SNOWY MONARO REGIONAL COUNCIL

ATTACHMENTS TO REPORTS

(Under Separate Cover)

Ordinary Council Meeting

28 September 2016

ATTACHMENTS TO REPORTS
FOR
ORDINARY COUNCIL MEETING
WEDNESDAY 28 SEPTEMBER 2016

Page No.

ADMINISTRATIVE CONDITIONS

Approved Plans and Documentation

1. The developer is to ensure that the development complies fully with DA3192/2016 as submitted to Council on the 28/06/2016 3:30:59 PM with supporting documentation including, but not limited to the development plans being:

   - Statement of Environmental Effects – Extension of Lake Jindabyne Share Trail Curiosity Rocks to Hatchery Bay. This document includes plans and associated supporting material being:
     1. Appendix A proposed Trail Maps Sections 1-3
     2. Appendix F Wollondibby Creek Bridge Report
     3. Appendix G Flora and Fauna Assessment
   - General Terms of Approval - Integrated Development— Extension of shared trail from Curiosity Rocks to Hatchery Bay, Jindabyne, Office of Environment and Heritage 29/8/2016.
   - Aboriginal Cultural Heritage Assessment, Sue Feary and Gerard Niemoeller August 2015.

   as stamped by the Snowy Monaro Regional Council and attached to this Notice, except where amended by the following conditions of consent (and as amended in red by Council):

Inconsistency between documents

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

OTHER APPROVALS

General Terms of Approval Office of Environment and Heritage

3. **<u>Administrative conditions</u>**

   Information supplied to OEH

   Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

   - the integrated development application DA 3192/2016
   - the Statement of Environmental Effects (SoEE) dated June 2016 relating to the proposed extension of Lake Jindabyne shared trail — Curiosity Rocks to Hatchery Bay;
   - the Aboriginal Cultural Heritage Assessment Report titled: Lower Thredbo Valley Shred Path: Bullocks Flat to Curiosity Rocks, Snowy Mountains NSW. Dated August 2015 and received by OEH on 2 February 2015.

   <u>General Terms of Approval for Aboriginal cultural heritage</u>

   - No harm can occur to any Aboriginal objects within the Lake Jindabyne shared trail — Curiosity Rocks to Hatchery Bay development area unless an

Aboriginal Heritage Impact Permit (AHIP) has been issued by OEH.

- No harm can occur to the Curiosity Rocks Aboriginal Place unless an Aboriginal Heritage Impact Permit (AHIP) has been issued by OEH and the boundary of the Aboriginal Place must be included on all maps prepared as part of the proposed development.
- The applicant must comply with the conditions of any AHIP that is issued by OEH.
- The applicant must ensure that all persons involved in actions or works covered by an AHIP (whether employees, contractors, sub-contractors, agents and invitees) are made aware of, and comply with, the conditions of any AHIP.
- Requirement 26 "Stone artefact deposition and storage" in the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (24 September 2010, available online at: http://www.environment.nsw.gov.au/licences/archinvestigations.htm) must be complied with.
- No human remains in, on or under the land may be harmed. If any human remains are discovered and/or harmed in, on or under the land, the proponent or AHIP holder must:
  a) not further harm these remains
  b) immediately cease all work at the particular location
  c) secure the area so as to avoid further harm to the remains
  d) notify the local police and OEH's Environmental Line on 131 555 as soon as practicable and provide any available details of the remains and their location, and
  e) not recommence any work at the particular location unless authorised in writing by OEH.

PRIOR TO THE COMMENCEMENT OF WORKS

Site Notice

4. Before commencement of any work, a sign must be erected in a prominent, visible position:
   (a) Showing the name and telephone number of the contractor carrying out the works and the Council contact for information.
   (b) Providing information on the times that the area will be closed for construction.

   This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

Notification prior to Commencement of Works

5. The developer shall ensure that license holders of the land on which the trail is to be constructed are notified of the commencement of works. This notification shall be in writing 14 days prior to works commencing.

DURING WORKS

Approved Plans to be On-site

6. A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification will be kept on the site at all times during construction and will be readily available for perusal by any officer of the Council.

Erosion & Sediment Control

7. The developer is to ensure that where site works are undertaken including all excavations, land clearing and materials storage, all topsoil that is removed is stripped and stockpiled in an appropriate location for future revegetation works. The stockpiled area is to be encircled by a geofabric filter fence.

8. The developer is to ensure that erosion and siltation control measures are installed and maintained on the site for the entire length of the construction project. Erosion control measures are to include the placement of hay bales staked in the ground or the erection of geofabric filter fencing at the bottom of all areas where cut and fill is carried out and within any existing drainage areas from those cut and fill areas. These control measures are to be in accordance with the requirements of the consent authority and best management practices as outlined in the NSW Department of Housing "Soils and Construction, Managing Urban Stormwater 4th Edition, March 2004 – the Blue Book".

9. The developer shall ensure that erosion and siltation control measures shall be undertaken in accordance with the approved *Erosion and Sediment Control Plan* in respect to any part of the land where the natural surface is disturbed or earthworks are carried out.

10. The developer is to ensure that all works proposed must be designed, constructed and operated to minimise sedimentation, erosion and scour of the banks or bed of the watercourse and to minimise adverse impacts on aquatic and riparian environments.

All-weather Access

11. An all-weather stabilised access point must be provided to the site to prevent sediment leaving the site as a result of vehicular movement. Vehicular movement should be limited to this single accessway.

Trade Waste

12. (a) The applicant must provide an adequate trade waste service to ensure that all waste material is contained, and removed from the site for the period of construction

(b) Materials used in the construction of the building are not to be deposited or stored on Council's footpath or road reserve, unless prior approval is

obtained from Council.

(c) The burning of builders waste on site by open fire is prohibited.

Use of Power Equipment

13. The developer is to ensure that work on the development site by all persons using power tools and equipment is limited to the following hours:

Mon – Fri	7.00am to 8.00pm
Saturday	7.00am to 8.00pm
Sunday	8.00am to 8.00pm
Public Holidays	8.00am to 8.00pm

Excavation

14. The developer is to ensure that at all times all excavations and backfilling associated with the development is executed safely and in accordance with professional standards.

15. The developer is to ensure that all excavations are properly guarded and protected at all times to prevent them from being a danger to life or property.

Dust Control Measures

16. Adequate measures will be taken to prevent dust from affecting the amenity of the neighbourhood during construction. In particular, the following measures must be adopted:

(a) Physical barriers will be erected at right angles to the prevailing wind direction or will be placed around or over dust sources to prevent wind or activity from generating dust emissions,
(b) Earthworks and scheduling activities will be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed,
(c) All materials will be stored or stockpiled at the best locations,
(d) The surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs,
(e) All vehicles carrying spoil or rubble to or from the site will at all times be covered to prevent the escape of dust or other material,
(f) All equipment wheels will be washed before exiting the site using manual or automated sprayers and drive-through washing bays,
(g) Gates will be closed between vehicle movements and will be fitted with shade cloth, and
(h) Cleaning of footpaths and roadways will be carried out regularly.

TRAIL AND BRIDGE CONSTRUCTION

Trail and Bridge Construction

17. The developer is to ensure that the trail is constructed in accordance with methods outlined in the statement of environmental effects, attached to this development application.

18. The developer is to ensure that trail construction is in accordance with the International Mountain Bike Association (IMBA) principles of sustainable trails.

19. The developer is to ensure that the bridge proposed over Wollondibby Creek is constructed in accordance with the engineering design specifications supplied by Grounded Engineering.

20. The developer shall ensure that stock control measures are incorporated into the construction of the trail wherever the track passes through fence lines. This will include stock grids and self-closing gates.

21. The design of the stock grids and self-closing gates will be approved prior to construction in consultation with licence holders.

Trail Signage

22. The developer is to ensure that signage is erected at both ends of the trail advising that dogs are prohibited on the trail and a warning that stock will be grazing within the property.

The reasons for the imposition of the conditions are:

1 To minimise any likely adverse environmental impact of the proposed development.

2 To ensure the protection of the amenity and character of land adjoining and in the locality.

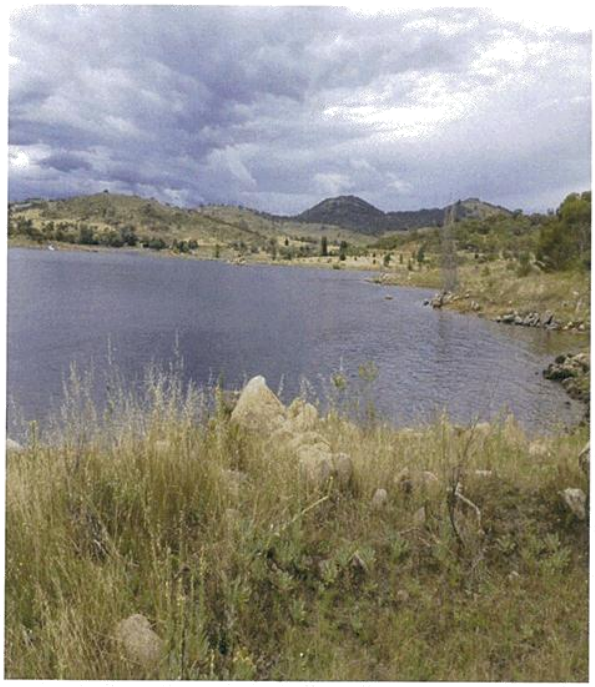
3 To ensure the proposed development satisfies the relevant statutory requirements.

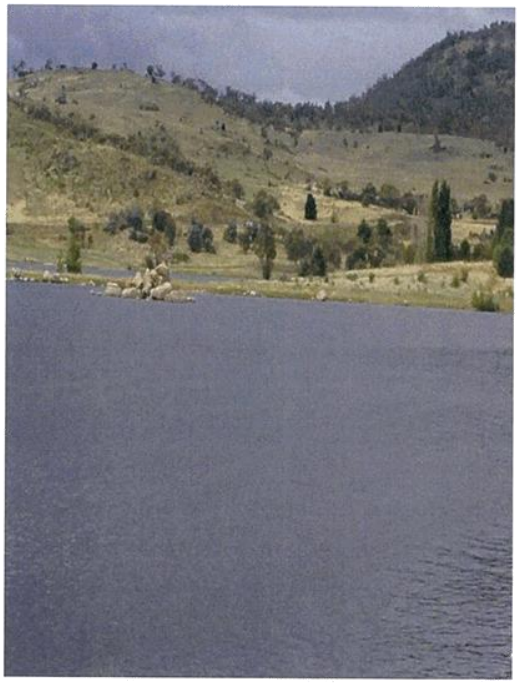
4 To ensure the development does not conflict with the public interest.

5 To ensure development proceeds in accordance with approved plans.

STATEMENT OF ENVIRONMENTAL EFFECTS

Extension of Lake Jindabyne Shared Trail-Curiosity Rocks to Hatchery Bay





For: Snowy River Shire Council

Contents

1.0 Introduction

Snowy River Shire Council proposes to undertake an extension of the Lake Jindabyne Shared Trail from Curiosity Rocks to Hatchery Bay. The shared trail would be constructed in accordance with the International Mountain Bike Association (IMBA) principles of sustainable trails as has previous trail development from Cobbon Crescent to Tyrolean Village.

The proposed route will traverse through disturbed open grassland to a maximum width of 1.8metres. The track will be constructed by either manual labour, or small excavator/bobcat. Trail construction in Sections 2 and 3 will be of minimal disturbance requiring only vegetation removal and some areas of manual labour. Refer to Appendix A, *Proposed Trail Maps.*

2.0 Site description

The proposed trail will start from the end of an existing trail at Curiosity Rocks and will traverse through open grassland to Hatchery Bay picnic area. The total length of the Shared Trail will be 4.2km.

The area for the proposed trail is relatively flat with gradual slopes. The Wollondibby Creek forms an inlet into Lake Jindabyne just after the Curiosity Rocks area.

2.2 Land Ownership

The majority of the land adjoining the lake foreshore is grazing land/private property. Snowy Hydro Limtied (SHL) are the land owners in which the shared trail is proposed. SHL currently have a lease arrangement with private property owners of "Sunnybrae" for grazing. The shared trail proposal has been supported by the owners of "Sunnybrae." Refer to Appendix B, *Land Owners Letter of Support.*

An existing shared trial license agreement exists for the current Lake Jindabyne shared Trail. Landowners consent has been granted and a contract between SHL and Council has been approved. Refer to Appendix B, Shared Trail License Agreement. Page 4 of the license agreement related to this application.

3.0 Present and previous uses

Currently the site is used for grazing and public access to the foreshore for recreational activities such as fishing and swimming. Historically the area was always grazing land prior to the forming of Lake Jindabyne

3.1 Existing Structures

There are currently stock fences on site. As mentioned previously Snowy Hydro have a license agreement with the neighbouring property owner to allow grazing in the area of the proposed trail. An appropriate stock proof pedestrian access structure has been designed to allow for access

of trail users through stock proof fences. This has been described in section 4; *project Scope and description*

4wd and walking tracks exist in some places on-site. Some vehicle tracks may have previously been used by adjoining property owners who manage stock. Other existing trails are used by bike riders and walkers. Any existing disturbed areas that are within the trail corridor will be revegetated.

Existing disturbed areas

4.0 Project Scope and description of proposed works

The construction of the shared trail will be similar to that already developed as part of the lake Jindabyne Shared Trail from Cobbon Crescent to Tyrolean Village. The shared trial will follow the International Mountain Bike Association (IMBA) principles of sustainable trails. This includes building techniques that will have very little impact on the environment, resist erosion through appropriate design and blend in with the surrounding environment. The types of trail building methods that will be used include;

Rolling Contour Trail
This type of track is constructed on flat or gently sloping terrain with no cross contour fall. There is no benching required and the terrain allows for adequate drainage on either side of the proposed trail. It is of key importance to build these sections of trail with a rolling contour so that water runs off the track into the drainage system. Refer to *Appendix D* IMBA Trail Solution Guide for Rolling Contour.

Rolling Contour Bench Cut
Follows the contour with an out slope or in slope depending on the terrain and site specific drainage requirements. The gentle out slope of no more than 5% allows for water to sheet off the before it can accumulate and run causing erosion issues. Due to the rolling contours of the trail, where an in slope is required, grade reversal will be situated to ensure correct drainage.

Proposed Trail Alignment

The proposed shared trail link from curiosity Rock to Hatchery Bay has been broken up into 3 sections. Refer to *Appendix A* for detailed maps. The position of the proposed trial will remain above the full supply levels of the lake and also outside private property. The trail alignment will remain high in elevation to prevent inundation by flooding or changes to lake levels. To ensure that this is achieved a large section of the full supply level and private property boundary has been surveyed and pegged onsite (refer to Appendix E boundary and full supply level survey data). The trail will remain above 915-917m apart from the entrance to and including the bridge crossing at Wollondibby Creek. Techniques such as steel mesh platform and use of granite material will be used in this area to minimise damage during the occasional flood.

Figure 1 Shared Trial Proposal Overview

Section 1

Trail Construction - distance 800m
Vegetation clearing / brush cutting of trail corridor to 1.8m wide where required.
Machine excavation of rolling contour bench cut trail 1.2m wide to IMBA standards.
Installation of 1-2m long bridge lead in ramp to either end of bridge.
Supply and install large rock / DGB20mm material to trail sections through rocky outcrops, and compact trail tread on completion.

Bridge 1 – distance 12m

Construction of steel framed bridge with Weldlock mesh fibreglass deck. Refer to Appendix F *Grounded Engineering bridge options report.* The preferred option at 'Site B' will consist of 12 metre single span steel bridge deck with 2.5 metre lead in ramp. The trail leading into Wollondibby Creek crossing will be below the high water mark and may become flooded during heavy rain events. It is not practical for the creek crossing to avoid the maximum probable flood levels. Trail and bridge crossing will be built to AS 5100 standard that would minimise damage during a flood event (steel mesh platform, granite material).

Section 2

Trail construction - distance 600m
Vegetation clearing of trail corridor to 1.8m wide.
Brush cutting / mowing of trail tread to 700mm wide to remove vegetation to ground level.
Spraying of non selective herbicide on trail tread where required.

Hand shaping to install trail tread / backslope where required on steeper side slopes.
Revegetation of excess spoil / disturbed ground within trail corridor.

Install pedestrian grid to allow access through existing stock fence. Refer to figure 1 below.

Figure 2. Stock grid/ramp example Centennial Trail Canberra.

Section 3

Trail Construction – distance 3.2km
Vegetation clearing of trail corridor to 1.8m wide.
Brush cutting / mowing of trail tread to 700mm wide to remove vegetation to ground level.
Spraying of non selective herbicide on trail tread where required.
Hand shaping to install trail tread / backslope where required on steeper side slopes.
Revegetation of excess spoil / disturbed ground within trail corridor.
Installation of 2 pedestrian cattle grids through existing fence line.

5.0 Environmental Planning

5.1 Threatened Species, Populations and Ecological communities

The proposed trail development is not likely to significantly affect threatened species, populations or ecological communities. The location is already heavily disturbed by grazing and existing 4wd tracks

A search of the Office of Environment, BioNet Atlas has been undertaken (refer to appendix G-flora and fauna list). A site inspection for the proposed trail alignment has taken place and there will be no impact to those species listed as endangered, vulnerable or protected.

The proposed trail development will also not have an impact on any threatened fauna species found within the area. As mentioned earlier the development will be of minimal disturbance and will only involve clearing a corridor of 1.8metres through open grassland.

5.2 State Environmental Planning Policies

Snowy River Local Environmental Plan 2013

The proposed trail development is within zone SP1-Special Activities. The development is permissible with consent as an environmental facility. The SRLEP 2013 defines an environmental facility as *a building or place that provides for the recreational use or scientific study of natural systems, and includes walking tracks, seating, shelters, board walks, observation decks, bird hides or like, and associated display structures*.

Threatened Species Conservation Act 1995

An assessment of threatened species has been completed as part of this SEE and shows that no threatened species will be effected by the proposed works

Environmental Planning and Assessment Act 1979 and EP&A Regulation 2000

All provisions with this legislation where relevant have been satisfied in the information provided within this SEE and attached documents.

Environmental Protection and Biodiversity Conservation Act 2000

No Species listed under this act will be impacted by the proposed activity

Protection of the Environment Operations Act 1997

Environmental control measures have been documented within the SEE which will mitigate any potential harm to the environment

National Parks and Wildlife Act 1974

An assessment of threatened species and indigenous heritage has been undertaken as part of the SEE and show that the proposed activity will not impact of Aboriginal Heritage, significant flora and fauna and ecological communities.

5.3 Visual Impact

The proposed trail development is within the visual protection area of Lake Jindabyne. The proposed trial development will not impact on the scenic quality of this area for the following reasons;

- The construction of the trail will be of minimal disturbance, majority of the trail will not require any excavation works. Therefore the trail will not be highly visible
- The proposed trail will be built above the full supply level of the lake and will be used for recreational purposes such as access for fishing, walking and bike riding

5.4 Access

Access will require consent from SHL as the land owners of the proposed trail area. A contract between Council and SHL has been approved and includes the shared trail corridor of this proposal (Appendix B- Shared Trail License Agreement).

5.5 Erosion and Sediment Control

The proposed trail will be built in accordance with the international Mountain Bike Association standards for sustainable trails. As stated in section 4 *construction method,* the majority of the trail will not require machine excavation and will only involve clearing and spraying of vegetation. In this area requiring excavation consideration will taken to trail alignment and drainage to prevent erosion. The following mitigation measures will be followed during any excavation works;

- Work will not be carried out during periods of rain or when rain is imminent so as to minimise disturbance and potential for erosion.
- Sediment and erosion controls will be erected where necessary in disturbed area to minimise erosion and sedimentation potential. All control devices are to be routinely monitored and maintained until disturbed areas are revegetated or the risk of erosion is minimised.
- Where it does not effect the use of the trail, disturbed areas will be mulched and re-seeded with local seed mix (as prescribed by SRSC). The area included within the Lake Jindabyne foreshore lease area between Curiosity Rocks and the Wollondibby Creek inlet will be rehabilitated as a separate conservation project with the Office of Environment and Heritage.

This SEE only considers the shared trail alignment and any minor rehabilitation works of old tracks within the trail corridor.

5.6 Stream bed and banks

A steel bridge platform will be erected at the Wollondibby Creek. There will be minimal disturbance to the Creek as the bridge will be erected with engineered supports on either side of the banks. This structure will not interfere with the flow regime. The following mitigation measures will be followed during the bridge construction;

- No excavation will be undertaken in the streambed
- Any concrete works to be undertaken on the banks for bridge abutments and will be contained using double bonding so as to reduce the risk of spills into the stream bank
- Work on or near the stream bed and bank will only be undertaken during dry weather conditions
- There are no aquatic threatened species in the project area

5.7 Chemical and hazardous substance management

Potential for fuel spills associated with plant and equipment. Spraying of grass/vegetation is required in section 2 and 3 as no excavation is required. The trail will naturally wear through use.

- All plant and equipment to have pre-start checks for fuel and oil leaks.
- All refuelling is to be undertaken in an area where any spills can be controlled and contained
- Sand or fuel/oil absorbent material to be available to protect the existing environment from contamination if a spill occurs
- Contractor must appropriately certified to undertake spraying

5.8 European Cultural Heritage

There are no sites of significant European heritage located in the vicinity of the trail

6.0 Aboriginal Heritage

An Aboriginal Cultural Heritage Assessment (ACHA) was complete for the proposed trail alignment by archaeologists Sue Feary and Gerard Niemoeller (Refer to attached report). The assessment also included the Lower Thredbo Valley Track proposal by National Parks and Wildlife. Both trail proposals were included in the one assessment for convenience and at a cost saving to both stakeholders. The results of the assessment specifically for the Lake Jindabyne Shared extension are as follows:

Figure 3. Recorded Aboriginal Sites

Artefact scatters were present at the locations indicated in Figure 2 above as site's WD1, HB 1, HB2 and HB3. Figure 3 below summarises the detail of each site along with management response and Consequence of Harm.

Site name	Site Type	Archaeological Significance	Management response	Type of Harm Direct/Indirect/None	Degree of Harm Total/Partial / None	Consequence of Harm Total/ Partial/ No Loss of Value
WD1	Stone artefact scatter	Moderate	Impact by shared path, and by proposed conservation works	Direct	Partial	Partial loss of value
HB 3	Isolated stone artefact	Low to moderate	Will not be impacted – no further action required.	None	None	No loss of value
HB 2	Stone artefact scatter	Low to moderate	Impact by shared path	Direct	Partial	Partial loss of value
HB 1	Stone artefact scatter	Low	Impact if roadworks or if closure rehabilitation	Direct	Partial	Partial loss of value

Figure 4. Management Response Summary

The Aboriginal Cultural Heritage Assessment (ACHA) report recommends that no further archaeological investigations are required unless there are significant deviation from the proposed trail alignment.

The ACHA report also recommends an Aboriginal Heritage Impact Permit (AHIP) is sought for partial harm to sites WD1 and HB1-2. The ACHA report has been provided to the NSW OEH to support the AHIP determination process. Works will not take place until the AHIP is obtained.

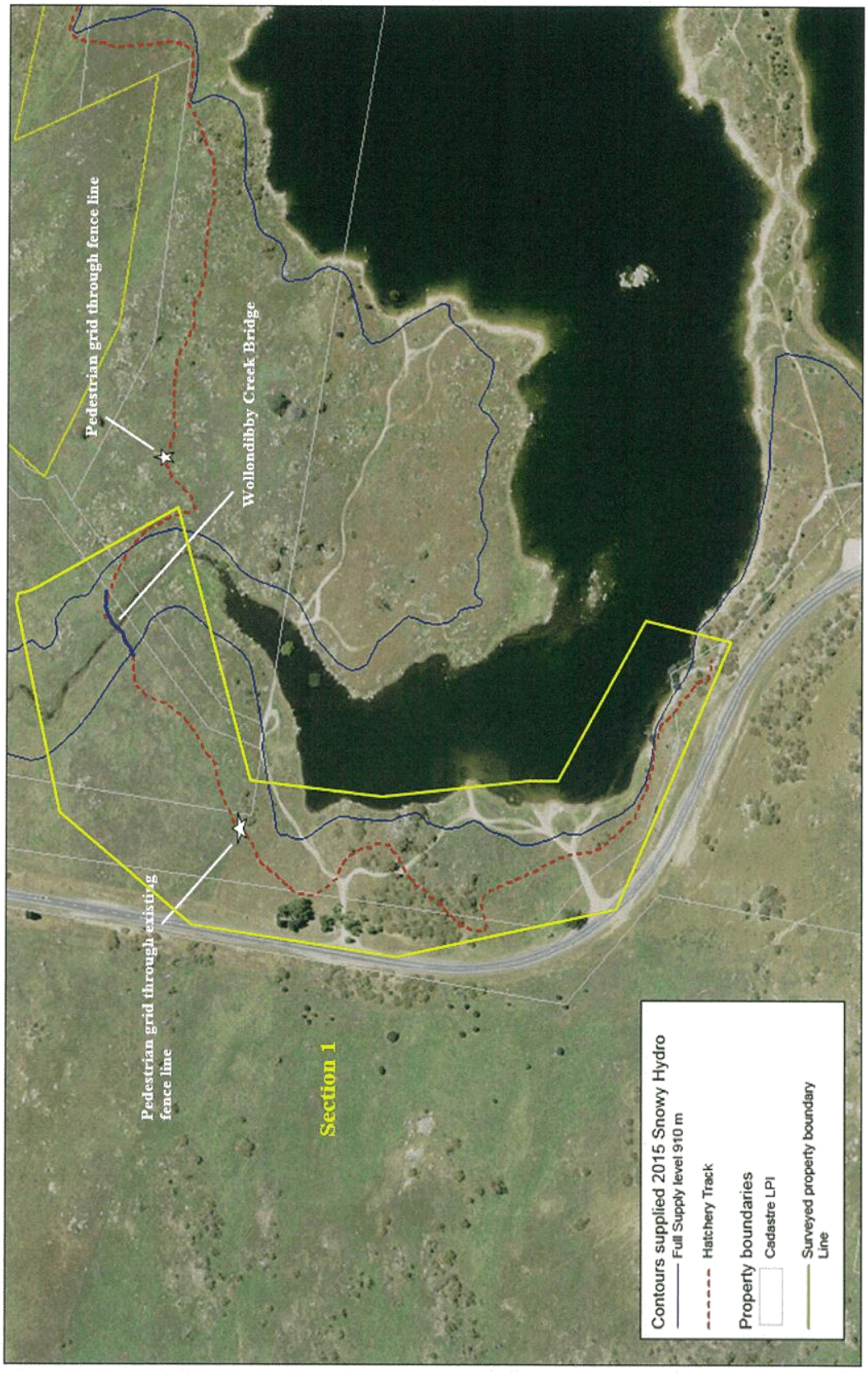
Rehabilitation work will not be carried out within the areas of sites WD1 and HB1-2. SRSC are currently working with the Office of Environmental and Heritage to conduct a conservation/rehabilitation plan for the Curiosity Rocks site which extends to the Wollondibby Creek inlet. This will be conducted as a separate project and is not part of this SEE.

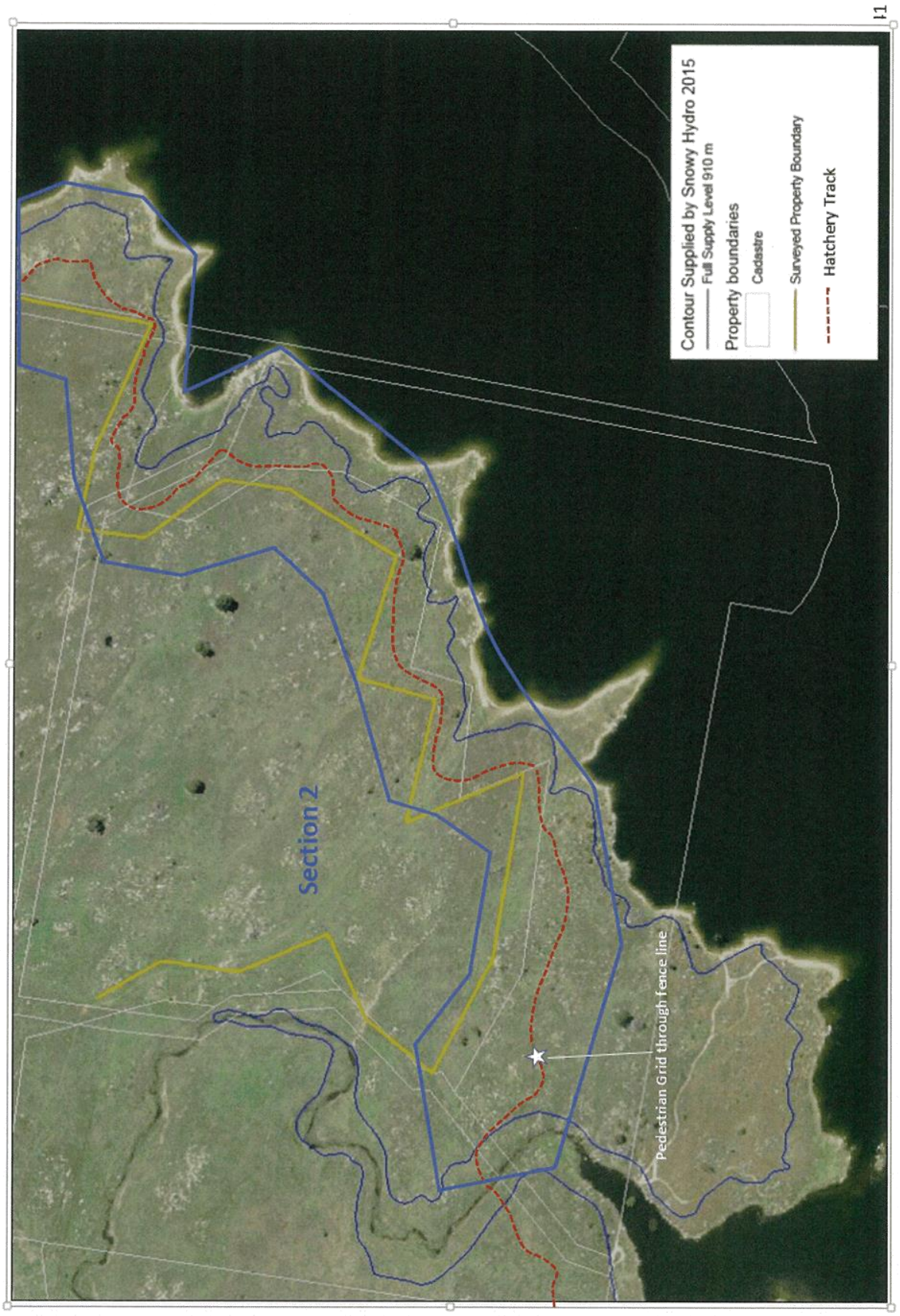
7. Asbestos Assessment

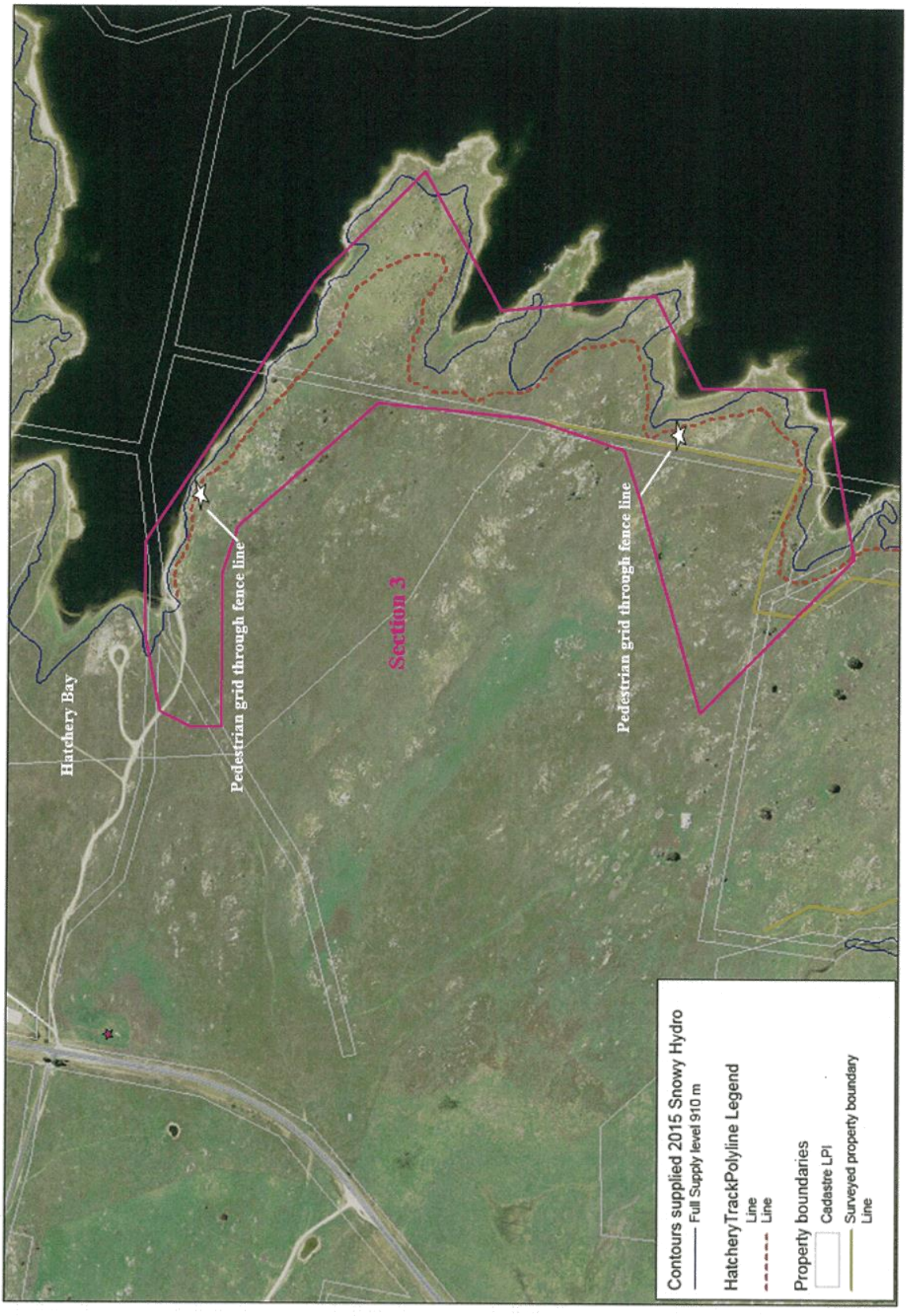
Due to the discovery of asbestos on the Lake Jindabyne Shared Trail in the past, a basic asbestos assessment was undertaken within the area of the new trail corridor. The assessment was undertaken to ensure the land in which the shared trail extension is proposed will be suitable and that contamination would unlikely be discovered.

Coffey Environments undertook a desktop and field inspection of the area (Appendix G- Asbestos Assessment Report). The report concluded that no asbestos containing materials were identified during the field assessment. Should any suspected asbestos containing materials become evident during the shared trail development, all works will stop and a qualified WHS consultant will be contacted to confirm the status of the suspect material/s. Depending on the outcome of the investigation, appropriate measures will be put in place for removal.

Appendix A- Proposed Trail Maps Sections 1-3




Contour Supplied by Snowy Hydro 2015
Full Supply Level 910 m
Property boundaries
Cadastre
Surveyed Property Boundary
Hatchery Track
Section 2
Pedestrian Grid through fence line


Hatchery Bay
Pedestrian grid through fence line
Section 3
Pedestrian grid through fence line
Contours supplied 2015 Snowy Hydro
Full Supply level 910 m
HatcheryTrackPolyline Legend
Line
Line
Property boundaries
Cadastre LPI
Surveyed property boundary
Line

Appendix B.

snowy hydro
renewable energy

RECEIVED
20 JUN 2016
BY: .....

1 June 2016

Mr Joe Vescio
General Manager
Snowy River Shire Council
2 Myack Street
Berridale NSW 2628

Dear Joe,

Re: Contract 90694 - Variation to Licensed Area of the bike and pedestrian corridor around the Lake Jindabyne foreshore.

I refer to the Licence Agreement dated 1 December 2009 (as amended) for the bike and pedestrian paths through Snowy Hydro's land on the Lake Jindabyne foreshore (**Agreement**).

We are writing to set up the mechanisms to vary the license to;

(a) allow for an extension between the existing network and Hatchery Bay, and

(b) include a section at Rainbow Beach, Tyrolean Village which had been previously omitted, and

(c) recognise the realignment and new management arrangements in the Coppertom section.

Clause 17.3 of the Agreement requires any variation to be in writing and signed by the parties and clause 9 of the Agreement specifically allows for variations to the Licensed Area.

Accordingly, Snowy Hydro proposes to vary the Agreement as follows:

New clause 6.1(2)(e)

Insert new clause 6.1(2)(e) as follows:

(e) management of asbestos identified by the *Snowy Hydro Limited, Asbestos Management Plan, Copper Tom Point,* 18 September 2014 (as amended from time to time) and attached at Annexure D.

Annexure C

The maps at Annexure C are amended with the maps annexed to this letter.

Snowy Hydro Limited ABN 17 090 574 431
Monaro Highway, Cooma NSW 2630. PO Box 332, Cooma NSW 2630
Telephone: 02 6453 2888 Facsimile: 02 6452 3794, www.snowyhydro.com.au

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New Annexure D

The Snowy Hydro Limited, Asbestos Management Plan, Copper Tom Point, dated 18 September 2014 and attached to this letter is annexed to the Agreement as new Annexure D.

New Annexure E

Summary of Snowy Hydro Limited, Asbestos management Plan, Coppertom Point

All other terms and conditions of the original Agreement continue to apply.

Please confirm your acceptance of the above amendments by returning a copy of this letter to me that has been signed where indicated below.

Yours sincerely,

Charlie Litchfield
Manager Environmental Services

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The signatures below confirm that the parties agree to vary the Agreement to include the conditions set out above.

Dated:

Snowy Hydro Authorised Representative

Witness

Name of Authorised Representative
(BLOCK LETTERS)

Name of Witness
(BLOCK LETTERS)

Council Authorised Representative

Witness

JOSEPH GEORGE VESCIO

JANINE HUDSON

Name of Authorised Representative
(BLOCK LETTERS)

Name of Witness
(BLOCK LETTERS)

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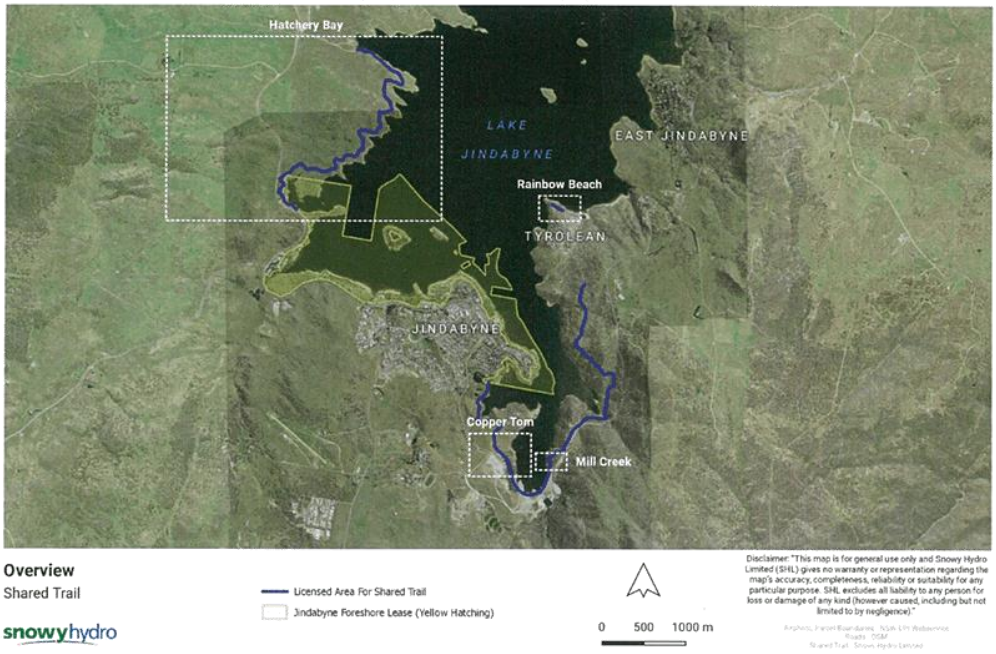
ANNEXURE C

ANNEXURE C - OVERVIEW
LICENSED AREA FOR SHARED TRAIL



Overview
Shared Trail

snowyhydro

Licensed Area For Shared Trail
Jindabyne Foreshore Lease (Yellow Hatching)

0 500 1000 m

Disclaimer: "This map is for general use only and Snowy Hydro Limited (SHL) gives no warranty or representation regarding the map's accuracy, completeness, reliability or suitability for any particular purpose. SHL excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence)."

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Mill Creek Map

ANNEXURE C
LICENSED AREA FOR SHARED TRAIL

Mill Creek
Shared Trail

snowy hydro

Licensed Area For Shared Trail
Property Boundary (White Line)

0 15 30 m

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Address, Parcel Boundaries - NSW LPI, Watercourse Roads - DSM
Shared Trail - Snowy Hydro Limited

Coppertom Map

ANNEXURE C
LICENSED AREA FOR SHARED TRAIL

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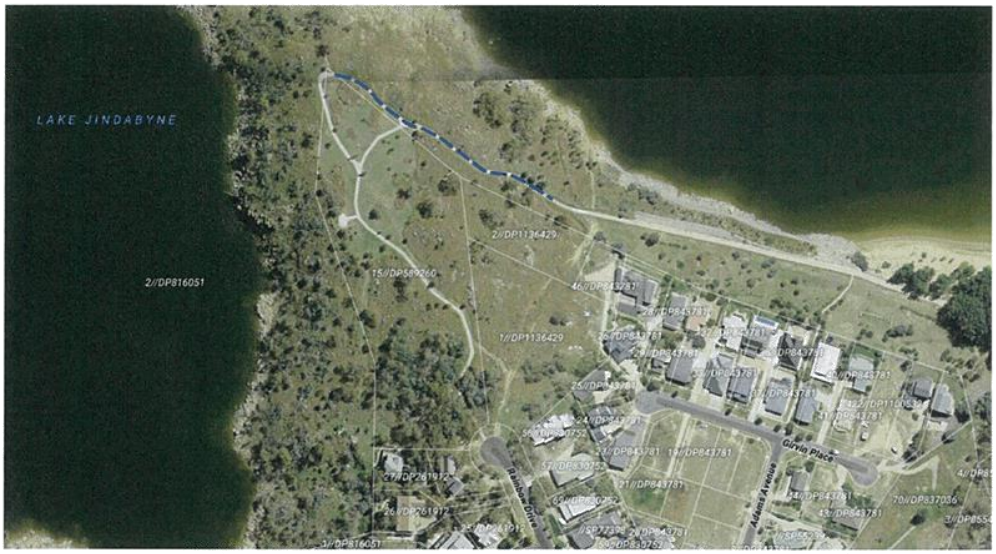
Rainbow Beach Map

ANNEXURE C
LICENSED AREA FOR SHARED TRAIL



Rainbow Beach
Shared Trail

snowyhydro

Licensed Area For Shared Trail
Property Boundary (White Line)

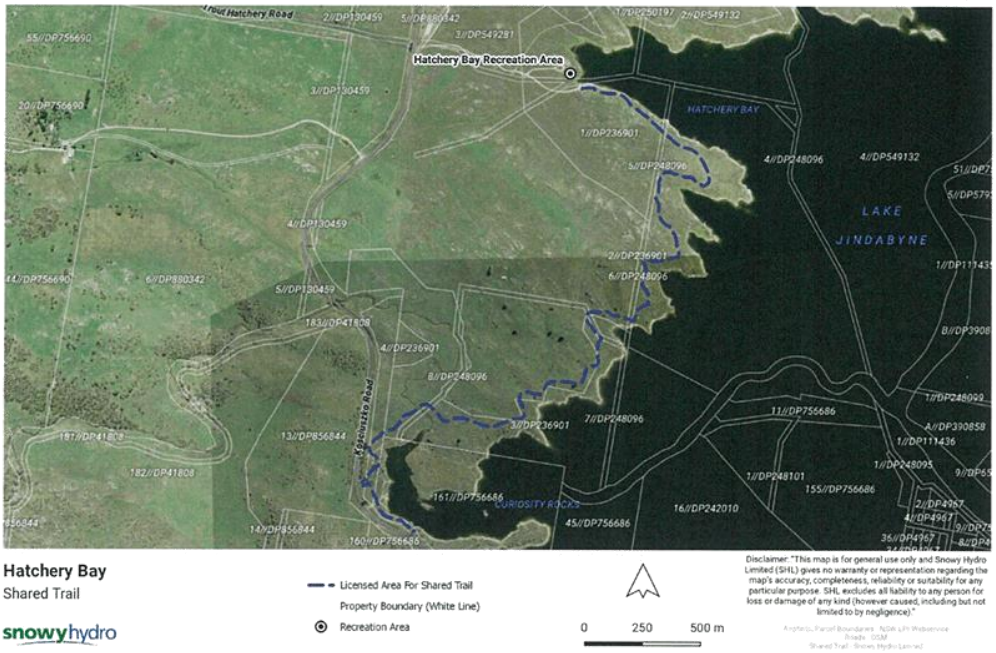
0 25 50 m

Disclaimer: "This map is for general use only and Snowy Hydro Limited (SHL) gives no warranty or representation regarding the map's accuracy, completeness, reliability or suitability for any particular purpose. SHL excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence)."

Aerphoto, Parcel Boundaries, NSW LPI Webservice
Roads - OSM
Shared Trail - Snowy Hydro Limited

Hatchery Bay Map

ANNEXURE C
LICENSED AREA FOR SHARED TRAIL



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Annexure D

Asbestos Management Plan for Coppertom Area

Report Dated 18 September 2014

Prepared by Coffey

snowyhydro Limited
renewable energy

Annexure E

Summary of Asbestos Management Plan Responsibilities for Coppertom Area

Administration
SHL own the site and are therefore responsible for the overall management of activities occurring at the site. SRSC are licensed to undertake certain activities on the site. Administrative responsibilities below reflect this.

Role	Responsibility	Task	Frequency
SHL	Owns overall responsibility of health and safety of site users and environmental performance of the site.	Review of annual compliance report	Annual
SHL	Integrate the AMP into SHL's Management System.	Work orders loaded in SHL Ellipse	Upon completion of AMP
SHL	Ensures Council is aware of the AMP for areas under easement or licensed to them.	Revise SRSC's licence agreement for the site to include reference to AMP	Upon completion of AMP
SHL	Ensures risks are managed through the implementation of the AMP and monitors adherence to the AMP.	Review of annual compliance report	Annual
SHL	Initiates and undertakes corrective actions for non-conformance to the AMP.	Review of annual compliance report	Annual
SRSC	Ensure any new tasks are approved by the Site Owner prior to commencing.	Seek approval from SHL.	As required

Site inspection, monitoring and maintenance

SRSC will inspect, monitor and maintain the areas where they derive benefit and those areas that may impact upon their beneficial use. SHL will inspect, monitor and maintain those areas which provide no benefit to other parties.

Responsibilities allocated below reflect this. Areas to be managed by each party are shown on the attached map.

Role	Responsibility	Task	Frequency
SRSC	Maintain a logbook to include records of random monitoring of site activities, records of inappropriate site use and corrective actions undertaken.	Complete Site Inspection Checklist	As required.
SRSC	A suitably competent person to walk over the environmental management area on a regular basis to identify if any area requires corrective action and confirm there has been no access to restricted areas by the general public. The site walkover should also assess the environmental management areas for the presence of any visible ACM which may have been exposed. Items to be inspected are included on Site Inspection Checklist.	Complete site inspections as per schedule.	Monthly for the first 6 months. 3 monthly for the next 18 months. Review frequency after 2 years.
SRSC	Undertake grounds maintenance at regular intervals, including replenishment/relocation of mulch, maintenance of the gates and fences adjacent the bike path and WTP access track and maintenance of the path / track surfaces.	Complete maintenance works	As required
SHL	Undertake required maintenance of the exclusion fences at the northern and southern ends of the site only.	Complete maintenance works	As required
SRSC	The WTP access track should be subject to regular emu picks by a suitably licensed contractor to minimise the risk of vehicles driving over and breaking ACM fragments. Timing to be based on how often the track is accessed.	Complete emu pick as per schedule	Annual emu pick in Spring prior to high bike use period
SRSC	The bicycle path should be subject to emu picks prior to key use periods (such as holidays). Advise SHL of emu pick dates to allow SHL to undertake air monitoring	Complete emu pick as per schedule	Annual emu pick in Spring prior to high bike use period

SHL	Air quality monitoring to be undertaken on the day of the emu pick	Complete air quality monitoring and forward results to SRSC	Annual - Air quality monitoring to be undertaken on the day of emu picks.
SHL	Following emu picks a clearance inspection should be undertaken by a suitably competent person.	Complete clearance inspection and forward results to SRSC	Annual - Clearance inspection to be done on the day of completion of the emu pick.
SRSC	If ACM is found in areas accessible to the general public, the emu pick, air quality monitoring and clearance inspection requirements set out above should be followed.	Complete emu pick, air quality monitoring and clearance inspection	As required

Reporting
As owner of the land, SHL require all other users of the site to report on their compliance with the SHL AMP.

Role	Responsibility	Task	Frequency
SRSC	ACM is to be disposed of appropriately and records maintained in SHL's Asbestos Register.	Provide asbestos disposal documentation to SHL hygienist	Within 1 week of disposal.
SRSC	Imported soils must be validated by a suitably qualified environmental consultant.	Provide validation documentation to SHL hygienist	Prior to importation
SRSC	An annual compliance report is to be prepared by SRSC and submitted to SHL for review. Report content requirements are listed below.	Complete annual compliance report and submit to SHL	Annual

Review
As owner of the land and administrator of the SHL AMP, SHL have the responsibility of reviewing the AMP as indicated below.

Role	Responsibility	Task	Frequency
SHL	Ensure the AMP is reviewed and, if necessary, revised at least once every five years or when: • There is a review of the asbestos register or a control measure • Asbestos is removed from, or disturbed at the site. • The AMP is no longer adequate for managing asbestos or ACM at the site • A health and safety representative requests a review if they reasonably believe that any of the matters listed in the above points affects or may affect the health and safety of a member of their work group and the AMP was not adequately reviewed.	Review and/or revise AMP	Every five years or sooner if required

Annual Compliance Report (to be completed by SRSC) – required content

1. List any new tasks undertaken at the site. Were these approved prior to commencement?
2. Summary of random inspections including dates, findings and corrective actions
3. Summary of all site walkovers. Include copies of monthly/3 monthly inspection record sheet.
4. Summary of WTP emu picks. Include copies of monthly/3 monthly emu pick record sheets and clearance certificates as necessary.
5. Summary of bike path emu picks. Include copies of monthly/3 monthly emu pick record sheets and clearance certificates as necessary.
6. Summary of maintenance activities undertaken including dates and details of the work
7. Summary of asbestos disposal for the preceding year including records of disposal
8. Summary of materials imported to the site including date, material type, quantity and validation documentation.
9. Provide a statement outlining whether SRSC consider a review of the AMP is necessary based on the years findings.

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Copper Tom Point asbestos management area - Site Inspection Checklist

Date:		
Inspection type: (random, monthly, quarterly, event based)		
Inspector: (name and organisation)		
Areas inspected:	Yes / No	Finding
• Drainage ditch and / or mesh at fence (check for holes in mesh or presence of ACM in drain)		
• Fence and gate integrity (check for holes or breaks in fence line and check warning signs are in good condition)		
• Capping layer (check for exposure of geofabric or ACM in immediate surrounds)		
• Check for evidence of access into the environmental management area by unauthorised persons (e.g. rubbish).		
• Bike path (bitumen surface not damaged, no ACM visible)		
• WTP access track (bitumen surface not damaged, no ACM visible)		
• WTP intake access road (no erosion on track or ACM visible)		
• Northern and Southern boundary fences		
• Evidence of public access from the dam		
• Other		
Is ACM visible in any areas of the site? Y / N, if yes, where?		
Based on the findings, are any maintenance or mitigation works required? List these below;		
1		
2		
3		
4		
Records of any maintenance are to be detailed in Annual Compliance Report		

Appendix C- Letter of Support from Neighbouring Landholder

20 November 2014

The Manager
Snowy Hydro

Attention Charlie Litchfield

We are the holders of the licence over the Snowy Hydro land as shown in the attached plan, between our property ~~Forestview~~ "Sunnybrae" and Lake Jindabyne.

We acknowledge the proposed multi use track shown on the plan and agree to have our licence agreement amended to include the multi use track manager, Snowy River Shire, as a third party.

A condition of our agreement to amend the licence is that stock control measures will be incorporated in the construction wherever the track passes through fence lines. This will include stock grids and self closing gates for mountain bike riders and walkers, of a design and construction approved by us.

* Signage at both ends informing walkers or riders that **dogs are prohibited** will be a required and a warning that **stock is grazed within the property**.

1. **Signed:** [redacted] Date: 8/12/14

Print name: Gai McKenzie

2. **Signed:** [redacted] Date: 8/12/14

Print name: Rex Weston

* P.S. As well as bike riders & walkers I dare say there will be fishermen using the access to get to more areas of the lake foreshore. How do we prevent them leaving their discarded line around – it's not a pretty outcome for livestock tangled in fishing line!

Appendix C- Rolling Contour Trails

Rolling Contour Trails— Building Great Trails that Last

The Problem: Erosion

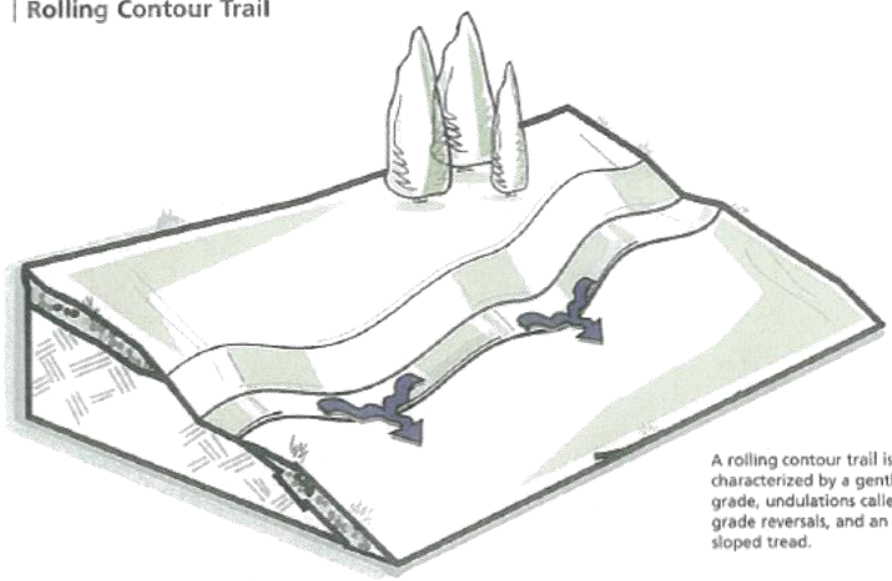
Erosion is the natural process through which rock and soil are worn away by wind and water. It's also a trail's worst enemy. Left unchecked, erosion can destroy trails and damage the environment. Trail erosion is accelerated by a combination of trail users, gravity, and water. *All* trail users loosen soil, especially on steeper grades where they resist the force of gravity.

Water compounds the problem if it's allowed to channel or "focus" down the trail. Focused water can do more damage to a trail than any user. It gains velocity and energy, washing away precious soil and cutting deeper into the tread each time it flows.

The Solution: Rolling Contour Trails

Fortunately, you can build trails that will resist erosion—**rolling contour trails.** A contour trail is a path that gently traverses a hill or sideslope. It's characterized by a gentle grade, undulations called **grade reversals,** and a **tread** that usually tilts or **outslopes** slightly toward the downhill edge. These features minimize tread erosion by allowing water to drain in a gentle, non-erosive manner called **sheet flow.** When water drains in thin, dispersed sheets, dirt stays where it belongs—on the trail.

Rolling Contour Trail



A rolling contour trail is characterized by a gentle grade, undulations called grade reversals, and an outsloped tread.

Trail Solutions: IMBA's Guide to building Sweet Singletrack 2004

Appendix D- Land boundary and High Water Level Survey

OUR REF : **S709**
YOUR REF :
REPLY TO : **John Kleven**
DATE: **23 February 2016**

KLEVEN SPAIN
Survey Consultants
ACN 096 035 504

Page 1 of 2

Snowy Hydro

Survey Report

Re: Jindabyne New Bicycle Track

Further to your instruction, we advise that a survey for the purposes of Boundary Identification and Full Supply Level (FSL) has been conducted on the south easterly boundary of Lot 6 DP 880342.

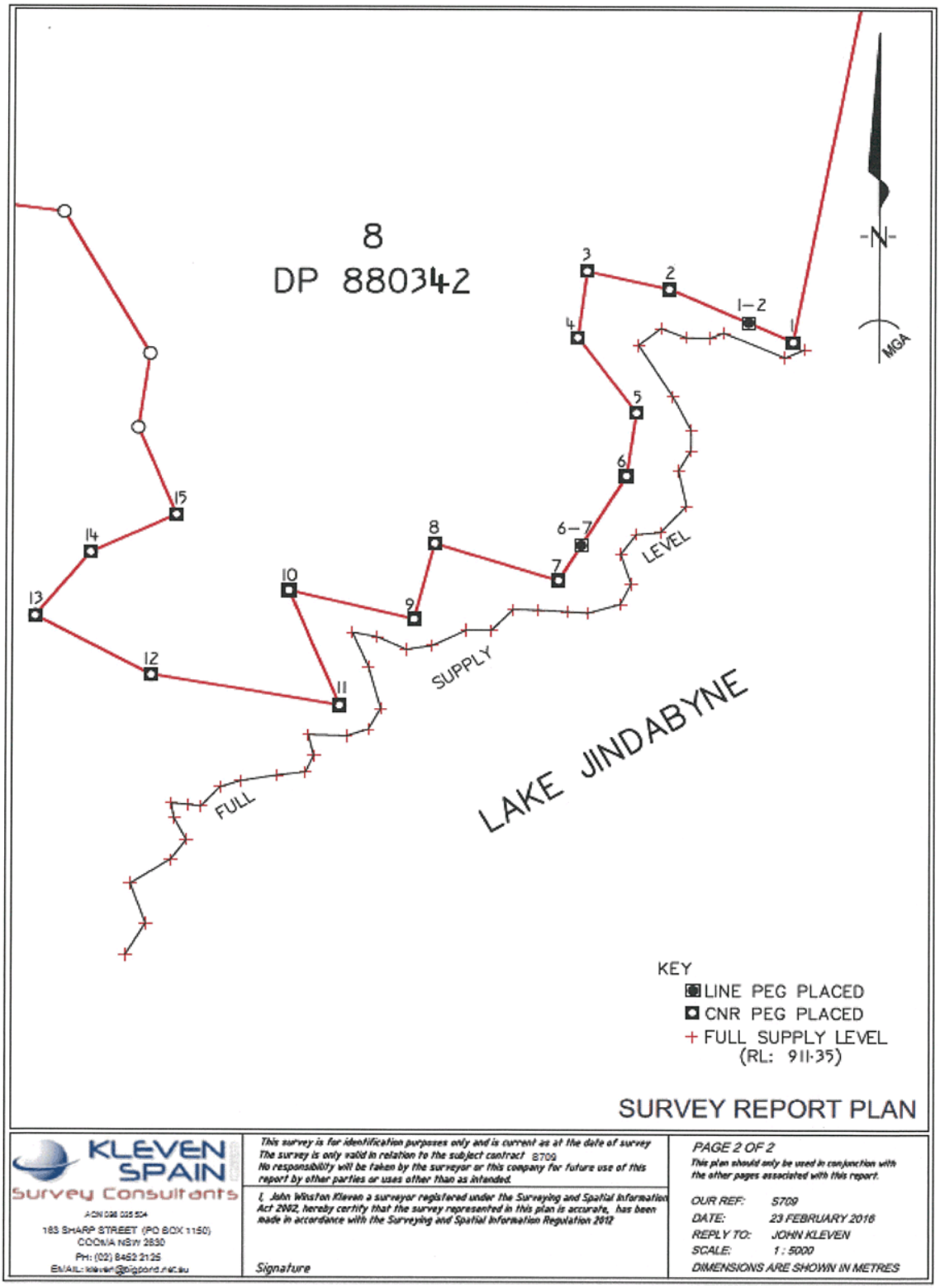
The report plan attached shows the positions and details of marks placed in relation to Boundary's and FSL.

Should you require any additional information, please do not hesitate to contact our office.

Yours faithfully
Kleven Spain
Cooma Office

per: John W. Kleven
Surveyor Registered under the Surveyor's Act 2002

Report Plan Following /-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CNR PEG PLACED
FULL SUPPLY LEVEL
(RL: 911·35)
SURVEY REPORT PLAN
KLEVEN SPAIN
Survey Consultants
ACN 098 035 504
183 SHARP STREET (PO BOX 1150)
COOMA NSW 2630
PH: (02) 6452 2125
This survey is for identification purposes only and is current as at the date of survey
The survey is only valid in relation to the subject contract S709
No responsibility will be taken by the surveyor or this company for future use of this report by other parties or uses other than as intended.
I, John Winston Kleven a surveyor registered under the Surveying and Spatial Information Act 2002, hereby certify that the survey represented in this plan is accurate, has been made in accordance with the Surveying and Spatial Information Regulation 2012
Signature
PAGE 2 OF 2
This plan should only be used in conjunction with the other pages associated with this report.
OUR REF: S709
DATE: 23 FEBRUARY 2016
REPLY TO: JOHN KLEVEN
SCALE: 1 : 5000
DIMENSIONS ARE SHOWN IN METRES

Appendix E- Wollondibby Creek Bridge Report

GROUNDED
STRUCTURAL ENGINEERING AND DRAFTING SERVICES

26 August 2015

Alannah Dickenson
Snowy River Shire Council

Feasibility report for new cycle path crossing at Wollondibby Creek.

The following report outlines the structural site design parameters and feasibility of the various construction methods suggested for a structure to cross the Wollondibby creek, on the Lake Jindabyne Shared Trail.

The two proposed construction options are for either a concrete culvert structure or a steel bridge/platform, both are sensible durable structures which once completed require very little maintenance.

Exposed timber structures are not suitable in our area because the extremely dry environment and high UV radiation reduces the durability of external timber dramatically.

Wire rope structures can be a public safety risk in exposed high wind areas with no shielding offered and they require considerable ongoing maintenance.

Structural design considerations

The key design parameter when considering a structure to span a body of flowing water is the disruption of the flow. Disruption of flow leads to the generation of extreme forces and turbulence; turbulence in turn creates excessive erosion problems and damage to structures.

Photo 1. 100m downstream of proposed site, 27-08-2015

Building a structure that spans the entire creek and flood zone (and therefore does not disrupt the flow of the creek even in flood) requires major construction. Considering the purpose of the crossing, this would almost certainly lead to exceeding the budget,

Due to the significant differences between normal and peak flow, the site lends itself to a crossing design which does not disrupt the flow of water during normal flow but may disrupt the flow minimally in the flood zone.

The first consideration when proposing to build a structure that in some way will disrupt the flow of the creek is to check the velocity of the water passing the structure at any period of its flow cycle.

It is easy to overlook the potential power of Wollondibby Creek when it is viewed during normal flow. Dynamic float tests conducted in control areas at the site, over two days, one week apart and during normal flow (no significant rain for a week preceding the test) revealed an average surface velocity of just 0.45m/s.

Photo 2. 90m downstream from proposed site, 27-8-2015

In flood, this tributary produces a tremendous force and brings large debris with it all the way to the lake. Fortunately for reporting purposes, the creek has been in moderate flood during the last few days of the reporting period. Unfortunately I was away for the peak of the flood but managed to get to the site the day after the rain ceased to gather flow data and take some photos.

Photos 1- 4 show Wollondibby Creek in moderate flood with visible turbulence, erosion and debris collection within 100 metres of the proposed site.

The same dynamic float tests were conducted in the same control areas around the proposed site a full day after the rain had ceased; and found the average surface velocity to be 3.15m/s, seven times faster than during normal flow (0.45m/s)

Large debris can be dislodged and carried at this velocity (some evidence of which is shown in photo 1.) and at this speed has the potential to damage a structure that has not been adequately designed.

Given the tests were taken 24 – 36 hours after the peak of the flood event, it should be considered that the water velocity would have reached significantly higher levels than what was recorded (estimated at least 4.5m/s).

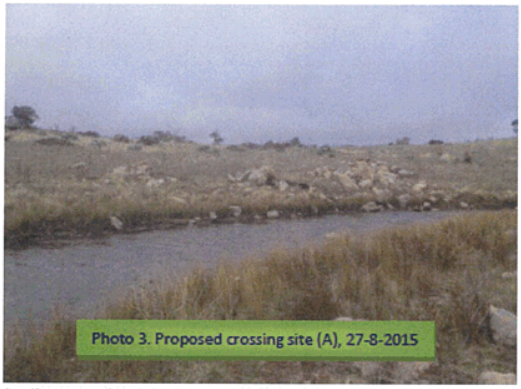


Photo 3. Proposed crossing site (A), 27-8-2015

The approximate maximum water depth at the proposed crossing site was also measured prior to; and after the recent rain.

Maximum depth during normal flow is approximately 340mm.

Maximum depth 27 August, 2015 following peak flow was approximately 890mm.

Evidence of the water reaching the floodplain just downstream from the site can be seen in photo 4. This evidence suggests that the water level was up to 600mm higher during the peak of the flood event making the estimated peak depth approximately 1.5 metres deep.

The width of the creek at the proposed crossing site was also measured.

Maximum width during normal flow is 2.2m.

Maximum width 27 August, 2015, following peak flow is 6.6m

Estimated maximum width at peak flow is 8.5m.

Using the maximum estimated parameters of 1500mm deep x 8500 wide and 4.5m/s, the estimated mass flow rate is approximately 46.5 cubic meters of water passing the site every second (without accounting for friction and turbulence). Fast flowing water of this volume can be destructive and potentially very dangerous to anyone crossing it.

The suggested concrete culvert structure can be an economical solution in smaller water courses particularly where the variation in flow is not as extreme and regular as in the proposed site.

The forces generated in the type of peak flow we have experienced this week would require significant ground works to ensure adequate support and anchoring of the new structure. Large box culverts would be required to allow for flow, to give adequate height clearance above the max water level and to resist the loads applied.

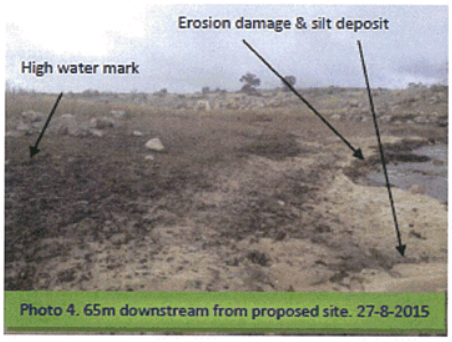


Photo 4. 65m downstream from proposed site. 27-8-2015

Undertaking significant ground works in a creek prone to flood and in a culturally sensitive area is a very risky process and highly likely to result in cost over runs.

Approximate mass of the concrete box culverts required is about 6.8 tonne each and four of them would be required to cross the main section of the creek. The footings required to support the mass & turn- over effect alone, are considerable in size and would likely involve diversion of the main creek flow to complete their construction.

A Concrete Culvert structure is not suited to this site/project for the following reasons;

- Due to large footings required in the creek bed, bad weather during construction would lead to lengthy delays and extra construction costs.
- This type of design will disrupt the major flow if the creek at approximately 2.4 metre intervals. This allows for the collection of large debris and maintenance requirements.
- Site access is also an issue for the delivery and installation of large culvert structures. Access tracks would need to accommodate heavy rigid trailers and cranes, rather than 4WD's and light trucks for a lighter weight construction.
- The cost of the culverts alone would be approximately $24,000 plus transport. The footings including the cost of diverting the creek is estimated to be at least $40,000. On top of that there is the cost of installing them and then making a durable trail to cross the floodplain.

A Steel structure is much more suited to this project for the following reasons;

- Single span across the major span of the creek is relatively cheap and means zero flow disruption other than in extreme flood events
- Lightweight construction (in comparison to concrete structures) alleviates the need for large footings, reduces the cost of access and construction.
- Availability of sectional sizes which can minimize flow disruption and resist impacts from moving debris.
- Very short 'on site' construction period compared with concrete structures.
- Raised platforms across the floodplain area involve minimal ground disturbance to install. This is a plus in a culturally sensitive area

Site Suitability.

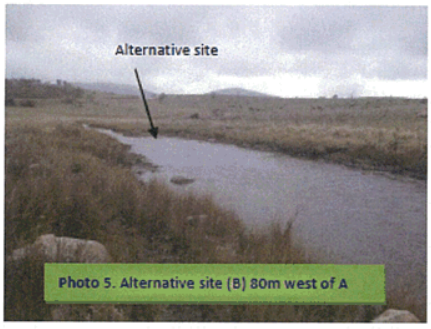


Photo 5. Alternative site (B) 80m west of A


Photo 6. Proposed site (A)

The high water mark at the top of the flood plain is approximately 3 meters above the creek bed. The bank of the immediate creek bed accounts for more than half of that rise.

Beyond that there is a floodplain of varying width (from 10 – 50 metres), which shows evidence of being frequently inundated with floodwater.
Either side of the bends in the creek (more so downstream of a bend), this floodplain is sparsely vegetated and prone to erosion (see photo 4)

Water velocity in the flood plain is greater at either side of a bend in the creek than along a straight stretch of water. To avoid frequent closures and maintenance requirements the flood plain should be considered as part of the crossing.

The currently proposed site (site A) offers the shortest path between high ground (elevation above the high water mark) and therefore makes a feasible site for the proposed crossing. The suggested single span to cross the main creek bed would be approximately 13 metres, with only a short lead in ramp to the northern side of about 2 metres. The lead in ramp to the southern side is not quite as simple.

Water on the floodplain travels quite slowly due to friction, but as it approaches a bend in the creek, the water is sucked back into the main stream and its velocity increases.

The crossing of the floodplain in high velocity areas, either side of a bend (like at site A) is less suited to a ground surface trail because of its exposure to erosion once the vegetation is removed.

The turbulence is also significantly increased at site A, both in the creek and on the floodplain, because of a high concentration of large surface boulders (see photos 3 & 6).

For these reasons, crossing of the floodplain at site A should be via an elevated platform, raised above the high water mark avoiding the issues arising from higher velocity, turbulent water. The raised platform to cross the flood plain at site A, would need to be approximately 18 metres long.

Approximately 80 metres to the west of the proposed site is a straight section of the creek, which would also make a viable site without major trail deviation (see map site B and photos 5 & 7).

The water velocity at site B was measured to be only 2.9m/s during flood, 10% slower than at the proposed site.

Photo 7. Floodplain adjacent to alternative site B

Whilst the flood plain on either side of the creek is significantly wider (approximately 25m to the south and 20m to the north), there is virtually zero erosion on either side of the creek. There are also no boulders in this area which makes construction of footings considerably easier.

Because of the decrease in velocity and turbulence, there is no erosion and therefore a ground surface trail would be much more suitable for crossing the flood plain in this area.

A simply formed trail with a surface topped with DGB 20 or similar low wear material would drain quickly after a flood event and would allow access to the bridge within a day of the peak of a flood event.

This approach could present a significant cost saving to the project. The creek bed is also slightly narrower here at approximately 10.5m, the proposed structure would have about a 12 metre span with a 2.0 lead in ramp either side.

Cost estimate

The concrete culvert structure has been shown to be structurally unsuitable for this project and therefore I will not spend time on estimating the cost to construct it.

I believe there are two viable options; to build a steel structure at either site A or site B as discussed above. An approximate cost breakdown for the supply and installation of these options is outlined below.

SITE A

Construction breakdown	Estimated Cost
Site establishment (silt control, erosion protection)	$2,500
13 metre single span bridge deck (fabricated off site)	$16,500
Bridge support structures (2 of, prefabricated off site)	$4,200
2.5m lead in ramp north side (1 of, prefabricated off site)	$2,000
18m raised platform, south side	$14,800
Footings to main supports including install	$6,500
Site structural Installation	$9,750
Site stabilization/revegetation	$1,200
Total	$57,450

SITE B

Construction breakdown	Estimated Cost
Site establishment (silt control, erosion protection)	$2,500
12 metre single span bridge deck (fabricated off site)	$14,500
Bridge support structures (2 of, prefabricated off site)	$4,200
2.5m lead in ramp each side (2 of, prefabricated off site)	$4,000
45m ground surface trail	$7,500
Footings to main supports including install (easier excavation)	$5,200
Site structural Installation	$4,650
Site stabilization/revegetation	$1,200
Total	$43,750

NOTES

- No allowances have been made for access trail repair (by Council).
- I have allowed for the ground surface trail either side of option B so that the equal comparison is made for what it will cost to fully cross the floodplain at either site.
- These are obviously estimated costs only and cannot be considered valid until a design has been completed.

As discussed earlier, I am happy to provide further consultation prior to the design phase so that attempts can be made to tailor design a structure to a budget.

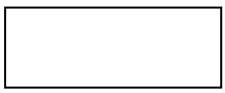
Once again, thank you for the opportunity to offer my advice. If you require any clarification I am available by phone or email.

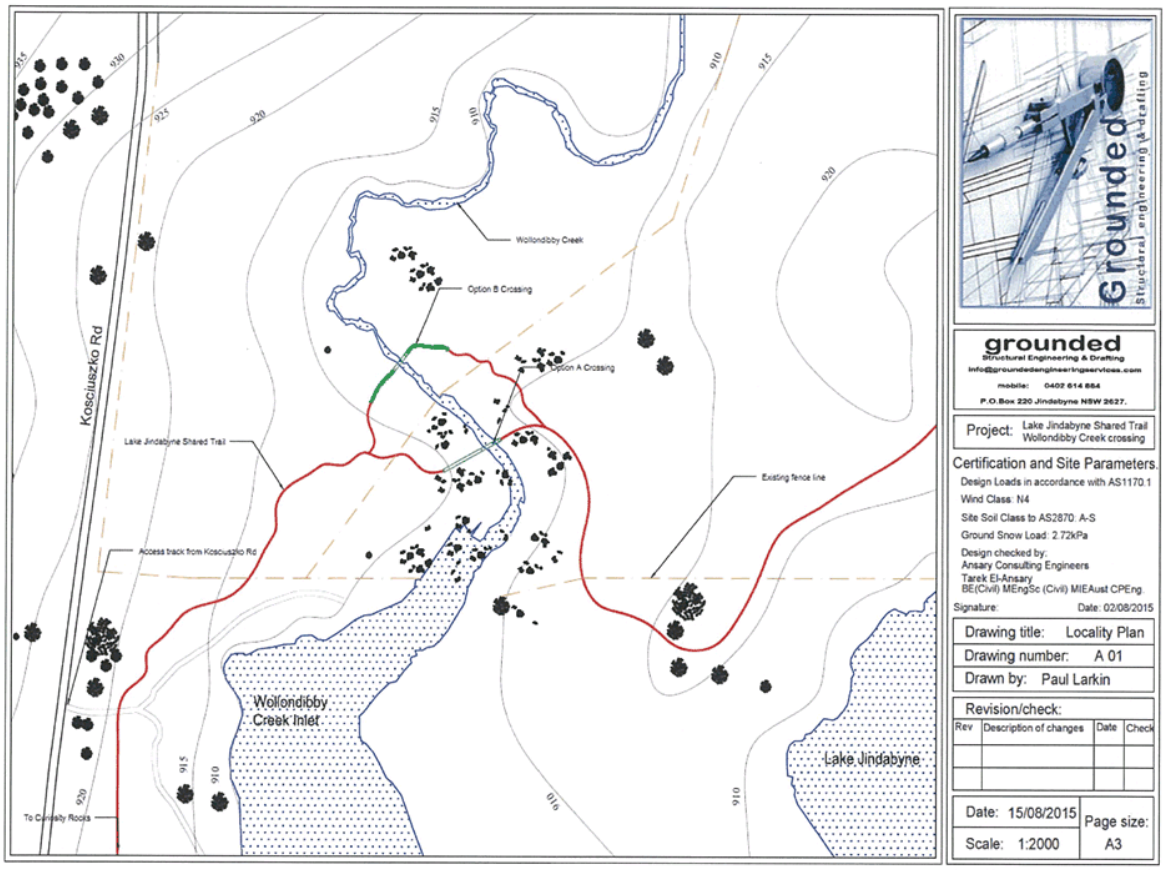
Regards,

Paul Larkin

Director

Grounded Engineering & Drafting Servicess




Kosciuszko Rd
Wollondibby Creek
Option B Crossing
Option A Crossing
Lake Jindabyne Shared Trail
Existing fence line
Access track from Kosciuszko Rd
Wollondibby Creek Inlet
Lake Jindabyne
To Curiosity Rocks
grounded
Structural engineering & drafting
grounded
Structural Engineering & Drafting
info@groundedengineeringservices.com
mobile: 0402 614 884
P.O.Box 220 Jindabyne NSW 2627.
Project: Lake Jindabyne Shared Trail Wollondibby Creek crossing
Certification and Site Parameters.
Design Loads in accordance with AS1170.1
Wind Class: N4
Site Soil Class to AS2870: A-S
Ground Snow Load: 2.72kPa
Design checked by:
Ansary Consulting Engineers
Tarek El-Ansary
BE(Civil) MEngSc (Civil) MIEAust CPEng.
Signature:
Date: 02/08/2015
Drawing title: Locality Plan
Drawing number: A 01
Drawn by: Paul Larkin
Revision/check:
Rev
Description of changes
Date
Check
Date: 15/08/2015
Page size: A3
Scale: 1:2000

Appendix F- flora and fauna assessment

Data from the BioNet Atlas of NSW Wildlife website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions.
Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°; ^^ rounded to 0.01°).

Search criteria : Public Report of all Valid Records of Threatened (listed on TSC Act 1995) ,Commonwealth listed or Protected Plants in selected area [North: -36.34 West: 148.54999999999998 East: 148.64999999999998 South: -36.44] returned a total of 18 records of 12 species.
Report generated on 28/10/2014 3:36 PM

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm. status	Records	Info
Plantae	Flora	Asteraceae	1341	*Calotis glandulosa*		Mauve Burr-daisy	V,P	V	3	
Plantae	Flora	Asteraceae	9952	*Craspedia aurantia*			P		1	
Plantae	Flora	Asteraceae	CRAP	*Craspedia spp.*		Billy Buttons	P		1	
Plantae	Flora	Orchidaceae	10289	*Chiloglottis valida*		Large Bird Orchid	P		1	
Plantae	Flora	Orchidaceae	10273	*Diuris semilunulata*			P		1	
Plantae	Flora	Orchidaceae	10280	*Prasophyllum candidum*			P		1	
Plantae	Flora	Orchidaceae	4551	*Pterostylis furcata*		Sickle Greenhood	P		1	
Plantae	Flora	Orchidaceae	11030	*Pterostylis monticola*		Mountain Greenhood	P		1	
Plantae	Flora	Orchidaceae	PTER	*Pterostylis spp.*		Greenhood	P		1	
Plantae	Flora	Proteaceae	5452	*Persoonia chamaepeuce*			P		2	
Plantae	Flora	Rhamnaceae	5563	*Discaria nitida*		Leafy Anchor Plant	V,P		4	
Plantae	Flora	Scrophulariaceae	5961	^^*Euphrasia scabra*		Rough Eyebright	E1,P,3		1	

Data from the BioNet Atlas of NSW Wildlife website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions.
Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°; ^^ rounded to 0.01°).
Copyright the State of NSW through the Office of Environment and Heritage.
Search criteria : Public Report of all Valid Records of Entities in selected area [North: -36.34 West: 148.54999999999998 East: 148.64999999999998 South: -36.44] returned a total of 6,551 records of 568 species.
Report generated on 28/10/2014 3:19 PM

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm. status	Records	Info
Animalia	Amphibia	Myobatrachidae	3134	*Crinia signifera*		Common Eastern Froglet	P		8	
Animalia	Amphibia	Myobatrachidae	T118	*Crinia sp.*			P		1	
Animalia	Amphibia	Myobatrachidae	3058	*Limnodynastes dumerilii*		Eastern Banjo Frog	P		7	
Animalia	Amphibia	Myobatrachidae	3063	*Limnodynastes tasmaniensis*		Spotted Grass Frog	P		8	
Animalia	Amphibia	Myobatrachidae	3120	*Pseudophryne dendyi*		Southern Toadlet	P		3	
Animalia	Amphibia	Hylidae	3166	*Litoria aurea*		Green and Golden Bell Frog	E1,P	V	1	
Animalia	Amphibia	Hylidae	3168	*Litoria booroolongensis*		Booroolong Frog	E1,P	E	1	
Animalia	Amphibia	Hylidae	3215	*Litoria verreauxii*		Verreaux's Frog	P		10	
Animalia	Amphibia	Hylidae	3907	*Litoria verreauxii alpina*		Alpine Tree Frog	E1,P	V	1	
Animalia	Reptilia	Scincidae	2682	*Acritoscincus duperreyi*		Eastern Three-lined Skink	P		1	
Animalia	Reptilia	Scincidae	2464	*Acritoscincus platynota*		Red-throated Skink	P		1	
Animalia	Reptilia	Scincidae	2386	*Ctenotus taeniolatus*		Copper-tailed Skink	P		1	
Animalia	Reptilia	Scincidae	2408	*Egernia cunninghami*		Cunningham's Skink	P		6	
Animalia	Reptilia	Scincidae	2561	*Eulamprus tympanum*		Southern Water-skink	P		1	
Animalia	Reptilia	Scincidae	2450	*Lampropholis delicata*		Dark-flecked Garden Sunskink	P		2	
Animalia	Reptilia	Scincidae	2451	*Lampropholis guichenoti*		Pale-flecked Garden Sunskink	P		3	
Animalia	Reptilia	Scincidae	2430	*Liopholis whitii*		White's Skink	P		3	
Animalia	Reptilia	Scincidae	2444	*Nannoscincus maccoyi*		Highlands Forest-skink	P		3	
Animalia	Reptilia	Scincidae	2458	*Niveoscincus coventryi*		Southern Forest Cool-skink	P		2	
Animalia	Reptilia	Scincidae	2459	*Pseudemoia entrecasteauxii*		Tussock Cool-skink	P		2	
Animalia	Reptilia	Scincidae	2541	*Pseudemoia spenceri*		Trunk-climbing Cool-skink	P		6	
Animalia	Reptilia	Scincidae	2578	*Tiliqua nigrolutea*		Blotched Blue-tongue	P		8	
Animalia	Reptilia	Scincidae	2580	*Tiliqua scincoides*		Eastern Blue-tongue	P		1	
Animalia	Reptilia	Agamidae	2194	*Amphibolurus muricatus*		Jacky Lizard	P		3	
Animalia	Reptilia	Agamidae	2182	*Rankinia diemensis*		Mountain Dragon	P		1	
Animalia	Reptilia	Elapidae	2642	*Austrelaps superbus*		Lowland Copperhead	P		4	
Animalia	Reptilia	Elapidae	2665	*Drysdalia coronoides*		White-lipped Snake	P		1	
Animalia	Reptilia	Elapidae	2681	*Notechis scutatus*		Tiger Snake	P		1	
Animalia	Reptilia	Elapidae	2726	*Parasuta dwyeri*		Dwyer's Snake	P		1	

Appendix G- Asbestos Assessment -Coffey Environments

coffey

Accredited for compliance with ISO/IEC 17020. NATA accredited inspection body 2220.

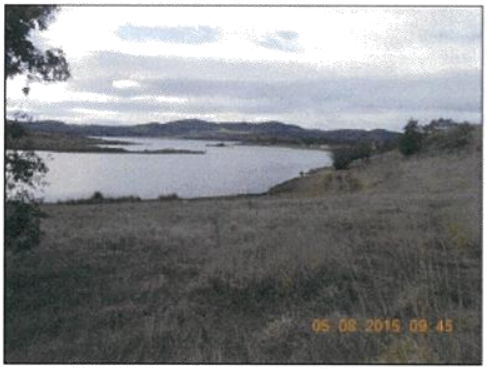
REPORT

ASBESTOS CONTAMINATION ASSESSMENT - SHARED TRAIL LAKE JINDABYNE JINDABYNE NSW 2627

Prepared for: Snowy River Shire Council

Project No.: ENAURHOD06353AB

Date: 14 August 2015



Fieldwork by	Written/Submitted by:	Reviewed/Approved by:
Bibiana Ortiz	Bibiana Ortiz	Aaron Holmes
WHS Consultant	WHS Consultant	WHS Team Leader

Coffey Environments Australia Pty Ltd ABN 65 140 765 902
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Accredited for compliance with ISO/IEC 17020.
NATA accredited inspection body 2220.

31 August 2015

Project No.: ENAURHOD06353AB

Alannah Dickeson
Recreation & Environmental Coordinator
Snowy River Shire Council
Razorback Office
1 Gippsland St Jindbyne NSW 2627

Attention: Alannah Dickeson

Subject: **Assessment of Asbestos Contamination – Lake Jindabyne Shared Trail, Jindabyne NSW**

Coffey Environments Australia Pty Ltd is submitting its report following a site visit and visual Asbestos contamination assessment of the Lake Jindabyne Shared Trail, hereafter referred to as 'the trail'.

Please note that all activities and services provided by Coffey Environments Australia Pty Ltd are subject to the Methodologies and Statement of Limitations contained within this report.

Please do not hesitate to contact the undersigned should you wish to discuss any aspect of the report.

For and on behalf of
Coffey Environments Australia Pty Ltd

Bibiana Ortiz
WHS Consultant

Record of Distribution

Accredited for compliance with ISO/IEC 17020.
NATA accredited inspection body 2220.

No. of copies	Report File Name	Report Status	Date	Prepared for:	Initials
1	ENAURHOD06353AB .doc	Draft	14 August 2015	Coffey Environments Australia Pty Ltd	BO
1	ENAURHOD06353AB .pdf	FINAL	31 August 2015	Snowy River Shire Council	AD

EXECUTIVE SUMMARY

Coffey Environments Australia Pty Ltd (Coffey) was commissioned by Snowy River Shire Council to conduct an investigation into the presence and likely risks of exposure to asbestos containing materials in the trail. Coffey inspected the trail for suspected asbestos containing materials or debris and an Asbestos Materials Register was produced, in accordance with the requirements of NSW Code of Practice - *How to Manage and Control Asbestos in the Workplace (2011).*

On the 5th August 2015, Coffey conducted the site visit, to visually inspect the aforementioned Lake Jindabyne Shared Trail as Coffey understands that asbestos may have been had been found previously on the track.

During the site visual inspection conducted by Coffey the following site conditions were observed:

- A desktop review of the supplied aerial photographs could not identify any possible sources of asbestos contamination such as dwellings or temporary buildings in the vicinity of the proposed trail
- No Asbestos Containing Materials (ACMs) or associated debris were visually identified along the track or in the grassed verge 2 metres each side of the trail which was approximately 4 kilometres in length.

1 INTRODUCTION

Coffey was commissioned by Snowy River Shire Council to conduct a desktop assessment and visual inspection of the Lake Jindabyne Shared Trail for possible asbestos contamination. The inspection was conducted on 5th August 2015.

1.1 Background and Site Description

Snowy River Shire Council (SRSC) are currently working on a Statement of Environmental Effects (SEE) as part of the Development Application for the shared trail extension. The proposed trail corridor is located between Curiosity Rocks and Hatchery Bay, approximately 5km North West of Jindabyne. The Lake Jindabyne Shared Trail currently extends from Jindabyne Township to Tyrolean Village. Asbestos has been previously discovered on the popular shared trail in the past and hence SRSC wanted a basic asbestos contamination assessment to be conducted on the proposed trail corridor expension before commitiing to the development.

The inspection area is comprised of a bush track area approximately 4 kilometres in length which extends between the Gaden Trout Hatchery and Curiosity Rocks. Coffey notes that no buildings are located along the trail.

Coffey discovered numerous pieces of broken ceramic pipes along the trail. These fragments are not suspected for asbestos and as such, do not present an exposure risk.

2 SCOPE OF WORK

The scope of work involved the following:

- Desktop assessment for any dwellings or temporary buildings that may have existed near the area of the proposed trail corridor.
- A field assessment of the areas that may show to be potential dumping sites of asbestos.
- An asbestos assessment report which includes the details of the desktop assessment along with any findings from a field assessment. The report will also need to include final recommendation on the likelihood of finding asbestos within the trail corridor.

2.1 Survey Team

The site inspection and assessment for the trail was undertaken by Matthew Eldridge and Bibiana Ortiz (Workplace Health & Safety Consultants) of Coffey.

2.2 Information Sources

Alannah Dickeson, Recreational and Environmental Coordinator of the Snowy River Shire Council provided assistance with collation and interpretation of information.

3 METHODOLOGY

Asbestos material surveys and inspections are undertaken considering a risk management approach, in accordance with best practice, relevant statutory regulations and relevant Codes of Practice. A risk

assessment was conducted based on a number of factors associated with asbestos materials identified during the survey and prioritised through Risk and Action Classifications.

The assessment involved a desktop assessment for any dwellings or temporary buildings that may have existed near the area of the proposed trail corridor and site assessment for potential asbestos contamination in the trail.

Onsite investigations cannot guarantee to locate the presence of asbestos in restricted locations such as in areas of high and dense vegetation in some areas. Whilst every effort was made by the consultants to inspect all areas, further access and detailed investigation may be required with the assistance of contractors should disturbance of the soils be required, which may have asbestos fragments at depth.

The asbestos material visual inspection exercise was restricted to areas that were reasonably accessible during the survey, with respect to the following:

- without contravention of relevant statutory requirements or codes of practice; and
- without placing the surveyor at undue risk;

Where the Surveyor encountered access restrictions during the survey, these situations are documented and reported.

4 LIMITATIONS

This report and the associated services performed by Coffey are in accordance with the scope of services set out in the contract between Coffey and the Client. The scope of services was defined by the requests of the Client and by the availability of access to the site.

Coffey derived the data in this report primarily from visual inspections, examination of available records, interviews with individuals with information about the site, and if requested, limited sample collection and analysis made on the dates indicated. In preparing this report, Coffey has relied upon, and presumed accurate, certain information provided by government authorities, the Client and others identified herein. The report has been prepared on the basis that while Coffey believes all the information in it is deemed reliable and accurate at the time of preparing the report, it does not warrant its accuracy or completeness and to the full extent allowed by law excludes liability in contract, tort or otherwise, for any loss or damage sustained by the Client arising from or in connection with the supply or use of the whole or any part of the information in the report through any cause whatsoever.

Limitations also apply to analytical methods used in the identification of substances (or parameters). These limitations may be due to non-homogenous material being sampled (i.e. the sample to be analysed may not be representative), low concentrations, the presence of 'masking' agents and the restrictions of the approved analytical technique. As such, non-statistically significant sampling results can only be interpreted as 'indicative' and not used for quantitative assessments.

The data, findings, observations, conclusions and recommendations in the report are based solely upon the state of the site at the time of the investigation. The passage of time, manifestation of latent conditions or impacts of future events (e.g. changes in legislation, scientific knowledge, land uses, etc.) may render the report inaccurate. In those circumstances, Coffey shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of the report.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the provisions of the agreement between Coffey and the Client. Coffey accepts no liability or responsibility whatsoever and expressly disclaims any responsibility for or in respect of any use of or reliance upon this report by any third party or parties.

It is the responsibility of the Client to accept, if the Client so chooses, any recommendations contained within and implement them in an appropriate, suitable and timely manner.

No assessment can be regarded as absolute. Future inspections of the trail may reveal materials concealed during the assessment, which were not accessible at the time of the survey.

4.1 Desktop Assessment

Snowy River Shire Council (SRSC) supplied Coffey with available aerial photograhs showing the proposed new trail area prior to the Jindabyne valley. The aerial photographs were examined closely along the proposed trail path and its vicinity for the presence of any dwellings or temporary buildings. The desktop assessment could not identify any possible sources of asbestos contamination in the vicinity of the proposed trail.

In addition to the supplied aerial photopgraphs Coffey also reviewed the historical imagery for the proposed trail on Google Earth abd could not find any temporary dwellings in the vicinity of the trail. Historical imagery was available for the trail area from 2003 to 2013.

4.2 Asbestos Visual Inspection

The asbestos visual assessment was restricted to surface inspection only and as such cannot ascertain any asbestos contamination in the sub surface.

No inspection can be guaranteed to locate all asbestos within an area. The assessment cannot be regarded as absolute, without extensive invasion of the area. Pruning/ spraying of the vegetation on the land/ clearing of the land may expose situations, which were concealed or otherwise impractical to access during this assessment.

The Client must not rely on an inspection or report as indicating that a site is "asbestos free". All that the report can be relied upon to show is that no asbestos was visually identified on the trail's ground during the course of the inspection. The findings of the report must be considered together with the specific scope and limitations of the type of inspection undertaken.

The recommendations, conclusions or findings contained in this report shall not abrogate a person of their responsibility to work in accordance with Statutory Requirements, Codes of Practice, Guidelines, Safety Data Sheets, Work Instructions or reasonable work practices.

5 FINDINGS

5.1 Asbestos Containing Materials

No suspected asbestos containing materials were visually identified along the trail ground surface or in the verges two metres either side of the trail.

6 RECOMMENDATIONS

Should any suspected asbestos containing materials become evident during future disturbance/ refurbishment works, Coffey should be contacted immediately so that an WHS consultant can confirm the status of the suspect material/s.

Coffey is able to assist with all aspects of Risk Management for removal of Asbestos Materials resulting from the findings of any future unexpected finds.

7 BIBLIOGRAPHY

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National Institute for Occupational Safety and Health [NIOSH (U.S.A.)], Manual of Analytical Methods, Elements by ICP, Method 7300, 4th Edition, Issue 2 - 1994

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National Occupational Health and Safety Commission (NOHSC), National Standard and National Code of Practice for Synthetic Mineral Fibre - May 1990

Occupational Health and Safety (Maritime Industry) Act 1993

The National Model regulations for the Control of Workplace Hazardous Substances; [NOHSC: 1005 (1994)]

Seafarers Safety, Rehabilitation and Compensation Authority's "Guidance on the Prohibition on the use of Asbestos in Australian Maritime Industry Workplaces (Version 3 March 2004).

Department of Industrial Resources (DoIR) Guidance for Upstream Petroleum on the National Ban on Asbestos of 31 December 2003.

National Occupational Health and Safety Commission (NOHSC), Approved Criteria for Classifying Hazardous Substances, 1008 - 2002

NSW Code of Practice - How to Manage and Control Asbestos in the Workplace (2011)

NSW Code of Practice - How to Safely Remove Asbestos (2011)

National Occupational Health and Safety Commission (NOHSC), National Standard and National Code of Practice for Synthetic Mineral Fibre - May 1990

Occupational Health and Safety (Maritime Industry) Act 1993

The National Model regulations for the Control of Workplace Hazardous Substances [NOHSC: 1005 (1994)]

Seafarers Safety, Rehabilitation and Compensation Authority's "Guidance on the Prohibition on the use of Asbestos in Australian Maritime Industry Workplaces (Version 3 March 2004).

Work Health and Safety Act 2011 and Regulations (Commonwealth, NSW, ACT, NT & QLD)

Occupational Health and Safety Act 2004 and Regulations 2003, 2007 (VIC),

Work Health and Safety Act 2012 and Regulations 2012 (SA)

Workplace Health and Safety Act 1995 and Regulations 1998 (TAS)

Occupational Health and Safety Act 1984 and Regulations 1996 (WA)

The National Occupational Health & Safety Commission -NOHSC 1003-2005: Australian Exposure Standards for Atmospheric Contaminants in the Workplace.

Amendment to the Customs (Prohibited Imports) Regulations 1956 - Regulation 4C – Importation of Asbestos. Australian Customs Notice No. 2009/30 – August 2009.

Photograph 1: Undergrowth on the trail

Photograph 2: Ceramic pipes found

Photograph 3: Ceramic pipes found.

Photograph 4: Vegetated part of the trail

Hatchery Bay Jindabyne
Proposed foreshore path
snowyhydro

LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc. to ensure they are familiar with the latest applicable state legislation and guidance.

STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Management and Labelling/Signage Requirements	Other Requirements
COMMONWEALTH ***NEW SOUTH WALES*** ***QUEENSLAND*** ***NORTHERN TERRITORY*** ***TASMANIA*** ***SOUTH AUSTRALIA*** *Work Health and Safety Act 2011 (Cth, NSW, QLD, TAS); Work Health and Safety Act 2012 (SA)* *Work Health and Safety Regulations 2011 (Cth, NSW, QLD, TAS); Work Health and Safety Regulation 2012 (SA)* *Work Health and Safety (National Uniform Legislation) Act and Regulations 2011 (NT)* *Supported by:* *Code of Practice - How to Manage and Control Asbestos in the Workplace (2011)* *Code of Practice - How to Safely Remove Asbestos (2011)*	A person conducting a business or undertaking (PCBU) must, for work place buildings/ structures that are constructed prior to December 31, 2003; • survey to identify and locate any Asbestos Containing Materials (ACM; and, • compile and keep at the workplace a site specific Asbestos Register . If ACM is identified at the work place, an Asbestos Management Plan (AMP) is to be compiled for the management of the identified ACM. The Asbestos Register and the Asbestos Management Plan must be made available at the work place for workers, people intending to conduct business at the work place and to Health and Safety representatives.	Re-inspections of identified ACM is determined on a case-by-case basis depending on the risk situation and should be informed by and conducted in accordance with the site specific Asbestos Management Plan.	The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey. The Asbestos Register must be maintained and also updated if: • the AMP is under review, • further ACM is identified and/or, • ACM is removed, disturbed or encapsulated. The site specific AMP must include management actions and justifications, incident and emergency response plans and record details of works carried out that involves ACM at the work place. The AMP must be maintained and updated: • when the Asbestos Register is under review, • if asbestos is removed, disturbed or encapsulated, • if the AMP is no longer adequate for managing the ACM, • if a Health and Safety Officer requests a review and/or at least • once every 5 years.	Generally, health monitoring is not required excepting for workers involved in asbestos removal works. Training is required for persons involved in asbestos removal work or carrying out asbestos related works. All identified ACM in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item. Before refurbishment or demolition: • ensure Asbestos Register is current • undertake necessary inspections A licenced asbestos removalist is required unless: • ACM < 10m2 and non-friable and then by a competent person	WHS Regulation 419 requires A person conducting a business or undertaking (PCBU) must not carry out, or direct or allow a worker to carry out, work involving asbestos; excepting as is applicable: • managing risk; • sampling, identification and analysis; • maintenance • removal/disposal • other exemptions per s.419 (3)

Coffey
ENAURHOD06353AB
31 August 2015

Page 17 of 17

NSW GOVERNMENT | Office of Environment & Heritage

DOC16/429082
DA 3192/2016

Sophie Ballinger
Manager Development Assessment
Snowy Monaro Regional Council
Shop 2, Razorback Plaza, Gippsland Street
Jindabyne NSW 2627
Via email: sophie.ballinger@snowymonaro.nsw.gov.au

Dear Ms Ballinger,

Integrated Development Application DA 3192/2016 – Extension of shared trail from Curiosity Rocks to Hatchery Bay, Jindabyne

GENERAL TERMS OF APPROVAL

I am responding to your integrated development application for the above development received by the Office of Environment and Heritage (OEH) on 22 July 2016.

Aboriginal cultural heritage

We have reviewed the information provided and determined that we are able to issue an Aboriginal Heritage Impact Permit (AHIP), under section 90 of the *National Parks & Wildlife Act 1974,* subject to a number of conditions. The general terms of approval for this proposal are provided at **Attachment A**. These conditions must be incorporated into any development consent granted for this proposal.

These general terms relate to the development and associated footprint as proposed in the documents provided to OEH. These terms may not apply if either the applicant or council alter the development and associated footprint. If changes occur prior to consent, OEH must be consulted to determine whether our general terms need to be modified to ensure that all Aboriginal Cultural Heritage values have been considered.

Since the submission of the AHIP application and integrated development application, parts of the proposed shared trail are now located within the recently gazetted Curiosity Rocks Aboriginal Place. The attached general terms of approval reflect this recent gazettal.

PO Box 733 Queanbeyan NSW 2620
11 Farrer Place Queanbeyan NSW
Tel: (02) 6229 7188 Fax: (02) 6229 7001
ABN 30 841 387 271
www.environment.nsw.gov.au

Biodiversity assessment

OEH is satisfied that the proposal will have minimal impact on the biodiversity values of the site, based on the information provided in the Statement of Environmental Effects that states that the area is heavily disturbed by grazing and existing 4WD tracks, as well as the lack of records of any threatened species on the site.

If you have any questions, or wish to discuss this matter further please contact Christine Gant-Thompson on (02) 6229 7097.

Yours sincerely

29/8/16

Tobi Edmonds
A/Senior Team Leader, Planning – South East
Regional Operations Group
OFFICE OF ENVIRONMENT AND HERITAGE

Attachment A – General Terms of Approval for DA 3192/2016.

ATTACHMENT A - GENERAL TERMS OF APPROVAL FOR DA 3192/2016

Administrative conditions

Information supplied to OEH

Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- the integrated development application DA 3192/2016
- the Statement of Environmental Effects (SoEE) dated June 2016 relating to the proposed extension of Lake Jindabyne shared trail – Curiosity Rocks to Hatchery Bay;
- the Aboriginal Cultural Heritage Assessment Report titled: *Lower Thredbo Valley Shred Path: Bullocks Flat to Curiosity Rocks, Snowy Mountains NSW*. Dated August 2015 and received by OEH on 2 February 2015.

General Terms of Approval for Aboriginal cultural heritage

- No harm can occur to any Aboriginal objects within the Lake Jindabyne shared trail – Curiosity Rocks to Hatchery Bay development area unless an Aboriginal Heritage Impact Permit (AHIP) has been issued by OEH.
- No harm can occur to the Curiosity Rocks Aboriginal Place unless an Aboriginal Heritage Impact Permit (AHIP) has been issued by OEH and the boundary of the Aboriginal Place must be included on all maps prepared as part of the proposed development.
- The applicant must comply with the conditions of any AHIP that is issued by OEH.
- The applicant must ensure that all persons involved in actions or works covered by an AHIP (whether employees, contractors, sub-contractors, agents and invitees) are made aware of, and comply with, the conditions of any AHIP.
- Requirement 26 "Stone artefact deposition and storage" in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (24 September 2010, available online at: http://www.environment.nsw.gov.au/licences/archinvestigations.htm) must be complied with.
- No human remains in, on or under the land may be harmed. If any human remains are discovered and/or harmed in, on or under the land, the proponent or AHIP holder must:
  a) not further harm these remains
  b) immediately cease all work at the particular location
  c) secure the area so as to avoid further harm to the remains
  d) notify the local police and OEH's Environmental Line on 131 555 as soon as practicable and provide any available details of the remains and their location, and
  e) not recommence any work at the particular location unless authorised in writing by OEH.

Our Ref: STH16/00129/01
Contact: Amanda Priestley (02) 4221 2771
Your Ref: DA3192/2016

Transport Roads & Maritime Services

9 August 2016

Sophie Ballinger
Snowy Monaro Regional Council
BY EMAIL: records@snowyriver.nsw.gov.au / records@snowymonaro.nsw.gov.au

DEVELOPMENT APPLICATION 3192/2016 – LOT 3 DP 236901, KOSCIUSZKO ROAD, JINDABYNE, EXTENSION OF SHARED TRAIL

Dear Sir/Madam

Roads and Maritime Services (RMS) refers to your letter dated 18th July 2016 regarding the subject development application.

RMS does not object to the development application in principle.

RMS notes that the proposal will not impact on the classified road network.

If you have any questions please contact Amanda Priestley on (02) 4221 2771.

Yours faithfully

Kendrick Westlake
A/Manager Land Use
Southern Region

Roads & Maritime Services

Level 4, Southern Regional Office, 90 Crown Street, Wollongong NSW 2500 | PO Box 477 Wollongong East NSW 2520
T 02 4221 2460 | **F** 02 4221 2777 | **www.rmservices.nsw.gov.au** |

P.O. BOX 440,
JINDABYNE,
NSW. 2627

REF; Extension of SHARED trail.(DA3192/2016)

1st August 2016.

Dear Joe Vescio,

there are many items that have not been addressed or need comments! Firstly, why was this DA not published on council's website? With council offices only available during their work hours they are difficult to access. When asked, council staff did offer to copy select pages but would not offer an entire proposal copy.

The proposal starts ". . from the end of the existing trail at Curiosity Rocks". From memory, when the last section was constructed from near the boat ramp, council was to plan and formalise/install a path from the caravan park to this new section, around the trailer car park. When is this to be completed? & will the construction of the Marine Rescue facility have an impact on this? Also in councils Lake foreshore plan, this trailer park was to be formalised also. Currently, and especially in peak use times , this area can become quite hazardous. With the current high lake levels there is not much of a path through this area.

The proposal starts off saying the trail will be "max width 1.8m" then "1.8m vegetation clearing where required and later "trail 1.2m with tread 700mm". Given that this will be a relatively "fast" trail & will attract heavy 2 way use & most handlebars are 800mm appx. wide, shouldn't this trail be made FIT FOR USE as a SHARED pathway – to be used in both directions & for all abilities of riders and walkers?

The maps shown in the proposal are so small as to be almost unreadable and seem to show differences in each. The map on page 39 appears to show that the track will be at or below FSL in several places. We have seen that, at FSL, lake level can be affected easily by winds on the lake. With the bridge over the Wollondilly being sited at FSL then, perhaps, a side track to the road bridge and back the other side of this creek, could be installed for these high level times? I did ask for a better map, or access to one , but none was available. Couldn't glean any grid references either, for a site visit.

On P14, this trail is referred to as a "bike path", if the funding is being granted for a SHARED PATH then consistency is required in the approach. Giving over scarce recreational space to a single use group is not very visionary thinking, and against councils stated aims of "ensuring public spaces are accessible by all". Our area is very short of access to open space & this is likely to worsen with current population growth and the growth of all sectors of tourism.

The proposal states that the track will be constructed similar to that developed ". . Cobbon to Tyrolean". (i.e. Mill Creek). I sincerely hope not! I attended the information session for the Mill Creek track, where we were shown a short section of prepared track, and were told that this would be the standard to be followed for the remainder of it. The tread was to be 1500mm appx., to follow contours as much as possible, and not have sharp corners etc. So I was assured this would be fit for it's purpose. Unfortunately it wasn't how it turned out. There are several blind corners, several rocky sections, approaches to bridges have "zig-zag" corners in deep "tubes", & several sections are "grooved" and are a pedal tripping hazard. Even the raised mesh sections have their handrails extended out from the "walkway" and are canted out at an angle making them awkward as a handrail. Most of the track can only be described as single track and not the shared pathway that was promised. Very difficult to ride and just as awkward for walking. As MTB riders seem to only ride in one track (centre of!) the wear is exacerbated & therefore requires more maintenance. This new extension should be built for the enjoyment of all – imagine a young family heading to Gaden for an outing, ice cream at caravan park on the way, starting on wide concrete and then 1500-1800W reasonable hard surface to Curiosity & then similar all the way to Hatchery Bay.

The social media comments would entice many more to the area. The MTB riders have plenty of areas for themselves!

The proposal says that the trail will be constructed according to IMBA principles. One of the first of these is that it must be fit for the purpose. A shared trail must be constructed for the availability and use of ALL. Where is council's "Vision For The Future"? Shared trail does not mean single track for the exclusive use of MTB riders! Most of these are not interested in the environmental aspect of the trail, only see it as a sport with its "thrills & spills", to the detriment of the rest of the general public.

This proposal also raises other issues that are not addressed within it. Going back many years , the Lions and many volunteers had the Vision to construct the existing lake path near the township. Almost entirely built by volunteers. It was built to the minimum width required at the time to guarantee funding. They also installed the lighting making it a very usable asset for many purposes and events. To my memory of the time, council was a reluctant partner to this, but I hope they realise its benefit now. Unfortunately council seems a little slow in carrying out maintenance on this asset. When the high water levels and winds hit, it took public concerns to push council to do anything. Possibly it could have been saved from collapsing if they had taken action earlier. Even now there is still damage to be fixed. At the end of the "Horizon's Peninsula" the waves are starting to eat further into the unprotected surface &, in the same area, a section of path appears to be undermined and slowly collapsing. Vehicles driving from the Claypits to the sailing club via the path are eroding the bank putting the path at risk in several places. Also, with the path underwater near the sailing club, maybe council could install a small walkway to the side of this flooded area so that the public can continue to enjoy the walk or ride.

As previously mentioned, there is a lack of access from the caravan park across the trailer park and a little further towards Curiosity Rocks the path is underwater. Presumably this is the start point for the extension? Unclear in the proposal. At the rocks area, 4WD drivers are slowly eroding it in many places. They are also driving over the bank to access this peninsula, using the track in places. This raises the question, who is responsible for access roads to the Claypits, sailing club, boat ramp, Curiosity Rocks etc? They all need help! Will this be included in the rehabilitation mentioned in the proposal? Will deterrent measures be installed to ensure 4wd's don't access the new track? Most nights there are campers there. In a previous lake foreshore plan, a carpark was to be installed at the rocks area (Lone pine corner) and a "scenic lookout" a bit further round , overlooking the rocks/peninsula/aboriginal heritage area. That may deter some 4wd drivers! Any chance of this happening?

More! The proposal states that there is to be inspections carried out and a logbook kept. When was this last done for any of the current tracks? Are they viewable by the public? What actions have been taken as a result of these inspections? Not a lot of noticeable maintenance appears to have been carried out since the path was constructed from the boat ramp onwards. Luckily most users here are walkers (and anglers), so the path hasn't worn as it would if many bike riders used it. Interestingly it is claimed that our new "recreation & environmental coordinator" is a keen MTB rider, so she wouldn't be able to carry out these inspections for fear of bias? Also, whilst I must here praise the works carried out by the "Stewardship group" (Matt, Paul et al), they, also, are MTB enthusiasts and are focused on Bike trails and not SHARED TRAILS, as can be seen at Mill Creek. Also there are websites promoting Mountain Bike trails in our area (supposedly supported by our council?) that shows on their maps that the only shared trail is the concrete path at the township. If visiting MTB riders access this site/map, they will have an expectation that they have right of way in all those areas and , as experience has shown, will not give way to walkers nor will they signal when fast approaching from behind a walker or slow rider. On these same maps a section shows "jumps area" (at Mill Creek) with landing from the jump onto the shared trail, I found this out by shock! How many of our councillors, present or past, have actually walked from Tyrolean to Curiosity? This should be a prerequisite before any decision is made! -I would be happy to accompany any or all of them!

Even more! Has any thought been given to the effect that the Thredbo Valley Trail will have on the lake foreshore trail if council accepts ownership of the mooted bridge at Gaden? Most using the TVT only go Downhill! So they would have an effect on a narrow trail with head-on risks on a narrow track. Has council considered the impact of this increased traffic going through the crowded (with children playing) caravan park? Council originally issued promotional material for the lake path claiming "it will provide mobility to a wider range of members- those who do not own a car will be able to walk (or ride) safely between villages'. This same material also promotes the health benefits of the same, especially walking. Makes the Vision of the Lions even greater. This material also makes comparison to Victorian SHARED tracks, some of these (in Vic) have been constructed with a view to the future, and I have ridden some of these, sharing with all abilities of walkers, riders and even horse riders. They are very popular, especially as they go town to village etc. so there are cafe's etc. en route. Users were very respectful of each other, signalling when passing etc. They had a vision!

In conclusion, I ask – where is the council's vision for the future? Please do not allow single interest groups to influence decisions that must be made on behalf of all residents and visitors. Besides, a single pass by a 1500-1800 wide bobcat would be more cost - effective than single track cut by hand. Maybe put this out for tender to ALL landscapers, earthmovers etc. and not just bike trail makers. Council has well qualified personnel capable of doing the planning and site layout, & management of the project I'm sure.

Yours Sincerely, & in hope of a visionary outcome!

[redacted]

IF NOT CLAIMED WITHIN SEVEN DAYS
PLEASE RETURN TO PO BOX 714 COOMA NSW 2630

SNOWY MONARO REGIONAL COUNCIL

Development Assessment
Shop 3 Razorback Plaza,
Gippsland Street Jindabyne
PO Box 143 Berridale NSW 2628
www.snowyriver.nsw.gov.au
For Appointments or Information Please Call 02 6451 1550
Business Hours – Monday to Friday 8.30am to 4.30pm

DA3192/2016	Date Rec: 24/6/16	Receipt No:	PN: 104181

Development Application

Made under section 78A of the Environmental Planning and Assessment Act 1979

This form is required to apply for consent to carry out development. The **DA Guide** is available to assist in completing this application. Please place a cross in the relevant boxes and fill in the relevant sections if not applicable leave blank. This application can be lodged by mail or in-person at Council's Jindabyne Office. This application cannot be lodged by fax.

1. Pre lodgement Meeting (if applicable)

Officer Name: Date:

2. Applicants Details

All correspondence relating to this application will be sent to the address below and any contact with Council Officers is limited to those listed as applicant.

Name : Joseph Vescio / Contact:- Alannah Dickeson

Company/Organisation: Snowy Monaro Regional Council

Address: Shop 3 Razorback Building 1 Gippsland st Jindabyne

Suburb: Jindabyne Postcode: 2627

Phone: 6459 1559 Mobile: Fax:

Email : alannah.dickeson@SnowyRiver.nsw.gov.au

3. Land to be Developed

Unit/Street No: Street or Property Name:

Suburb or locality: JINDABYNE

Lot & DP/SP or Section: Lot 3 DP 236901 + lot 161 DP 756686

The correct Lot and DP or SP, can be found on rate notices from Council or on the title documents for the land.

4. Description of Proposal

☒ New construction	☐ Subdivision of land or a building	☐ Change of Use
☐ Alterations and/or additions	☐ Temporary use	☐ Approval to Use
☐ Demolition	☐ Tree Removal	☐ Holiday Letting

Description Details ie - build a house, dual occupancy, change of use to holiday dwelling, boundary adjustment, subdivide land (if subdividing then indicate the number of lots and purpose of each lot).

Shared trail Construction from Curiosity Rocks to Hatchery Bay.

5. Staged Development

Is this application for staged development consent?

☐ Yes If **YES** please attach information which describes the stages of your development and/or a copy of any consent already approved for part of your development.

☒ No

6. Cost of Building and Application Fees

Construction costs are to be based on **$1,500/m²** of building for residential buildings, and **$750/m²** for ancillary works (e.g. balcony, verandas, and carport). For commercial retail and industrial development current commercial construction rates apply.

Please supply a breakdown if the development includes more than one building. (e.g. dwelling house & shed)

Gross Floor Area	(m²)	x	Price	=	Cost of Building
Building		x	$1500	=	$
Ancillary works (ie balcony, verandas, and carport)		x	$750	=	$
Total Cost of Building				=	$ 100 000

Cost Centre 3010

Once the cost of building has been determined please contact Council's Customer Service Officer in Jindabyne on (02) 6451 1550 for an application fee estimate or refer to Council's Schedule of Fees and Charges.

Please note that incorrect calculation of fees can incur additional payment and result in delays in processing the application.

Integrated development or concurrence from State Agencies, requires a fee of $250 made payable to each authority and a once only processing fee of $110 made payable to Council.

7. Environmental Effects of the Development

Is the proposal Designated Development?

☐ Yes - Please attach an Environmental Impact Statement (EIS)
☒ No - Please attach a Statement of Environmental Effects (SEE) **ALL** applications must be accompanied by a statement of environmental effects

Is the proposal likely to have a significant effect on threatened species, populations, ecological communities or their habitats?

☐ Yes - Please attach a Species Impact Statement (SIS)
☒ No

Will the proposal involve the change of use of a building other than a dwelling house?

☐ Yes - Please attach the current and proposed Category 1 Fire Safety Provisions
☒ No

8. Concurrences from State Agencies

Does the development require the concurrence of State Agencies?

☒ Yes - Please list any agencies whose concurrence is required:
An AHIP is Required from OEH. Assessment + Consultation is Complete. A permit will be issued after DA is approved.
Please attach:
- A full copy of this application for each agency/authority

☐ No

9. Approvals from State Agencies – Integrated Development

Is the application for integrated development?

☐ Yes - Please complete **DA Supplement 1 – Integrated Development** and submit with your application.
Please attach a full copy of this application for each agency/authority

☒ No

10. Other approvals from Council

Do you want Council to approve any other activity at the same time as this application? The following are a number of approvals most commonly applied for with a development application. This list is not exhaustive and there are a number of other approvals, which may be relevant to your development. A list can be found in the Development Application Help Guide or in Councils Ancillary Activity Application form.

- ☐ Construction Certificate application form attached
- ☐ Driveway/Crossover/Road Works (Section 138) application form attached
- ☐ Sewerage, Stormwater Drainage, Water Supply, connect to Council Sewer application form attached
- ☐ Install an On-Site Sewage Management Facility application form attached
- ☐ Operate an On-Site Sewage Management Facility application form attached
- ☐ Water Connection application form attached
- ☐ Install a manufactured home, Ancillary Activity Application form attached
- ☐ Other _____, Ancillary Activity Application form attached

11. BASIX Certificate

A BASIX Certificate is required for a new house or for residential alterations and additions worth more than $50,000.

The Building Sustainability Index (BASIX) is a web-based planning tool designed to assess the potential performance of residential buildings against a range of sustainability indices.
A BASIX Certificate identifies the sustainability features required to be incorporated in the building design. These features may include sustainable design elements such as recycled water, rainwater tanks, AAA-rated showerheads and taps, native landscaping, heat pump or solar water heaters, gas space heaters, roof eaves/awnings and wall/ceiling insulation.

You need a BASIX Certificate in Snowy River Shire when BASIX applies to the type of development for which you require approval. Commencement dates and details of types of development are at www.basix.nsw.gov.au.
The applicant is required to submit the BASIX Certificate with the Development Application or Complying Development Certificate application. The plans and specifications must also identify the BASIX commitments which will be checked by a professional building certifier during construction. Where submitted plans or specifications are inconsistent with the relevant BASIX Certificate, Council should require applicants to submit consistent applications before progressing the assessment process, either by amending plans / specifications or by submitting a new BASIX Certificate with commitments that match the rest of the application.

Applicants can generate the BASIX Certificate only on the NSW Department of Planning' BASIX website: www.basix.nsw.gov.au. For more information, phone the BASIX Help Line on 1300 650 908.

☐ Yes - BASIX Certificate Required ☒ No - BASIX Certificate Not Required.
Please note that BASIX commitments MUST be shown on DA plans.

12. Supporting information

- Please see Councils **DA Application Help Guide and Lodgment Checklists** for submission requirements
- A Statement of Environmental Effects (SEE) is required to be completed for **ALL** applications.
- A list of all accompanying documents (ie plans, statement of environmental effects etc) on a separate covering letter or plan cover sheet is required for **ALL** applications.
- You can support your application with additional material such as photographs, aerial photographs, slides, models and plans to illustrate your proposal.
- For required plans please see Council DA Application Help Guide and Lodgement Checklists **All plans submitted are to be folded to A4, NOT rolled.**

13. Crown Development

If the application is Crown Development in accordance with the provisions of the *Environmental Planning and Assessment Act 1979* **please identify the Crown Agency -** _____

14. Owners Consent

- Must be signed by all land owners.
- If the owner is a company or owner's association eg: Body Corporate must be signed by a director or secretary UNDER COMMON SEAL.

As the owner(s) of the land to which this application relates, I/we consent to the making of the application and give consent for Council, its officers or agents to enter the land without first having given notice for the purpose of processing this application to carry out inspections, take photographs, videos, surveys and measurements.

Name: GLEN DEWING Date: 15/6/16

Signature:

Name: Date:

Signature:

15. Privacy Policy

The information you provide in this application will enable us, and any relevant state agency, to assess your application under the *Environmental Planning and Assessment Act 1979* and other applicable state legislation. If the information is not provided, your application may not be accepted.
If your application is for designated development or advertised development, it will be available for public inspection and copying during a submission period. Written notification of the application will also be provided to the neighbourhood. You have the right to access and have corrected information provided in your application. Please ensure that the information is accurate and advise us of any changes.

16. Disclosure of Political Donations or Gifts

Under section 147(4) of the Environmental Planning and Assessment Act 1979 ('the Act') a person who makes a development application to a council is required to disclose the following *reportable political donations* and *gifts* :

(a) all reportable political donations made to any local councillor of that council. Reportable political donations include those of or above $1,000.

(b) all gifts made to any local councillor or employee of that council.

Have you or any person with a financial interest in this application made any of the above political donations or gifts in the last 2 years?

☐ Yes • Please complete the **Snowy River Shire Political Donations Disclosure Statement** and submit with your application.

☒ No

17. Applicants Declaration

I/We the undersigned hereby apply for approval of the development/activity proposal described in the plans, specifications and documents accompanying the application.

I/We undertake to carry out that development/activity in accordance with any approval granted by the Council and to conform to the provisions of the relevant Act(s), Regulations, Codes and planning instruments.

I also understand that:

- [x] if incomplete, the application may be delayed or rejected
- [ ] more information may be requested

Name: JOSEPH VESCO Date: 2/6/16

Signature:

Lower Thredbo Valley Shared Path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment.

By
Sue Feary and Gerard Niemoeller
August 2015

Final report to NPWS and Snowy River Shire Council

Frontispiece: Lower Thredbo valley Photo: S. Feary.

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Definitions & Acronyms used in report

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIP	Aboriginal Heritage Impact Permit
asl	above sea level
BP	Before Present
EP&A Act	NSW *Environmental Planning and Assessment Act 1979*
KNP	Kosciuszko National Park
KNPPoM	Kosciuszko National Park Plan of Management
LGA	Local Government Area
LTVT	Lower Thredbo Valley Track
NP	National Park
NP&W Act	NSW *National Parks and Wildlife Act 1974*
NPWS	National Parks and Wildlife Service
OEH	NSW Office of Environment & Heritage
PoM	Plan of Management
RAP	Registered Aboriginal Party
REF	Review of Environmental Factors
SRSC	Snowy River Shire Council
Study area	the area identified by the AHIMS search
Subject area	the area to be directly affected by the proposal. That is, the footprint of the proposal.

Executive Summary

Southern Ranges Region of National Parks and Wildlife Service (NPWS) wishes to extend an existing shared path (pedestrian and bicycle), which currently ends at Bullocks Flat in the lower Thredbo valley in Kosciuszko National Park. The extension would continue down the valley for an additional 20 kms on the steep northern slope to meet up with the existing Pallaibo walking track and thence to the Thredbo picnic area next to Kosciuszko Road. An upgrade of the existing walking track would be required.

Snowy River Shire is also planning to extend an existing shared path on the western shore of Lake Jindabyne, from Curiosity Rocks to Hatchery Bay, a distance of around 5 kms, on land owned by Snowy Hydro and managed by Council. The path requires a bridge crossing over Wollondibby Creek and it is also intended to rationalise a series of informal vehicle tracks and close those causing damage to the lake's foreshores.

There are plans to link the two shared paths to create a continuous shared path from Thredbo Village to Hatchery Bay. This would require a short diversion from the Pallaibo track to meet with a new bridge across the Thredbo River, and a new section of path from the bridge through the Gaden Hatchery to Gaden Road. The route would utilise the existing Gaden and Hatchery Roads across to Hatchery Bay to link with the path around the lake. This report contains an assessment of all shared path options as provided to the consultants at the time of field survey.

The Thredbo valley has been the subject of intensive archaeological research since the 1980s and many sites have been recorded, from extensive artefact scatters at Crackenback resort and the Ski tube, to small scatters and isolated finds along the valley's lower slopes from Bullocks Flat to Thredbo Village. Most artefacts have been made from high quality quartz which has probably been locally quarried. Sites tend to occur on flat elevated land above the flood zone on both sides of the river.

The Jindabyne valley has also been the subject of intensive archaeological investigation, from surveys in 1976 when dam levels were historically low to recent surveys for residential subdivisions at East Jindabyne. Most recorded sites are artefact scatters, characterised by many artefacts including ground implements, made from river pebbles. The large numbers of sites reflect the availability of rich resources at the confluence of the Snowy and Thredbo in pre-contact times. The base of the mountains has been interpreted as a major meeting place for intertribal gatherings associated with movement to the mountain peaks for bogong moth feasts during summer months.

Several recorded sites occur on or close to the proposed route options, the most significant being a granite rock feature called Curiosity Rocks, now surrounded by the waters of Lake Jindabyne, and an adjacent peninsula with a large stone artefact scatter. The rock formation has high cultural significance for Ngarigo people, especially women, and the area was recently nominated for gazettal as an Aboriginal Place under the National Parks and Wildlife Act 1974.

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Aboriginal consultation for the assessment was conducted in accordance with OEH requirements for Aboriginal consultation. A total of seventeen individuals and groups responded to the initial invitations for consultation, the majority identifying with the Murring clan from the south coast. Members of the Southern Aboriginal Working Group (SAWG) established under the Kosciuszko National Park Plan of Management were also invited to register an interest in being consulted and five responded. On site meetings and inspections were held with Ramsey Freeman representing the Snowy Mountain Indigenous Elders Group and Ngarigo knowledge holder Iris White. Representatives from Bega LALC and SAWG participated in fieldwork, carried out by consultants Sue Feary and Gerard Niemoeller in May 2015, together with NPWS project manager Chris Darlington and Alannah Dickeson from SRSC.

Systematic field survey was conducted for all route options, with the section between Bullocks Flat and Paliabo track presenting major logistical challenges in terms of access and also in regard to very thick understory vegetation making it very difficult to see the ground. Pallaibo track provided reasonable visibility over more gentle terrain as did the route around Lake Jindabyne.

Field survey resulted in the recording of 26 locales, all stone artefacts, with the majority being quartz. Little was found in the lower Thredbo valley due to the low archaeological potential of the predominantly steep terrain. However, 10 isolated finds /small artefact scatters were recorded on gentle spurs or flat areas above the river, where bare ground was exposed. Numerous artefacts were recorded along the Pallaibo track and one artefact was recorded in the vicinity of the proposed bridge in the Gaden Hatchery grounds. Four new sites were recorded on the western shores of Lake Jindabyne, including one site of at least 30 artefacts. Distribution patterns of new and existing sites around Lake Jindabyne almost certainly reflect the location of major waterways prior to flooding for the dam.

All sites in the lower Thredbo valley section were interpreted as isolated finds or small scatters with low potential to extend below the ground or beyond what was visible during the survey. Artefacts on the Pallaibo track represent a diffuse dispersed scatter accumulated over generations of seasonal use. As a complex the sites in the lower Thredbo valley have some archaeological significance as they are new recordings in previously unsurveyed areas and offer a comparison to assemblages recorded further upstream. However, the numbers of artefacts are too small and their context too disturbed to make any meaningful contribution to the current body of knowledge, hence their overall archaeological significance is assessed as being low.

Likewise the individual sites around Lake Jindabyne have mostly low archaeological significance, but as a complex they are consistent with existing paradigms of Aboriginal occupation and use of the Jindabyne valley. A small section of the proposed path goes through the proposed Curiosity Rocks Aboriginal Place (AP) which has high cultural and social significance to Ngarigo and coastal people.

The likely extent of each site in the lower Thredbo valley section has been mapped to show its relationship with the proposed alignment of the shared path. During fieldwork, it was possible to realign the route to avoid the likely extent of all recorded sites. Since areas of high archaeological potential *viz*

elevated river terraces and flat spurs are being avoided by the path, the potential for other sites to be present is low. The bridge over the river at Gaden Hatchery can also be relocated to avoid the known site.

The report recommends that an Aboriginal Heritage Impact Permit (AHIP) is not required for the proposed track between Bullocks Flat and the Pallaibo track where it turns north at Sawpit Creek. It further recommends that upgrading Pallaibo track will require an AHIP to harm recorded objects. An area-based AHIP application is recommended for the section of Pallaibo to be upgraded, to encompass any additional objects not visible at the time of survey, with artefacts to be either moved out of harm's way or collected and repatriated on country.

Two of the recorded sites at Lake Jindabyne will not be impacted as they are not on the route. One site WOLLONDIBBY1 will require an AHIP for partial impact as it is on the path alignment, on an existing informal vehicle track. The remainder of this site may also be impacted by a proposed Aboriginal sites conservation works programme for the western shores of Lake Jindabyne to be conducted by OEH and Snowy River Shire Council. An AHIP will also be required for site Hatchery Bay 2 which will be bisected by the track if any works are intended for Gaden Road. If the expanded Curiosity Rocks Aboriginal Place is gazetted in the near future, an AHIP will be required to construct sections of path within the AP.

Table of Contents

Figures

Tables

1. Introduction

This report describes the Aboriginal cultural heritage assessment undertaken in respect of proposals to extend existing shared paths (pedestrian and bicycle) in the lower Thredbo River valley in Kosciuszko National Park (KNP) (hereafter called the LTVT), and on the western shores of Lake Jindabyne. The two proposals may be linked to form a continuous path by way of a new bridge over the Thredbo River and an additional section of path at the Gaden Trout Hatchery, and inclusion of Hatchery Road. The LTVT is approximately 20 kms long and the Snowy River Shire section is approximately 5 kms.

The proponents of the development are Southern Ranges Region of National Parks and Wildlife Service of the NSW Office of Environment and Heritage for the section within Kosciuszko National park (LTVT) and the Snowy River Shire Council for the remainder of the path.

A Review of Environmental Factors (REF) has been prepared for all options of the proposed path within Kosciuszko NP to meet the requirements of Part 5 of the *Environmental Protection and Assessment Act 1979 and* Section 228 of the EPA Regulation 2000 (EnviroKey, 2015). As the proposed activity is occurring in Kosciuszko National Park, REF preparation was also guided by the requirements of the Kosciuszko National Park Plan of Management (DEC NSW, 2006).

Snowy River Shire Council has prepared a Statement of Environmental Effects (SEE) for the proposed shared path between Hatchery Bay and Curiosity Rocks, a distance of 5.2 kms (Snowy River Shire Council, 2015). The shared path extension is consistent with the Lake Jindabyne Foreshore Management Plan but will also require OEH approval for construction within the Curiosity Rocks Aboriginal Place once gazetted.

The Aboriginal heritage assessment and report preparation have been conducted in accordance with relevant OEH guidelines and codes (DECCW, 2010; DECCW, 2010;OEH, 2011) and relevant sections of the Kosciuszko National Park Plan of Management (DEC NSW, 2006, p. 99)

1.1. Description of proposal

The LTVT commences at Bullocks Hut in the lower Thredbo Valley, where it crosses to the northern side of the Thredbo River to run roughly adjacent to the Thredbo River for approximately 20 kilometres, to end at the Thredbo River Picnic Area at Kosciuszko Road. The Snowy River Shire Council (SRSC) is currently working with community stakeholders and government to seek approval and fund a bridge crossing and shared path that will link the LTVT to Jindabyne at Gaden Trout Hatchery (EnviroKey, 2015). The SRSC are intending to extend their existing shared path around Lake Jindabyne from the Curiosity Rocks car park in the south to Hatchery Bay picnic area in the north and thence along Gaden Road to link with the LTVT at the Gaden Trout Hatchery. The section of Hatchery Road between Kosciuszko Road and the Hatchery Bay Picnic area is unsealed and the lower section of the road below the public toilet may be closed to prevent

vehicle access to the lake edge. No works are proposed for the sealed section of Gaden Road between Kosciuszko Road and the hatchery.

Due to the uncertainty as to whether the SRSC will proceed, this heritage assessment investigated two contingencies at the lower end of the proposed track:

- Option 1 – Construction of a bridge over the Thredbo River at the Gaden Trout Hatchery, linking to a new section of track extending from the Pallaibo Track and another new section from the river to Hatchery Road. An external party, likely Snowy River Shire Council, would own the bridge.
- Option 2 – Track to continue past the Gaden Trout Hatchery, join the Pallaibo Track at the lowest point where it crosses Sawpit Creek and continue along the Pallaibo Track to the Thredbo River Picnic Area. This option will require that section of the Pallaibo Track to be re-zoned from a walking track to a multi-use track. Some track modifications and upgrades would be required.

The final development may encompass both options 1 and 2 above.

The proposal involves construction of a shared path to international mountain bike standards along the mid and lower slopes of the northern side of the Thredbo River in Kosciuszko National Park and on slopes and ridges on the western side of Lake Jindabyne. It will involve vegetation clearing to a maximum width of 2 metres, benching where required, and some excavation. A new footbridge will be built over the Wollondibby River, and also the Thredbo River if Option 1 goes ahead.

1.2. Objectives of assessment

The objective of the archaeological assessment is to establish whether or not construction of the proposed shared paths and associated infrastructure will result in impacts to Aboriginal heritage and to determine the need, or otherwise, for an Aboriginal Heritage Impact Permit (AHIP) and any associated conditions where appropriate. This will involve: field investigation; description, analysis and significance assessment of all objects found; synthesis and analysis of relevant archaeological data and historical and anthropological information, and preparing a report that meets relevant OEH standard and guidelines, to support an AHIP application should one be necessary.

1.3. Personnel

The assessment and report preparation have been conducted by consultant archaeologists Sue Feary and Gerard Niemoeller with assistance from Chris Darlington from NPWS, Alannah Dickeson from Snowy River Shire Council and Jackie Taylor from OEH. Chris Darlington provided essential logistical support for fieldwork and Ronnie Thomas from Bega Local Aboriginal Land Council and Derek Davison representing the Southern Aboriginal Working Group (SAWG)/Ngarigo, participated in field survey over five days.

OEH staff Miles Boak, Sarah Robertson and Christine Gant-Thompson from the OEH Queanbeyan office and Ramsey Freeman from Snowy Elders Aboriginal Corporation, attended on Tuesday 20th May. Jackie Taylor and Roy Barker from OEH , Alannah Dickeson and Rochelle Crowe from Snowy River Shire Council and Iris White, Ngarigo elder SAWG member attended on Friday 23rd May, for sections of the shared path to be constructed by Snowy River Shire Council.

1.4. Aboriginal consultation

The assessment includes an Aboriginal consultation process conducted in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010a). The study area is within the Bega and Eden LALC boundaries. Fourteen Aboriginal parties registered an interest in being consulted and were sent the draft methodology for the field survey and offered the opportunity to share cultural information and to provide recommendations for management of any Aboriginal objects to be impacted by the proposed development. A detailed written response was provided by the Bega LALC. The draft report has been circulated to registered parties for comment.

2. Aboriginal consultation

The consultation process for this project has been in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010a). The consultation process was conducted by Chris Darlington, NPWS and Alannah Dickeson, Snowy River Shire Council, with assistance from Sue Feary. Steps taken in the consultation process were as follows:-

2.1. Notification

A list of Aboriginal parties to be consulted in regard to proposed activities was compiled from the following sources:-

- Responses to an advertisement seeking expressions of interest for being consulted in regard to the proposed extension of the shared path from Bullocks Flat to Curiosity Rocks which was placed in the Summit Sun, Cooma-Monaro Express and Bega Post on 14 and 16 April respectively (see Appendix 1 for newspaper advertisement).

- The membership list for the Southern Aboriginal Working Group (SAWG). This group was established under the KNP Plan of Management and comprises knowledge-holders with cultural connections to KNP country (see Table 1 for list). On 2nd April 2015, a letter was sent to all SAWG members by post or email asking if they wanted to be consulted in regard to the development proposal (see Appendix 1).

- A list of registered Aboriginal groups with a potential interest in being consulted regarding the proposed works was sought from the NSW Office of Environment and Heritage's Queanbeyan office on 27 March 2015. Table 2 is the list provided by OEH (contact details removed). The area falls within the boundaries of the Bega and Eden LALCs, who are both registered with OEH for Snowy River Shire. Nineteen parties were on the list, of which 10 live on the south coast and are affiliated with the Murrin clan whose boundaries were described as extending *'from the Hawkesbury River to the Snowy River'.*

- On 2nd April 2015, a letter was sent to all these registered groups by post or email asking if they wanted to be consulted in regard to the development proposal (see Appendix 1).

Table 1: Southern Aboriginal Working group members

Title	FirstName	LastName	Organisation
Ms	Sharon	Anderson	
Mr	Evan	Anderson	
Aunty	Deanne	Davison	Ngarigo Elder
Mr	Stanley	Dixon	
Ms	Colleen	Dixon	
Mr	David	Dixon	
Miss	Robben	Dixon	
Miss	Michelle	Dixon	
Mrs	Sally	Lavallee	
Miss	Erica	Luff	
Mr	Rod	Mason	
Mr	Paul	McLeod	
Aunty	Rachel	Mullett	Ngarigo Elder
Ms	Ellen	Mundy	
Mrs	Doris	Paton	
Mr	Tim	Paton	
Aunty	Rae	Solomon-Stewart	Ngarigo Elder
Mr	Matthew	Stewart-Fitzpatrick	
Miss	Tamika	Townsend	
Mrs	Iris	White	

Table 2: List of registered Aboriginal parties held by OEH for Snowy River Shire

Organisation/Individual Name
Bega Local Aboriginal Land Council
Eden Local Aboriginal land Council
Mr Arnold Williams CEO Ngunnawal Elders Corporation
Bega Traditional Aboriginal Elders Council Inc (BTAEC). John Dixon
Ramsay Freeman Snowy Mountains Indigenous Elders Group
Matilda House (on behalf of Williams, Freeman and Simpson-Wedge families)
Colleen Dixon
Yukkumbruk. Contact: Serena Williams
Alice Williams
Nundagurri Aboriginal Corporation. Contact: Aaron Broad - Chief Cultural Heritage Officer (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
Walbunja Aboriginal Corporation: Senior Technical Services Officer - Hika Te Kowhai
Goobah Development Pty Ltd. Contact: Basil Smith Chief Cultural Heritage Officer (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
Gunyuu Contact: Darlene Hoskins-McKenzie CEO (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
Wullung: Contact Person Lee-Roy Boota - Chairperson (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
Badu: Contact person Karia Lea Bond - Chairperson (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
Yerramurra: Contact Person - Nicholas Wade Glover - Chairperson (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Jerringong: Contact Person - Jodie Stewart - Chairperson (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
Murrumbul: CEO - Levi McKenzie (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
Wingikara: Contact Person - David Bell (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)
MUNYUNGA: Contact Person - Peter Foster (Murrin Clan: This group's states that their boundaries extend from the Hawkesbury River to the Snowy River)

3. All the organisations listed on page 10, Section 4.1.2, of the OEH consultation requirements (DECCW 2010a) were contacted by email or post on 14 April 2015 with the exception of Snowy River Shire Council, as they are one of the proponents, and National Native Title Tribunal (NNTT)(see Appendix 1 for letter). The NNTT website was accessed to determine whether any native claims were registered over the subject area or had been determined in favour of native title claimants.

2.2. Outcome of notification process

- Table 3 lists groups/individuals who registered an interest in being consulted. Registration was by telephone calls, emails and written correspondence, in response to the newspaper advertisement and/or the letter to OEH registered Aboriginal groups and agencies and members of the SAWG.
- NTSCorp advised they were unable to pass on confidential information regarding Aboriginal people registered with them, but offered to pass the request on to relevant groups. No responses were received (Appendix 2).
- The Aboriginal Land Rights Registrar and LLS responses are at Appendix 2.
- A search of the NNTT website revealed no registered native title claims over the subject area.

Table 3: Responses from SAWG memebers and RAPs registered weith OEH

Stakeholder	Date of request to be consulted	Mode of communication
1. Bega Local Aboriginal Land Council	2/4/15	Email
2. Eden Local Aboriginal Land Council	10/4/15	Email
3. Ramsay Freeman – Snowy Mountains Indigenous Elders Group	8/4/15	Telephone
4. Nundagurri Aboriginal Corporation	2/4/15	Email
5. Walbunja Aboriginal Corporation	2/4/15	Email
6. Goobah Development Pty Ltd	16/4/15	Email
7. Gunyuu – Murrin Clan	10/4/15	Email
8. Wullung – Murrin Clan	2/4/15	Email
9. Badu – Murrin Clan	2/4/15	Email
10. Murrumbul – Murrin Clan	10/4/15	Email

11. Wingikara – Murrin Clan	11/4/15	Email
12. Munyunga – Murrin Clan	11/4/15	Email
13. Paul McLeod – Southern Aboriginal Working Group (SAWG)	2/4/15	Email
14. Iris White - SAWG	8/4/15	Telephone
15. Tamika Townsend - SAWG	8/4/15	Email
16. Doris Paton - SAWG	14/4/15	Telephone message
17. Rod Mason - SAWG	13/4/15	Email

2.3. Stages 2 and 3: Presentation of information about project and gathering information about cultural significance

- Due to the large number of individuals seeking to be consulted, many who live on the coast, more than 4 hours drive from the subject area, and the relatively small-scale of the proposed development, it was not feasible to hold a project meeting. Detailed information was distributed to all registered parties on 20th April 2015 by post or email as per Sections 4.2 and 4.3 of OEH's Aboriginal consultation requirements ;
    - presenting more information on the proposed track extension and its potential impacts on Aboriginal heritage
    - presenting a draft methodology for conducting the Aboriginal heritage assessment, including field survey
    - seeking comment on potential management recommendations
    - a list of queries regarding the cultural significance of the area , to assist NPWS and Snowy River Shire in planning and design of the proposed track See Appendix 3 for information sent to Registered parties.
- A detailed response was received from the CEO, Bega LALC (see Appendix 4).
- Iris White and Ramsay Freeman had telephone conversations with Alannah, Sue and Chris regarding consultation.
- No responses were received from remaining registered parties.
- NPWS contacted Eden LALC, as the western end of the shared path is within their boundaries. The CEO of Eden LALC advised that Bega LALC heritage officer Ronnie Thomas was authorised to represent the interests of the Eden LALC in regard to the shared path proposal.
- NPWS and SRSC also engaged a number of registered party members to participate in part or all of the five days of fieldwork , including Ronnie Thomas (Bega LALC), Derek Davison (Ngarigo); Iris White (Ngarigo/SAWG) and Ramsey Freeman (Snowy Mountain Indigenous Elders Group).
- Iris White briefed the field team in regard to the cultural significance of the Curiosity Rocks area.

2.4. Stage 4: Review of draft ACHAR

A copy of the draft ACHAR has been sent to registered parties for comment and feedback within a 28 day period. A written response was received from Bega LALC (Appendix 8). Bega LALC endorsed the report and its recommendations and advised that their preference was for artefacts to be moved out of harm's way rather than be collected.

Chris Darlington contacted Iris White by telephone, who advised that she had not had a chance to read the report, but 'trusted' NPWS and SRSC to appropriately manage Aboriginal heritage within their respective jurisdictions.

No other responses had been received as at 6 August 2015.

3. Description of the area

3.1. Location

The subject area is in the South East Highlands region of southern NSW, on the southern and eastern fall of the Snowy Mountains from the Main Range at 2228 metres asl to 900 metres asl in the steep gorge of the lower Thredbo valley and the broad open Jindabyne valley, the latter now inundated. The nearest town is Jindabyne a few kms to the east, with Cooma approximately 70 kms to the northeast (Figure 1).

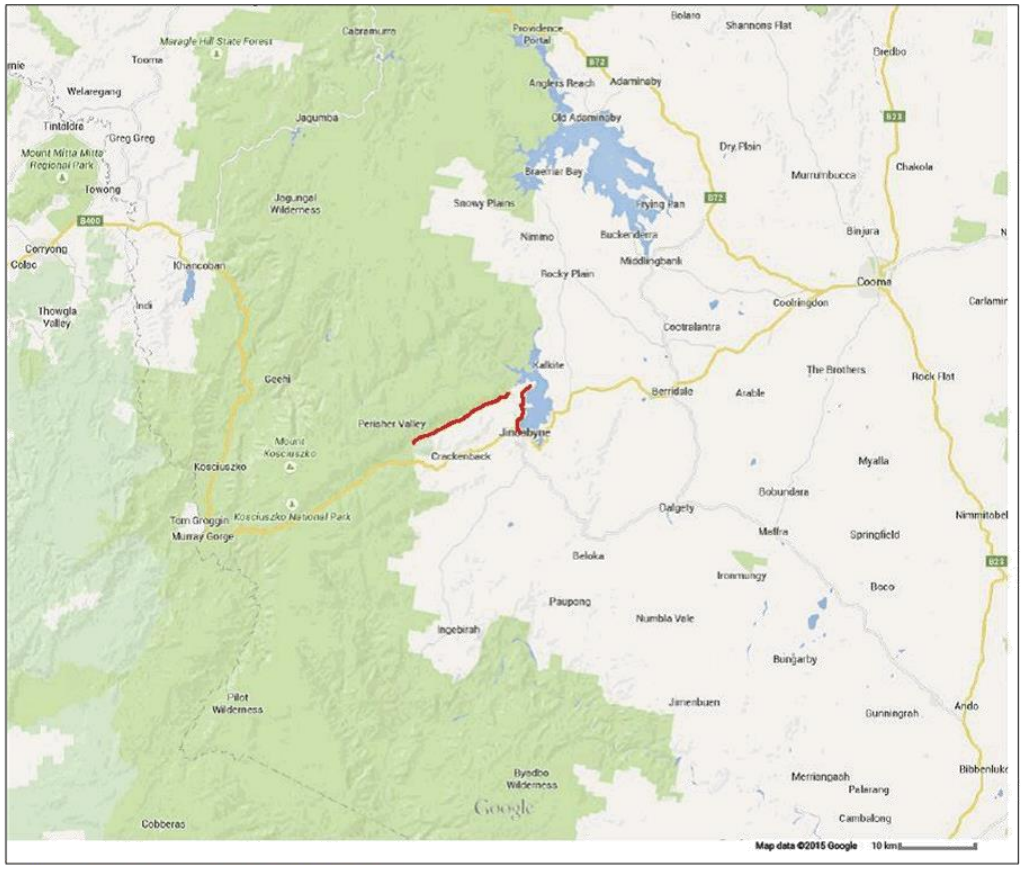

Figure 1: Locality map. Subject areas shown in red

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

The subject area for the shared path in KNP is a 20 kilometre long corridor of 50 metre width on the northern slopes of the lower reaches of the Thredbo valley between Bullocks Flat [55 -629210/5966732] and the Thredbo River Picnic area in KNP [55-6292105966637] (Figure 2) .

The subject area for the shared path at lake Jindabyne is a 5 km long corridor of 50 metre width between Hatchery Bay [55-644176/5971897] and Curiosity Rocks [55-643530/5969914], with a bridge crossing over Wollondibby Creek (Figure 3.)

If Option 1 proceeds, the corridor will deviate from the Paliabo track near Sawpit Creek, cross the Thredbo River over a new bridge at the Trout Hatchery and follow Gaden Road and Hatchery Bay Road to the western side of Lake Jindabyne at Hatchery Bay where it turns south to follow the lake shore to Curiosity Rocks (Figure 3).

The proposed shared path is within County Wallace, Parishes Mitchell, Guthega and Crackenback, in the Snowy River Shire. It is located on the Perisher Valley, Jindabyne and Kalkite Mountain 1:25K topographic maps.

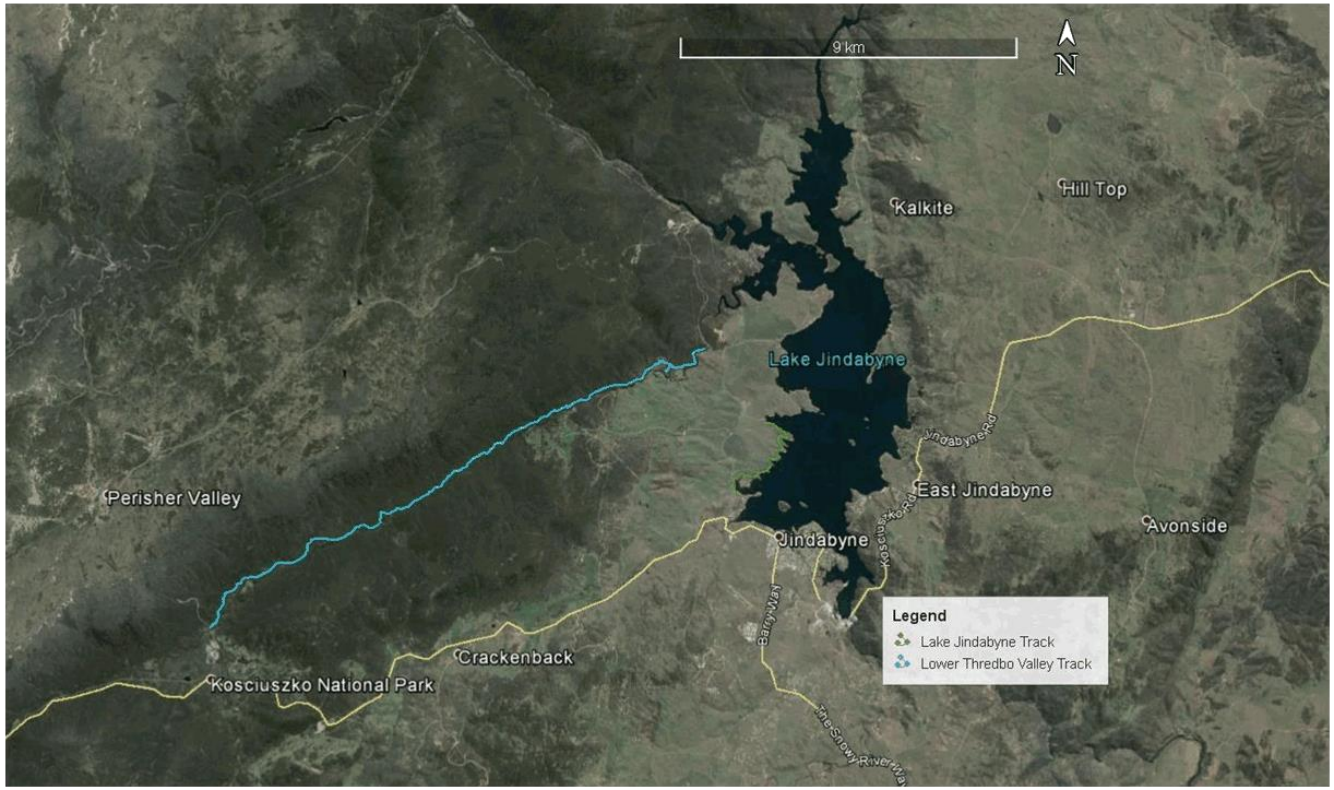

Figure 2: Aerial photo showing location of two proposed shared path extensions

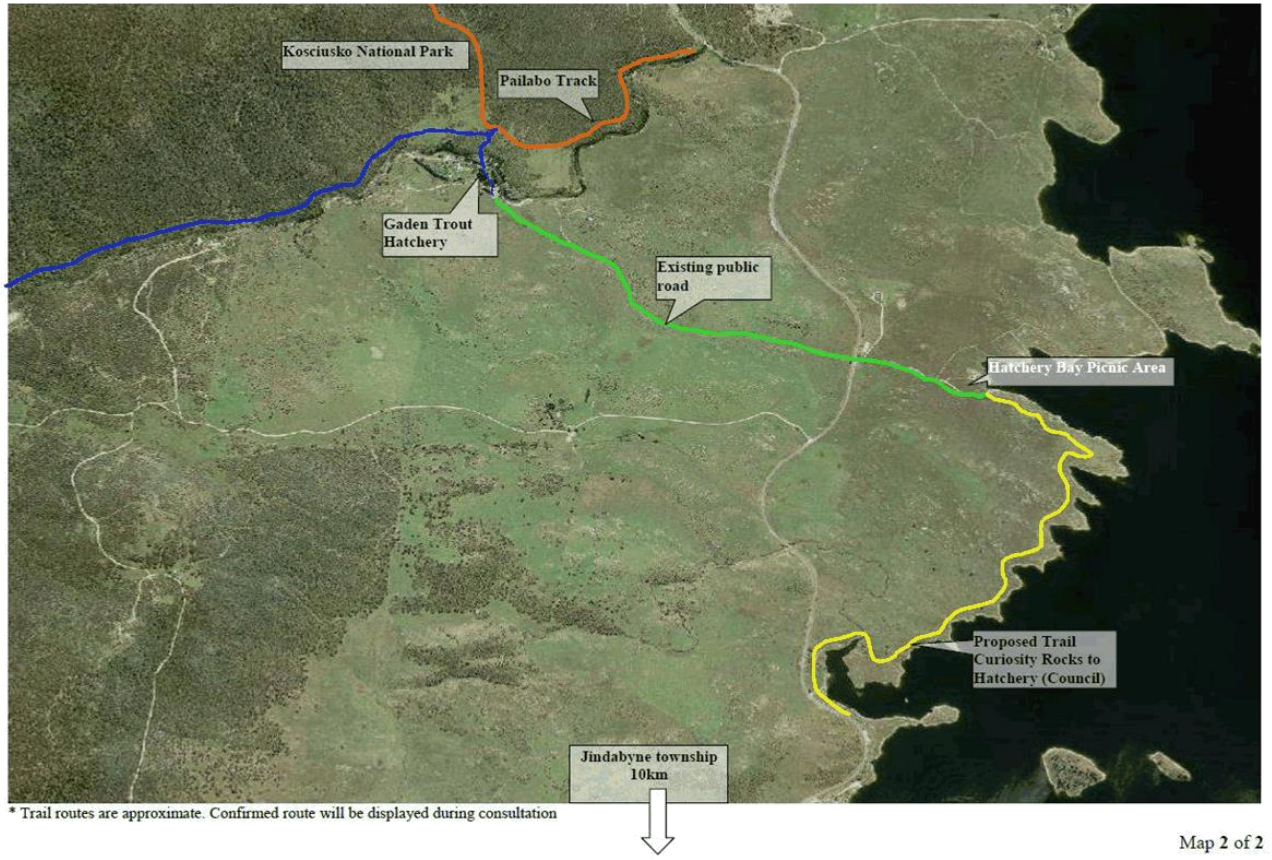

Figure 3: Aerial photo showing Option 1 with associated linkages

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

3.2. Biophysical setting

Thredbo Valley (within KNP)

The landform of the study area is highly variable due to the length of the proposed track. In some sections the track follows the relatively flat river plain adjacent to Thredbo River while in other sections the landscape is very steep where the track deviates greater distances from the edge of Thredbo River. Some of these sections would have slopes greater than 25 degrees. The track crosses many small tributaries to Thredbo River most of which are very minor and most likely ephemeral or intermittent. At the higher elevations of the track, typically above about 1050 metres ASL, there was a distinct lack of surface rock and significant rock outcrops. Below this elevation there was a higher occurrence of rock outcropping and loose surface stone. Generally the surrounding landscape is steep to very steep (Figure 4). Adjacent to the proposal, slopes are consistently greater than 25 degrees. The study area is part of the east-west river valley of the Thredbo River, in between two significant east-west ridge lines with elevations of greater than 1500 metres asl to the north and 1400 metres asl to the south (EnviroKey, 2015). Thredbo River is impacted by seasonal changes in climate resulting in high flows during the spring snow melt and subject to snow and ice during the winter seasons.

Figure 4: proposed path alignment, mid slope in lower Thredbo River valley

Jindabyne

Landforms between the Thredbo valley and Lake Jindabyne comprise the undulating foot slopes of the Snowy Mountains, on the western side of Lake Jindabyne. Land within the Gaden trout hatchery has been

modified through landscaping and construction of trout pools and a picnic area. The land around the lake is gently to steeply undulating, characterised by prominent headlands with distinctive granite outcrops (Figure 5). The proposed path is designed to be above the highest dam level; hence it is sometimes cut into quite steep slopes.

Figure 5: Lake Jindabyne with a rocky granite headland

Geology and geomorphology

The following information is taken from the REF. According to the 1:500,000 Monaro Geology Map the geology of the area is largely foliated granite, leucogranite, adamellite, granodiorite and tonalite consisting of largely massive intrusions. The geological formation that covers the entire length of the proposal is the Kosciuszko Batholith, with the Thredbo River following a large fault line that runs in a north-east direction. To gain a more detailed understanding of the landscapes within the study area, information was taken from the NSW Mitchell Landscapes (Mitchell 2002). These provide a geological description of the landscapes of each bioregion within NSW. The study area is within the Jindabyne Plains (Jbv) landscape in the South East Highlands (SEH) - Monaro Region. This landscape consists of wide open valleys and plains at a general elevation of 800 to 900 metres with surrounding low ranges and rounded peaks to 1100 metres on massive Silurian-Devonian granite and granodiorite. In one section the study area is close to the edge of the Main Range Montane (Mam) in the Australian Alps (AA) - Montane Region which is described as well-drained steep slopes on Silurian-Devonian gneissic granite, granite and granodiorites and Ordovician Slate, chert, quartzite and phyllite with a general elevation of 100 to 1500 metres (EnviroKey, 2015).

Prior to inundation, the Eucumbene River entered through a northern gorge into the Jindabyne valley to join the Snowy and Thredbo rivers in the broad alluvial valley. The Snowy River was a stream of around 50 metres width, flanked by flat land, low banks and marshes (Chapman, 1977). Curiosity Rocks was a prominent rock feature adjacent to Wollondibby creek and the peninsula to the south was once a ridge line remnant parallel to Wollondibby Creek (Avery, 1997; Boot, nd). Figure 6 is an aerial photo of the Jindabyne valley prior to dam construction showing the location of Curiosity Rocks at the confluence of the Wollondibby and Thredbo Rivers.

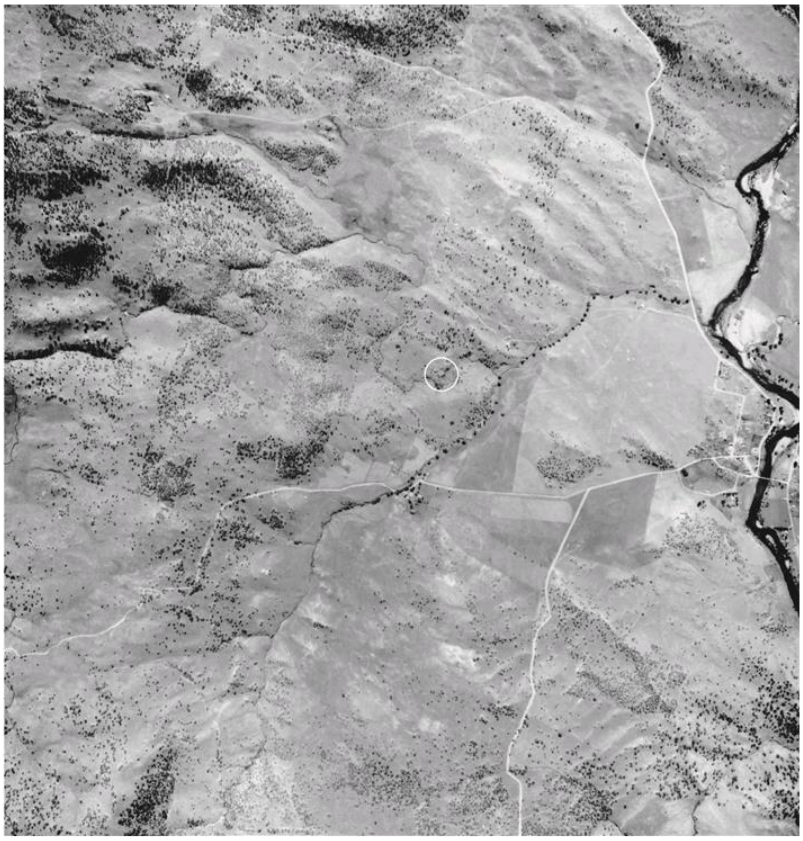

Figure 6: Jindabyne valley prior to flooding. Circle shows location of Curiosity Rocks.

Soil types and properties

The study area is within the Jindabyne Plains (Jbv) landscape in the South East Highlands (SEH) - Monaro Region (Mitchell 2002). The Jindabyne Plains landscape consists of wide open valleys and plains at a general elevation of 800 to 900 metres with surrounding low ranges and rounded peaks to 1100 metres. Soils consist of shallow gravelly loams, extensive red and yellow texture-contrast soils on slopes, two or

three terraces marginal to the main streams with dark coloured gritty uniform loams and clays in alluvium (Mitchell 2002). In one section the track is close to the edge of the Main Range Montane (Mam) landscape in the Australian Alps (AA) - Montane Region. The Main Range Montane landscape has soils which are intermediate in character between low elevation texture-contrast profiles and higher elevation organic uniform profiles. Their properties vary with bedrock; gritty clay loams on granites and pedal red to yellow clay subsoils on meta-sediments (Mitchell 2002).

The now submerged Jindabyne valley floor contains alluvial deposits with some Tertiary gravels, sands, sandstone and clay (Dibden, 2012).

Vegetation

The following information has been taken from the REF (EnviroKey, 2015). A detailed flora survey was conducted for the LTVT section of the proposed path, which mapped three main vegetation communities - Snow Gum - Mountain Gum shrubby open forest; Snow Gum - Candle Bark woodland, and Alpine Ash - Mountain Gum moist shrubby tall open forest. The first is the most common along the track alignment and occurs on the steep to very steep sections along Thredbo River over a length of about 14.46 kilometres. The canopy cover was up to about 60 percent cover with a dense shrub layer. Snowgum-Candlebark woodland occurs on the river flats of Thredbo River at both the western and eastern ends of the track alignment over a length of 3.92 kilometres. The canopy was more open and typical of woodland, up to about 40 percent cover. Alpine ash-Mountain Gum forest was observed over a small area (1.67 kilometres in length) within the middle of the eastern section of the track alignment extending from the bank of Thredbo River as far upslope as was surveyed for the proposal. The topography was steep to very steep and the vegetation was typical of a forest habitat with an average canopy cover of 60 percent.

All three types have mixed mid and understory with several species known to have been utilised by Aboriginal people eg Tasman Flax-lily (*Dianella tasmanica*) and Alpine Pepperbush (*Tasmannia xerophila*).

The vegetation groups are characterised by an 'open' or 'sparse' shrub layer but in many situations the vegetation observed did not fit the vegetation descriptions. This was most evident in the large patches of very dense shrub growth, some virtually monospecific, underneath the canopy, which excluded many of the usual groundcover species. The fire that occurred in 2003 is the most likely explanation for this unusual growth with the dense shrub layer growing in response to the fire event (EnviroKey, 2015).

The Lake Jindabyne section occurs within disturbed open grassland of mostly introduced grasses and shrubs with a long history of grazing. A few copses of snow gums occur on rocky headlands (Figure 7).

Figure 7: vegetation around Lake Jindabyne

3.3. History of [Aboriginal] peoples living on the land

Numerous archaeological sites in the Thredbo River valley and around the shores of Lake Jindabyne attest to a considerable Aboriginal presence in pre-contact times. Archaeological excavations at what is now Lake Crackenback resort produced radiocarbon dates demonstrating Aboriginal occupation from 4,000 years BP (Kamminga, 1992). Around 60 kms to the north but still in Ngarigo country, a double burial with rare grave goods, including a kangaroo tooth necklace, gave a date of 7,000 years BP (Feary, 1996).

The montane and alpine areas of the Australian Alps form the highest part of the Great Dividing Range including its highest peak, Mt Kosciuszko at 2228 metres (Costin 1954). Between the mountain peaks, major rivers such as the Snowy and Mowamba and Thredbo/Crackenback Rivers, have incised deep parallel valleys, arising in the alpine herb fields and descending through montane woodlands to the tablelands. Such valleys would not only have offered shelter to Aboriginal people during cold winter months; they would also have provided travelling routes between the tablelands and high mountain peaks, as well a range of seasonally available resources (Kamminga, 1992; Grinbergs, 2008).

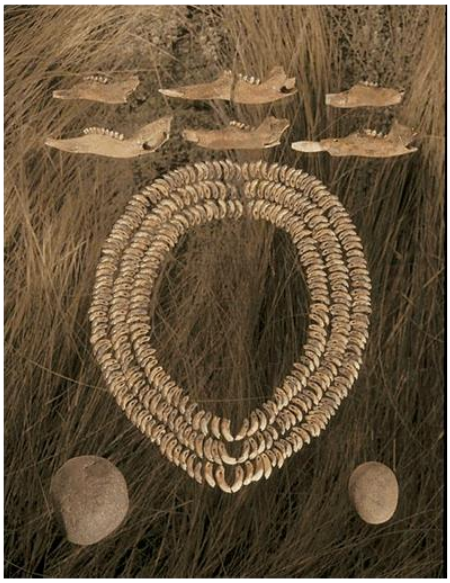

Figure 8: 7,000 year old grave goods from an Aboriginal burial site near Cooma

According to ethnographic and ethnohistoric records and Aboriginal oral tradition, the Thredbo valley falls within the country of the large group of Ngarigo speaking people, who spoke variants of a language also spoken at Tumut, Yass, Queanbeyan and Braidwood (Wesson, 2000). The Ngarigo occupied the Monaro tablelands and were often referred to as the Monaro tribe, but their territory also included the high mountain peaks of the Snowy Mountains to the west. The records and maps of A. W. Howitt, Norman Tindale and R.H.Matthews all place the Thredbo River within the territory of Ngarigo speaking peoples (see Young 2005 and Figure 9). Howitt describes the territory of the Ngarigo thus:

> *The Ngarigo had the Wolgal on the north, the Ya-itmathang on the northwest, the Kurnai on the west and south-west, and the Yuin or Coast Murring to the southeast. The Ngarigo in fact occupied the Monaro tableland. The name of this tribe was that of its language, and the tribespeople called themselves "Murring", that is "men, indicating that it belong to another nation who used that term in common* (Howitt, 1996, pp. 78-79).

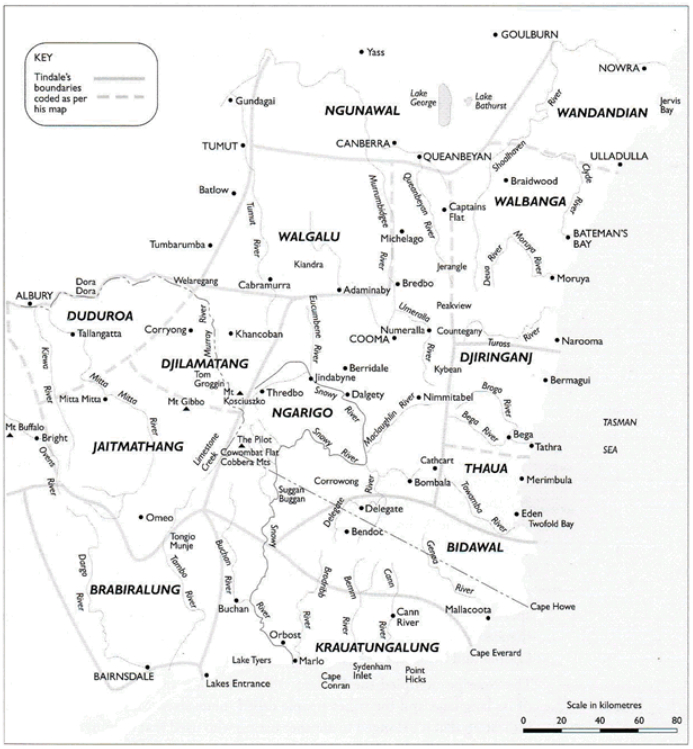

Figure 9: Tindale's map of tribal boundaries. Source: Young (2005).

There were also divisions based on location and activity. Howitt called those who lived in the high mountains Bemeringal, from *Bemering* , meaning mountain, which included the people living on the Monaro tablelands. This distinguished them from people living on the coast, the Katungal and the coastal hinterland, the Paiendra (Flood, 1982).

Historical records contain numerous descriptions of the annual bogong moth feast, almost to the exclusion of descriptions of other aspects of traditional Aboriginal life. Payten (1949) provides a description of the gatherings drawn from the accounts of settlers on the Monaro;

> *From Eden, Bega, Braidwood, Tumut, the Upper Murray and Gippsland the tribes wended their way to the tablelands and thence to the foot of the main range. Here a halt was made to observe certain formalities before commencing the feast of several months' duration, usually November, December and January. For these three months the aborigines feasted on the moth, to them a great delicacy and a food which was both plentiful and easily acquired. The excursions of these tribes and groups were contrary to the usual fixed tribal boundaries and knowing the ways of the Aboriginal we would expect that such a migration would be carried out under proper rules and procedures* (in Grinbergs 2008:10) .

Both Young (2005) and Kamminga (1993) give excellent summaries of ethnographic descriptions of large gatherings of Aboriginal people at various locations in the vicinity of the Thredbo valley, conducting ceremonial activities prior to heading to the mountain peaks for the bogong moth feasts.

In 1973, archaeologist Josephine Flood set out to establish an overall picture of pre-contact Aboriginal life in the mountains, making extensive use of the ethnographic record pertaining to bogong moth feasts (Flood 1980). She concluded that Aboriginal occupation of the Australian Alps was largely determined by the weather and the seasonal availability of the bogong moth. Human activity at the highest elevations in the Alps would have been restricted to the warmer months of the year and during winter months when the peaks are covered with snow, Aboriginal people would have migrated to the more sheltered valleys. Flood (1980) argued that larger occupation sites, possibly the result of repeated and/or extended visitation at various times of the year, will be found at altitudes up to 1200m. Between 1200m and 1500m, smaller lithic scatters would be the dominant site type, reflecting short term summer camps possibly associated with specialised activities. By and large, subsequent research has supported this model of archaeological site distribution (Grinbergs 2008).

However, subsequent research has also suggested an overemphasis by Flood and the populist literature, on the influence of bogong moths in interpreting traditional Aboriginal occupation and resource use in the region (Chapman 1978, Grinbergs 1992; Kamminga 1993). Furthermore Sandra BoWollondibbyler suggested that the tubers of the daisy yam, *Microseris scapigera* would have been a more reliable staple food, with bogong moth harvesting restricted to special and infrequent ceremonial occasions (Bowdler, 1981).

While sites found in the Thredbo valley may reflect use of the valley as a travelling route to the high country, the presence of large numbers of sites at what was once the confluence of the Snowy and Thredbo Rivers is more difficult to understand. They may be associated with seasonal activities such as ceremonial gatherings prior to movement to the mountains, or they may have nothing at all to do with moth feasts, being more a reflection of a riverine based economy, relying on the resources of the river rather than on the resource poor treeless plains. An interesting feature of the local archaeology is a reliance on large river pebbles in stone tool making in the Jindabyne valley, which may reflect a shortage of other stone material or a particular technology. Many sites in the Thredbo valley are dominated by quartz artefacts. Avery (1997) notes that quartz is locally available from reefs, veins, nodules and pebbles. Silcrete is also present in the Dalgety –Berridale area, the Eucumbene valley and the Adaminaby Plateau and is locally available at Kara creek on the Berridale Plateau and at Mt Gilead, south of Jindabyne (Chapman, 1977) .

Although the Thredbo and Jindabyne valleys are in Ngarigo territory, it is highly likely that both areas frequently visited by non-Ngarigo speaking people from the coast and elsewhere, for the purposes of meeting with other groups for ceremonial activities. Non-Ngarigo speakers would have following cultural protocols for accessing other people's country. The archaeological sites therefore probably represent use and occupation by many different Aboriginal groups, including those from other tribal areas.

Ngarigo people's first encounter with another culture was in 1823, when explorer Captain Mark John Currie who '*passed through a chain of clear downs to some extensive ones, where we met a tribe of natives'* (Hancock, 1972, p. 3). White settlement commenced in the 1830s, disrupting traditional Aboriginal life, although the numerous ethnographic accounts from the 19th and early 20th of traditional ceremonial activity suggest that cultural integrity remained relatively intact until the advent of the Aborigines Protection Board. Hancock (1972) suggests that the problem pastoralists had with native animals such as kangaroos and possums and dingoes was entirely due to cessation of Aboriginal hunting which kept numbers in control. There is mention of many Aboriginal people in the Jindabyne region dying of starvation during a severe drought between 1824 and 1829 and of a sharp decline in numbers between the 1820s and 1840s.

Aboriginal people worked as stockmen and in domestic employment and there appears to have been considerable movement between the coast and tablelands in relation to whaling, bean and pea picking on the coast in the early 20th Century. Once the reserves were set up, Aboriginal people became more dispossessed of their lands and more reliant on government handouts and numbers dwindled from disease, hunger and the gun (Young, 2005). Many Ngarigo people ended up in the reserve at Delegate, set up in 1892 and revoked in 1957.

Historical records suggest that Aboriginal people had no involvement in construction of the Snowy Hydro Scheme, which changed the face of the Jindabyne area and everybody who lived there (Seldon, 2011). Further research in this area could be fruitful.

Although there is a large population of Ngarigo people in southern NSW today, very few live in the Cooma – Jindabyne area, being either at Tumut/Tumbarumba or on the south coast. They continue to have strong connections to country, through participation in management of Kosciuszko National Park by membership of various advisory groups and by employment.

3.4 Material evidence

3.4.1. Aboriginal Heritage Information Management System (AHIMS)

A search of the AHIMS register was undertaken on 24th April 2015 for a 20 EW x 10 NS kilometre area (200km^2) including and surrounding the subject area [study area]. Initial searches of a larger area were unable to be processed by AHIMS due to the large number of recorded sites. The search area was gradually reduced until AHIMS could accommodate the search parameters. Table 4 below shows the grid coordinates for the AHIMS register search.

A total of 116 Aboriginal sites have been previously recorded within the search area (see Appendix 5 for list of sites). Of these, twenty-one (62-1-0315 to 62-1-0333) are individual recordings of stone artefacts around the Curiosity Rocks peninsula. These are almost certainly a re-recording of stone artefacts

associated with the large artefact scatter at site 62-1-0150. Unfortunately it was not possible to verify this, as site cards for 62-1-0315 to 62-1-0333 have not been submitted to AHIMS.

Table 4: parameters of AHIMS search

	Minimum	Maximum
Easting	**55 625000**	**55 645500**
Northing	**5965000**	**5975000**

The site features and site types provided by the AHIMS search were analysed to understand what the most commonly recorded site types are in the region and indicate what site types may be expected to occur along the shared path alignment. Where a single artefact was recorded and specified, these have been expressed as an isolated stone artefact. Where the numbers of artefacts was not recorded, these sites have been expressed as stone artefact locale and included with sites where more than one stone artefact was recorded.

A review of the AHIMS Site data shows all but one (99.1%) of the 116 recorded sites are open sites. A rock shelter with deposit has been recorded at Porcupine/Lubra Rocks, which is also an important female site (61-3-0014). Frequency of site feature attributes for previously recorded AHIMS Sites (n=115) is shown in Table 5. Note that a single site may contain multiple features or attributes.

Table 5: Frequency of site features extrapolated from AHIMS register search

Site Features	*n = 115*	*%*
Stone artefact locale	80	69.6%
Isolated stone artefact	22	19.1%
Potential Archaeological Deposit (PAD)	7	6.1%
Culturally modified tree	2	1.7%
Bora / Ceremonial / Grinding groove	1	0.9%
Burial / Stone artefact locale	1	0.9%
Grinding Groove	1	0.9%
Shelter / Potential Archaeological Deposit (PAD)	1	0.9%
Totals	**115**	**100.0%**

Table 5 shows that stone artefacts (stone artefact locales and isolated stone artefacts) represents the most common site feature recorded within the AHIMS Search area (88.2%). The distribution of previously recorded sites is shown in Figure 10, which is as much a reflection of where surveys have been conducted as it is of pre-contact Aboriginal occupation.

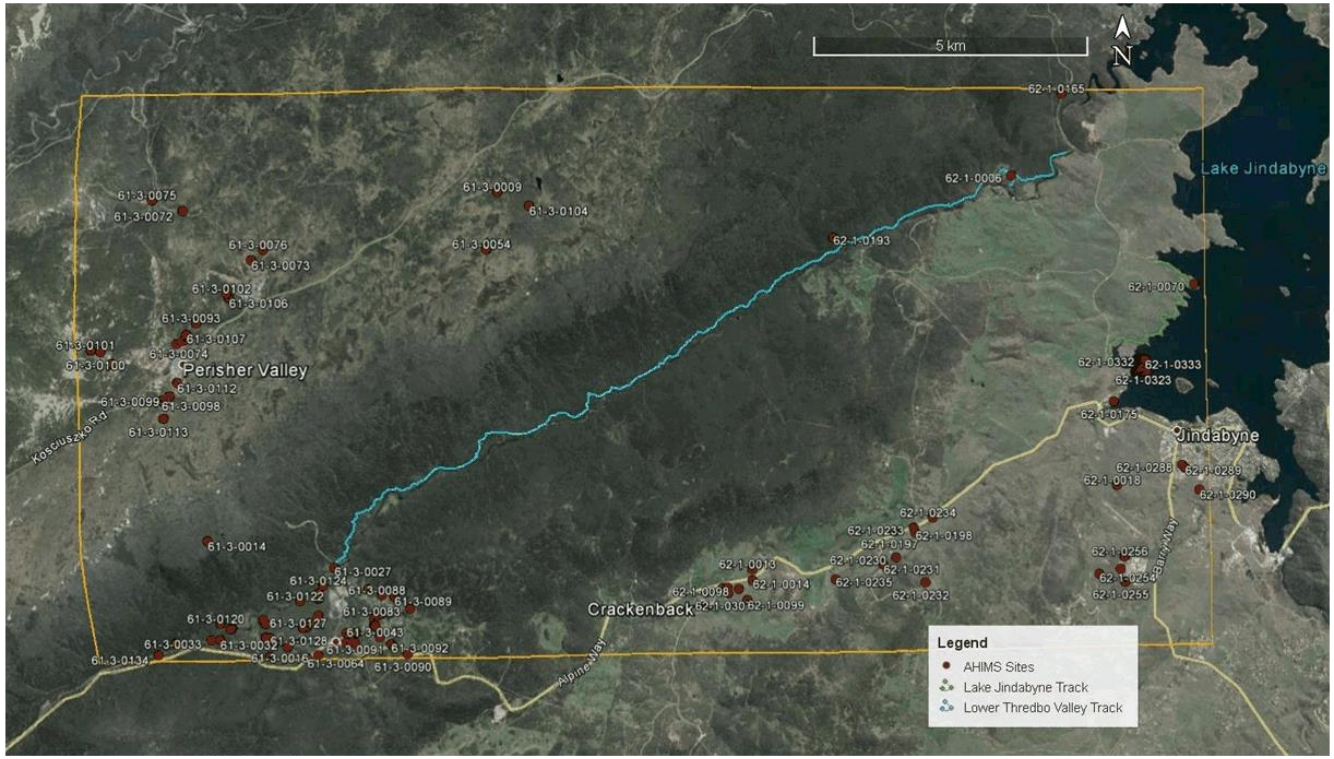

Figure 10: previously recorded sites in the study area

Site 62-1-0150 has restricted access on AHIMS but is known to encompass an extensive artefact scatter on the peninsula adjacent to Curiosity Rocks, and the rock feature itself, which is culturally and spiritually significant to Ngarigo people, particularly women (Avery, 1997). A report nominating the area for gazettal as an Aboriginal Place was prepared in 2013 (OEH, 2013) and it appears that the AP was gazetted on 6 July 2014 (see Appendix 6 for gazettal notice). However the gazettal covered an area much smaller than that nominated, being confined to the rock feature itself. Various OEH staff have verbally advised the authors that the gazettal was withdrawn and the larger area is to be re-gazetted. It has not been possible to obtain any documentation to support or refute this advice.

3.4.2. Regional archaeological context

The regional archaeological context can be understood by examining reports of previous archaeological investigations arising from academic research and heritage assessment associated with developments.

Since the subject area is located in the lower Thredbo valley, and the Jindabyne valley, close to the confluence of the Thredbo and Snowy Rivers (now submerged under Jindabyne dam) the archaeological signature of both the Thredbo valley and the Jindabyne area are relevant.

Jindabyne archaeology[1]

In 1976 Val Chapman conducted pioneering work around Lake Jindabyne when lake levels were historically low. She recorded 34 artefact scatters, with three being >100 artefacts, with a diverse array of artefact types including many made from river pebbles. The largest sites were closely associated with major rivers, now submerged by the dam (Chapman, 1977). Chapman refers to an old Australian Museum record of a bora ground and axe grooves located at the junction of Wollondibby Creek and the Snowy River, now submerged (AHIMS # 62-1-17).

Chapman also conducted the first targeted study in east Jindabyne which recorded six artefact scatters, at the break of slope or at the base of steep slopes, generally close the water courses. These also contained worked river pebbles as well as silcrete artefacts (Chapman, 1982).This pattern was to be found in subsequent studies for proposed subdivisions in East Jindabyne.

Another early survey of Lake Jindabyne was done by NPWS Ranger John Gallard when he located 26 sites (Gallard, 1975). Some of which were re-recorded by Chapman and again decades later by consultant archaeologists. He identified a number of possible hearths, which were later interpreted as termite mounds (Navin, 1998).

[1] Most of the information in this section has been taken from Dibden (2012) and Navin Officer (2003), which contain excellent summaries of previous archaeological investigations.

Djekic (1982) located six culturally modified trees (none definite) and six small artefact scatters associated with the Snowy River, during a transmission line survey between Cooma and Jindabyne. Geering subsequently salvaged one of Djekic's sites, found to contain over 700 artefacts, the majority made from quartz, with other raw materials, including river pebbles (Geering, 1982).

Walkington (1988) found no sites during a survey for the proposed Mill Creek subdivision south of Lake Jindabyne. Koettig (1989) surveyed a proposed pipeline route between Berridale and Lake Jindabyne and found 12 artefact scatters and isolated finds located on a range of landforms. One site was subsequently test excavated (Silcox, 1990).

Packard (1990) surveyed archaeologically sensitive areas area for the east Jindabyne sewerage scheme and found two artefact scatters.

In 1990 Kerry Navin surveyed the site for the proposed Tyrolean Village estate in East Jindabyne and recorded 18 artefact scatters, seven being isolated finds, found mainly along ridges (Navin, 1998). Permits were subsequently issued to allow destruction of most of the recorded sites. In 2003, Navin Officer conducted an audit of sites within the Tyrolean Village footprint. As well as finding all previously recorded sites, they recorded an additional 10 artefact scatters, all less than 10 artefacts. They concluded that most sites were small, disturbed surface scatters of stone artefacts. They noted that the east Jindabyne area was rich in archaeological sites which were suffering from the effects of cumulative impacts (Navin Officer Heritage Consultants PL , 2003). They also stated that in 2003, OEH would be unlikely to issue permits to harm objects without subsurface investigation (Navin Officer Heritage Consultants PL , 2003). In 2012, Dibden surveyed a section of the larger Tyrolean Village estate which contained four previously recorded sites of which one was re-located and no new sites were found. In contrast to Navin officer, Dibden concluded that the archaeological landscape was still relatively intact and that sub-surface testing was not warranted (Dibden, 2012).

In 1991 Kerry Navin surveyed the Rush's report development area at east Jindabyne, which recorded 20 artefact scatters, with the largest being close to permanent water sources and generally consistent with existing patterns of site distribution (Navin, 1991). Consents were also issued for several of these sites.

A survey of steep land at 'Alpine sands' in East Jindabyne identified six artefact scatters (Saunders 1997).

Williams Barber Archaeological Services (1993) surveyed an area south of Jindabyne on the Barry Way and found four small artefact scatters made mostly from quartz. Oakley (1999) subsequently inspected three sites recorded during this survey and a surrounding area but found no sites. Although the land was located between two major creeklines, it was considered to have low potential.

Many other archaeological csurveys have been condeucted around lake Jindabyne and Dibden (2012) contains an excellent summary of archaeological investigations undertaken in the Jindabyne area. As a result of her analysis, Dibden (2012:19) concluded;

In summary, artefact scatters are typically recorded during field survey in the Jindabyne area. Artefact scatters will generally be found within the majority of survey contexts, indicating that stone artefacts are widely distributed across the landscape. However, site density varies significantly according to topography, gradient, elevation and proximity to various water sources. Artefact scatters which cover large areas and contain high artefact numbers are typically found on reasonably elevated contexts close to major streams (3rd or 4th order) such as the Wollondibby, Thredbo and Snowy Rivers. These sites are probably representative of long term, intensive and repeated Aboriginal occupation (Flood 1980: 190 – 192; Kamminga 1992: 107). Smaller scatters can be found elsewhere across a number of landform elements and terrain contexts. These sites are likely to be representative of smaller scale foraging and hunting activities.

Perhaps the most important and well-studied site in the area is that associated with Curiosity Rocks, a natural rock feature now inundated with water. Avery (1997) conducted a sampling exercise across what would have been a low peninsula prior to dam building and identified an extensive and diverse artefact assemblage, with knapping floors and sub-surface deposits. Most artefacts were primary flakes made from quartz which is different to many other recorded sites around the lake, which are dominated by pebble tools. Avery suggests that these may have been collected over the years by fossickers. The value of the site lies not only in its very large numbers of artefacts, but also its proximity to Curiosity Rocks and bora grounds and axe grooves (61-1-0013) now inundated, and the intertribal meeting places for Aboriginal people at Wollondibby and Crackenback and elsewhere.

Thredbo valley

Jo Flood found no archaeological sites in the Thredbo Valley during her doctoral research (Kamminga 1993) but sites have been reported from there since 1973 when NPWS Ranger John Gallard recorded a site along the Rutledge's – Bullocks track as containing 'axes, hammerstones, scrapers and flakes.' Large numbers of Aboriginal sites have since been recorded from the Thredbo valley. Most are artefact scatters recorded during archaeological investigations for developments but there are also anecdotal references to burials and stone arrangements (61-3-0013), although these have never been re-located. In 1949 R.F. Payten, described 'three blackfellows graves, of which two are on the Thredbo River , a few miles above the confluence of the Little Thredbo and Thredbo Rivers , comprising mounds of earth covered in stones, about 3 feet high' (Young 2005 :79), which may refer to the same site. Another example of an historical record is that of a 19th Century Aboriginal grave near Jindabyne, recorded by Richard Helms in his article 'Anthropological Notes', in the *Journal of Proceedings of Linnaean Society*, 1895 (Figure 11).

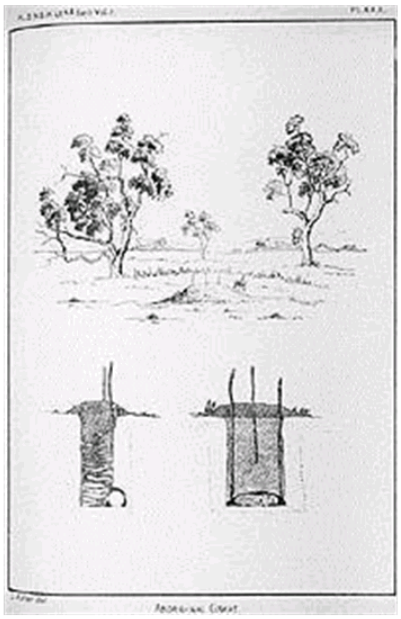

Figure 11: Aboriginal grave near Jindabyne. Source: http://www.powerhousemuseum.com/hsc/snowy/impact.htm

In 1983, David Hogg PL was commissioned to prepare an EIS for a proposed ski tube between Bullocks Flat and Perisher Valley and associated infrastructure. Archaeologist Katrina Geering prepared the archaeological report, noting that Gallard had collected all the artefacts he had seen and deposited them in the NPWS office at Sawpit Creek. It is probable that he collected the more obvious artefacts, such as axes and hammerstones, leaving behind more 'mundane' items such as unretouched quartz flakes. A significant bias was introduced into the remaining archaeological evidence as a result of this selective collection.

Geering recorded numerous sites within the area to be impacted by the ski tube car park at Bullocks Flat, including 64 artefacts where Gallard had previously recorded. Geering interpreted the sites as a possible summer base camp and recommended salvage prior to development. As part of the salvage operations, the site was re-mapped and test excavations were conducted by ANU Tech, resulting in the site being interpreted as an almost continuous and relatively dense artefact scatter between Rutledge's and Little Thredbo huts. Part of the site was issued with a 'consent to destroy' to allow construction of the ski tube car park, while the remainder of the site was afforded some protection through remediation works by NPWS (see Feary 2008).

During the 1980s and 1990s, an accelerated rate of development of facilities and services within the ski resorts prompted a number of environmental impact assessments, many of which included archaeological investigations. The Thredbo Valley is the only thoroughfare from Jindabyne to Thredbo Village, and has been the subject of numerous archaeological surveys associated with installation of infrastructure to service the Thredbo ski fields. These include upgrading and maintenance of the Alpine Way (Paton 1985; Navin Officer

1992); upgrading an electricity line (Walkington 1987); laying an optical fibre cable (Paton 1988) and installation of a Telstra cable line (Barber 2003).

Archaeological sites, comprising surface scatters of mostly quartz flakes were recorded along all the routes, including some re-recordings of previously recorded sites. Consents to destroy have been issued for a number of these sites, to allow developments to proceed.

In 1987 extensive archaeological investigations, including test excavations, were undertaken for the proposed Lake Crackenback Tourist Resort, located just outside the national park at the junction of Little Thredbo and Thredbo Rivers. A total of 661 artefacts were recovered from the excavation, being mainly quartz (96%), with flakes representing nearly 95% of the assemblage and exhibiting little temporal or spatial variation. Radio-carbon dating of charcoal samples obtained from stratified deposits gave dates of 940 +/- 150 BP (ANU-6866), 4390 +/- 80 BP (ANU-6867) and 2460 +/- 120BP (ANU-6868) respectively (Kamminga et al 1989: 35). This provided the first dated cultural sequence within the NSW section of the Australian Alps.

The Lake Crackenback Tourist resort was archaeologically re-visited in 2003 during a survey by Barber (2003), who identified seven artefact locales. Other surveys in the vicinity also found small artefact scatters on spur crests and gentle slopes (Parkes & Barber, 2003). Subsequent subsurface testing revealed very few artefacts despite the high archaeological potential of the landform where excavations were conducted (Barber, 2003).

In April 2008, archaeologist Alistair Grinbergs conducted a preliminary investigation of the route of the proposed shared use track between Bullocks Flat and the Thredbo Rangers station in the Thredbo valley. He identified 21 sites, comprising small artefact scatters, isolated finds and a possible axe grinding groove. Some of his recordings were re-interpretations of a previous recording of single, large artefact scatter, as a series of smaller sites strung along the valley, mainly on the eastern side, close to but above the river's flood zone (Grinbergs 2008). Grinbergs identified two areas of potential archaeological deposit (PAD) during his preliminary investigations, both within the riparian zone. He noted that ground visibility was very poor due to a thick cover of alpine grasses and that surface and subsurface artefacts may be present but could not be seen during the survey.

In 2008, further analysis and salvage of site 61-3- 0019, was conducted for Stage 1 of the shared use track, between Bullocks Flat and Thredbo Diggings. Sixty five stone artefacts on the pathway were systematically recorded and collected and subsequently buried together at a location close to the new pathway (see Feary 2009 for a full description of the salvage).

In 2010, as part of Stage 2 of the shared path, subsurface testing was conducted at three bridge crossings over the Thredbo River, within Kosciuszko National Park (Niemoeller, 2011). Three 50x50cm test pits and 5 hand auger holes were excavated at each bridge site, on both sides of the river where practicable. Despite the large numbers of surface artefact scatters recorded in this section of the Thredbo Valley, no evidence for Aboriginal occupation was found during the subsurface investigations. None of the test excavations were done at the PAD sites identified previously by Grinbergs, however, the test pit locations were considered to be of equally high archaeological potential. The absence of any subsurface evidence at these locations may be related to a lack of archaeological evidence on the surface. An alternative explanation is that, with the exception of Bridge

Site 1 (south), the test pits were positioned much closer to the river than most of the previously recorded sites, indicating that periodic flooding may have washed sites away, and/or the locations were never actually used by Aboriginal people because they were flood prone. Although bridge site 1 south was more elevated, it also had quite a slope, making it less suitable for camping.

Kamminga has postulated that the valley was a major thoroughfare for Aboriginal people moving into the higher mountain peaks from ceremonial grounds at Kalkite and the Wollondibby valley and the base of Mount Crackenback and those sites can be expected to occur all the way up the valley (Kamminga 1993). He interprets the archaeology of the Thredbo valley as a continuous archaeological site, comprising many activity areas and postulates that flaking of quartz pebbles at locations along the valley floor and lower slopes over millennia has produced a high background count of flaking debitage. Kamminga considers that every test excavation conducted at regular intervals along the Thredbo valley will reveal stone artefacts (Kamminga 1993).

The sample size of subsurface deposits is too small to make sound judgements on whether Kamminga's model of continuous subsurface deposits along the entire valley can be challenged. However, these findings may contribute to a refining of the model, by suggesting that rather than an even distribution of archaeological material along the valley, traditional use was concentrated at the lower end of the valley around Bullocks Flat and the Little Thredbo River, where people gathered and/or lived. Transitory movement up and down the valley has left much less evidence, perhaps only a background scatter, some of which has been subject to the impacts of flooding over thousands of years.

In 2014, an Aboriginal heritage assessment was conducted at two locations on the Thredbo River where bank stabilisation activities were proposed. A collapsed gabion wall required urgent attention adjacent to the Fish Trap within Gaden Trout Hatchery grounds and only a few metres upstream of the proposed new bridge across the river. The other location was the southern banks of the river at Paddys Corner, a distinct and very large bend in the river, popular with fishers and a crossing place for cattle going to the high country in historic times. No sites were found at either location (Feary, 2014).

3.4.3. Local archaeological context

The AHIMS search indicates that five recorded sites are on or close to the proposed alignment (see Table 6 and Figure 9). A section of the existing path is within the proposed Aboriginal Place boundaries at Curiosity Rocks and the proposed extension will also be within the boundaries until it reaches Wollondibby Creek (see Figure 12).

Table 6: recorded archaeological sites in or close to subject area

SITE ID	SITE NAME	DESCRIPTION	STATUS
61-3-0027	Site C/ Crackenback River 2/Tallangatta	Four quartz flakes on northern side of river recorded in 1983. Unable to be found during a survey of the same area in 1984 (Paton, 1984))	May have been destroyed by Skitube bridge development. Not on alignment of shared path
62-1-0193	Brooks Mill Creek 1	Possible culturally modified tree, northern side of Thredbo River. Very steep country	Not on track alignment. Will not be impacted
62-1-0006	Sawpit Creek; Thredbo River; Site 28	3 axe heads on northern banks of Thredbo River at Paddys Corner. Artefacts collected in 1976 during PhD research by Jo Flood	Description does not match grid reference. Exact location unknown
62-1-0170	Colorado Point; Lake Jindabyne; J/WS 24,25,26	Large artefact scatter on western side of lake, recorded and collected when lake levels low in 1977 (Chapman, 1977).	Close to alignment
62-1-0150	Curiosity Rocks – rock feature [now in lake] and peninsula	Large artefact scatter on peninsula adjacent to Curiosity Rocks, initially recorded by Chapman (1977). Major site protection works conducted in 1999. Includes culturally significant places. Within the proposed Curiosity Rocks Aboriginal Place boundaries	Site badly damaged and needs further site protection works. Will not be impacted as path has already been built at this location.
Curiosity Rocks Aboriginal Place	62-1-0150	Nomination included rocks and portion of lake shore, identified as being spiritually significant (see Figure 11 below).	AP gazetted on 6/7/2014, but excluded western shores of lake. Has been de-gazetted (OEH staff pers. comm.)

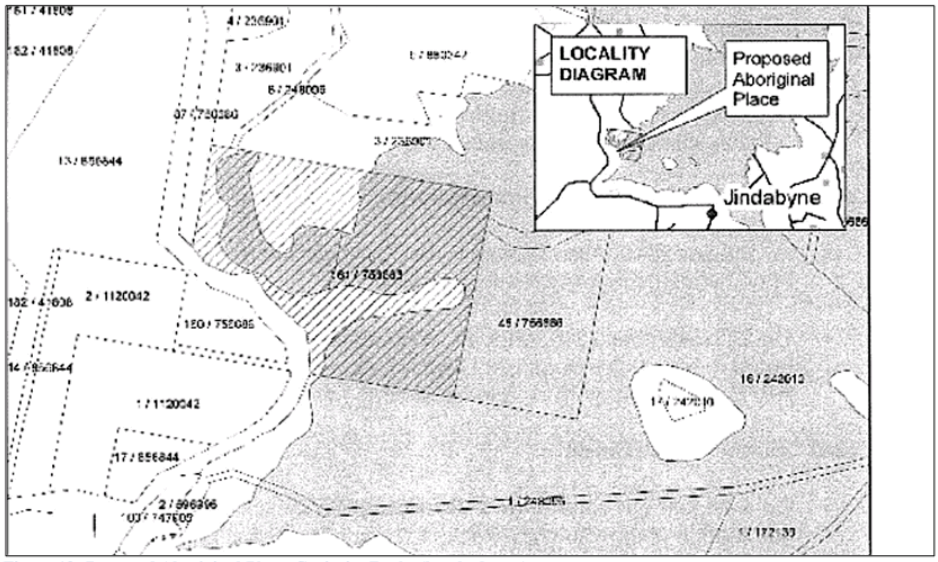

Figure 12: Proposed Aboriginal Place, Curiosity Rocks (hatched area)

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

4. Proposed activity

4.1. Land use history

Archaeological evidence suggests that pre-contact Aboriginal history involved use of the Thredbo valley potentially for living (around Bullocks Flat) and for movement into the high country for at least 4,000 years. The confluence of Snowy and Thredbo rivers may have been a major camping area for Aboriginal people. During this time, the area would have been dominated by riverine systems on gentle terrain supporting open forest, and treeless plains of the Monaro tablelands. Aboriginal people probably burnt the area as part of land management but the extent to which this has modified the structure and floristics of the vegetation is scientifically unknown. There is scientific evidence to indicate that forest at higher elevations was rarely burnt prior to white settlement (Zylstra, 2006).

Clearing of vegetation for grazing and agriculture probably began in the 1820s, when the fertile land on the banks of the Snowy River attracted James and John Prendergast. Prendergast and his brothers were instrumental in setting up the Monaro to Gippsland cattle route which aided in the economic growth of the area (Seldon, 2011). Another early white inhabitant James Spencer, a squatter at Waste Point was believed to have been the first person to graze sheep in the high country during summer, beginning decades of damage to the high country until the Kosciuszko State Park was declared.

The region was dominated by grazing with occasional visits from fishermen or bushwalkers, something of backwater;

> *Jindabyne was then only a very slow backward place of about 300 people – one of those country towns that grew, a shop here and a shop there – it wasn't a collective town* (McHugh, 1989, p. 56).

Jindabyne and the Snowy Mountains region experienced profound social and environmental change with the commencement of the Snowy Hydro Scheme in 1949 and an influx of thousands of European workers to the area. Inundation of the Jindabyne valley began in 1967 and the township's people were moved to where Jindabyne currently stands, leaving behind a whole town that emerges when dam levels are very low. Flooding the valley submerged many Aboriginal sites. Figure 13 shows the proposed route on the western edge of the lake overlain on a pre-dam aerial photograph. Curiosity Rocks is shown by numerous small dots and numbers and the AP nomination is shown in red. The association between Curiosity Rocks and confluence of two major water courses is plain to see.

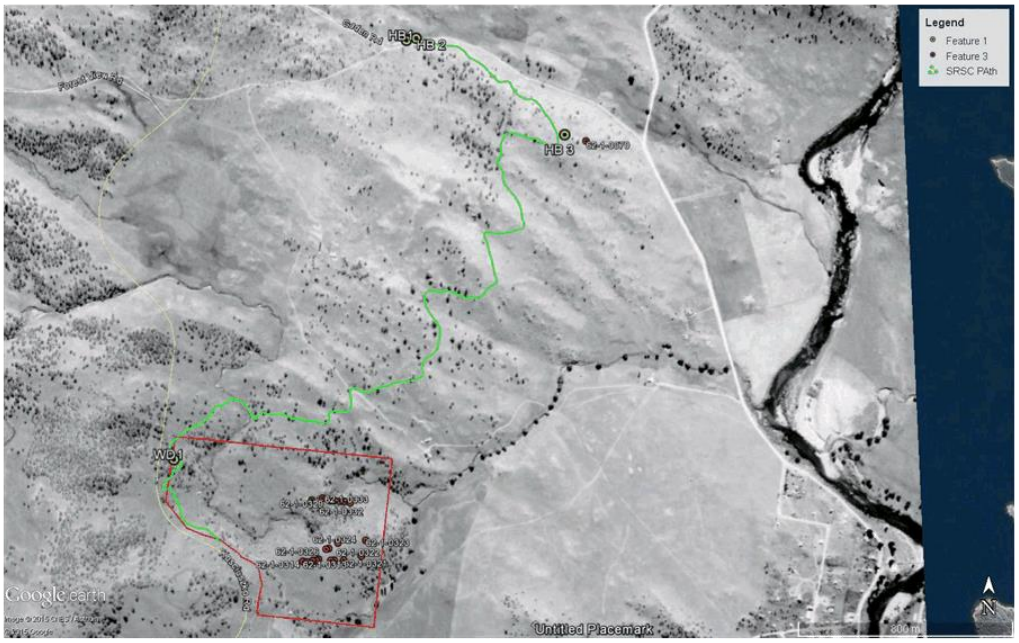

Figure 13: 1960s aerial photo with AP (red) and proposed shared path route shown (green). Photo courtesy Snowy Mountains Hydro.

With increasing recreational use of the mountains for skiing since the 1960s, much infrastructure has been built along the Thredbo Valley which has led to major impacts on Aboriginal sites (see Section 3.4.2).

In response to Australians' love of freshwater recreational fishing in, the Gaden Trout Hatchery began in 1948 on land owned by Bill Napthali, on the western arm of the Paddys Corner bend on the south bank of the Thredbo River. Acclimatisation societies played a major role in management of the hatchery and provision of trout eggs, but it was financially onerous and in 1959, management was passed to NSW Fisheries. The Fish Trap was constructed across the river in 1974.

Historical clearing in the National Park, indicates a long history of disturbance from pastoral activities (Figure 14). Open grassy areas on gentle terrain may be natural due to frost hollow effects, the result of Aboriginal burning or due to clearing for pasture or all three.

Figure 14: stone chimney in open grasslands near Paddys Corner, KNP.

Prior to gazettal of the Kosciuszko National Park, cattle used to cross the river at Paddys Corner, enroute to summer pasture in the high country. Hard hooves would have damaged any Aboriginal sites and eroded the river banks and has compacted the soil. Frequent flooding has removed and re-deposited sediments many millions of times, and any associated Aboriginal objects.

4.2. Description of development

The following information is taken from the REF for the activity within Kosciuszko NP and from the Statement of Environmental Effects (SEE) for the Snowy River Shire section.

4.2.1 LTVT section from Bullocks Flat to Pallaibo (including Pallaibo track and proposed bridge over Thredbo River at Gaden Hatchery with associated bridge approaches.

The LTVT begins at Bullocks Hut in the Thredbo River valley where it immediately crosses to the northern side of the Thredbo River utilising the pedestrian access on the Skitube Bridge (pending formalisation of an agreement between Perisher Blue and OEH).

It will run roughly adjacent to the Thredbo River for approximately 20 kilometres and end at the Thredbo River Picnic Area at Kosciuszko Road (Figure 15). With the Thredbo River being the national park boundary in this area, the track will remain entirely on the north (national park) side of the river until it exits at either Gaden Trout Hatchery or Thredbo River Picnic Area. The Snowy River Shire Council (SRSC) is currently working with community stakeholders and government to seek approval and fund a bridge-crossing and trail that will link the LTVT to Jindabyne at Gaden Trout Hatchery (see below).

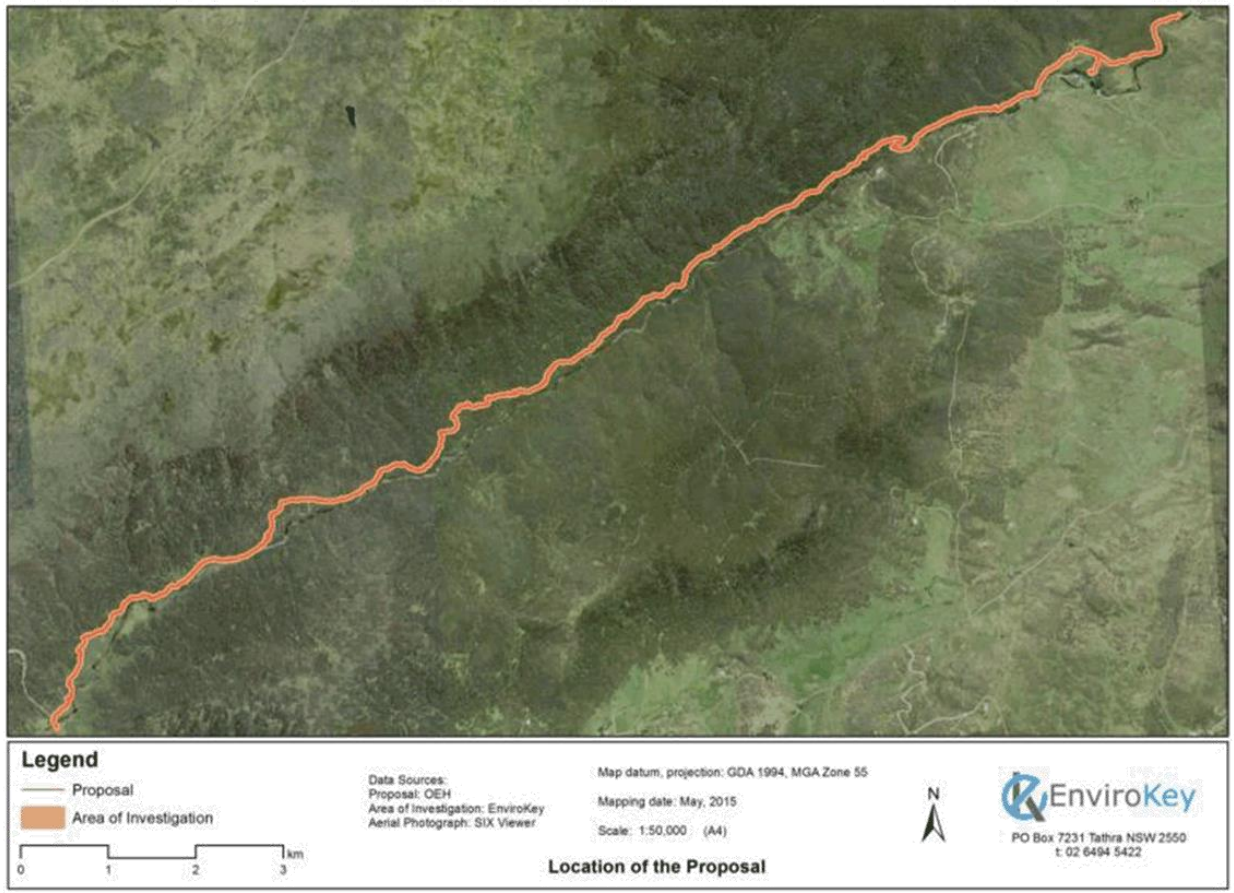

Figure 15: Thredbo Picnic area - proposed shared path between Bullocks Flat and Thredbo Picnic area

Due to the uncertainty as to whether SRSC will secure the funds required this ACHAR is assessing two options, *viz.*

- Option 1 – Construction of a bridge at the Gaden Trout Hatchery. An external party, likely Snowy River Shire Council, would own the bridge.
- Option 2 – Track to continue past the Gaden Trout Hatchery, join the Pallaibo Track at the lowest point where it crosses Sawpit Creek and continue along the Pallaibo Track to the Thredbo River Picnic Area. This option will require that section of the Pallaibo Track to be re-zoned from a walking track to a multi-use track. Some track modifications and upgrades would be required.

The final path may encompass both options 1 and 2 above. For the purposes of the assessment it has been assumed that both options will be utilised and both have been assessed.

The REF's preferred option has the proposed track with a hand-benched track to a width of up to 1300 mm. This would achieve an IMBA grade of blue square or an 'intermediate' rating. This track would be suitable for skilled mountain bikers, suitable for mountain bikes. The IMBA Trail Difficulty Rating System (IMBA Australia 2012) indicates that the track width must be handlebar width or greater (specifically 600mm plus or minus 300mm for tread or bridges), with possible sections of rocky or loose tread and the trail will have obstacles such as logs, roots and rocks.

The shared-use track would be constructed to International Mountain Bike Association (IMBA) guidelines for sustainable trails. The track criteria will conform to the IMBA 'More Difficult – Blue Square' trail difficulty rating, but will generally be slightly narrower and at a more challenging end of the grade of track that would be classified 'Blue Square'. Track features are described in Table 7.

Table 7: features of proposed track

Track Feature	Description
Tread width	Up to 1300 mm benched track.
Tread surface	Primarily a firm, stable bare earth surface. Some armouring may be required through unsuitable ground conditions.
Bridges and platforms	Creeks, tributaries, springs and other crossings containing notable moisture will be protected by low-level raised platforms, constructed by steel with fibreglass reinforced plastic (FRP) mesh deck.
Tread landscaping	Many sections of the track, particularly those sections where drainage is limited, the tread will be 'lifted' and 'tilted' to create improved drainage.
Track Corridor (Vegetation Clearance)	1.5m – 1.8m wide, 2.4m high
Average Trail Grade	10% or less
Maximum Trail Grade	15% or greater
Natural Obstacles and Technical Trail Features	Unavoidable obstacles less than 200mm high and bridges minimum 600mm wide

Track Construction

- Rolling contour track to IMBA specifications
- 1.5 metres to 1.8 metres wide vegetation clearance constructed with brush-cutters, chainsaws and other equipment
- 2.4 metre high track corridor constructed with brush-cutters, chainsaws and other equipment
- Track alignment chosen to ensure food line of sight and enable use in both directions
- Up to 1300 millimetre wide benched track constructed with powered and non-powered hand tools by experienced track builder
- Potential use of a small excavator for certain sections if access allows
- Onsite materials could be utilised (where available and appropriate and in the accordance with the project Environmental Management Plan (EMP)) for track armouring, creek crossings and bridge approaches
- Many sections of the track, particularly those sections where drainage is limited, the tread would be 'lifted' and 'tilted' to create improved drainage.

Creek and Tributary Crossings

- Steel bridge structures with fibreglass reinforced plastic mesh deck
- A 'more difficult' rating will allow bridges to be shorter, narrower and lower as entries that are more technical and exits to the crossing are permissible. Where possible, bridges will be less than 900mm high and most will not require handrails
- Due to experience of target user, deck level will only allow for one in five year flood. Construction will be built to a standard to withstand the force of such flood waters
- 600 - 900mm wide bridge deck is considered adequate. However wider decking at 1300mm will be constructed if budgets allow
- Smaller bridges allow for simpler modular design that requires less technical expertise and minimises onsite construction
- Smaller bridges result in less material and therefore fewer helicopter lifts to deliver to site
- Approaches to bridges will require rock armouring, approximately 500mm either side. This rock will need to be dropped in.

Damp Area Crossings

- Damp areas and springs will mostly be crossed with elevated FRP decking
- Some shorter crossings will be armoured with stone pitching and decomposed granite. This would require materials to be brought in.

For much of the track there is either a damp area of a creek/tributary crossing every 200 to 300 metres.

The proposed track will be built above the Thredbo River's flood line for the entire route.

Construction/Maintenance

- Loadings and width of platforms may not allow ATV access
- Two wheel motorbike at low speed would be ideal, with the possibility of small trailer for equipment and light materials
- Helicopter for heavy materials such as armouring and platforms
- Pedestrian and mountain bike access will be a major form of access for both construction and maintenance
- Limited vehicle access to points near the trail through fire roads from opposite side of the river
- Tethered boat/rafts and pulley systems can be used to bring light materials and fuel across the river
- People can wade across the river in low flows and at designated safe points.

4.2.2 Jindabyne section

Snowy River Shire Council proposes to undertake an extension of the Lake Jindabyne Shared Trail from Curiosity Rocks to Hatchery Bay (see Figure 3). The total length of the Shared Trail will be 5.2km. The shared trail would be constructed in accordance with the International Mountain Bike Association (IMBA) principles of sustainable trails as has previous trail development from Cobbon Crescent to Tyrolean Village.

The proposed route traverses through disturbed open grassland with a full bench cut construction to a maximum width of 1.8metres. The track will be constructed by either manual labour, or small excavator/bobcat. To minimise disturbance, track construction will work from existing tracks, some sections will only require poisoning of grass and no excavation or soil removal.

The area for the proposed trail is relatively flat with gradual slopes. The Wollondibby Creek forms an inlet into Lake Jindabyne just after the Curiosity Rocks area. A bridge will be built over Wollondibby Creek.

The project scope of works is as follows;

Section 1

- Trail Construction - distance 600m
- Vegetation clearing / brush cutting of trail corridor to 1.8m wide where required.
- Machine excavation of rolling contour bench cut trail 1.2m wide to IMBA standards.
- Installation of 1-2m long bridge lead ins to either end of bridge 1.
- Revegetation of excess spoil / disturbed ground within trail corridor.
- Trail Construction – distance 200m
- Supply and install large rock / DGADEN BRIDGE20mm material to trail sections through rocky outcrops, and compact trail tread on completion.

- Other works -Livestock control
- Install 2 x cattle grid ramps / squeeze gates as per specification.
- Bridge 1 – distance 15m
- Construction of steel framed bridge with Weldlock mesh fibreglass deck as per drawing specifications.

Section 2

- Trail construction - distance 600m
- Vegetation clearing of trail corridor to 1.8m wide.
- Brush cutting / mowing of trail tread to 700mm wide to remove vegetation to ground
- level.
- Spraying of non-selective herbicide on trail tread where required.
- Hand shaping to install trail tread / backslope where required on steeper side slopes.
- Revegetation of excess spoil / disturbed ground within trail corridor.
- Other works – point B
- Revegetation of old Wollondibby trails in area.
- Install rest area at Curiosity Rocks including seating.

Section 3

- Trail Construction – distance 3.2km
- Vegetation clearing of trail corridor to 1.8m wide.
- Brush cutting / mowing of trail tread to 700mm wide to remove vegetation to ground level.
- Spraying of non-selective herbicide on trail tread where required.
- Hand shaping to install trail tread / backslope where required on steeper side slopes.
- Revegetation of excess spoil / disturbed ground within trail corridor.
- Other works -Livestock control – points C-F
- Install 5 x cattle grid ramps / squeeze gates as per specification.

Section 4

- Trail Construction – distance 800m
- Vegetation clearing of trail corridor to 1.8m wide.
- Brush cutting / mowing of trail tread to 700mm wide to remove vegetation to ground level.
- Spraying of non-selective herbicide on trail tread where required.
- Hand shaping to install trail tread / backslope where required on steeper side slopes.
- Revegetation of excess spoil / disturbed ground within trail corridor.

4.2.3 Linking sections

If Option 1 goes ahead, the two sections of shared path will be linked by Gaden Road between the trout hatchery and Kosciuszko Road, and Hatchery Bay Road between Kosciuszko Road and Hatchery Bay picnic area. The former is a sealed road for which no activity is planned and it was therefore not inspected. The latter is an unsealed vehicle track the lower section of which may be closed off to vehicles and restricted to use by bicycles and walkers. This section was inspected as part of the Lake Jindabyne section of the field survey.

4.3. Potential harm to Aboriginal objects

The REF describes the following potential impacts of the shared path within Kosciuszko National Park.

> ..potential impacts are considered to be likely due to the track alignment across steep slopes with a requirement to cut into or excavation into the soil to create flat surfaces. Also the removal of all mid-storey vegetation would require removal of shrubs and seedlings by the roots to minimise regrowth and this would also create soil disturbance exposed to erosion. Though this is considered an indirect impact, it is likely that erosion will represent a significant challenge during the construction and maintenance of the track due to the steepness of the landscape. Even light precipitation events are likely to create runoff in this landscape which increases the potential for erosion. Design features (such as the retention of groundcover vegetation where possible and the retention of vegetation outside the impact area) and a series of mitigation measures are likely to avoid or limit the potential impacts of soil erosion (EnviroKey, 2015).

Any Aboriginal objects present on or close to the final alignment of the proposed shared path will be directly impacted by path construction, due to disturbance of the sediments on or in which artefacts occur, as described above. Culturally modified trees in the lower Thredbo valley will be impacted by vegetation clearing along the path's corridor. Other site types such as stone arrangements that may be present around Lake Jindabyne will be affected if they are on or close to the final route.

Harm is likely to continue as a result of increased use of the area once the shared paths are constructed. The REF proposes a series of safeguards/measures to minimise the likelihood of indirect impacts affecting any biota within the study area and these will also apply to any associated Aboriginal objects, such as stone artefacts.

5. Archaeological investigations

5.1. Predictions

Factors to consider when developing a predictive model are: - landforms, disturbance history, distribution patterns of known sites, and existing predictive models derived from previous investigations in the region. Based on these factors, the Aboriginal objects most likely to be present in the lower Thredbo valley are **stone artefacts** with a lesser likelihood of **culturally modified trees**. Artefacts are most likely to occur as isolated finds or low density scatters of flaked stone artefacts made from good quality quartz and occasionally silcrete or porphyry rock types.

Most of the path is along slopes of up to 25 degrees, with a very low potential for artefacts associated with camping or travelling. These are most likely to occur on the flat elevated river terraces above the highest flood levels or on flat spurs and ridges. Mature eucalypts occur on the slopes in the Thredbo valley, and have the potential to contain scars resulting from removal of bark by Aboriginal people.

There is a high potential for artefacts to be present along the Pallaibo track section due to its proximity to the river and gentle terrain, and along the short deviation from Pallaibo to the proposed bridge site.

Aboriginal objects most likely to occur around Lake Jindabyne are flaked and ground stone implements, including those made from river pebbles, and possibly **stone arrangements**.

A possible axe groove was recorded further up the Thredbo valley in 2008, but being granite, it is more likely to be a natural feature (Grinbergs 2008). **Axe grooves** are very unlikely to occur in outcropping rock on mid-slopes, being usually found close to a water supply and in sandstone rather than granite.

Stone quarries using quartz outcrops on valley slopes and quartz veins in granite surrounding Lake Jindabyne are predicted to occur, although none have been recorded in the region thus far.
The Gaden Hatchery section is predicted to have no objects due to the highly modified and landscaped appearance of the grounds.

5.2. Field survey

Field survey methodology was guided by the following factors:

- The nature of the proposal – a linear transect along the slopes of the lower Thredbo Valley and above the northern bank of the Thredbo River and around the shore of Lake Jindabyne.
- A high level of logistical difficulty for the lower Thredbo valley, as access was only possible at either end or by crossing the river at two locations only on the south side– Pender Lea and Robertson's crossing, with permission from landowners.
- Very limited ground visibility, mostly steep terrain and thick vegetation post fire in the Thredbo valley, and a thick cover of introduced grasses on the slopes around Lake Jindabyne. Hence field survey concentrated on finding areas of bare ground and looking carefully for stone artefacts. All large trees were carefully inspected for scars in LTVT. Quartz outcrops were checked for evidence of quarrying.
- The footprint for the shared path is only 2 metres but the development corridor is 50 metres wide, to allow for small last minute deviations. However it was not always possible to systematically survey this width in LTVT due to the steep terrain, many creek crossings and very thick understorey.

The field methodology sent to Registered Aboriginal Parties for comment is described below:

- Field survey will involve surface investigation only and is expected to take up to six (6) days of walking. The track route will be clearly marked with tape and it is the intention to walk the route

in its entirety, and 25 metres each side of the midline. This will allow flexibility in path alignment, to avoid Aboriginal sites or significant environmental features if present. The route will be walked by both archaeologists, accompanied by agency representatives where appropriate, and one or two appropriately qualified and experienced Aboriginal heritage officers, representing registered Aboriginal parties. Careful attention will be paid to bare patches of ground for the presence of stone artefacts and any mature trees that may contain cultural scars.

- Logistical issues for fieldwork in the national park include the rugged nature of the terrain, presence of thick vegetation, and the need to wade across the river at some locations. There are also limited opportunities to access the track by vehicle, which means that on some days long distances will need to be covered.
- Where vegetation is thick and ground visibility very limited or non-existent, the archaeological sensitivity of the landform – including the potential for buried or obscured archaeological material, will be assessed, based on landforms, topography and geomorphological processes. The need for any future subsurface investigations will be identified.
- Recording, significance assessment and recommendations regarding further work, will be in accordance with relevant OEH codes.

Fieldwork occurred over five days between 19 and 23 May 2015, conducted by consultant archaeologists Sue Feary and Gerard Niemoeller, accompanied by Aboriginal heritage officers Ronnie Thomas and Derek Davison, and supported by Project Manager Chris Darlington (for Lower Thredbo Valley) and Alannah Dickeson (for lake Jindabyne). The entire route was walked by all field crew, to 25 metres each side of the flagged centreline where feasible. A different section of the track was surveyed on each of the five days. The section within the Kosciusko National Park and Thredbo Valley was completed over four days, with the section around Lake Jindabyne conducted over one day.

All large eucalypts were checked for scars and all patches of bare ground were checked for stone artefacts. Outcrops of quartz and other rock types were checked for quarrying. Areas of relatively higher archaeological potential were identified and mapped.

The level of visibility and exposure for this survey was generally very low (<3%) and this was especially true of the Lower Thredbo Valley section within Kosciuszko National Park (Figure 16). The highest visibility was afforded either along existing tracks such as the Pallaibo Track (Figure 17), vehicle tracks nearer Jindabyne or around the eroded margins of Lake Jindabyne. Observations for the different sections and transects of the proposed track and survey are described in Table 8.

Figure 16: typical understory, near Bullocks Flat

Figure 17: Pallaibo track showing improved visibility

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Table 8: Observations recorded along the proposed track

Track	*Section / Transect*	*Landscape Traversed*	*Land units Traversed*
Lower Thredbo Valley Track, KNP	Bullock Flats to Pender Lea	Side slopes of Lower to mid foot slopes of Thredbo Valley	Numerous minor spur slopes and incised gullies, with some low gradient shelves on lower slope above Thredbo River Gradients (2 to 25 degrees)
Lower Thredbo Valley Track, KNP	Pender Lea to Robertsons Crossing	Lower to mid foot slopes of Thredbo Valley	Numerous minor spur slopes and incised gullies, with some low gradient shelves on lower slope above Thredbo River (2 to 25 degrees)
Lower Thredbo Valley Track, KNP	Robertsons Crossing to Gaden Trout Hatchery	Lower to mid foot slopes of Thredbo Valley	Numerous minor spur slopes and incised gullies, with some low gradient shelves on lower slope above Thredbo River and near Brooks Mill Creek (2 to 25 degrees)
Lower Thredbo Valley Track, KNP	Gaden Trout Hatchery – Pallaibo Track to Thredbo River Picnic area, Kosciuszko Road	Lower to mid foot slopes of Thredbo Valley	Numerous minor spur slopes and incised gullies, with some low gradient shelves on lower slope above Thredbo River and near Sawpit Creek. (0 to 10 degrees)
Lake Jindabyne	Curiosity Rocks to Hatchery Bay	Shores of Lake Jindabyne	Side slopes of gently undulating low rises and gullies. (2 to 10 degrees)

5.3. Results and analysis

The proposed track traverses the side slopes of the lower to mid-foot slopes of Thredbo Valley and crosses many micro variations (of spurs and gullies) not shown on the topographic maps.

The length of the survey, allocated time and amount of micro variations made the recording and calculating of specific details as per Requirements 10 and 11 of the Archaeological Code of Practice unfeasible. Instead the general of level of visibility and exposure was recorded for each transect section. Observations about visibility and exposure for each section are included within Table 9.

Table 9: visibility and exposure recorded along the proposed track

Track	*Section / Transect*	*Landscape Traversed*	*kms*	*Visibility*	*Exposure*
Lower Thredbo Valley Track, KNP	Bullock Flats to Pender Lea	Side slopes of Lower to mid foot slopes of Thredbo Valley	6.7	1%	1%
Lower Thredbo Valley Track, KNP	Pender Lea to Robertsons Crossing	Lower to mid foot slopes of Thredbo Valley	4.5	1%	1%
Lower Thredbo Valley Track, KNP	Robertsons Crossing to Gaden Trout Hatchery	Lower to mid foot slopes of Thredbo Valley	4.7	1%	1%
Lower Thredbo Valley Track,	Gaden Trout Hatchery – Pallaibo Track to	Lower to mid foot slopes of Thredbo Valley	1.4	2%	2%

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KNP	Thredbo River Picnic area, Kosciuszko Road				
Lake Jindabyne	Curiosity Rocks to Hatchery Bay	Shores of Lake Jindabyne	4.2	2%	3%

A total of 26 Aboriginal sites were recorded during the survey, all of which comprised stone artefacts. The number and types of sites recorded for each section are shown in Table 10.

Table 10: Number of sites and site types recorded by section along the proposed track.

Track	*Section / Transect*	*No of sites*	*Site types*
Lower Thredbo Valley Track, KNP	Bullock Flats to Pender Lea	4	3 isolated stone artefacts, 1 possible quarry
Lower Thredbo Valley Track, KNP	Pender Lea to Robertsons Crossing	1	1 isolated stone artefact
Lower Thredbo Valley Track, KNP	Robertsons Crossing to Gaden Trout Hatchery	6	2 artefact scatters, 4 isolated stone artefacts
Lower Thredbo Valley Track, KNP	Gaden Trout Hatchery – Pallaibo Track to Thredbo River Picnic area, Kosciuszko Road	11	1 artefact scatter, 10 isolated stone artefacts
Lake Jindabyne	Curiosity Rocks to Hatchery Bay	4	3 artefact scatters, 1 isolated stone artefact

Most of the recorded sites contained flaked stone artefacts whilst two also contained manuport / anvils which were likely utilised within the stone artefact manufacture process of bipolar flaking (LTVT 2 and Hatchery Bay (HB) 3). Site WOLLONDIBBY (WD) 1 exhibited the highest number of artefacts (30+) (Figures 18 and 19), followed by LTVT 2 (20) and Hatchery Bay (HB) 2 (10+). A low density possible quarry site of porphyritic material was also recorded (BULLOCKS FLAT (BF) 3). Although no cores were recorded at this site, the flakes were manufactured from the associated porphyritic material outcropping at this location. Table 11 provides details of site types recorded.

Figure 18: informal road on ridge with site WOLLONDIBBY1

Figure 19: artefacts from WOLLONDIBBY1

Table 11: Frequency of site types recorded during this survey.

Site Type	*No of site types recorded*	*%*
Isolated stone artefact (1 artefact)	16	61.5%
Isolated stone artefacts (2 artefacts)	2	7.7%
Stone artefact scatter (3 + artefacts)	7	26.9%
Quarry	1	3.8%
Total	**26**	**100.0%**

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Stone Artefact Types and Raw Materials

The majority of flaked stone artefacts were manufactured from quartz and quartz is the dominant stone raw material and is represented at 22 (84.6%) of the 26 recorded sites. In contrast silcrete was represented at 4 sites (15.4%), porphyritic at 3(11.5%) (Figure 20), and chert was represented at 1 (3.8%) of the recorded sites. Table 12 below shows a simple measure of assemblage complexity and compares the number of raw materials and artefacts recorded at each site. Most of the recorded sites (21 or 80.8%) contained a single artefact type (predominantly flakes) manufactured from one stone raw material, predominantly quartz.

Figure 20: non-quartz artefacts from BULLOCKS FLAT3

Table 12: Comparison of numbers of stone artefact types and raw materials recorded at sites.

	No of Raw Materials represented			
No of Stone Artefact types represented	**1**	**2**	**3**	**Totals**
1	21			21
2	1	1	2	4
4		1		1
Totals	**22**	**2**	**2**	**26**

Density of Sites

The density of sites per kilometre for each section was calculated to provide an indication and discuss the intensity of land use and occupation by Aboriginal people (Table 13). Whilst these calculations do not consider visibility and exposure, and this is acknowledged as a limitation, there are numerous other factors that may influence the actual measure. These factors might include raw material availability and factors determined by the actual track route across slopes.

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Table 13: Frequency of site types recorded during this survey

Track	*Section / Transect*	*Landscape Traversed*	*kms*	*No of sites recorded*	*No of sites recorded per kilometre*
Lower Thredbo Valley Track, KNP	Bullock Flats to Pender Lea	Side slopes of Lower to mid foot slopes of Thredbo Valley	6.7	4	0.6
Lower Thredbo Valley Track, KNP	Pender Lea to Robertsons Crossing	Lower to mid foot slopes of Thredbo Valley	4.5	1	0.2
Lower Thredbo Valley Track, KNP	Robertsons Crossing to Gaden Trout Hatchery	Lower to mid foot slopes of Thredbo Valley	4.7	6	0.8
Lower Thredbo Valley Track, KNP	Gaden Trout Hatchery – Pallaibo Track to Thredbo River Picnic area, KosciuszkoRoad	Lower to mid foot slopes of Thredbo Valley	1.4	11	7.8
Lake Jindabyne	Curiosity Rocks to Hatchery Bay	Shores of Lake Jindabyne	4.2	4	0.9

Table 14 provides a summary of site information, including location, artefact descriptions and the potential for site to contain archaeological depth. The latter has been assessed as low for most sites and low to moderate for some, especially on the Pallaibo track where slopes have a lower gradient. The recorded artefacts probably reflect a background scatter resulting from occupation and movement along gentle lower slopes. Artefacts have been heavily disturbed as a result of previous track construction. It should be noted that no sites were found during test excavations for the Thredbo to Bullocks Flat section of the shared path (Niemoeller, 2011).

Although much of LTVT was steep with a low archaeological potential, isolated finds and small artefact scatters were still found (Figure 21). Their locations were not on the steeper slopes but on relatively flat spurs above the river and often between gullies which carry water on a temporary basis. This pattern is similar to that on the Thredbo valley further upstream and also in the Snowy River valley, where extensive scatters occur where major tributaries join the Snowy River. The reduced numbers of sites compared to further up the Thredbo valley can be explained by lack of visibility (although similar problems were encountered further up the valley) and the alignment of the track being generally along a steep mid-slope.

LTVT3 is located a few hundred metres west of 61-1-0006 (although the plotted location of the latter does not correlate with the description on the site card which places it on the northern side of Paddys Corner). LTVT3 is on a small knoll, which differs from the described context for 61-1-0006, hence it is concluded there is no relationship between the two sites.

Figure 21: selection of quartz artefacts from site LTVT2

Few objects were found around Lake Jindabyne, when compared to other previous studies conducted around the lake, probably because the alignment is away from prior rivers. The two largest sites WOLLONDIBBY1 and Hatchery Bay 2 are in highly disturbed contexts, due to vehicle damage and changing dam levels respectively (Figure 22).

Figure 22: Lakeshore at location of Hatchery Bay2

Figure 23 shows the location of newly recorded sites along the alignment and the index for following figures (Figures 24 to 27), which provide more detail for each section of the alignment.

Table 14: Site descriptions

Site name	*Location*	*Grid Coordinates (Zone 55, GDA 94) Easting*	*Northing*	*Site Type*	*Landscape*	*No of artefacts*	*No of artefact types per site*	*No of stone raw materials per site*	*Raw materials and Artefacts types represented*	*Description*	*Likelihood of Potential Archaeological Deposit (PAD)*
BULLOCKS FLAT(BF)1	Northern bank Thredbo River	629388	5966833	Isolated stone artefact	Lower foot slopes	1	1	1	Quartz / flake	1 quartz flake (0-10mm) in small exposure on gentle slope (<5 degrees)	Low
BULLOCKS FLAT(BF)2	Northern bank Thredbo River	629615	5967498	Isolated stone artefact	Mid foot slopes	1	1	1	Quartz / flake	1 isolated quartz flake (0-10mm) associated with large wombat hole. Natural quartz noted nearby	Low
BULLOCKS FLAT(BF3)3	Northern bank Thredbo River	632972	5969129	Quarry	Lower foot slopes	2	1	1	Porphyritic / flakes	2 flakes and angular fragments near outcrop exposure of dark grey porphyritic type material.	Low
BULLOCKS FLAT(BF)4	Northern bank Thredbo River	634016	5969740	Isolated stone artefact	Mid foot slopes	1	1	1	Quartz / flake	1 quartz flake, (20-30mm) with some cortex, located in small grassy exposure above deep humic soils.	Low to moderate
Robertsons (RC) 1	Northern bank Thredbo River	636020	5970857	Isolated stone artefact	Lower to Mid foot slopes	1	1	1	Quartz / flake	1 quartz flake (10-20 mm). Approx 10m north of the proposed shared track, will not be impacted.	Low
LTVT1	Northern bank Thredbo River	638084	5972065	Isolated stone artefacts	Lower to Mid foot slopes	2	1	1	Quartz / flake	2 quartz artefacts 5 metres apart on level area (<3° slope); 1 quartz core poor quality material 2 negative flake scars; 1 quartz flake.	Low
LTVT2	Northern bank Thredbo River	639220	5972554	Stone artefact scatter	Lower foot slopes	20	4	2	Quartz / flakes, retouched flakes, cores and manuport/anvil	3 stone artefact locales located along crest of small spur / bench. 20 artefacts - 17 at locales 2 and 3. 15 quartz flakes, 3 quartz cores (2 multiplatform and 1 single platform), 1 quartz retouched flake. Some of these artefacts manufactured from very high quality quartz). Single	Moderate

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Site name	*Location*	*Grid Coordinates (Zone 55, GDA 94) Easting*	*Northing*	*Site Type*	*Landscape*	*No of artefacts*	*No of artefact types per site*	*No of stone raw materials per site*	*Raw materials and Artefacts types represented*	*Description*	*Likelihood of Potential Archaeological Deposit (PAD)*
										large rounded river cobble manuport with small amount of possible pitting possibly resulting from anvil use and bipolar flaking.	
LTVT3	Northern bank Thredbo River	641361	5973489	Stone artefact scatter	Lower foot slopes	3	2	1	Quartz / flakes and core	2 quartz flakes and single platform quartz core on small, distinct knoll in large open plain between river and proposed track, possibly near site AHIMS Site 62-1-006. Numerous exposures from wombat diggings.	Moderate
Gaden Hatchery (GH)1	South bank Thredbo River – Gaden Trout Hatchery	641475	5973265	Isolated stone artefact	River bank	1	1	1	Porphyritic / retouched flake	1 large porphyritic retouched flake (40-50mm), immediately adjacent to the Thredbo River within Gaden Hatchery picnic area and poplar trees in disturbed context subject to frequent flooding and exhibiting redeposited sand. Flake displays lateral and distal retouch and minor cortex on platform.	Low
GADEN BRIDGE (GB)1	Flat bench	641528	5973345	Isolated stone artefacts	Lower foot slopes	2	1	1	Quartz / flakes	2 quartz flakes approximately 1 metre apart, flat grassy area with black sallee regrowth above granite gravels and minor clay soils.	Low
GADEN BRIDGE (GB)2	Flat bench	641529	5973327	Isolated stone artefact	Lower foot slopes	1	1	1	Quartz / flake	1 quartz flake approximately 15 metres south of GADEN BRIDGE1, and located in a small exposure with black sallee regrowth above granite gravels and minor	Low

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Site name	*Location*	*Grid Coordinates (Zone 55, GDA 94) Easting*	*Northing*	*Site Type*	*Landscape*	*No of artefacts*	*No of artefact types per site*	*No of stone raw materials per site*	*Raw materials and Artefacts types represented*	*Description*	*Likelihood of Potential Archaeological Deposit (PAD)*
										clay soils.	
PALLAIBO (P)1	Pallaibo track	641667	5973412	Isolated stone artefact	Lower to Mid foot slopes	1	1	1	Quartz / flake	1 quartz flake on track, (10-20mm), slight slope and southwest aspect towards river	Low
PALLAIBO (P)2	Pallaibo track	641758	5973379	Isolated stone artefact	Lower to Mid foot slopes	1	1	1	Quartz / flake	1 quartz flake on track, (10-20mm)	Low
PALLAIBO (P)3	Pallaibo track	641926	5973409	Stone artefact scatter	Lower foot slopes	2	2	2	Quartz, silcrete / flake, retouched flake	2 quartz flakes, (0-10 and 10-20 mm) and 1 silcrete retouched flake (beige colour thumbnail scraper).	Low to moderate
PALLAIBO (P)4	Pallaibo track	641935	5973412	Isolated stone artefact	Lower foot slopes	1	1	1	Quartz / flake	1 quartz retouched flake / bipolar core (10-20 mm) located on flat section of track at top of rise.	Low to moderate
PALLAIBO (P)5	Pallaibo track	641944	5973419	Isolated stone artefact	Lower foot slopes	1	1	1	Quartz / flake	1 quartz flake (0-10mm) on flat section of track	Low to moderate
PALLAIBO (P)6	Pallaibo track	642031	5973445	Isolated stone artefact	Lower foot slopes	1	1	1	Quartz / flake	1 quartz flake (10-20mm) on gently rising section of track	Low to moderate
PALLAIBO (P)7	Pallaibo track	642045	5973448	Isolated stone artefact	Lower foot slopes	1	1	1	Silcrete / flake	1 silcrete flake (10-20mm)	Low to moderate
PALLAIBO (P)8	Pallaibo track	642197	5973464	Stone artefact scatter	Lower foot slopes	3	1	1	Quartz / flake	2 quartz flakes (0-10 mm); 1 quartz flake (10-20 mm) located on flat section of track.	Low to moderate
PALLAIBO(P)9	Pallaibo track	642260	5973571	Isolated stone artefact	Lower foot slopes	1	1	1	Quartz / flake	1 quartz flake (0-10 mm) located on flat section of track.	Low to moderate
PALLAIBO (P)10	Pallaibo track	642256	5973601	Isolated stone artefact	Lower foot slopes	1	1	1	Quartz / flake	1 quartz flake (10-20mm) located on gentle slope.	Low to moderate
PALLAIBO (P)11	Pallaibo track	642399	5973843	Isolated stone	Lower foot slopes	1	1	1	Quartz / flake	1 quartz flake (10-20mm) located close to Thredbo	Low to moderate

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Site name	*Location*	*Grid Coordinates (Zone 55, GDA 94) Easting*	*Northing*	*Site Type*	*Landscape*	*No of artefacts*	*No of artefact types per site*	*No of stone raw materials per site*	*Raw materials and Artefacts types represented*	*Description*	*Likelihood of Potential Archaeological Deposit (PAD)*
				artefact						River.	
WOLLONDIBBY (WD)1	Lake Jindabyne	643235	5970312	Stone artefact scatter	Spur crest / slope	30+	2	3	Quartz, silcrete, tuff / flakes, retouched flakes	Site located over crest and northerly sloping knoll spur. Scatter of stone artefacts distributed along existing track and washed into rills.	Moderate Artefacts likely to occur in subsurface context and extend to either side of track where visibility is very low.
Hatchery Bay(HB) 3	Lake Jindabyne,	644734	5971512	Isolated stone artefact	spur crest / granite boulders	1	1	1	Igneous / anvil	Single rounded river cobble used as anvil, hammer stone. Some grinding on edge. Located in association with outcrop of large granite boulders. Near plotted location of previously recorded AHIMS site 62-1-0070	Low to moderate. Some potential for subsurface artefacts.
Hatchery Bay (HB)2	Lake Jindabyne,	644163	5971887	Stone artefact scatter	Slope	10+	2	3	Quartz, silcrete, chert / flakes and retouched flakes	A diffuse scatter of stone artefacts eroding out and extending along sandy lake foreshore margin. Quartz flakes also occur on side slope above margin and exposed on existing vehicle track that crosses proposed track alignment.	Moderate Given artefacts are eroding out of margin some PAD considered likely.
Hatchery Bay (HB)1	Hatchery Bay road /	644136	5971881	Stone artefact scatter	Gentle slope	4	1	1	Quartz / flakes	Sparse scatter of 4 quartz flakes along existing vehicle track. 1 artefact manufactured from high quality translucent quartz.	Low to moderate

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Kamminga (1992) postulated that the Thredbo valley was a major thoroughfare for Aboriginal people moving into the higher mountain peaks from ceremonial grounds at Kalkite and the Wollondibby valley and the base of Mount Crackenback and those sites can be expected to occur all the way up the valley (Kamminga 1992). He interpreted the archaeology of the Thredbo valley as a continuous archaeological site, comprising many activity areas and postulates that flaking of quartz pebbles at locations along the valley floor and lower slopes over millennia has produced a high background count of flaking debitage.

Within the Lower Thredbo Valley (between Bullocks Flat and Gaden Hatchery the archaeological evidence is almost entirely comprised of low density quartz scatters or isolated artefacts. Ten of the eleven sites located along this section contain flaked stone artefacts entirely manufactured from quartz. Only one site (LTVT 2), along this 15.9 kilometre section contained more than 3 stone artefacts. All flaked artefacts at LTVT 2 were similarly manufactured from quartz.

In contrast 3 of the 4 sites located around Lake Jindabyne contained more than 3 stone artefacts. Raw material diversity along this section was also higher with 50% of the sites containing raw materials other than quartz.

The section along the Pallaibo track is also interesting. Although the majority of these sites (91%) are isolated artefacts and almost entirely comprised of quartz flaked artefacts, the density of sites per kilometre (7.8) calculated through this section is almost 10 times higher than further up the Thredbo Valley where, on average only 0.7 sites were found per kilometre. A number of additional factors may also influence these calculations including the proposed route of the track and the levels of visibility and exposure. The visibility and exposure were considerable lower further up the Thredbo Valley than along the Pallaibo Track.

The dominance of low density artefact occurrences comprised of quartz stone artefacts is well noted in previous surveys. The archaeological evidence revealed during this study continues to the support those results and the postulations of Kamminga (1992).

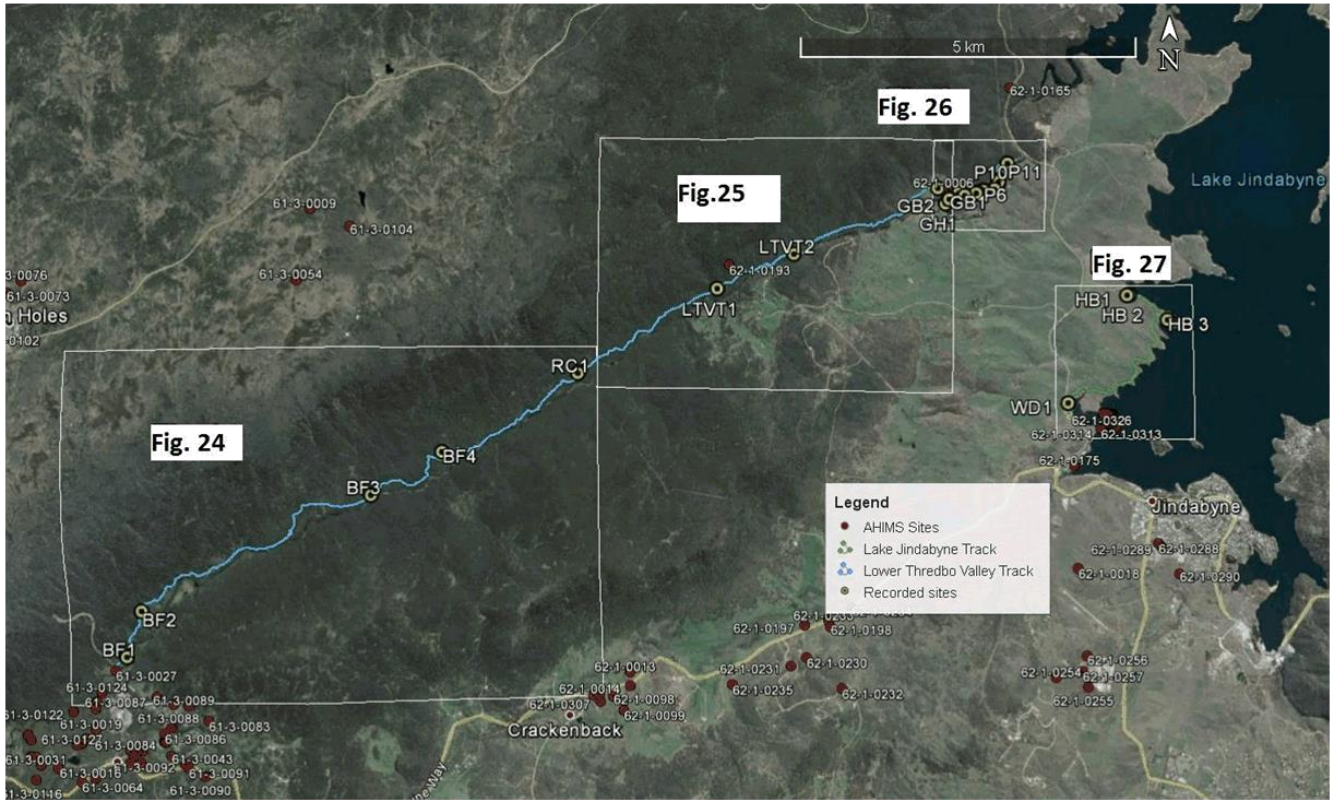

Figure 23: Sites recorded during survey (shown as yellow dots) along proposed shared path linkages from Bullocks Flat to Jindabyne Proposed shared path within KNP from Bullocks Flat to Gaden Hatchery and Pallaibo Track shown in blue. Proposed shared path around Lake Jindabyne between Hatchery Bay and Curiosity Rocks shown in green. Previously recorded AHIMS Sites (shown as red dots).

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

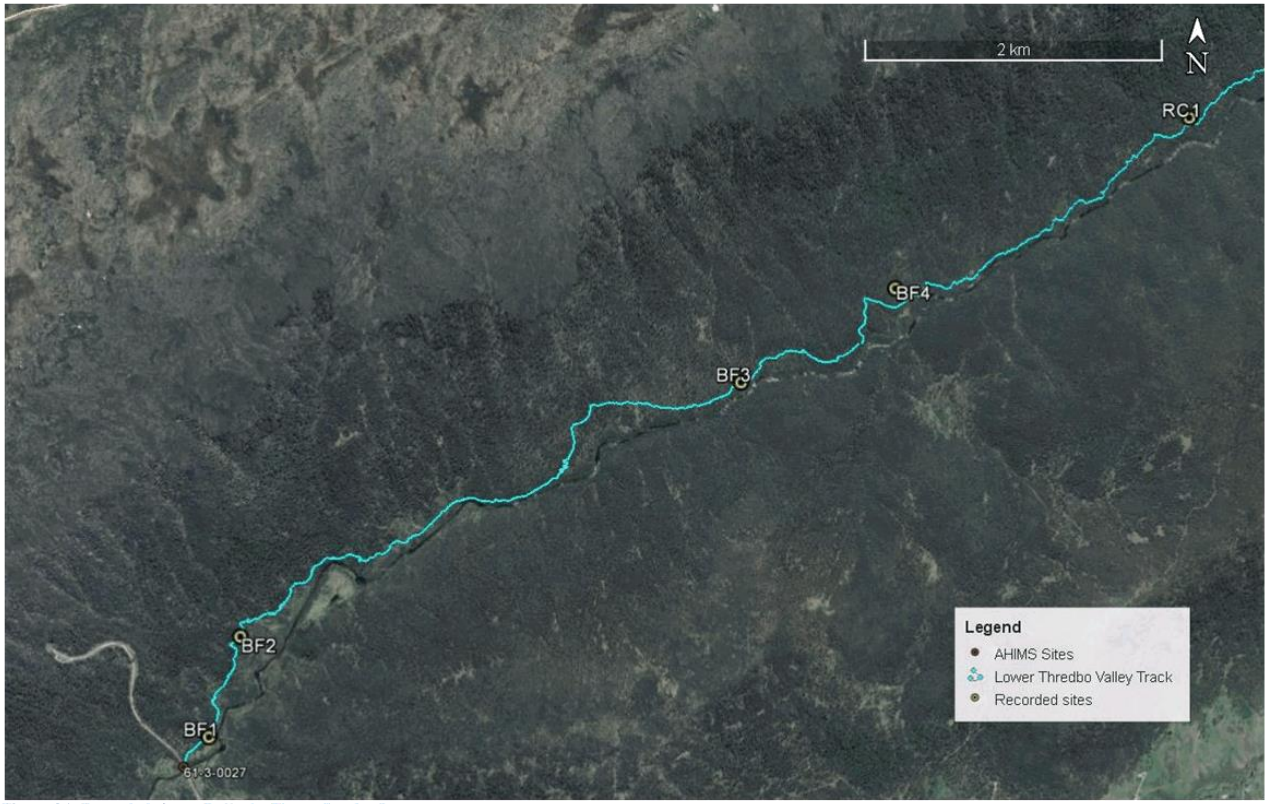

Figure 24: Recorded sites – Bullocks Flat to Pender Lea

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Figure 25: Recorded sites Pender lea to Robertsons Crossing

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

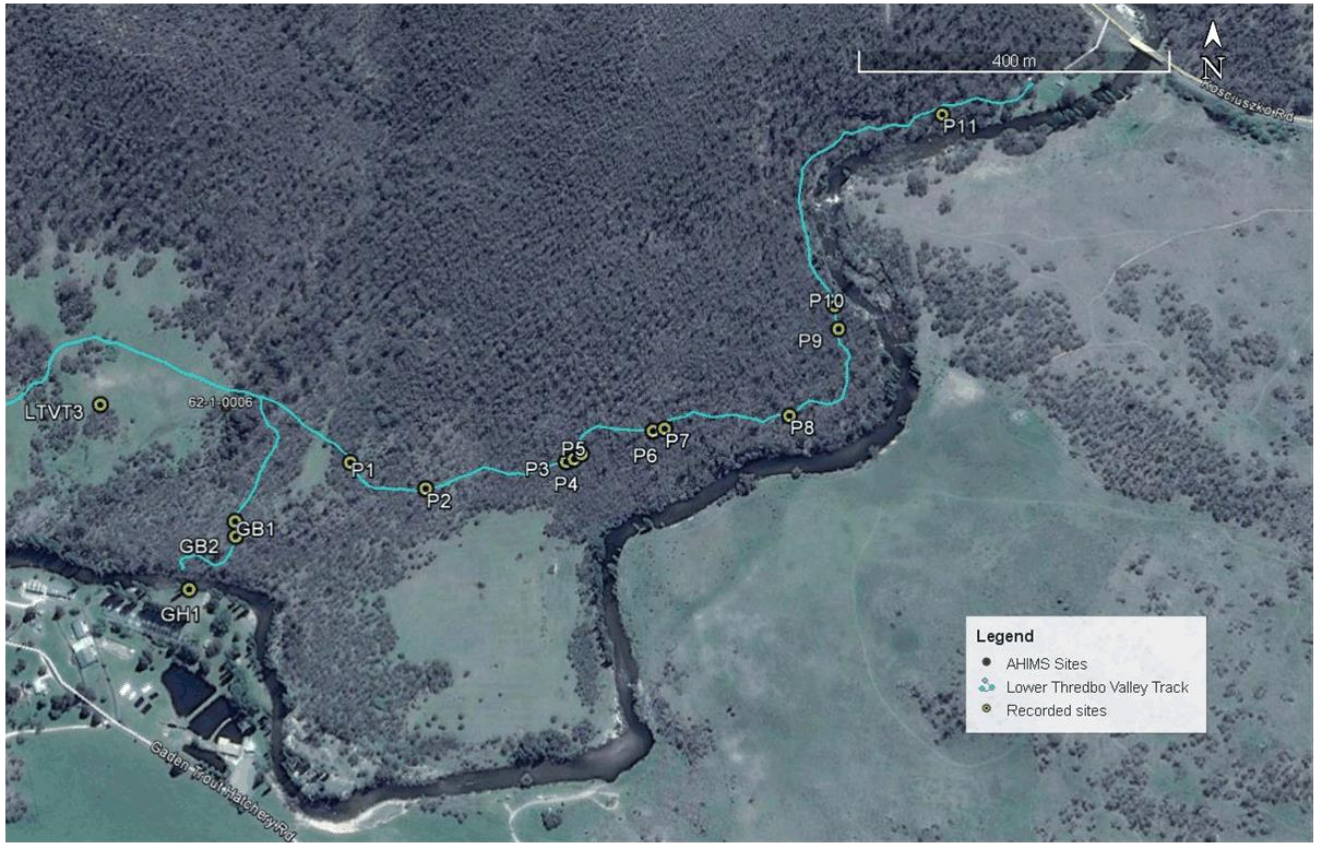

Figure 26: Recorded sites Robertson's Crossing to Thredbo Picnic Area and Gaden bridge

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

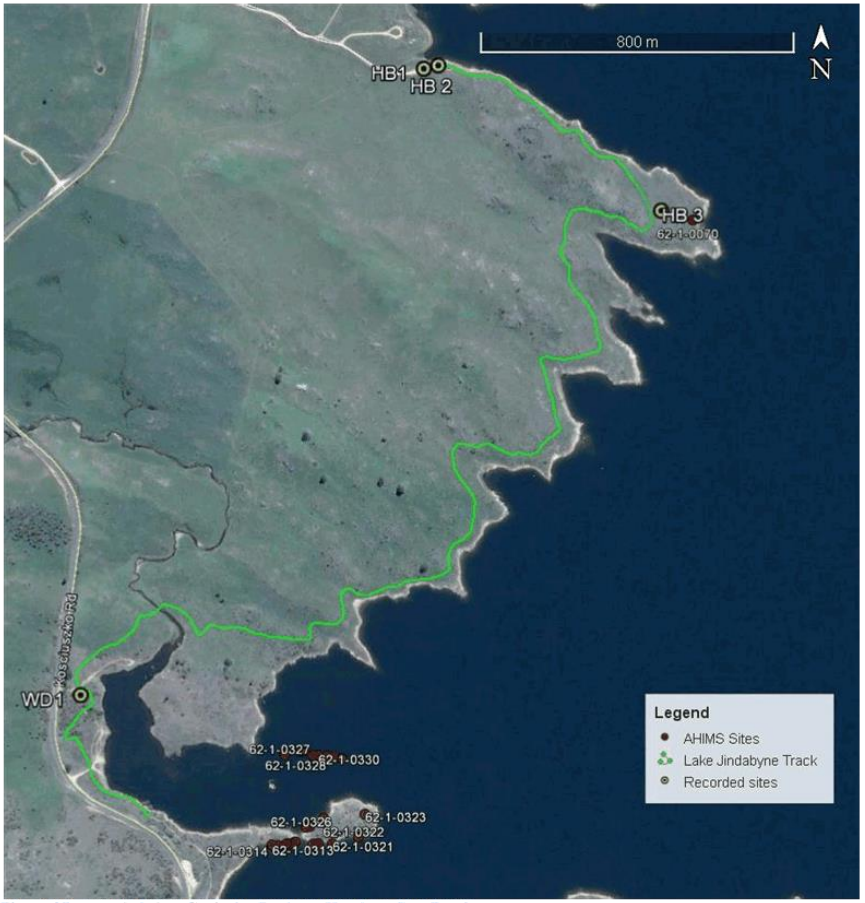

Figure 27: recorded sites Curiosity Rocks to Hatchery Bay Road

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

The locations of several previously recorded sites were searched for if they were recorded as being on or close to the path alignment. Assessment of these previously recorded sites is shown in Table 15.

Table 15: Assessment of previously recorded sites on or near route

SITE ID	SITE NAME	DESCRIPTION	STATUS
61-3-0027	Site C/ Crackenback River 2/Tallangatta	Four quartz flakes on northern side of river recorded in 1983. Grid reference does not correlate with location description. Unable to be found during a survey of the same area in 1984 (Paton, 1984). May have been destroyed by Skitube bridge development.	Not found, but unlikely to be on alignment of shared path which is on a steep side slope.
62-1-0193	Brooks Mill Creek 1	Possible culturally modified tree, northern side of Thredbo River. Very steep country. Not on track alignment. Will not be impacted	Not investigated as well upslope from path alignment.
62-1-0006	Sawpit Creek; Thredbo River; Site 28	3 axe heads on northern banks of Thredbo River at Paddys Corner. Grid references do not correlate. Artefacts collected in 1976 during PhD research by Jo Flood.	One site found in the vicinity (LTVT3), but unlikely to be related to it.
62-1-0070	Colorado Point; Lake Jindabyne; J/WS 24,25,26	Large artefact scatter on western side of lake, recorded when lake levels low in 1977 (Chapman, 1977). Collected in 1977	Not on alignment. Re-located, 1 utilised river cobble (Hatchery Bay 3)
62-1-0150	Curiosity Rocks – rock feature [now in lake] and artefact scatter on peninsula	Large artefact scatter on peninsula adjacent to Curiosity Rocks. Major site protection works conducted in 1999. Site badly damaged and needs further site protection works.	Will not be impacted as path has already been built at this location. Site may extend further north around lake (along river).
Curiosity Rocks Aboriginal Place	62-1-0150	Nomination included rocks and portion of lake shore, identified as being spiritually significant (see Figure xx below). AP gazetted on 6/7/2014, but excluded western shores of lake.	Section of path will be within proposed AP. Date for gazettal unknown.

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6. Significance assessment

6.1. Criteria

The ICOMOS Burra Charter provides the framework for cultural significance assessment using the key criteria of **social, aesthetic, scientific** and **historic** values (ICOMOS 2000). The OEH assessment guidelines also provide some direction on how to apply these criteria in the context of an ACHAR report (OEH, 2011).

Significance assessment relates to physical objects, places, and features of the natural/cultural environment associated with intangible values.

Social value: Generally, all evidence of pre-contact Aboriginal presence is significant to Aboriginal people; even it is not visible at the time of a particular field inspection. The previously recorded edge ground axes collected from Paddys Corner and artefacts collected from Colorado Point have high social significance, although their current whereabouts is unknown.

All of the recorded sites located during this assessment are stone artefacts and therefore likely to have fairly uniform level of significance to Aboriginal people. A particular exception may be that of site Hatchery Bay 3 containing an anvil / hammer stone. Artefacts that are particularly tactile or that have a higher level of rarity will often be of particular significance to Aboriginal people.

Curiosity Rocks including the rock feature and the adjacent peninsula with its artefact scatter have high social and spiritual significance (see Section 2.4). Ethno-historical information indicates that the Thredbo valley was a traditional route of movement for attending bogong moth feasts in the Snowy Mountains. Areas such as Wollondibby and Crackenback were important tribal meeting places, hence these areas are likely to have social value to Ngarigo people.

Scientific (archaeological) value*:* this refers to the capacity of the evidence to contribute to current understanding of Aboriginal pre-contact history of the region, - *'the timely and specific research questions'* of the time, generally expressed in terms of rarity, representativeness or educational value (Sullivan & Bowdler, 1984).

Individual sites are small and on the surface, comprising primary flakes and occasional retouched pieces. They accord with previously recorded sites in the Thredbo valley and around Lake Jindabyne; hence they are neither rare nor particularly good representations of their type. The measurements and analysis conducted for this assessment have realised the scientific value of the individual sites.

As a complex, the recorded sites along LTVT and Pallaibo demonstrate the close association between relatively minor topographical variation and site distribution patterns, and offer a comparative analysis for previous findings in the Thredbo valley and also in the Snowy River valley. The complex has moderate archaeological significance as the sites are the first to be recorded in this section of the valley.

Sites recorded at Lake Jindabyne were small and disturbed. None are rare or good representative examples of their type hence they have low archaeological significance. The object found at Colorado Point may be part of previously recorded site 62 - 1-70 which is of high archaeological significance, but was collected in the 1970s.

The isolated find recorded at Gaden hatchery is not *in situ* and has low archaeological significance.

Collectively, the newly recorded sites do not contribute substantively to the current body of knowledge concerning Aboriginal occupation of the region and are therefore of low archaeological significance.

The assessment of archaeological significance is primarily based on the discussion of previously recorded site types within the region and the number of artefact and raw materials types recorded at each site. The potential for PAD also contributes to the archaeological research potential.

Identified sites were attributed with a separate value between 1 and 5 [low to high]) to assess their archaeological significance (representative / rarity values and archaeological research potential) (see Appendix 7 for attributions). These scores were then totalled (5 values x 3 significance indicators = cumulative values) to provide a numeric value reflecting the level of archaeological significance for each place (Table 16).

These values were ranked against the index of cumulative values to determine the overall archaeological significance of each site. The archaeological significance for each site is summarised in Table 17. The full significance matrix assessment is included at Appendix 7.

Table 16: Significance indicators and cumulative values index

Value	*Significance*	*Cumulative values*	*Attributed Archaeological significance*
1	Low	3 -5	Low
2	Low to moderate	6 – 8	Low to moderate
3	Moderate	9 -11	Moderate
4	Moderate to high	12- 13	Moderate to high
5	High	14 –15	High

Table 17: Significance values assigned for identified sites

Archaeological Significance	*No of sites*	*Assessment of archaeological significance for recorded sites*
Low	21	BULLOCKS FLAT 1, BULLOCKS FLAT 2, BULLOCKS FLAT 4, Robertsons 1, LTVT 1, LTVT 3, GADEN HATCHERY 1, GADEN BRIDGE 1, GADEN BRIDGE 2, PALLAIBO1 – 11, Hatchery Bay 1
Low to moderate	3	BULLOCKS FLAT 3, Hatchery Bay 2, Hatchery Bay 3

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Moderate	2	LTVT2, WOLLONDIBBY 1
Moderate to high	0	-
High	0	-

A*esthetic value*: Curiosity Rocks is a visually arresting rock formation and has aesthetic value for this reason and also because it evokes emotional responses from knowledge holders (Figure 28).

Figure 28: Curiosity Rocks - peninsula in foreground with rock formation in lake

Historic: apart from the continuation of traditional practices associated with bogong moth feasts there are no known Aboriginal historic associations with Jindabyne or the lower Thredbo valley although large numbers of Aboriginal people lived around Jindabyne in the early 1800s.

6.2. Statement of cultural significance

Aboriginal objects recorded during this assessment associated with the Lower Thredbo valley and Jindabyne valley have medium social significance and low - moderate archaeological significance. The Curiosity Rocks area has very high social significance overall and the artefact scatter on the peninsula has high archaeological significance. The presence of the objects supports existing models of Aboriginal occupation of the region but does not contribute substantively to the existing knowledge.

7. Assessing harm

7.1. Avoiding harm

The narrowness of the path, the low-key nature of the development, and consideration of heritage issues in the early stage of planning have enabled some flexibility in the path alignment in order to avoid Aboriginal sites.

When a site or object was discovered during this survey of lower Thredbo Valley, avoidance strategies were discussed on site and where feasible the track was realigned. This meant realigning and reflagging the track, flagging the site in a different colour and recording the site location for later entry and capture into the relevant spatial management system (GIS). In each case, a buffer of at least 5 metres radius was left around the objects, or, if the extent of the site was able to be assumed from landform elements, e.g. toe of a spur, the track was realigned to avoid the assumed extent. For example Figure 29 shows the relationship between the estimated extent of site LTVT2 and the proposed path (blue line), which will be realigned to totally avoid the site.

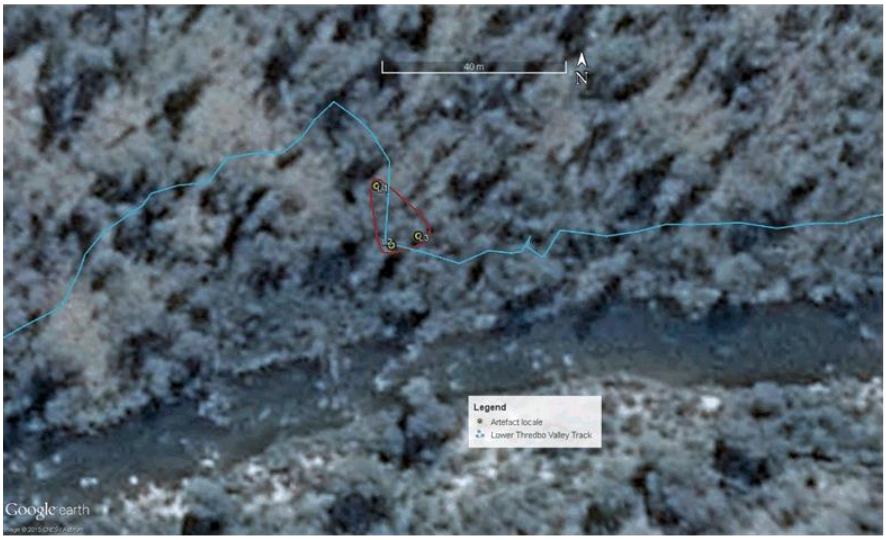

Figure 29: extent of site LTVT 2vrelative to the proposed path alignment

The new realigned section of track was then resurveyed to ensure that no other Aboriginal sites or objects may be disturbed. Constraints allowing and wherever possible, the track was realigned to the downward side of the artefact so as to minimise any future potential harm resulting from water movement or erosion that may result from the construction or use of the track. The position of the objects in relation to the track also influenced the realignment strategy. Realignments aimed to establish a 10 metre minimum buffer for avoiding sites. Table 18 identifies sites able to be avoided by track

realignment. Figures 30 to 40 show the relationship between the proposed track, inferred extent of recorded sites and proposed realignments of the track to avoid harm.

This impact assessment was conducted following the implementation of avoidance management strategies meaning that the level of proposed impact is now generally very low. Where avoidance is not possible an alternative strategy to mitigate harm is proposed (see section below).

7.2. Mitigating harm

Artefacts recorded along the Pallaibo track (PALLAIB0 1-PALLAIBO 11) will be harmed if Option 2 proceeds and the track is upgraded. Prior to development, movement of artefacts to the side of the track, or community collection and repatriation at a location agreed to by NPWS and Registered Aboriginal Parties are two effective strategies for mitigating harm (see Table 18). One RAP (Bega LALC) has indicated a preference for artefacts to be moved out of harm's way and the new location to be recorded on AHIMS.

Table 18: Harm management strategies

Site name	*Site Type*	*Archaeological Significance*	*Management response*	*Type of Harm Direct/Indirect/ None*	*Degree of Harm Total/Partial / None*	*Consequence of Harm Total/ Partial/ No Loss of Value*
BULLOCKS FLAT1	Isolated stone artefact	Low	Avoid - Realign path (see Fig 30)	None	None	No loss of value
BULLOCKS FLAT2	Isolated stone artefact	Low	Avoid - Realign path (see Fig 31)	None	None	No loss of value
BULLOCKS FLAT3	Quarry	Low to moderate	Will not be impacted (see Fig 32)	None	None	No loss of value
BULLOCKS FLAT4	Isolated stone artefact	Low	Will not be impacted (see Fig 33)	None	None	No loss of value
Robertsons 1	Isolated stone artefact	Low	Will not be impacted (see Fig 34)	None	None	No loss of value
LTVT1	Isolated stone artefacts	Low	Avoid - Realign path (see Fig 35)	None	None	No loss of value
LTVT2	Stone artefact scatter	Moderate	Avoid - Realign path (see Fig 36)	None	None	No loss of value
LTVT3	Stone artefact scatter	Low	Will not be impacted (see Fig 37)	None	None	No loss of value
Gaden Hatchery 1	Isolated stone artefact	Low	Avoid - Position bridge footings to avoid site [Option 1]	None	None	No loss of value
GADEN BRIDGE1	Isolated stone artefacts	Low	Avoid - Realign path (see Fig 38)	None	None	No loss of value
GADEN BRIDGE2	Isolated stone artefact	Low	Avoid - Realign path (see Fig 38)	None	None	No loss of value
PALLAIBO 1	Isolated stone artefact	Low	Movement or repatriation [Option 2]	Direct	Partial	No loss of value
PALLAIBO 2	Isolated stone artefact	Low	Movement	Direct	Partial	No loss of value
PALLAIBO 3	Stone artefact	Low	movement	Direct	Partial	No loss of value

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Site name	*Site Type*	*Archaeological Significance*	*Management response*	*Type of Harm Direct/Indirect/ None*	*Degree of Harm Total/Partial / None*	*Consequence of Harm Total/ Partial/ No Loss of Value*
	scatter					
PALLAIBO 4	Isolated stone artefact	Low	movement	Direct	Partial	No loss of value
PALLAIBO 5	Isolated stone artefact	Low	movement	Direct	Partial	No loss of value
PALLAIBO 6	Isolated stone artefact	Low	movement	Direct	Partial	No loss of value
PALLAIBO 7	Isolated stone artefact	Low	movement	Direct	Partial	No loss of value
PALLAIBO 8	Stone artefact scatter	Low	movement	Direct	Partial	No loss of value
PALLAIBO 9	Isolated stone artefact	Low	movement	Direct	Partial	No loss of value
PALLAIBO 10	Isolated stone artefact	Low	movement	Direct	Partial	No loss of value
PALLAIBO 11	Isolated stone artefact	Low	movement	Direct	Partial	No loss of value
Wollondibby1	Stone artefact scatter	Moderate	Impact by shared path, and by proposed conservation works (see Fig 39)	Direct	Partial	Partial loss of value
Hatchery Bay 3	Isolated stone artefact	Low to moderate	Will not be impacted – no further action required.	None	None	No loss of value
Hatchery Bay 2	Stone artefact scatter	Low to moderate	Impact by shared path (see Fig 40)	Direct	Partial	Partial loss of value
Hatchery Bay 1	Stone artefact scatter	Low	Impact if roadworks or if closure rehabilitation (see Fig 40)	Direct	Partial	Partial loss of value

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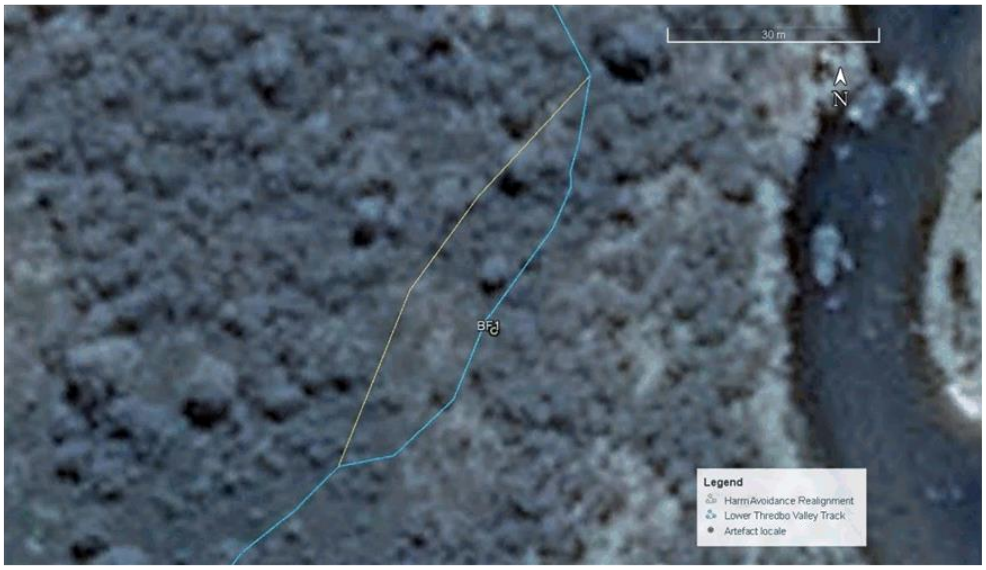

Figure 30: Proposed realignment (shown in yellow) to avoid harm to site Bullocks Flat 1.

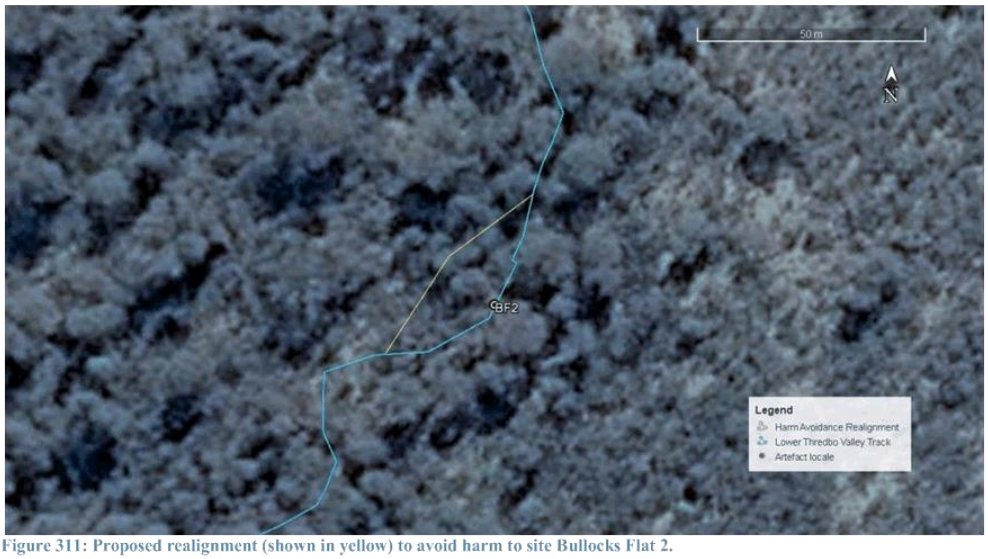

Figure 311: Proposed realignment (shown in yellow) to avoid harm to site Bullocks Flat 2.

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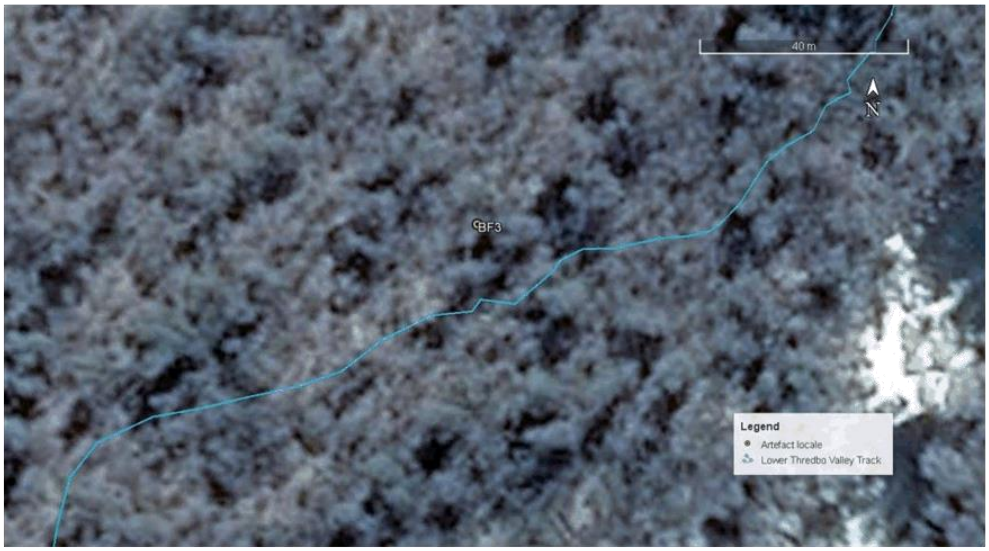

Figure 32: Location of site Bullocks Flat 3 in relation to proposed aligment (shown in blue).

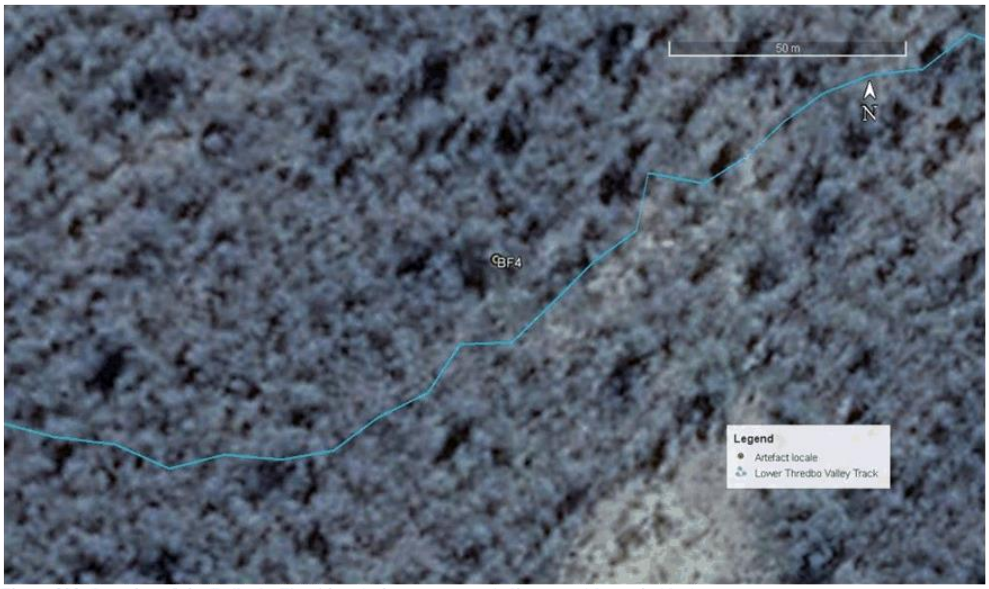

Figure 333: Location of site Bullocks Flat 4 in relation to proposed alignment (shown in blue).

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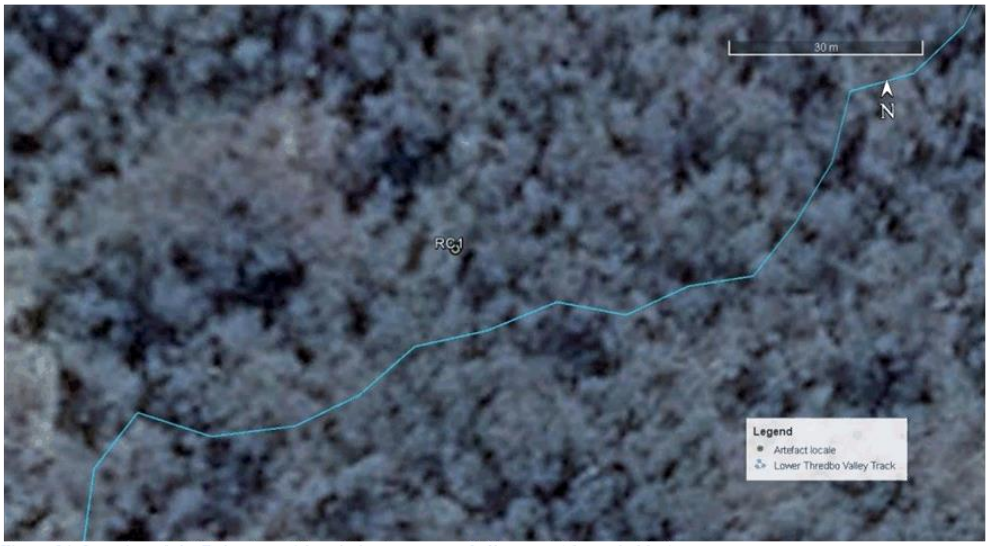

Figure 34: Location of site Robertsons 1 in relation to proposed alignment (shown in blue).

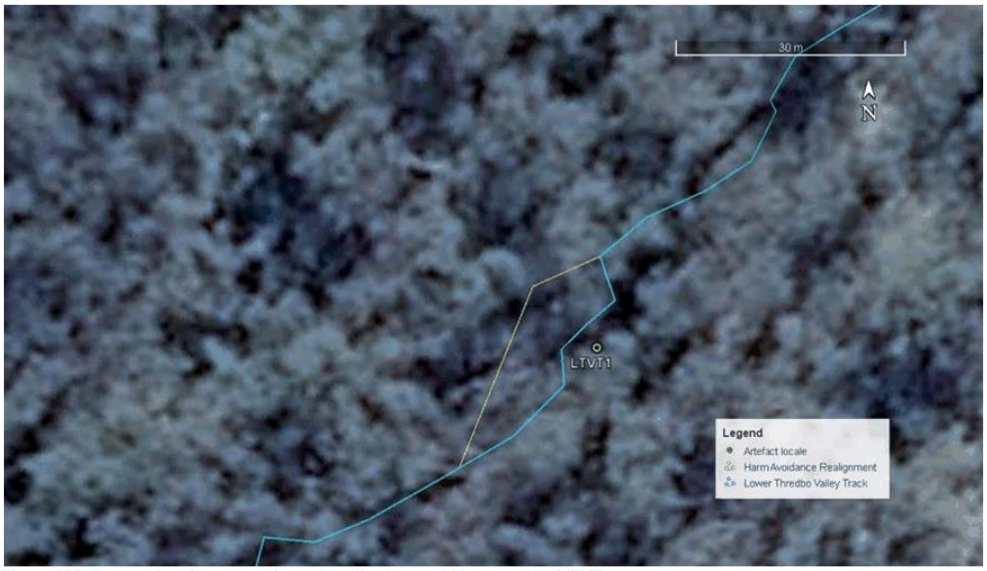

Figure 355: Proposed realignment (shown in yellow) to avoid harm to site LTVT 1.

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

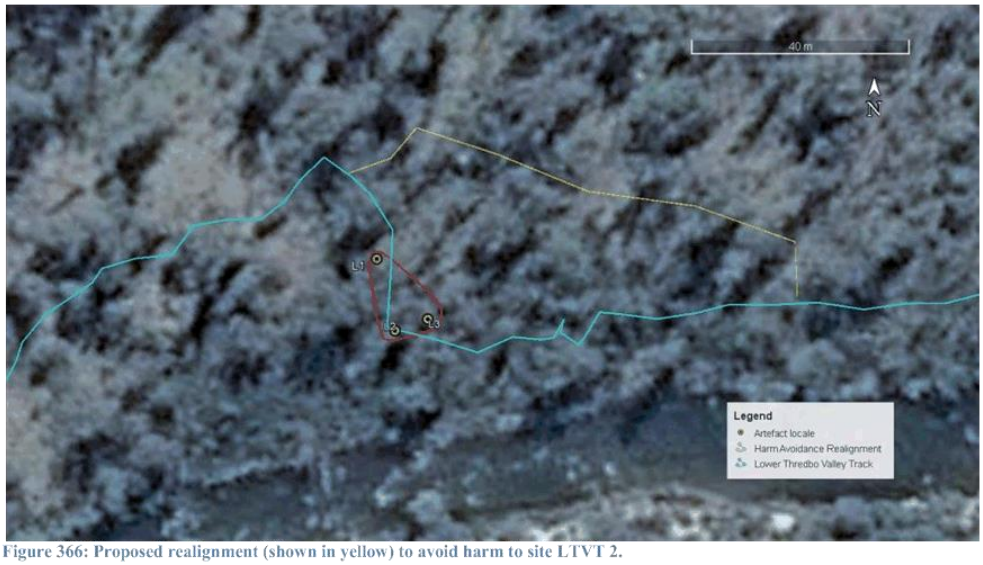

Figure 366: Proposed realignment (shown in yellow) to avoid harm to site LTVT 2.

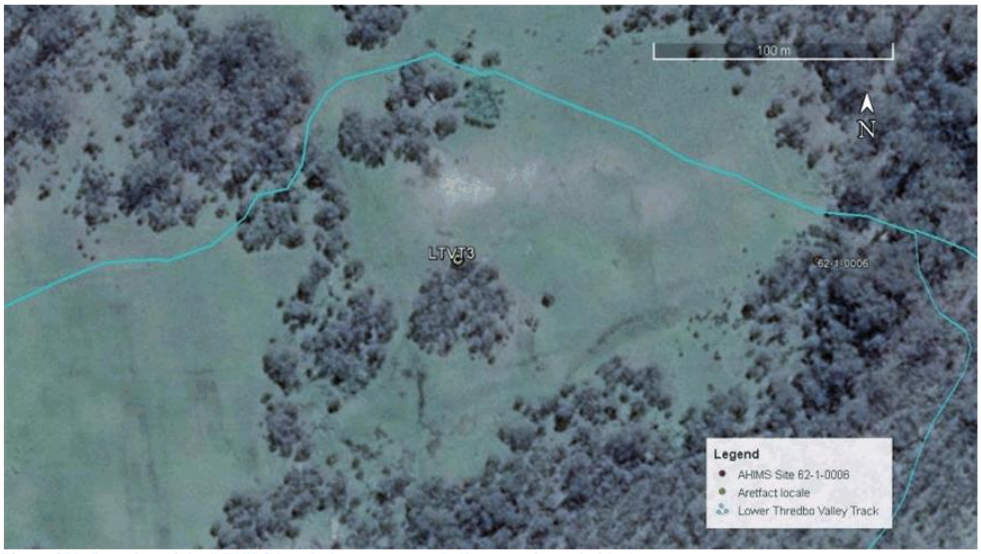

Figure 377: Location of site LTVT 3 in relation to proposed aligment (shown in blue).

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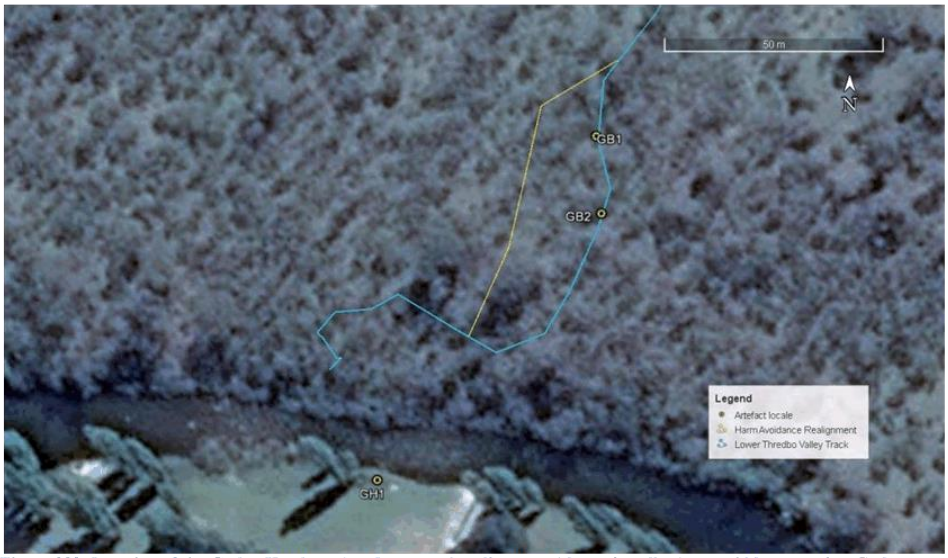

Figure 388: Location of site Gaden Hatchery 1 and proposed realignment (shown in yellow) to avoid harm to sites Gaden Bridge 1 and 2.

7.3. Harm cannot be avoided

Site WOLLONDIBBY1 was observed on an existing informal vehicle track adjacent to Lake Jindabyne and is likely to extend beyond the visible area each side of the road, along the ridgeline (Figure 39). The proposed path (green in Figure 39) goes to the east of the visible extent of WOLLONDIBBY1 and may impact on it. The extent of the site has been estimated as associated with crest and northerly sloping knoll spur.

Site HATCHERY BAY2 extends along the Lake Jindabyne shoreline and up the slope and it likely to be larger than what was observed. Because the extent of this site cannot be reliably determined, it is possible that the proposed path will cause impact on the southern edge of the site as shown in Figure 40.

The estimated extent of site **HATCHERY BAY1,** a dispersed artefact scatter on and beside the existing informal vehicle road is also shown in Figure 40. This road may be closed to vehicles and rehabilitated, which will result in impact to HATCHERY BAY1.

Figure 39: Visible extent of WOLLONDIBBY1 (in red) and estimated extent (orange) following the crest of the spur (approximate).

Figure 40: Possible extent of HATCHERY BAY2 and HATCHERY BAY1

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8. Potential conservation outcomes

Realignment of the LTVT section of the proposed path to avoid known sites can be considered a conservation outcome. The LTVT section of the shared path has been realigned to avoid all the newly recorded sites with at least a 5m metre suitable buffer where site boundaries are diffuse or uncertain. Although the sites are assessed as having low-moderate archaeological significance, they are the first to be recorded and it is pleasing that they will be conserved. Avoidance of the recorded sites along the Pallaibo deviation is also a conservation outcome. Site Gaden Hatchery 1, at the location of the bridge footings in the Gaden Hatchery picnic area can be avoided by moving the bridge footings.

Aboriginal artefacts recorded along the Pallaibo section of the shared path will be either moved to the side of the track or collected and repatriated if Option 2 is chosen. Although the context of the sites will be impacted, the artefacts themselves will be conserved through movement or collection and repatriation. In its response to the draft ACHAR, the Bega LALC supported movement of artefacts out of harm's way

Large artefact scatter WOLLONDIBBY1 on the western side of Lake Jindabyne will be directly partially impacted by construction of the shared path. However, although the path will impact a portion of this site, the remainder of the site beyond the proposed path will be protected as a result of a programme of road closure and environmental protection to be conducted by OEH and Snowy River Shire.

9. Principles of ecologically sustainable development

Ecologically sustainable development (ESD) involves the effective integration of social, economic and environmental considerations in decision-making processes. In 1992, the Commonwealth and all state and territory governments endorsed the *National Strategy for Ecologically Sustainable Development*. In NSW, the concept has been incorporated in legislation such as the EP&A Act and Regulation.

For the purposes of the EP&A Act and other NSW legislation, the Intergovernmental Agreement on the Environment (1992) and the *Protection of the Environment Administration Act* 1991 outline the following principles which can be used to achieve ESD.

(a) The precautionary principle: that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions can be guided by:

(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and

(ii) an assessment of the risk-weighted consequences of various options,

(b) Inter-generational equity: that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,

(c) Conservation of archaeological diversity and integrity: that conservation of archaeological diversity and integrity should be a fundamental consideration,

These principles have been considered and followed in respect of this assessment.

10. Recommendations

1. It is recommended that no further archaeological investigation is required as the archaeological footprint has been adequately understood from field investigations and research conducted in respect of the assessment for the current proposed alignment. Further investigation may be required if there are to be significant deviations from the existing proposed alignment.

2. Artefact scatters recorded along the LTVT section of the path and the deviation to the new bridge at Gaden should be flagged and fenced off during track construction to ensure they are not inadvertently damaged (BULLOCKS FLAT1, BULLOCKS FLAT2, BULLOCKS FLAT3, BULLOCKS FLAT4, LTVT1, LTVT2, GADEN BRIDGE1 and GADEN BRIDGE2). The location of all sites, including their known or assumed extent should be clearly marked on all maps and plans being used during track construction.

3. It is recommended that works can proceed on the lower Thredbo Valley section of track, but must cease if Aboriginal objects are encountered and the OEH Queanbeyan office notified. It is recommended that NPWS organise for contractors undertaking track work to receive basic training in the recognition of Aboriginal artefacts.

4. NPWS may consider archaeological re-survey of less steep [more archaeologically sensitive] sections of the track once the vegetation has been slashed, which will hopefully improve ground visibility. If additional artefacts are found, it is not too late to realign the track to avoid them, with a 5 metre radius buffer.

5. If the Pallaibo track is to be upgraded, an AHIP will be required to harm objects Pallaibo 1 to Pallaibo 11 inclusive. Harm may result from the activity itself, or from movement or community collection prior to the activity commencing. These artefacts reflect a dispersed background scatter and more objects may be present but not visible at the time of field inspection. It is recommended that an area based AHIP is sought for the track between the Thredbo Picnic area and where the track turns north over Sawpit Creek. The AHIP should include a condition for movement, in accordance with responses on the draft ACHAR from one of the Registered Aboriginal Parties [Bega LALC].

6. It is recommended that an AHIP is sought for partial harm to sites WOLLONDIBBY1, HATCHERY BAY2 and HATCHERY BAY1. Harm may result from the activity itself, or from movement or community collection prior to the activity commencing. The AHIP should include a condition for movement, in accordance with responses on the draft ACHAR from one of the Registered Aboriginal Parties [Bega LALC].

7. If an Aboriginal Place is declared for Curiosity Rocks using the boundaries identified in the original nomination, an AHIP will be required to construct the section of path within the AP.

11. References

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Appendix 1: Aboriginal consultation- Stage 1: Notification

1. The advertisement was placed in Cooma-Monaro Express, Bega Post and the Summit Sun between 14 and 16 April 2015.

Public Notices

NSW GOVERNMENT | Office of Environment & Heritage

Invitation to Aboriginal persons to be consulted regarding extension of shared path in Kosciuszko National Park from Bullocks Flat to Lake Jindabyne

The National Parks and Wildlife Service (NPWS) and Snowy River Shire Council (SRSC) propose to extend an existing shared (cycle and pedestrian) path in the Thredbo Valley for an additional 30 kms, from Bullocks Flat to the Gaden Trout Hatchery and the Thredbo River Picnic Area (NPWS) and along the Gaden Road to the western shores of Lake Jindabyne to Curiosity Rocks.

NPWS and SRSC are inviting Aboriginal people who hold cultural associations relevant to this area to be consulted regarding the proposed works. The purpose of this consultation is to assist NPWS and SRSC in conducting a cultural heritage assessment of the area to be affected by the proposal and if required, to assist in preparation of an application for an Aboriginal Heritage Impact Permit (AHIP) to allow Aboriginal objects to be impacted during works. The consultation will also assist the CEO of OEH in determining the application.

Any individuals or groups that wish to be consulted regarding the proposed works should contact Chris Darlington on (02) 6450 5595 or Chris.Darlington@environment.nsw.gov.au or Alannah Dickeson on (02) 6451 1559 or Alannah.Dickeson@snowyriver.nsw.gov.au before Friday 1 May 2015.

NPWS is part of the NSW Office of Environment and Heritage.

Z03180

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

2. Letter to SAWG and RAPs

Office of Environment & Heritage
NSW National Parks & Wildlife Service

SNOWY RIVER SHIRE
SPIRIT OF THE SNOWY MOUNTAINS

[name]
[address]

02/04/2015

Dear

RE: Invitation to Aboriginal persons to be consulted regarding extension of shared path in Kosciuszko National Park from Bullocks Flat to Lake Jindabyne

The National Parks and Wildlife Service (a Division of the Department of Premier and Cabinet, Office of Environment and Heritage [OEH]) and Snowy River Shire Council propose to extend an existing shared (cycle and pedestrian) path in the Thredbo Valley for an additional 30 kms, from Bullocks Flat to the Gaden Trout Hatchery and the Thredbo River Picnic Area (NPWS) and from there along Gaden Road around the western shores of Lake Jindabyne to Curiosity Rocks. A map showing the proposed route is enclosed with this letter.

NPWS and Council are inviting Aboriginal people who hold cultural associations relevant to this area to be consulted regarding the proposed works. The purpose of this consultation is to assist NPWS and Council in conducting a cultural heritage assessment of the area to be affected by the proposal and, if required, to assist in preparation of an application for an Aboriginal Heritage Impact Permit (AHIP) to allow Aboriginal objects to be impacted during works. The consultation will also assist the CEO of OEH in determining the application.

You are being contacted because you or your organisation is currently registered with the OEH Queanbeyan office as having an interest in being consulted on Aboriginal heritage assessment matters in the Snowy River Shire. If you wish to be consulted regarding these proposed works please respond in writing by email or post within fourteen (16) days of receiving this letter, to either Chris Darlington (NPWS) or Alannah Dickeson (Snowy River Shire). Contact details are as follows:

Chris Darlington
E: Christopher.darlington@environment.nsw.gov.au
NSW National Parks & Wildlife Service
Southern Ranges Region
PO Box 2228, Jindabyne NSW 2627

Alannah Dickeson
E: Alannah.Dickeson@snowyriver.nsw.gov.au
Snowy River Shire Council
PO Box 143, Berridale NSW 2628

For enquiries, please contact Chris Darlington on 0264 505 595 or Alannah Dickeson on 0264 511 559.

Yours sincerely,

[signed]

Chris Darlington
NSW National Parks & Wildlife Service

Alannah Dickeson
Snowy River Shire Council

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Office of Environment & Heritage
NSW National Parks & Wildlife Service

SNOWY RIVER SHIRE
SPIRIT OF THE SNOWY MOUNTAINS

[name]
[address]

02/04/2015

Dear
RE: Invitation to Aboriginal persons to be consulted regarding extension of shared path in Kosciuszko National Park from Bullocks Flat to Lake Jindabyne

The National Parks and Wildlife Service (a Division of the Department of Premier and Cabinet, Office of Environment and Heritage [OEH]) and Snowy River Shire Council propose to extend an existing shared (cycle and pedestrian) path in the Thredbo Valley for an additional 30 kms, from Bullocks Flat to the Gaden Trout Hatchery and the Thredbo River Picnic Area (NPWS) and from there along Gaden Road around the western shores of Lake Jindabyne to Curiosity Rocks. A map showing the proposed route is enclosed with this letter.

NPWS and Council are inviting Aboriginal people who hold cultural associations relevant to this area to be consulted regarding the proposed works. The purpose of this consultation is to assist NPWS and Council in conducting a cultural heritage assessment of the area to be affected by the proposal and if required, to assist in preparation of an application for an Aboriginal Heritage Impact Permit (AHIP) to allow Aboriginal objects to be impacted during works. The consultation will also assist the CEO of OEH in determining the application.

You are being contacted because you are currently listed as a member of the Southern Aboriginal Working Group, established by NPWS. If you wish to be consulted regarding these proposed works please respond in writing by email or post within sixteen (16) days of receiving this letter, to either Chris Darlington (NPWS) or Alannah Dickeson (Snowy River Shire). Contact details are as follows:

Chris Darlington
E: Christopher.darlington@environment.nsw.gov.au
NSW National Parks & Wildlife Service
Southern Ranges Region
PO Box 2228, Jindabyne NSW 2627

Alannah Dickeson
E: Alannah.Dickeson@snowyriver.nsw.gov.au
Snowy River Shire Council
PO Box 143, Berridale NSW 2628

For enquiries, please contact Chris Darlington on 0264 505 595 or Alannah Dickeson on 0264 511 559.

Yours sincerely,

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

[signed]
Chris Darlington
NSW National Parks & Wildlife Service

Alannah Dickeson
Snowy River Shire Council

3. Letter to agencies

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

OnSite Cultural Heritage Management Pty Ltd

PO Box 574 NAROOMA NSW 2546
gerard@onsitechm.com.au
ABN: 48 089 066 744
Ph: 0414441896
www.onsitechm.com.au

Our Ref: A041

14 April 2015

Establishing a Register of Interest for an Aboriginal Cultural Heritage Assessment – Thredbo Valley to Jindabyne shared use trail, Snowy River Shire NSW 2628.

The NSW National Parks and Wildlife Service is planning to extend the recently completed shared use Thredbo Valley Track within Kosciuszko National Park (KNP) for an additional 18 – 20 km downstream and connect onwards to Jindabyne. Once outside the national park, Snowy River Shire Council will construct a bridge over the Thredbo River and a path that will link the shared path to the western shores of Lake Jindabyne where it will join an existing trail at Curiosity Rocks, a distance of around 5 kms.

The project is situated within the Snowy River Shire and on the Jindabyne 8625-3S 1:25,000 and Perisher Valley 8525-2S 1:25,000 map sheets.

The proponents, NSW National Parks and Wildlife Service and the Snowy River Shire Council have engaged Sue Feary Conservation & Heritage Planning & Management and On Site Cultural Heritage Management to prepare an Aboriginal Cultural Heritage Assessment to identify and assess Aboriginal objects and values that may be harmed by the proposal pursuant to the *NSW National Parks and Wildlife Act 1974.* This assessment may be used to support an Aboriginal Heritage Impact Permit (AHIP) application if required. A map showing the proposed trail route is shown in the attached Figure.

I am writing to you in accordance with Section 4.1.2, Stage 1 of the ***Aboriginal cultural heritage consultation requirements for proponents***. In accordance with Stage 1 I am writing to you to identify Aboriginal persons who may hold cultural knowledge relevant to determining the significance of Aboriginal objects located within the project area.

Could you please conduct relevant database / register searches and provide the names of Aboriginal people you consider may be affected by this proposal. The names of Aboriginal persons you provide will be invited to register an interest in the project and participate in the consultation process.

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Your assistance in this process would be much appreciated and ensure that the proponents and the Office of Environment and Heritage consider the views of Aboriginal people that may be affected by this proposal.

Could you please forward the names of those Aboriginal people you consider may be affected by this proposal to me by Thursday 30 April 2015.

Please note that this information has been sought from the following organisations in accordance with Section 4.1.2 of the consultation requirements:

a) Office of Environment and Heritage EPRG regional office, South Queanbeyan
b) Eden Local Aboriginal Land Council
c) Bega Local Aboriginal Land Council
d) the Registrar, *Aboriginal Land Rights Act 1983* for a list of Aboriginal owners
e) the National Native Title Tribunal for a list of registered native title claimants, native title holders and registered Indigenous Land Use Agreements
f) Native Title Services Corporation Limited (NTSCORP Limited)
g) Snowy River Shire Council
h) Local Land Services South East (formerly CMA) for contact details of any established Aboriginal reference group

Regarding organisation (e) National Native Title Tribunal, an online Search of the Registers was conducted on the 14th April by Local Government Area. A search of the registers using Snowy River Shire as the search criteria did not reveal any relevant results for claims, claimants, determinations or land use agreements. The Registers searched included:

- Register of Native Title Claims
- National Native Title Register; and
- Register of Indigenous Land Use Agreements

Please contact me should you require any further information or wish to discuss this proposal on 0414441896 or gerard@onsitechm.com.au.

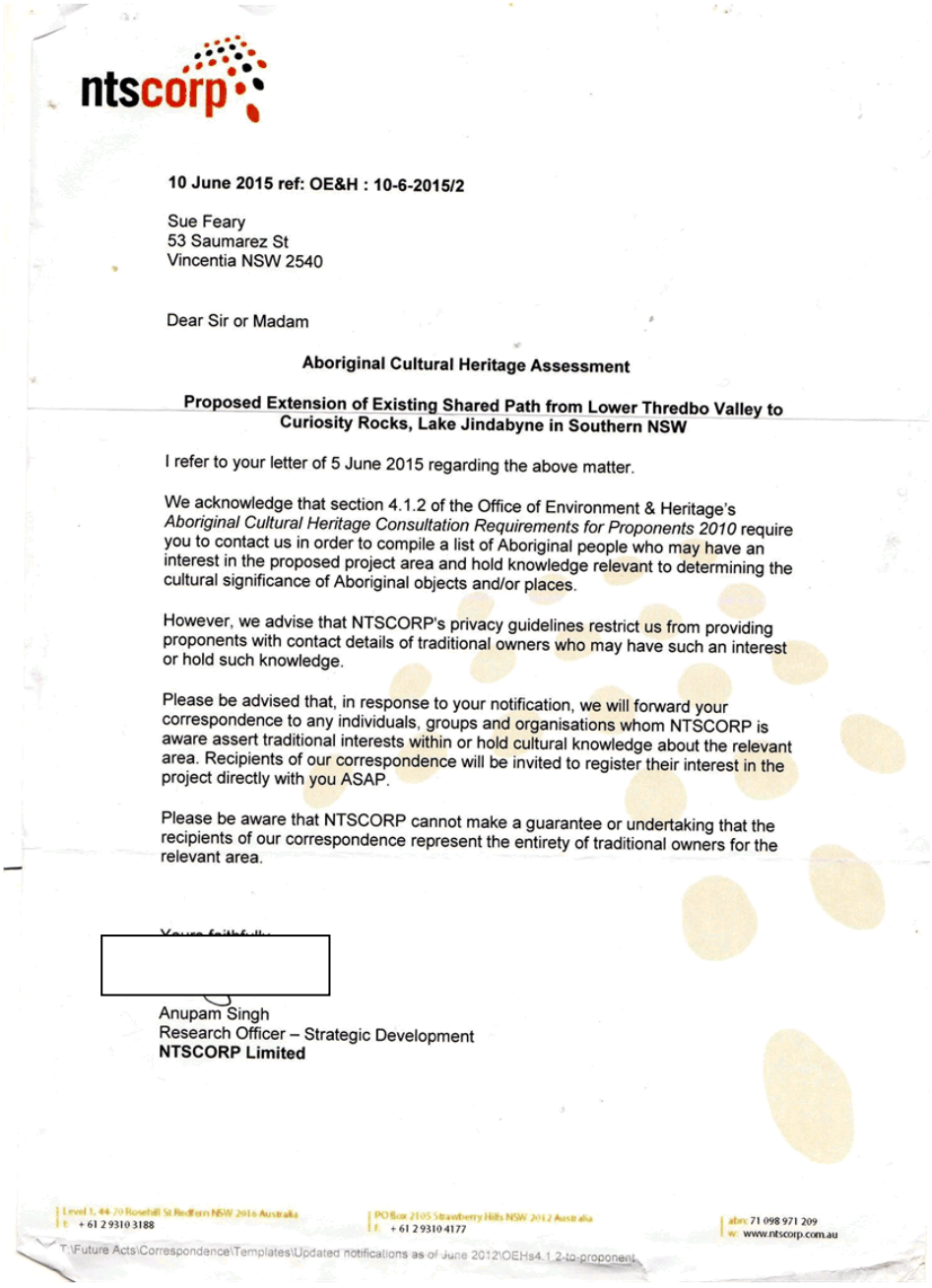
Regards

Gerard Niemoeller
Principal Heritage Consultant

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Appendix 2: Response from agencies

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.



ntscorp

10 June 2015 ref: OE&H : 10-6-2015/2

Sue Feary
53 Saumarez St
Vincentia NSW 2540

Dear Sir or Madam

Aboriginal Cultural Heritage Assessment

Proposed Extension of Existing Shared Path from Lower Thredbo Valley to Curiosity Rocks, Lake Jindabyne in Southern NSW

I refer to your letter of 5 June 2015 regarding the above matter.

We acknowledge that section 4.1.2 of the Office of Environment & Heritage's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* require you to contact us in order to compile a list of Aboriginal people who may have an interest in the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal objects and/or places.

However, we advise that NTSCORP's privacy guidelines restrict us from providing proponents with contact details of traditional owners who may have such an interest or hold such knowledge.

Please be advised that, in response to your notification, we will forward your correspondence to any individuals, groups and organisations whom NTSCORP is aware assert traditional interests within or hold cultural knowledge about the relevant area. Recipients of our correspondence will be invited to register their interest in the project directly with you ASAP.

Please be aware that NTSCORP cannot make a guarantee or undertaking that the recipients of our correspondence represent the entirety of traditional owners for the relevant area.

Yours faithfully,

Anupam Singh
Research Officer – Strategic Development
NTSCORP Limited

Level 1, 44-70 Rosehill St Redfern NSW 2016 Australia t + 61 2 9310 3188 | PO Box 2105 Strawberry Hills NSW 2012 Australia f + 61 2 9310 4177 | abn 71 098 971 209 w www.ntscorp.com.au

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Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

OFFICE OF THE REGISTRAR
ABORIGINAL LAND RIGHTS ACT 1983 (NSW)

11-13 Mansfield Street
Glebe NSW 2037
PO Box 112, Glebe NSW 2037
P: 02 9562 6327 F: 02 9562 6350

Sue Feary
Conservation & Heritage Planning and Management
53 Saumarez Street
VINCENTIA NSW 2540

Dear Sue

Re: Request - Search for Registered Aboriginal Owners

I refer to your letter dated 5 June 2015 regarding Aboriginal Cultural Heritage Assessment within Lake Jindabyne in NSW.

I have searched the Register of Aboriginal Owners and the project area described *does not appear* to have Registered Aboriginal Owners pursuant to Division 3 of the *Aboriginal Land Rights Act* 1983 (NSW).
I suggest that you contact the Bega Local Aboriginal Land Council. They will be able to assist you in identifying other Aboriginal stakeholders for this project. (02) 6492 3950.

Yours sincerely

Sally Porter
Administration Officer
Office of the Registrar, *Aboriginal Land Rights Act* (1983)

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

NSW GOVERNMENT Services South East

12 June 2015

Sue Feary
Conservation and Heritage Planning and Management
53 Saumarez Street
Vincentia NSW 2540

Dear Sir /Madam

Re: Proposed Extension of existing shared path from lower Thredbo Valley to Curiosity Rocks, Lake Jindabyne in Southern NSW

Thank you for your letter dated 5th June 2015, requesting assistance with identifying Aboriginal stakeholder groups or persons who may have an interest in your project area.

South East Local Land Service (SELLS) acknowledges that Catchment Management Authorities have been listed in *Section 4.1.2 (g)* of the *Aboriginal cultural heritage consultation requirements for proponents 2010,* under *Part 6, National Parks and Wildlife Act 1974* as a source of information to obtain the "names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal *objects* and/or *places*".

South East Local Land Service (SELLS) is a partner with many Aboriginal communities in the region on many natural resource management (NRM) projects. However, South East Local Land Service (SELLS) is not the primary source for contacting or managing contact lists for Aboriginal communities or persons that may inform or provide comment on planning issues. South East Local Land Service (SELLS) considers cultural heritage issues that relate to land-use planning in general and only considers culture and heritage issues in the context of NRM.

We strongly recommend that you make contact with the Office of Environment and Heritage (OEH), Cultural Heritage Division, Queanbeyan for all-inclusive contact lists of persons and organisations that may assist with your investigation.

Note: Southern Rivers Catchment Management Authority no longer exists. All work previously carried out by SRCMA in now delivered by South East Local Land Services (SELLS).

Should you wish to discuss this matter further, please contact Ken Davies, Senior Land Services Officer, Aboriginal Communities, South East Local Land Services (SELLS) on (02) 42249714.

Yours sincerely,

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Appendix 3: Stage 2 and 3 Aboriginal consultation - documentation sent to Registered Parties and SAWG.

Office of Environment & Heritage
NSW National Parks & Wildlife Service

SNOWY RIVER SHIRE
SPIRIT OF THE SNOWY MOUNTAINS

Sample letter

20/04/2015

Dear

RE: ABORIGINAL CONSULTATION FOR PROPOSED EXTENSION OF A SHARED PATH, BULLOCKS FLAT TO LAKE JINDABYNE: Stages 2 and 3

National Parks and Wildlife Service (NPWS) and Snowy River Shire Council ('Council') are intending to extend existing shared paths (cycle and pedestrian), located in the Thredbo Valley of Kosciuszko National Park and at Lake Jindabyne. The extension would go from Bullocks Flat in the national park, to Curiosity Rocks on the western side of Lake Jindabyne, a distance of approximately 30 kms [hereafter called the 'subject area']. The existing paths in the national park and around Lake Jindabyne are very popular and there is strong community support to link them together.

The Office of Environment and Heritage (OEH) Aboriginal consultation process is normally only triggered by the need for an Aboriginal Heritage Impact Permit (AHIP) under the *National Parks and Wildlife Act 1974*. Although the proposed route will not impact any known, recorded Aboriginal objects, new sites may be found during the field survey. Council and NPWS have decided therefore, to undertake Aboriginal consultation at this early stage in the project.

Stage 1 of the Aboriginal consultation process for this project has been conducted in accordance with OEH's Aboriginal consultation requirements (DECCW, 2010) and a number of Aboriginal groups/individuals have registered an interest in being consulted. The subject area lies within the boundaries of the Bega and Eden Local Aboriginal Land Councils (LALC) as defined under the *NSW Aboriginal Land Rights Act 1983.*

Stage 2 of the consultation process is concerned with the following matters:-

- presenting more information on the proposed track extension and its potential impacts on Aboriginal heritage
- presenting a draft methodology for conducting the Aboriginal heritage assessment, including field survey
- seeking comment on potential management recommendations

A report on the draft assessment methodology and management scenario has been prepared by Dr Sue Feary, the archaeologist engaged by NPWS and Council to conduct the heritage assessment. This report is

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

enclosed with this letter and is entitled *ABORIGINAL CONSULTATION STAGE 2: INFORMATION ON THE PROPOSED DEVELOPMENT AND THE ASSESSMENT PROCESS.*

You are invited to make comment on the draft methodology and management scenarios described in the enclosed report. In particular, we are seeking advice on whether you require any additional information in order to understand the scope of the proposed project and proposed cultural heritage assessment process, or whether there are other management options that you would like us to consider.

Stage 3 of the consultation process is concerned with gathering information from Aboriginal people on the cultural significance of the subject area, including specific sites and places, historical and traditional associations and religious values (where the information is able to be passed on). The aim of gathering this information is to ensure that the proposed development will not impact on significant values and where appropriate, these values be actively protected. Confidential information will not go into the report if this is the wish of the knowledge holder.

The enclosed paper entitled *ABORIGINAL CONSULTATION STAGE 3: GATHERING INFORMATION ABOUT CULTURAL SIGNIFICANCE* contains a list of queries that we would like you to consider. Your responses will assist NPWS and Snowy River Shire in planning and design of the proposed track.

Please make your submission in writing by close of business on 18th May 2015 to: NSW National Parks & Wildlife Service - Southern Ranges Region, 'Attention Chris Darlington', PO Box 2228 Jindabyne NSW 2627 or via email chris.darlington@environment.nsw.gov.au

Enquiries are to be made with either Chris Darlington or Alannah Dickeson through the contact details below.

Yours Sincerely,

[signed]

Chris Darlington
E: Chris.darlington@environment.nsw.gov.au
NSW National Parks & Wildlife Service
Southern Ranges Region
PO Box 2228, Jindabyne NSW 2627
0264 505 595

[signed]

Alannah Dickeson
E: Alannah.Dickeson@snowyriver.nsw.gov.au
Snowy River Shire Council
PO Box 143, Berridale NSW 2628
0264 511 559

Encl:
*ABORIGINAL CONSULTATION STAGE 2: INFORMATION ON THE PROPOSED DEVELOPMENT AND THE ASSESSMENT PROCESS.
*ABORIGINAL CONSULTATION STAGE 3: GATHERING INFORMATION ABOUT CULTURAL SIGNIFICANCE.

ABORIGINAL CONSULTATION STAGE 2: INFORMATION ON THE PROPOSED DEVELOPMENT AND THE ASSESSMENT PROCESS.

Proposed development

The NSW National Parks and Wildlife Service (NPWS) is planning to extend the recently completed shared use Thredbo Valley Track within Kosciuszko National Park (KNP) an additional 18 – 20 km downstream, to allow it to connect onwards to Jindabyne. Once outside the national park, Snowy River Shire Council will construct a bridge over the Thredbo River and a path that will link the shared path to the western shores of Lake Jindabyne where it will join an existing trail at Curiosity Rocks, a distance of around 5 kms (see Figure 1 for locality map).

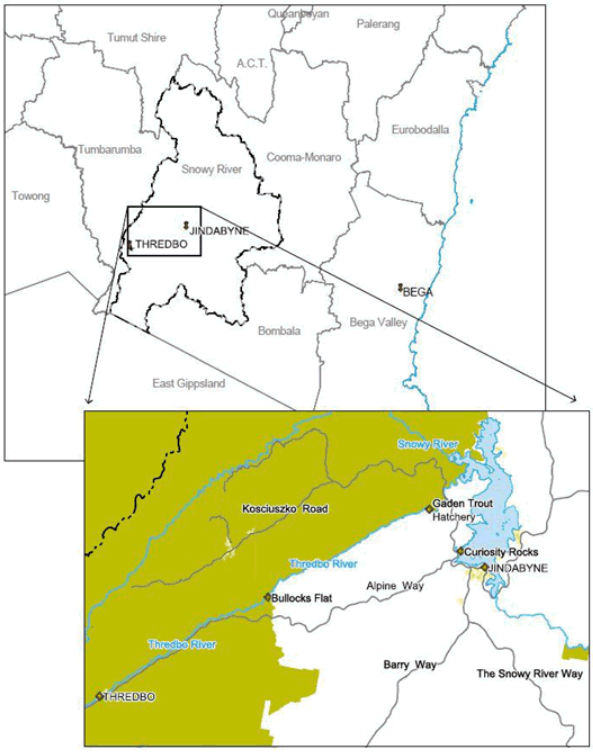

Fig.1

101

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Track route details

In Kosciuszko National Park (see Figures 2 and 3)

The track (with tributary and creek crossings) commences on the southern side of the Thredbo River at the Skitube bridge (Bullocks Flat), immediately crossing to the north side of the river on the Skitube bridge, where fencing will also be installed. It will run roughly adjacent to the Thredbo River on its northern side for approximately 18km and end at the Gaden Trout Hatchery (Option 1) or Thredbo River Picnic Area (Option 2). Both options may be included in the final design.

- Option 1 – Construction of a bridge at the Gaden Trout Hatchery. This bridge project would be owned by an external party, likely Snowy River Shire Council.
- Option 2 – Track to continue past the Gaden Trout Hatchery, join the Pallaibo Track at the lowest point where it crosses Sawpit Creek and continue along the Pallaibo Track to the Thredbo River Picnic Area. This option will require that section of the Pallaibo Track to be re-zoned from a walking track to a multi-use track. Some track modifications and upgrades would be required.

The finalised track route will have the flexibility to be cleared and constructed within 25 metres of either side of the marked route, where this would not cause the track to drop into the Thredbo River's flood line. This flexibility allows deviations in response to issues and findings identified in the REF and Aboriginal Cultural Heritage Assessment, or take advantage of improved aesthetic opportunities and identified safer lines, etc.

Snowy River Shire Council (see Figure 3)

The track will join the NPWS track at Gaden Trout Hatchery via a new bridge over the Thredbo River. It will then traverse Gaden hatchery land for a short distance and follow the existing sealed Gaden Road to Hatchery Bay on the western side of Lake Jindabyne. The path will then follow the lakeshore for a distance of around 5 kms, to link up with an existing trail coming in at Curiosity Rocks.

Fig. 2

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

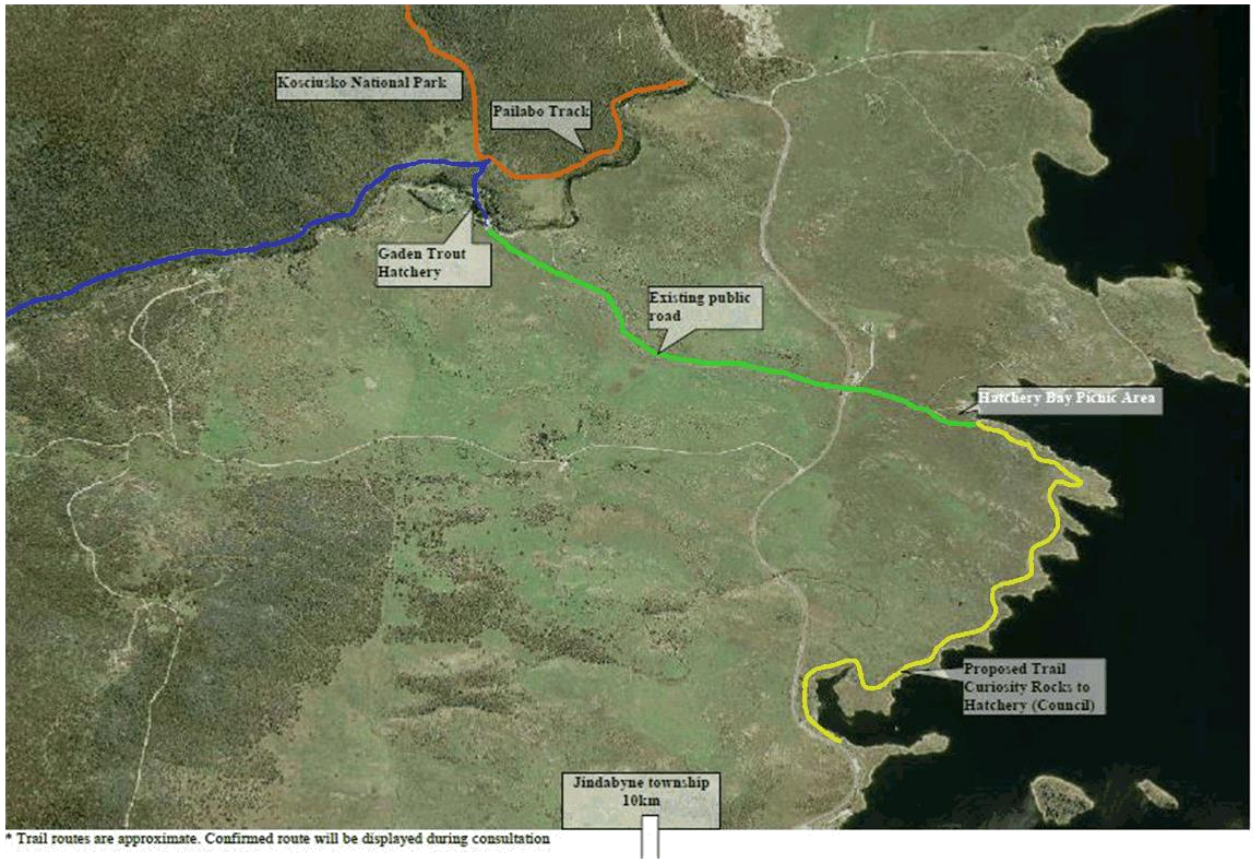

Fig.3

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Track specifications

The shared-use track will be constructed to International Mountain Bike Association (IMBA) guidelines for sustainable trails (see Table).

Tread width	Min. 600mm benched track. Up to 1200mm
Tread surface	Primarily a firm, stable bare earth surface. Some armouring may be required through unsuitable ground conditions.
Bridges and platforms	Creeks, tributaries, springs and other crossings containing notable moisture will be protected by low-level raised platforms, constructed by steel with fibreglass reinforced plastic (FRP) mesh deck. Some short sections may be protected with stone.
Tread landscaping	Many sections of the track, particularly those sections where drainage is limited, the tread will be 'lifted' and 'tilted' to create improved drainage.
Track Corridor (Vegetation Clearance)	1.5m – 1.8m wide, 2.4m high
Average Trail Grade	10% or less
Maximum Trail Grade	15% or greater
Natural Obstacles and Technical Trail Features	Unavoidable obstacles less than 200mm high and bridges minimum 600mm wide

Track Construction

- Rolling contour track to IMBA specifications.
- 1.5m – 1.8m wide, 2.4m high track corridor constructed with brush-cutters, chainsaws or other equipment.
- Track alignment chosen to ensure good line of sight and enable use in both directions.
- 600mm -1200 mm wide benched track constructed with powered and non-powered hand tools by experienced track builder
- Approx. 3km of track from Gaden Trout Hatchery upstream will be slightly wider (closer to 1200mm) and lower graded than the remainder of the track. This would be ideal for the first 3km from Bullocks Flat also, but may not be achievable due to high number of water crossings.
- Potential use of small excavator for certain sections if access allows
- On-site materials such as rock could be utilised - where available and appropriate, and in accordance with the project Environmental Management Plan - for track armouring, creek crossings and bridge approaches.
- Many sections of the track, particularly those sections where drainage is limited, the tread will be 'lifted' and 'tilted' to create improved drainage.

Creek and tributary Crossings

- Steel bridge structures with fibreglass reinforced plastic (FRP) mesh deck.
- 'More difficult' rating will allow bridges to be shorter, narrow and lower as more technical entries and exits to the crossing are permissible. Where possible, bridges will be <900mm high and most will not require handrails.

- Due to experience of the target user, deck level will only allow for one in five year flood. Construction will be built to a standard to withstand the force of such flood waters.
- 600 – 900mm wide bridge deck is considered adequate. However wider decking at 1200mm will be constructed if budgets allow.
- Smaller bridges allow for simpler modular design that requires less technical expertise and minimises on site construction
- Smaller bridges result in less material and therefore fewer helicopter lifts to deliver to site
- Approaches to bridges will require rock armouring, approx. 500mm either side. This rock will need to be dropped in by helicopter

Damp Area Crossings

- Damp areas and springs will mostly be crossed with elevated FRP decking
- Some shorter crossings will be armoured with stone pitching and decomposed granite. This would also require materials to be brought in.
- For much of the track there is either a damp area or creek/tributary crossing on average every 200 – 300m.
- The track will be built well above the Thredbo River's flood line for the vast majority of the route.

Construction / maintenance access

- Loadings and width of platforms will not allow ATV access
- Two wheel motorbike at low speed would be ideal, with the possibility of small trailer for equipment and light materials
- Helicopter for heavy materials such as armouring and platforms
- Pedestrian and mountain bike access will be a major form of access for both construction and maintenance
- Limited vehicle access to points near the trail through fire roads from opposite side of river
- Tethered boat / rafts and pulley systems can be used to bring light materials and fuel across the river
- People can wade across river in low flows and at designated safe points

It is also recommended that 3-4 kms of a slightly wider and lower grade track be constructed at the lower end of the track as it approaches the Gaden Trout Hatchery. This could also be constructed at the trail-head at Bullocks Flat if feasible. This will create the following key benefits:

- Provide a short, return route trail for families etc.;
- Provide a wider trail to reduce conflict between users; and
- Enable some ATV access to aid in maintenance and potential rescues.

Other Infrastructure

- Signage for; information at each end, emergency access points, distance covered and interpretation of notable cultural, heritage and natural values
- Potential of seating at some rest areas

- Fencing at the Bullock Flat Ski Tube bridge
- Hand rails where the track crosses above steep, exposed escarpments

Trail Construction

- Rolling contour track to IMBA specifications
- Clearing of vegetation of trail corridor to 1.8m wide with brush-cutters
- Brush cutting/mowing of trail tread to 700mm wide to remove vegetation to ground level
- Spraying of non selective herbicide on trail tread where required
- 600mm-1200mm wide benched track constructed by experienced trail builder where required on steeper slopes
- Use of small excavator maybe required on steeper slope between Curiosity Rocks and Wollondibby Creek for rolling contour bench cut. Installation of large rock/DGADEN BRIDGE20mm material to trail sections through rocky outcrop and compact trail treat on completion
- Revegetation of excess spoil/disturbed ground within trail corridor

Creek and River Crossings

- Construction of 15m steel framed bridge with wedlock mesh fibreglass deck at Wollondibby Creek
- Construction of bridge at Thredbo River, Gaden Trout Hatchery Picnic area
- The track will be built above the full supply level of Lake Jindabyne for the vast majority of the track. For the sections that may go below this level will require low-level raised platforms, constructed by steel with fibreglass reinforced plastic (FRP) mesh deck. Some short sections maybe protected with stone.

Other Infrastructure

- Installation of small/pedestrian cattle grid ramps at location of stock fence.
- Signage for; information at each end, and cultural heritage values

Potential impacts on Aboriginal objects

Any Aboriginal objects located within the final footprint of the shared path may be impacted by the following activities:-

- vegetation removal
- ground disturbance during shallow excavation for the path
- benching where slopes are relatively steep
- digging footings at bridge crossings and raised wooden pathways (possibly).

It should be noted that the intention of the proponents is to avoid all Aboriginal objects and places of Aboriginal significance where this is possible.

Draft methodology for cultural heritage assessment

NPWS and Council have engaged experienced archaeologists Dr Sue Feary and Gerard Niemoeller to conduct an Aboriginal cultural heritage assessment of the proposed shared path, and if required, to prepare an AHIP application to allow harm to certain Aboriginal objects.

The research methodology they intend to use is in accordance with relevant OEH guidelines and codes (DECCW, 2010; OEH, 2011). These codes and guidelines clearly outline the process, which is summarised here:-

- Review and evaluate previous archaeological work in the area, primarily through information held on OEH's database (AHIMS). This will determine whether any recorded sites are likely to be impacted by the proposed development.
- Review historical records relating to Aboriginal use and occupation of the area in pre-and post-contact times.
- Consider land use history in relation to its impacts on the archaeological record
- On the basis of all of the above, develop a predictive model for location and types of Aboriginal sites and objects likely to be present
- Develop a field survey design and conduct fieldwork. Field survey will involve surface investigation only and is expected to take up to six (6) days of walking. The track route will be clearly marked with tape and it is the intention to walk the route in its entirety, and 25 metres each side of the midline. This will allow flexibility in path alignment, to avoid Aboriginal sites or significant environmental features if present. The route will be walked by both archaeologists, accompanied by agency representatives where appropriate, and one or two appropriately qualified and experienced Aboriginal heritage officers, representing registered Aboriginal parties. Careful attention will be paid to bare patches of ground for the presence of stone artefacts and any mature trees that may contain cultural scars.
- Logistical issues for fieldwork in the national park include the rugged nature of the terrain, presence of thick vegetation, and the need to wade across the river at some locations. There are also limited opportunities to access the track by vehicle, which means that on some days long distances will need to be covered.
- Where vegetation is thick and ground visibility very limited or non-existent, the archaeological sensitivity of the landform – including the potential for buried or obscured archaeological material, will be assessed, based on landforms, topography and geomorphological processes. The need for any future subsurface investigations will be identified.
- Recording, significance assessment and recommendations regarding further work, will be in accordance with relevant OEH codes.
- The draft report will be reviewed and endorsed by the clients and then sent out to registered groups for their comment and feedback.
- Places identified by registered parties as having cultural significance will be marked on maps and on the ground without defining the exact location if appropriate.
- Although not part of this development proposal, the artefact scatter on the peninsula at Curiosity Rocks will be inspected and its current condition will be assessed.

Fieldwork is planned for late May/early June 2015. The draft assessment report is due for completion in late June 2015 with a final due in late July 2015.

Archaeological context

A large amount of archaeological investigation has occurred in the Thredbo valley and around Lake Jindabyne since the 1970s, and numerous sites have been recorded. Most are artefact scatters with a few culturally modified trees, but there are also references in historical records to burials higher up the valley. Bora grounds and axe grinding grooves are described for the junction of Wollondibby Creek and the Snowy River, now submerged (Boot, 1999).

Artefact scatters in the upper Thredbo Valley are mainly small, comprising flakes and flaked pieces made from high quality quartz. By contrast those in the lower Thredbo valley and around Lake Jindabyne tend to be larger and contain a more diverse range of stone tool types and raw materials, including pebble choppers, hammerstones, anvils and axe heads.

Archaeological excavations at Lake Crackenback Resort produced dates of 4,000 years BP for initial Aboriginal occupation of the Thredbo Valley area (Kamminga, et al., 1989) but recent test excavations for bridge footings along Stage 1 of the shared path in Kosciuszko National park did not find any subsurface archaeological material, despite the presence of surface artefacts (Niemoeller, 2011) .

The large numbers of artefact scatters located within the Wollondibby, Snowy and Thredbo Valleys may have been the base camps of separate Aboriginal groups assembling for the purpose of ceremonial activity, most likely associated with movement to the high country for bogong moth feasts (Flood, 1980).

Recorded sites close to the shared path alignment
(see Figure 5 for site locations and Table 1 for descriptions)

Table 1

SITE ID	SITE NAME	DESCRIPTION	STATUS
61-3-0019	Rutledges-Bullocks trail/Bull Ck	Extensive artefact scatter s first recorded in 1973, many of artefacts collected and lodged in the NPWS office at sawpit creek. Re-examined in the 1980s, when the Skitube was being built. Consent issued for construction of ski tube car park and other infrastructure .Test excavations conducted and according to NPWS records, part of the site was to be protected. Further investigation and collection was done in 2008, together with the Eden LALC, as part of development of the shared path between Bullocks Flat and Thredbo diggings.	Partially destroyed. Will not be impacted by proposed track.
61-3-0027	Site C/ Crackenback River 2/Tallangatta	Single quartz flake on northern side of river recorded in 1983. Unable to be found during a survey of the same area in 1984	May have been destroyed by Skitube bridge development. Not on alignment of shared path
62-1-0193	Brooks Mill Creek 1	Possible culturally modified tree, northern side of Thredbo River	Not on track alignment. Will not be impacted
62-1-0006	Sawpit Creek; Thredbo River; Site 28	3 axe heads on northern banks of Thredbo River at Paddys Corner. Artefacts collected in 1970s	Description does not match grid reference. Exact location unknown
62-1-0170	Colorado Point; Lake Jindabyne; J/WS 24,25,26	Small artefact scatter on western side of lake, recorded when lake levels low in 1976.	May be on or close to alignment
62-1-0150	Curiosity Rocks	Large artefact scatter on peninsula adjacent to Curiosity Rocks. Major site protection works conducted in 1999. Includes culturally significant places	Site badly damaged and needs further site protection works
Curiosity Rocks Aboriginal Place		Nomination included rocks and portion of lake shore, identified as being spiritually significant (see Figure 4 below).	AP gazetted on 6/7/2014, but excluded western shores of lake.

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

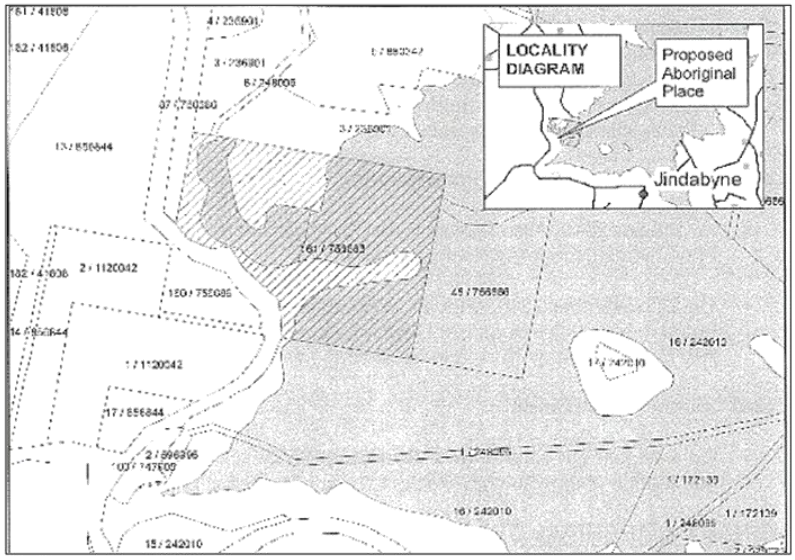

Fig. 4

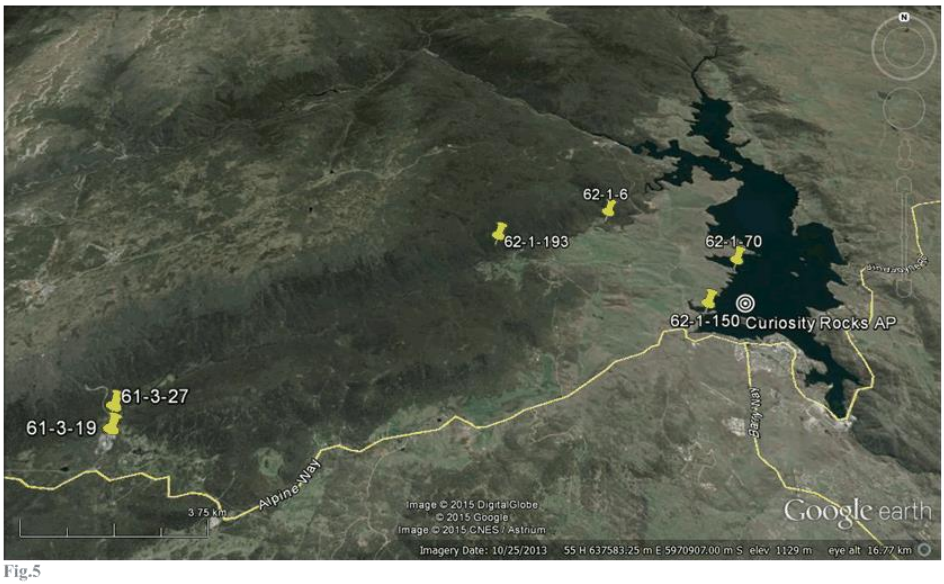

Fig.5

Possible management scenarios

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

- The intention is to realign the proposed path to totally avoid any Aboriginal sites.
- For locations with high archaeological potential and/ or where ground visibility is poor, the likelihood for objects to be present will be assessed and where appropriate, recommendations for test pitting will be developed.
- Where objects such as artefact scatters cannot be avoided, the proportion of the site to be impacted will be identified and mapped, with the intention of protecting the remainder of the site.
- Sites assessed as having high cultural significance (scientific and social) will not be impacted.
- In some instances it may be appropriate to move the artefacts out of harm's way or conduct a community collection, both of which require a permit from OEH.
- Exceptions to the above may occur in relation to any newly recorded sites on the western shores of the lake in the vicinity of Curiosity Rocks. If sites are to be impacted in this area, the potential for development of collaborative projects between Aboriginal knowledge holders and relevant agencies will be encouraged.

References

Boot, P., 1999. *Curiosity Rocks Peninsula artefact scatter (NPWS # 62-1-150) ,* Queanbeyan: NPWS.

CCHD Southern Region, 2013. *Curiosity Rocks Jindabyne, NSW. Aboriginal Place Assessment Report,* Queanbeyan: OEH.

DECCW, 2010. *Code of Practice for archaeological investigation of Aboriginal objects in New South Wales,* Sydney: DECCW.

Flood, J., 1980. *The Moth Hunters.* 1st ed. Canberra: Australian Institute of Aboriginal Studies.

Kamminga, J., 1992. Aboriginal settlement and prehistory of the Snowy Mountains. In: B. Scougall, ed. *Cultural Heritage of the Australian Alps.* Canberra: Austrelaian Alps Liaison Committee, pp. 101-124.

Kamminga, J., Paton, R. & Macfarlane, I., 1989. *Archaeological investigations in the Thredbo valley, Snowy Mountains,* s.l.: Faraba PL.

Niemoeller, G., 2011. *Subsurface testing of bridge footings. Thredbo to Bullocks Flat shared use track, Kosciuszko National Park. ,* Jindabyne: NPWS.

OEH, 2011. *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW,* Sydney: Office of Environment and Heritage.

ABORIGINAL CONSULTATION STAGE 3: GATHERING INFORMATION ABOUT CULTURAL SIGNIFICANCE.

The purpose of this stage is to facilitate a process whereby registered Aboriginal parties can:

a) contribute to culturally appropriate information gathering and the research methodology ;
b) provide information that will enable the cultural significance of Aboriginal objects and/or places on the proposed project area to be determined;
c) have input into the development of any cultural heritage management options.

A list of questions about the proposed project and assessment is provided below. These questions are only suggestions and you may provide any additional information you feel is necessary to inform the proponents and OEH about the Aboriginal cultural significance or values of the subject area.

1. **Are there any objects or places of cultural value in the subject area or in the immediate proximity? If so how do you think the proposed development might affect those values? Please note the proponents are currently have only limited information on the cultural significance of Curiosity Rocks and are seeking further input on values of the area.**

2. **Do you have any cultural concerns or perspectives about this assessment or the building of the shared path?**

3. **Are there any particular research questions you would like to see answered through the archaeological assessment process?**

4. **Have you got any views about the management of the lands within the Thredbo Valley in Kosciuszko National Park or lake Jindabyne and surrounding lands?**

5. **Is any of the information you have provided culturally sensitive and is it OK to print your views in a report?**

6. **If Aboriginal objects are found on or close to the proposed track how would you like them to be managed?**

7. **Would you be likely to support conservation management works to stabilise the Aboriginal sites or objects in the vicinity of Curiosity Rocks?**

Appendix 4: Response from Bega LALC re Stages 2 and 3 consultation

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Bega Local Aboriginal Land Council
ABN: 60 937 578 961
First Floor,187 Carp Street,
(PO Box 11)
Bega NSW 2550
Ph: 02 64923950 Fax: 02 64924087
Email: ceo_begalalc@commander.net.au

13th May 2015

Dear Chris,

Thank you for the opportunity for the Bega LALC to provide comments as part of the Aboriginal Consultation for the Proposed Extension of a Shared Path, Bullocks Flat to Lake Jindabyne.

The Bega LALC is broadly supportive of the development of this path extension and considers it to be a valuable community project and asset. It is appreciated that the works are proposed to be designed to minimise impacts on Aboriginal values and on the environment.

Before addressing the requests for information as detailed in the documents provided we would like to address a couple of points re the current status of the Curiosity Rocks Aboriginal Place and the consultation process. We understand that Sue Feary has been in contact with Paul House of the NSW Office of Environment and Heritage and may already have received information in relation to these matters.

Curiosity Rocks Aboriginal Place - The Bega LALC understands that the boundaries for the Curiosity Rocks Aboriginal Place (AP) has been finalised in accordance with the original proposed boundary established as part of the initial AP application. The Bega LALC understand that the AP process has yet to be finalised and requires the development of a specific *Plan of Management* for the site. The Bega LALC considers that all activity undertaken, particularly within the boundary of the gazetted AP, should be done with reference to an established *Plan of Management* for the site.

Regional Consultation

The Bega LALC would like to ensure that the proponents/consultants are aware of the process of consultation undertaken over an extended period by OEH/NPWS engaging with amongst other stakeholders the Snowy Region Aboriginal Working Group. If they have not already done so, it is recommended that the consultants contact Iris White (Chair of the Gulaga Board of Management) for information regarding this process and for information regarding Aboriginal stakeholders with an interest in the Curiosity Rocks AP site and its connected cultural landscape.

Stage 2

Information Provided - The Bega LALC finds that the information provided to be adequate to gain a sound understanding of the project and broadly agrees with the stated activities that might lead to impacts on Aboriginal objects.

Draft Methodology - The draft methodology is acceptable to the Bega LALC and appears to be in accordance with the relevant OEH guidelines.

Management Scenarios - The Bega LALC broadly supports the possible management scenarios detailed in the report with a clear preference for avoidance of impacts on Aboriginal sites/values. However further consultation with stakeholders would be required prior to the implementation of any management strategies/actions that potentially allow for ongoing impacts on Aboriginal objects or

require the relocation of objects. The Bega LALC would welcome the opportunity to participate in the development of collaborative projects engaging knowledge holders and relevant agencies.

Stage 3

The Bega LALC would like to provide the following response to the questions provided.

1. a)*Are there any objects or places of cultural value in the subject area or in the immediate proximity?*

Yes, the shared path (subject area) is understood to transect places of high cultural value and culturally rich and connected landscapes, particularly in the vicinity of Curiosity Rocks.

b) If so how do you think the proposed development might affect those values?

Please note the proponents are currently have only limited information on the cultural significance of Curiosity Rocks and are seeking further input on values of the area.

Implementation of the proposed development, as it is presently understood, should have minimal impact on these cultural values, subject to appropriate assessment and consultation being undertaken (as proposed).

2. Do you have any cultural concerns or perspectives about this assessment or the building of the shared path?

None beyond restating the need for appropriate assessment and consultation being undertaken

3. Are there any particular research questions you would like to see answered through the archaeological assessment process?

No

4. Have you got any views about the management of the lands within the Thredbo Valley in Kosciuszko National Park or lake Jindabyne and surrounding lands?

The Bega LALC would like to refer the consultants/proponent to the previous process of consultation undertaken with the Aboriginal Working Party.

5. Is any of the information you have provided culturally sensitive and is it OK to print your views in a report?

No, the information provided is not culturally sensitive. Sensitive details of knowledge relating to the subject area and its cultural context have not been provided in this document but are held by Bega LALC members.

6. If Aboriginal objects are found on or close to the proposed track how would you like them to be managed?

The Bega LALC would require details of the objects identified to be reported to the LALC before commenting on potential management strategies.

7. Would you be likely to support conservation management works to stabilise the Aboriginal sites or objects in the vicinity of Curiosity Rocks?

The Bega LALC would generally be supportive of such works but would need to consider the works in detail and be comfortable that the works would be compatible with the Curiosity Rocks AP specific *Plan of Management.*

Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and 3RSC.

Generally the Bega LALC is supportive of the Aboriginal Cultural values of places being assessed and in some cases being communicated to the wider community via interpretive materials etc. The Bega LALC recognises that such processes generally assist in developing enhanced understanding and appreciation of these values and engender support for conservation outcomes. The Bega LALC also understands that creating greater awareness of Aboriginal cultural values in the broader community can also create less positive response from elements of the broader community.

The Bega LALC looks forward to engaging in the consultation process and working toward developing positive outcomes for the community and for the Aboriginal cultural values of the subject area and its broader cultural landscape context.
Please contact the Bega LALC at your convenience should you require further information or clarification.
Best

Glenn Willcox
CEO
Bega LALC

Appendix 5: AHIMS search results

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Office of Environment & Heritage

AHIMS Web Services (AWS)
Extensive search - Site list report

Purchase Order/Reference : A041
Client Service ID : 170368

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
62-1-0070	Colorado Point;Lake Jindabyne;J/WS 24,25,26;	AGD	55	644700	5971300	Open site	Valid	Artefact : -	Open Camp Site	201,99585
	Contact	Recorders	V Chapman					Permits		
62-1-0150	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			4048,98505,99585
	Contact	Recorders	S Avery,R Clegg,Dick Henry					Permits		
62-1-0099	Wollondibby 2.;	AGD	55	636500	5965750	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	1490,1647
	Contact	Recorders	I Kirby,W Mongta,David Crew					Permits		
62-1-0165	Koscivszko RD 1;koscivszko NP;	AGD	55	642320	5974750	Open site	Valid	Artefact : -	Open Camp Site	99585
	Contact	Recorders	Heritage Solutions-Alistair Grinbergs					Permits		
62-1-0193	Brooks Mill Creek 1	AGD	55	638143	5972209	Open site	Valid	Modified Tree (Carved or Scarred) : 1		99585
	Contact	Recorders	Miss.Vanessa Mason					Permits		
61-3-0076	PB 1 (2)	AGD	55	628100	5972055	Open site	Valid	Artefact : 2		103098
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber					Permits		
61-3-0075	RC 1 (2)	AGD	55	626155	5972955	Open site	Valid	Artefact : 3		99701
	Contact	Recorders	Mr.Matthew Barber					Permits	2073,2074	
62-1-0175	WIAS	AGD	55	643200	5969200	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	Bobbie Oakley					Permits		
62-1-0197	TVL 3	AGD	55	639173	5966932	Open site	Valid	Artefact : 27		98388
	Contact	Recorders	Doctor.Rebecca Parkes					Permits	1626,1627	
62-1-0198	PADThredbo Valley Lodge	AGD	55	639550	5966900	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Doctor.Rebecca Parkes					Permits	1626,1627	
61-3-0083	LC 1	AGD	55	630450	5965700	Open site	Valid	Artefact : 10		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0084	LC 2	AGD	55	629825	5965400	Open site	Valid	Artefact : 1		103116
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0093	PRTL2 Pipers Gap Slope	AGD	55	626926	5970796	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
61-3-0094	PRTL3 Mount Pier South Spurline	AGD	55	626574	5970444	Open site	Valid	Potential Archaeological Deposit (PAD) : -		

Report generated by AHIMS Web Service on 24/04/2015 for Gerard Niemoeller for the following area at Datum :GDA, Zone : 55, Eastings : 625000 - 645000, Northings : 5965000 - 5975000 with a Buffer of 0 meters. Additional Info : To prepare an assessment. Number of Aboriginal sites and Aboriginal objects found is 116

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 1 of 8

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Office of Environment & Heritage NSW GOVERNMENT

AHIMS Web Services (AWS)

Extensive search - Site list report

Purchase Order/Reference : A041
Client Service ID : 170368

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
61-3-0098	PRTL10 Perisher South, Rock Creek	AGD	55	626296	5969463	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
61-3-0099	PRTL11 Perisher South	AGD	55	626444	5969537	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
62-1-0227	Perisher Blue 2	AGD	55	625490	5970110	Open site	Valid	Artefact : 12		
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
61-3-0085	LC 3	AGD	55	629800	5965425	Open site	Valid	Artefact : 2		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0086	LC 4	AGD	55	629800	5965525	Open site	Valid	Artefact : 10		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0087	LC 5	AGD	55	629700	5966060	Open site	Valid	Artefact : 2		103116
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0088	LC 6	AGD	55	629950	5965950	Open site	Valid	Artefact : 1		103116
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0089	LC 7	AGD	55	630175	5965930	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0090	TF 1	AGD	55	630400	5964900	Open site	Valid	Artefact : 2		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0091	TF 2	AGD	55	630150	5965025	Open site	Valid	Artefact : 2		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0092	TF 3	AGD	55	630100	5965075	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0100	Perisher Blue 3	AGD	55	625300	5970320	Open site	Valid	Artefact : 3		99856
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
61-3-0101	Perisher Blue 4	AGD	55	625140	5970350	Open site	Valid	Artefact : 10		99856
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
61-3-0102	Perisher Blue Isolated Find 1	AGD	55	627460	5971300	Open site	Valid	Artefact : 1		99856,103098
	Contact	Recorders	Navin Officer Heritage Consultants Pty Ltd					Permits		
62-1-0230	TVL 1	AGD	55	639187	5966466	Open site	Valid	Artefact : 2		
	Contact	Recorders	Doctor.Rebecca Parkes					Permits		
62-1-0231	TVL2	AGD	55	638958	5966349	Open site	Valid	Artefact : 11		

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Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Office of Environment & Heritage NSW

AHIMS Web Services (AWS)

Extensive search - Site list report

Purchase Order/Reference : A041
Client Service ID : 170368

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Doctor.Rebecca Parkes					Permits		
62-1-0232	TVL4	AGD	55	639678	5966035	Open site	Valid	Artefact : 1		
	Contact	Recorders	Doctor.Rebecca Parkes					Permits		
62-1-0233	TVL5	AGD	55	639525	5966991	Open site	Valid	Artefact : 1		98388
	Contact	Recorders	Doctor.Rebecca Parkes					Permits		
62-1-0234	TVL6	AGD	55	639869	5967167	Open site	Valid	Artefact : 4		
	Contact	Recorders	Doctor.Rebecca Parkes					Permits		
62-1-0235	TVL7	AGD	55	638095	5966090	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0106	Smiggin Holes Saddle	AGD	55	627500	5971225	Open site	Valid	Artefact : 41		103098
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0107	PRTL3	AGD	55	626750	5970600	Open site	Valid	Artefact : 11		98843
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0116	Alpine Way Culvert Site 2	AGD	55	627932	5964888	Open site	Valid	Artefact : 2		100689,103116
	Contact Searle	Recorders	Doctor.Julie Dibden					Permits		
61-3-0054	KNP91-9;Thompson's Plain;	AGD	55	632000	5972000	Open site	Valid	Artefact : -	Open Camp Site	1962
	Contact	Recorders	Ian Johnson.A Waghorn					Permits		
61-3-0014	Lubra Rocks;The Porcupine;	AGD	55	627000	5967000	Closed site	Valid	Artefact : -	Shelter with Deposit	2038,103116
	Contact	Recorders	John Gallard					Permits		
62-1-0013	Wollindibby Campsite;The Alpine Way;	AGD	55	636600	5966300	Open site	Valid	Burial : -, Artefact : -	Burial/s,Open Camp Site	2038
	Contact	Recorders	John Gallard					Permits		
62-1-0014	Wollindibby Homestead;Lewis Springs;	AGD	55	636600	5966100	Open site	Valid	Artefact : -	Open Camp Site	2038
	Contact	Recorders	John Gallard					Permits		
62-1-0018	Jindabyne;	AGD	55	643200	5967700	Open site	Valid	Ceremonial Ring (Stone or Earth) : -, Grinding Groove : -	Axe Grinding Groove,Bora/Ceremonial	97534
	Contact	Recorders	Australian Museum					Permits		
61-3-0019	Bull Creek;Rutledges;	AGD	55	628800	5965600	Open site	Partially Destroyed	Artefact : -	Open Camp Site	816,102018,103116
	Contact	Recorders	John Gallard					Permits	3045	
61-3-0026	Crackenback River 1;Tallangatta;	AGD	55	629300	5965100	Open site	Valid	Artefact : -	Open Camp Site	1709,103116
	Contact	Recorders	Katrina Geering					Permits		
61-3-0027	Crackenback River 2;Tallangatta;	AGD	55	629100	5966450	Open site	Valid	Artefact : -	Open Camp Site	1709,103116
	Contact	Recorders	Katrina Geering					Permits		

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Office of Environment & Heritage NSW GOVERNMENT

AHIMS Web Services (AWS)

Extensive search - Site list report

Purchase Order/Reference : A041
Client Service ID : 170368

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
61-3-0028	Crackenback River 3;Tallangatta;	AGD	55	629450	5965100	Open site	Valid	Artefact : -	Open Camp Site	1709,103116
	Contact	Recorders	Katrina Geering					Permits		
61-3-0029	Bullocks Flat to Thredbo 01	AGD	55	629350	5965200	Open site	Valid	Artefact : -	Open Camp Site	1317,103116
	Contact	Recorders	M Walkington					Permits		
61-3-0030	Bullocks Flat to Thredbo 02	AGD	55	628250	5965050	Open site	Valid	Artefact : -	Open Camp Site	1317,103116
	Contact	Recorders	M Walkington					Permits		
61-3-0031	Bullocks Flat to Thredbo 03	AGD	55	628000	5965100	Open site	Valid	Artefact : -	Open Camp Site	1317,103116
	Contact	Recorders	M Walkington					Permits		
61-3-0032	Bullocks Flat to Thredbo 04	AGD	55	627050	5965200	Open site	Valid	Artefact : -	Open Camp Site	1317,103116
	Contact	Recorders	M Walkington					Permits		
61-3-0033	Bullocks Flat to Thredbo 05	AGD	55	626900	5965200	Open site	Valid	Artefact : -	Open Camp Site	1317,103116
	Contact	Recorders	M Walkington					Permits		
61-3-0040	Site D;	AGD	55	628800	5965900	Open site	Valid	Artefact : -	Open Camp Site	602,612,816,103116
	Contact	Recorders	Robert Paton					Permits		
61-3-0041	Little Thedbo Homestead Site 2;	AGD	55	629800	5965400	Open site	Valid	Artefact : -	Open Camp Site	258,1364,1527,2058,103116
	Contact	Recorders	Mr.Ingereten MacFarlane					Permits		
61-3-0042	Little Threbo Homestead Site 3;	AGD	55	629900	5965600	Open site	Valid	Artefact : -	Open Camp Site	1364,1527,2058,103116
	Contact	Recorders	Mr.Ingereten MacFarlane					Permits		
61-3-0043	Little Thredbo Homestead Site 1;	AGD	55	629900	5965200	Open site	Valid	Artefact : -	Open Camp Site	1364,1527,2058,103116
	Contact	Recorders	Mr.Ingereten MacFarlane					Permits		
62-1-0006	Sawpit Creek;Thredbo River;Site 28;	AGD	55	641400	5973300	Open site	Valid	Artefact : -	Open Camp Site	99585,103134
	Contact	Recorders	Jo Flood					Permits		
61-3-0064	Alpine Way 9	AGD	55	628600	5964850	Open site	Valid	Artefact : -	Open Camp Site	2495,103116
	Contact	Recorders	Kerry Navin					Permits		
61-3-0016	Bull Creek;Kosciusko N.P.;	AGD	55	628800	5964900	Open site	Valid	Artefact : -	Open Camp Site	468,1942,103116
	Contact	Recorders	John Gallard					Permits		
62-1-0098	Wollondibby 1.;	AGD	55	636350	5965950	Open site	Valid	Artefact : -	Open Camp Site	1490,1647
	Contact	Recorders	I Kirby,W Mongta,David Crew					Permits		
61-3-0009	Daners Gap;Hotel Kosciusko;	AGD	55	632200	5973000	Open site	Valid	Artefact : -	Open Camp Site	321
	Contact	Recorders	Jo Flood					Permits		
61-3-0080	LTR 2	AGD	55	629475	5965275	Open site	Valid	Artefact : 1		98393,103116

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Office of Environment & Heritage
NSW GOVERNMENT

AHIMS Web Services (AWS)
Extensive search - Site list report

Purchase Order/Reference : A041
Client Service ID : 170368

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0081	LTR 1	AGD	55	629400	5965275	Open site	Valid	Artefact : 1		98393,103116
	Contact	Recorders	Mr.Matthew Barber					Permits		
61-3-0082	LTR 3	AGD	55	629300	5965280	Open site	Valid	Artefact : 18		98393,103116
	Contact	Recorders	Mr.Matthew Barber					Permits		
62-1-0254	Leesville Site 1	GDA	55	642950	5966305	Open site	Valid	Artefact : -		98933
	Contact Searle	Recorders	Doctor.Julie Dibden					Permits		
62-1-0255	Leesville Site 2	GDA	55	643430	5966152	Open site	Valid	Artefact : -		98933
	Contact T Russell	Recorders	Doctor.Julie Dibden					Permits		
62-1-0256	Leesville Site 3	GDA	55	643415	5966609	Open site	Valid	Artefact : -		98933
	Contact T Russell	Recorders	Doctor.Julie Dibden					Permits	2711,2712	
62-1-0257	Leesville Site 4	GDA	55	643346	5966384	Open site	Valid	Artefact : -		98933
	Contact T Russell	Recorders	Doctor.Julie Dibden					Permits	2711,2712	
61-3-0112	Perisher View PAD 1	GDA	55	626687	5969952	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99581
	Contact Searle	Recorders	Doctor.Julie Dibden					Permits	2297,2298	
62-1-0305	Wollondibby SU3/L1	GDA	55	636173	5966156	Open site	Valid	Artefact : 4		
	Contact	Recorders	Ms.Trish Saunders					Permits		
62-1-0306	Wollondibby SU3/L2	GDA	55	636258	5966162	Open site	Valid	Artefact : 2		
	Contact	Recorders	Ms.Trish Saunders					Permits		
62-1-0307	Wollondibby SU5/L1	GDA	55	636273	5966063	Open site	Valid	Artefact : 2		
	Contact	Recorders	Ms.Trish Saunders					Permits		
61-3-0145	Relocated site #61-3-0019	AGD	55	627849	5965463	Open site	Valid	Artefact : 65		102019
	Contact	Recorders	Ms.Sue Feary					Permits		
61-3-0118	Thredbo Walking track 1	AGD	55	627259	5965395	Open site	Valid	Grinding Groove : 1		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
61-3-0119	Thredbo Walking Track 2	AGD	55	627225	5965378	Open site	Valid	Artefact : 10		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
61-3-0120	Thredbo Walking Track 3	AGD	55	627054	5965485	Open site	Valid	Artefact : 7		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
61-3-0121	Thredbo Walking Track 4	AGD	55	627808	5965535	Open site	Valid	Artefact : 1		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		

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Office of Environment & Heritage NSW GOVERNMENT

AHIMS Web Services (AWS)

Extensive search - Site list report

Purchase Order/Reference : A041
Client Service ID : 170368

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
61-3-0122	Thredbo Walking Track 5	AGD	55	628478	5965864	Open site	Valid	Artefact : 1		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
61-3-0123	Thredbo Walking Track 6	AGD	55	628817	5966000	Open site	Valid	Artefact : 2		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
61-3-0124	Thredbo Walking Track 7	AGD	55	628895	5966134	Open site	Valid	Shell : 1		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
61-3-0125	Thredbo Walking Track 8	AGD	55	628657	5965473	Open site	Partially Destroyed	Artefact : 10		101126,102018,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits	3045	
61-3-0126	Thredbo Walking Track 9	AGD	55	628593	5965400	Open site	Partially Destroyed	Artefact : 1		101126,102018,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits	3045	
61-3-0127	Thredbo Walking Track 10	AGD	55	628522	5965382	Open site	Partially Destroyed	Artefact : 2		101126,102018,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits	3045	
61-3-0128	Thredbo Walking Track 11	AGD	55	627932	5965216	Open site	Partially Destroyed	Artefact : 1		101126,102018,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits	3045	
61-3-0129	Thredbo Walking Track 12	AGD	55	627857	5965225	Open site	Partially Destroyed	Artefact : 1		101126,102018,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits	3045	
61-3-0130	Thredbo Walking Track 13	AGD	55	627857	5965225	Open site	Partially Destroyed	Artefact : 1		101126,102018,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits	3045	
61-3-0133	Thredbo Walking Track 16	AGD	55	626248	5965145	Open site	Valid	Artefact : 7		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
61-3-0134	Thredbo Walking Track 17	AGD	55	625939	5964946	Open site	Valid	Artefact : 6		101126,103116
	Contact	Recorders	Mr.Alistair Grinbergs					Permits		
62-1-0315	Curiosity rocks 3	GDA	55	643752	5969921	Open site	Valid	Artefact : 5		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0316	Curiosity rocks 4	GDA	55	643755	5969923	Open site	Valid	Artefact : 3		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0317	Curiosity rocks 5	GDA	55	643766	5969922	Open site	Valid	Artefact : 6		
	Contact	Recorders	Mr.Paul House					Permits		

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Purchase Order/Reference : A041
Client Service ID : 170368

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
62-1-0318	Curiosity rocks 6	GDA	55	643775	5969927	Open site	Valid	Artefact : 13		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0319	Curiosity rocks 7	GDA	55	643821	5969921	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0320	Curiosity rocks 8	GDA	55	643834	5969922	Open site	Valid	Artefact : 4		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0321	Curiosity rocks 9	GDA	55	643870	5969921	Open site	Valid	Artefact : 3		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0322	Curiosity rocks 10	GDA	55	643937	5969936	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0323	Curiosity rocks 11	GDA	55	643954	5969994	Open site	Valid	Artefact : 3		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0324	Curiosity rocks 12	GDA	55	643849	5969986	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0325	Curiosity rocks 13	GDA	55	643814	5969966	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0326	Curiosity rocks 14	GDA	55	643804	5969964	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0313	Curiosity rocks 1	GDA	55	643716	5969920	Open site	Valid	Artefact : 5		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0314	Curiosity rocks 2	GDA	55	643732	5969917	Open site	Valid	Artefact : 2		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0327	Curiosity rocks 21	AGD	55	643639	5969962	Open site	Valid	Artefact : 2		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0328	Curiosity rocks 20	AGD	55	643680	5969969	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0329	Curiosity rocks 19	AGD	55	643710	5969959	Open site	Valid	Artefact : 7		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0330	Curiosity rocks 18	AGD	55	643724	5969959	Open site	Valid	Artefact : 7		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0331	Curiosity rocks 17	AGD	55	643746	5969957	Open site	Valid	Artefact : 5		
	Contact	Recorders	Mr.Paul House					Permits		
62-1-0332	Curiosity rocks 16	AGD	55	643763	5969955	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Paul House					Permits		

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Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Appendix 6: Curiosity Rocks Aboriginal Place gazettal notice

NSW GOVERNMENT

Rob Stokes MP
Minister for the Environment
Minister for Heritage
Minister for the Central Coast
Assistant Minister for Planning

RECEIVED
10 JUL 2014
Records
Cooma Office

DOC13/2843

Mr Murray Blackburn-Smith
Director Community & Environmental Services
Snowy River Shire Council
PO Box 143
BERRIDALE NSW 2628

Dear Mr Blackburn-Smith

The NSW Government is committed to the recognition and conservation of Aboriginal cultural heritage. As part of this commitment, the Office of Environment and Heritage has assessed an area of lands known as the Curiosity Rocks at Jindabyne for its special significance to Aboriginal culture.

I am pleased to advise that the area meets the requirements of an Aboriginal Place under section 84 of the NSW *National Parks and Wildlife Act 1974* (NPW Act). This declaration has now been made and I enclose a copy of the Gazettal notice for your information.

I can confirm that the declaration of an Aboriginal Place does not change the status of the land or affect ownership rights. However, under section 86 of the NPW Act, it is an offence to harm or desecrate the place without the consent of the Director General. The activities which might cause harm or desecration to this Aboriginal Place are described in the Gazettal notice.

I would like to take this opportunity to thank the Snowy River Shire Council for its support of the Curiosity Rocks being declared an Aboriginal Place, and its continued efforts to protect Aboriginal cultural heritage in NSW.

If you have any enquiries regarding this matter please contact Mr Paul House, Manager Southern Region, Country, Culture and Heritage Division, Office of Environment and Heritage on (02) 6229 7068.

Yours sincerely

Rob Stokes MP
Minister for the Environment
Minister for Heritage

Enclosure 6-7-14

Level 32, Governor Macquarie Tower, 1 Farrer Place, Sydney NSW 2000
Phone: (61 2) 9228 5253 Fax: (61 2) 9228 5763 Email: office@stokes.minister.nsw.gov.au

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

NATIONAL PARKS AND WILDLIFE ACT 1974

Curiosity Rocks Aboriginal Place

In pursuance of the powers vested in me under section 84 of the *National Parks and Wildlife Act 1974*, I, the Minister for the Environment, do, by this my order, declare such of the lands described hereunder as an Aboriginal Place. The place shall be known as Curiosity Rocks Aboriginal Place.

It is my opinion that this place is or was of special significance to Aboriginal culture. The values for which Curiosity Rocks Aboriginal Place has been declared as significant to Aboriginal culture includes, but is not limited to it being in sight of Kalkite Mountain and adjacent to a camping area and ceremonial grounds situated along the traditional travel pathways up the Snowy River to the Mt Twynam area.

The place is rich in stone resources and sites providing widespread evidence of long occupation and use of the area by Ngarigo ancestors. The area holds a deep spiritual connection for these ancestors to the Ngarigo lands and waters, the knowledge of which continues to be passed down across generations through the stories of the elders to the community of today.

Note: Under section 86 of the *National Parks and Wildlife Act 1974*, it is an offence to harm or desecrate (harm includes destroy, deface or damage) an Aboriginal Place.

Activities which constitute the rise and fall of water within the Snowy area may not be constituted as harm or desecration of this Aboriginal Place.

Should any activities that may cause harm to this Aboriginal Place be contemplated, consent should be sought from the Director General.

Activities which might harm or desecrate this Aboriginal Place include, but are not limited to, the following: the erection of a building in the area; the carrying out of a work in, on or under the area; the subdivision of the area; and the clearing of native vegetation in the area.

Activities or works for the conservation or protection of this Aboriginal Place that are carried out by an officer of the Office of Environment and Heritage, or under the direction of such an officer, in accord with section 87A (a) of the Act, may be exempt.

Traditional cultural activities that are carried out by Aboriginal people or their dependents, in accord with section 87B of the Act, may be exempt.

COPY

Rob Stokes MP
Minister for the Environment

GOD SAVE THE QUEEN

owy

SNOWY RIVER SHIRE
SPIRIT OF THE SNOWY MOUNTAINS

While due care has been taken by the Publisher in compiling this map, no responsibility will be accepted by Snowy River Council for errors or omissions. The Publisher, to the full extent permitted by law, excludes all warranties, and disclaims any responsibility to any person for loss or damage suffered from any use of this map.

Curiosity Rocks: Aboriginal Place (Sec. 8, NPWS Act 1974)

Data Source for Cadastre, Topographic Data and Aerial Imagery:
LPI - Department of Finance and Services (2013)
Panorama Avenue, Bathurst 2795 www.lpi.nsw.gov.au

Created by: Jo Clarke
Date: 1/08/2014

SCHEDULE

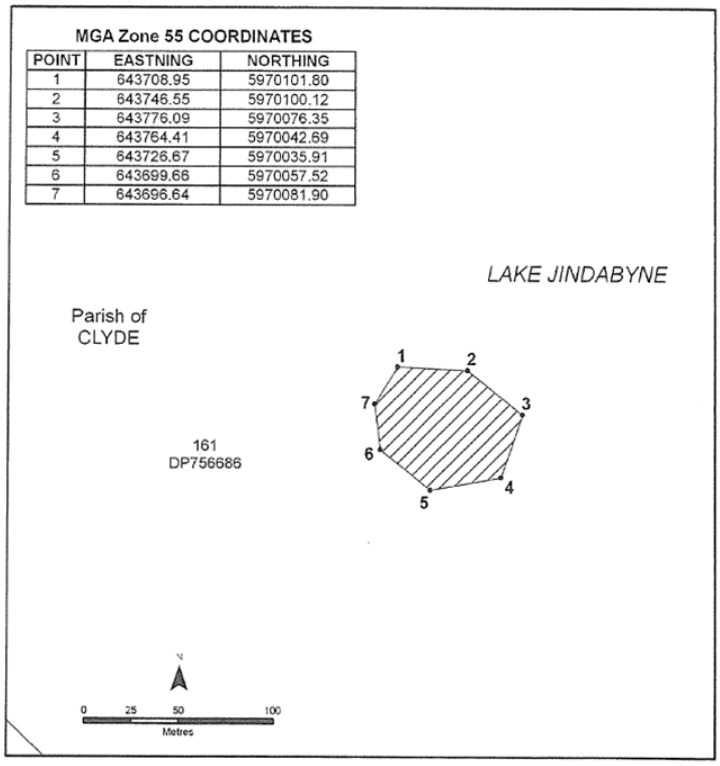
Land District – Cooma LGA – Snowy River

County Wallace, Parish Clyde, within Lot 161 DP756686, about 0.4 ha, being the area shown hatched in the diagram hereunder:

Papers: FIL10/14745

MGA Zone 55 COORDINATES

POINT	EASTNING	NORTHING
1	643708.95	5970101.80
2	643746.55	5970100.12
3	643776.09	5970076.35
4	643764.41	5970042.69
5	643726.67	5970035.91
6	643699.66	5970057.52
7	643696.64	5970081.90



wy

Appendix 7: Significance assessment matrix of sites recorded during field survey

Site name	*Site Type*	*No of artefacts*	*No of artefact types per site*	*No of stone raw materials per site*	*Raw materials and Artefacts types represented*	*Rarity values*	*Representative values*	*Archaeological research values*	*Cumulative Value total*	*Assessed Significance*
BULLOCKS FLAT1	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
BULLOCKS FLAT2	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
BULLOCKS FLAT3	Quarry	2	1	1	Porphyritic / flakes	3	1	2	6	Low to moderate
BULLOCKS FLAT4	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
Robertsons 1	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
LTVT1	Isolated stone artefacts	2	1	1	Quartz / flake	1	1	1	3	Low
LTVT2	Stone artefact scatter	20	4	2	Quartz / flakes, retouched flakes, cores and manuport/anvil	2	3	3	8	Moderate
LTVT3	Stone artefact scatter	3	2	1	Quartz / flakes and core	1	2	2	5	Low
Gaden Hatchery 1	Isolated stone artefact	1	1	1	Porphyritic / retouched flake	2	1	1	4	Low

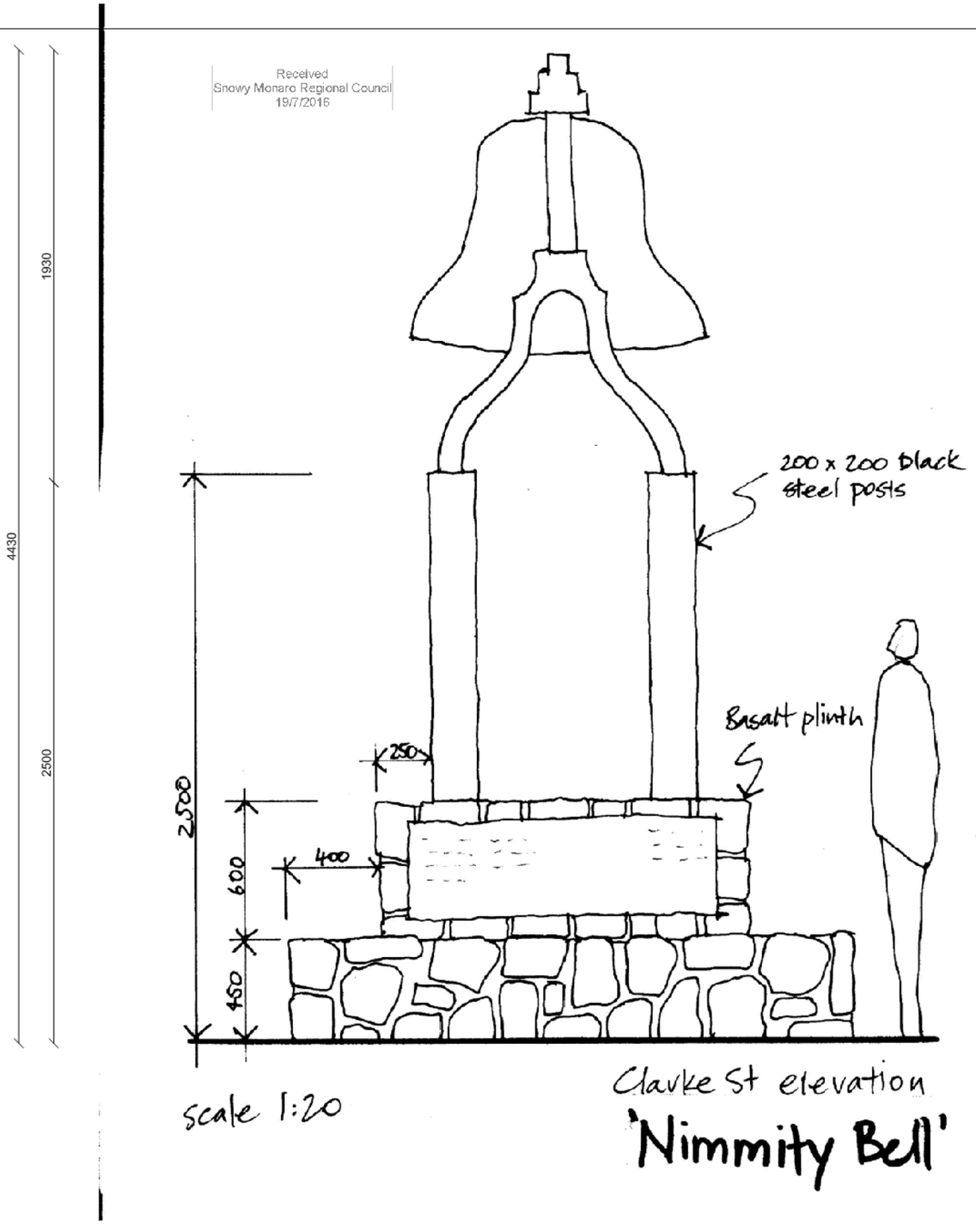
Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Site name	*Site Type*	*No of artefacts*	*No of artefact types per site*	*No of stone raw materials per site*	*Raw materials and Artefacts types represented*	*Rarity values*	*Representative values*	*Archaeological research values*	*Cumulative Value total*	*Assessed Significance*
GADEN BRIDGE1	Isolated stone artefacts	2	1	1	Quartz / flakes	1	1	1	3	Low
GADEN BRIDGE2	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 1	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 2	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 3	Stone artefact scatter	2	2	2	Quartz, silcrete / flake, retouched flake	2	2	1	5	Low
PALLAIBO 4	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 5	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 6	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 7	Isolated stone artefact	1	1	1	Silcrete / flake	2	1	1	4	Low
PALLAIBO 8	Stone artefact	3	1	1	Quartz / flake	1	1	1	3	Low

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.

Site name	*Site Type*	*No of artefacts*	*No of artefact types per site*	*No of stone raw materials per site*	*Raw materials and Artefacts types represented*	*Rarity values*	*Representative values*	*Archaeological research values*	*Cumulative Value total*	*Assessed Significance*
	scatter									
PALLAIBO 9	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 10	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
PALLAIBO 11	Isolated stone artefact	1	1	1	Quartz / flake	1	1	1	3	Low
WOLLONDIBBY1	Stone artefact scatter	30+	2	3	Quartz, silcrete, tuff / flakes, retouched flakes	3	3	3	9	Moderate
HATCHERY BAY 3	Isolated stone artefact	1	1	1	Igneous / anvil	3	3	1	7	Low to moderate
HATCHERY BAY 2	Stone artefact scatter	10+	2	3	Quartz, silcrete, chert / flakes and retouched flakes	2	2	2	6	Low to moderate
HATCHERY BAY 1	Stone artefact scatter	4	1	1	Quartz / flakes	1	1	1	3	Low

Feary S. and Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. FINAL REPORT to NPWS and SRSC.



NOTES:
1. ELEVATION AS DRAWN AND APPROVED BY THE 'NIMMITY BELL' ARCHITECT
AND INCORPORATED INTO PRACTICAL ENGINEERING SOLUTIONS PTY LTD TO INDICATE BELL'S OVERALL HEIGHT AND TO CREATE ONE SET OF DEVELOPMENT APPROVAL AND CONSTRUCTION CERTIFICATE DRAWINGS.
2. SEE SHEET A03 FOR BASE DIMENSIONS

PRACTICAL ENGINEERING SOLUTIONS PL/
ABN 67 157 931 069
Structural &
Project Management ENGINEERS

15 WANGIE STREET
Cooma NSW 2630
www.practicalengineers.com.ae

M: 0402 15 22 16
T: (02) 6452 5555
office@practicalengineers.com.au

Drawing Name:
ARCHITECTURAL & ENGINEERING DETAILS FOR PROPOSED 'NIMMITY BELL' AT ROAD RESERVE OF THE SOUTH EAST CORNER OF CLARKE STREET & BOMBALA STREET NIMMITABEL NSW

Client:
'NIMMITY BELL' COMMITTEE
C/-HOWARDS CHALRES

Architectural Sheet No.A05 of 6

Scale:	1:20
Date:	16.07.2016
Drawing No:	050913A
	NORTH / SOUTH ELEVATION
Sheet Size:–	A3
Designed:	O Boaru
Drawn:	O Boaru
Checked:	O Boaru

Approved:

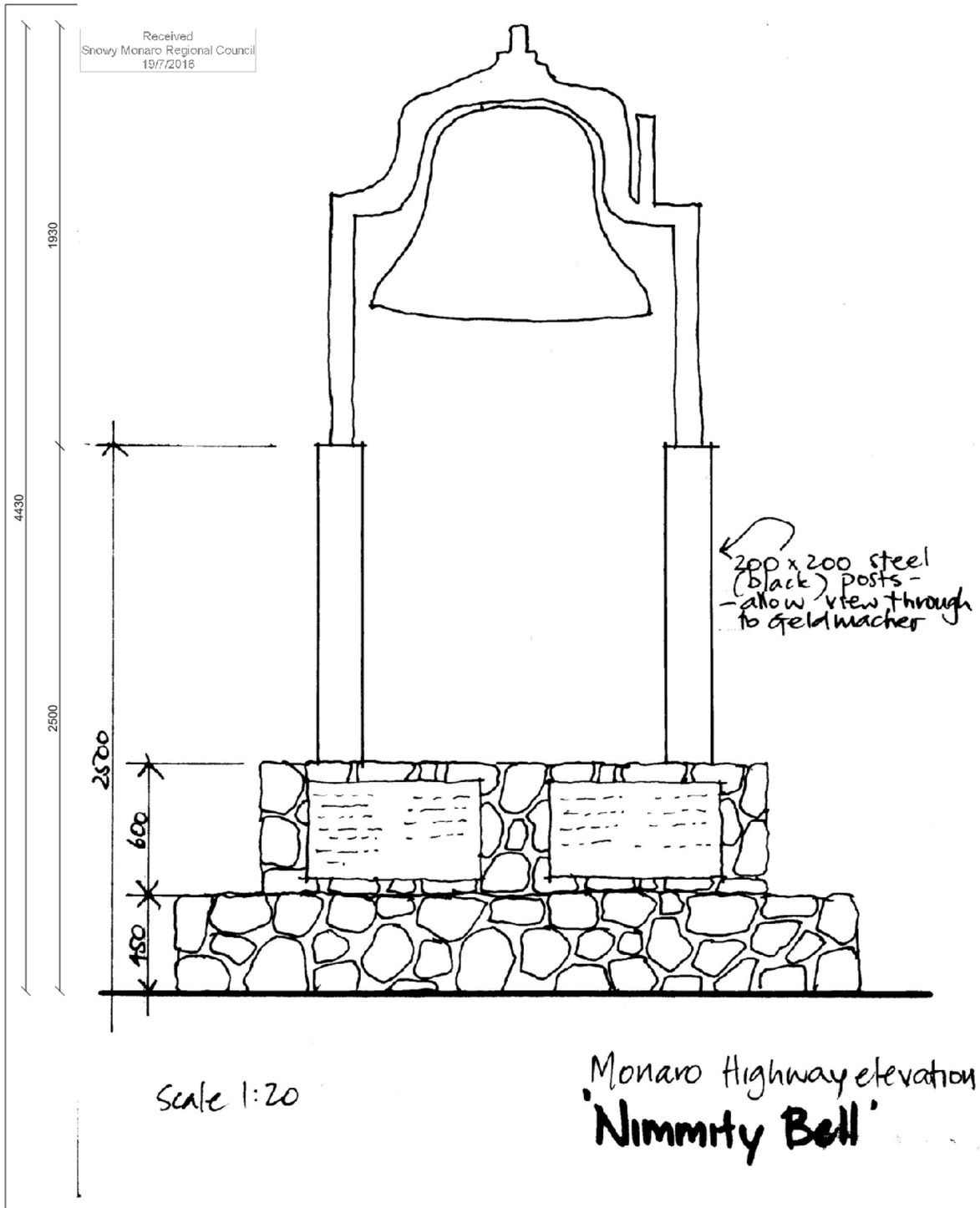
Ovi Boaru MIEAust CPEng

ISSUE	DATE	AMENDMENT
-	-	-

All workmanship and materials to conform with latest edition of the Building Code of Australia and relevant Australian Standards.

The contractor is to confirm all dimensions prior to commencing any works on site.

Refer to specification for other relevant information details.



Scale 1:20

Monaro Highway elevation
'Nimmity Bell'

NOTES:
1. ELEVATION AS DRAWN AND APPROVED BY THE 'NIMMITY BELL' ARCHITECT
AND INCORPORATED INTO PRACTICAL ENGINEERING SOLUTIONS PTY LTD TO INDICATE BELL'S OVERALL HEIGHT AND TO CREATE ONE SET OF DEVELOPMENT APPROVAL AND CONSTRUCTION CERTIFICATE DRAWINGS.
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Drawing Name:
ARCHITECTURAL & ENGINEERING DETAILS FOR PROPOSED 'NIMMITY BELL' AT ROAD RESERVE OF THE SOUTH EAST CORNER OF CLARKE STREET & BOMBALA STREET NIMMITABEL NSW

Client:
'NIMMITY BELL' COMMITTEE
C/-HOWARDS CHALRES

Architectural Sheet No. A04 of 6

Scale:	1:20
Date:	16.07.2016
Drawing No:	050913A
	WEST/EAST ELEVATION
Sheet Size:–	A3
Designed:	O Boaru
Drawn:	O Boaru
Checked:	O Boaru

Approved:

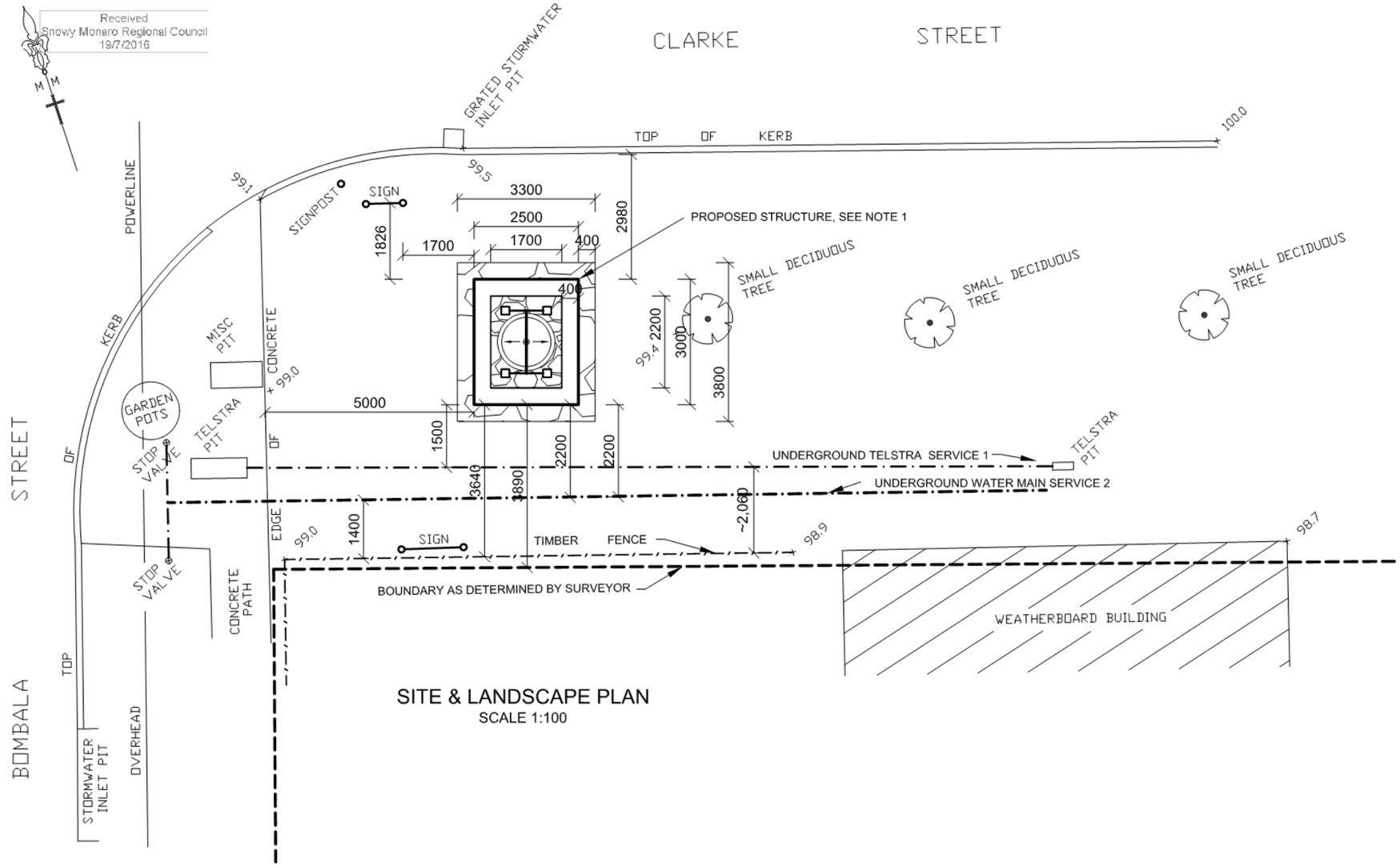
Ovi Boaru MIEAust CPEng

ISSUE	DATE	AMENDMENT
-	-	-

All workmanship and materials to conform with latest edition of the Building Code of Australia and relevant Australian Standards.

The contractor is to confirm all dimensions prior to commencing any works on site.

Refer to specification for other relevant information details.



SITE & LANDSCAPE PLAN
SCALE 1:100

NOTES:

1. PROPOSED BELL SUPPORTING STRUCTURE - 2,500 WIDE x 3,000 LONG AND SURROUNDED BY A FURTHER 400mm ROCK PAVING PLINTH AT GROUND LEVEL.
2. UNDERGROUND TELSTRA SERVICE 1 AS IDENTIFIED BY PETER CHAPPLE ON 29.06.2016. TWO TELSTRA SERVICES - MAIN AND OPTICAL FIBRE RUNNING THROUGH ONE 100 mm DIAMETER CONDUIT AT APPROXIMATELY 400 mm UNDER GROUND BETWEEN THE TWO PITS.
PETER CHAPPLE OFFERED TELSTRA SERVICES THAT AT THE TIME OF SET OUT, HE WILL BE PRESENT TO CONFIRM THE LOCATION OF TELSTRA SERVICES. VERBAL INSTRUCTIONS FROM PETER CHAPPLE ARE TO KEEP THE EDGE OF THE MAIN STRUCTURE AT A MINIMUM 1,500mm DISTANCE.
3. UNDERGROUND WATER MAIN SERVICE AS IDENTIFIED BY MR. MARK RIXON'S MANAGED WATER CREW FROM SNOWY MONARO REGIONAL COUNCIL - LOCATED AT APPROXIMATELY 1400mm NORTH OF THE EXISTING FENCE, PLACING THE EDGE OF THE STRUCTURE AT APPROXIMATELY 2,200mm, WELL BEYOND THE ZONE OF INFLUENCE
4. A DIAL BEFORE YOU DIG REQUEST WAS COMPLETED AND ALL SERVICES SHOWN ON THIS PLAN ARE SHOWN AS INVESTIGATED. IT IS THE BUILDER RESPONSIBILITY TO ENSURE THAT ALL EXCAVATION WORKS ARE COMPLETED WITH DUE DILIGENCE AND THAT NONE OF THE UNDERGROUND SERVICE ARE DISTURBED DURING THE WORKS. HAND EXCAVATION IS RECOMMENDED TO AVOID ANY UNKNOWN UNDERGROUND SERVICES.

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M: 0402 15 22 16
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Drawing Name:
ARCHITECTURAL & ENGINEERING DETAILS FOR PROPOSED 'NIMMITY BELL' AT ROAD RESERVE OF THE SOUTH EAST CORNER OF CLARKE STREET & BOMBALA STREET NIMMITABEL NSW

Client:
'NIMMITY BELL' COMMITTEE C/-HOWARDS CHALRES

Architectural Sheet No.A02 of 6

Scale:	NTS
Date:	16.07.2016
Drawing No:	050913A SITE PLAN
Sheet Size:–	A3
Designed:	O Boaru
Drawn:	O Boaru
Checked:	O Boaru

Approved:
Ovi Boaru MIEAust CPEng

ISSUE	DATE	AMENDMENT
-	-	-

All workmanship and materials to conform with latest edition of the Building Code of Australia and relevant Australian Standards.

The contractor is to confirm all dimensions prior to commencing any works on site.

Refer to specification for other relevant information details.

Enquiries Christine Lawley
Planning
Our Ref 2016.1006.1
Your Ref

Nimmitabel Lions Club
570 Old Bega Road
NIMMITABEL NSW 2631

Notice of Determination of a Development Application

Issued under the *Environmental Planning and Assessment Act 1979* (the 'Act')

Application Number	**10.2016.1006.1**
Property Description	**Clarke Street NIMMITABEL 2631 (adjacent Lot 6 Sec 42 DP 758776)** **L: 1 DY: 92**
Development Description	**Installation of the Nimmity Bell**

Determination

Pursuant to Section 80(1)(a) of the Act

Notice is hereby given of the determination by Cooma-Monaro Shire Council of Development Application 2016**.1006.1** relating to the land described above.

The Development Application has been **REFUSED** for the reasons specified below in this Notice.

Authority: Council (Meeting date 28 September 2016)

Determination Date: _____

Integrated Approval Bodies

Pursuant to Section 93 of the Act

The development application proposal was not Integrated Development. INT_01

Reasons for Refusal

Development Application 2016**.1006.1** is refused for the following reason/s:

A. The proposal has the potential to create frequent intrusive noise impacts on surrounding properties and has not sufficiently demonstrated how these potential noise impacts can be mitigated (S.79C(1)(b))

B. The proposal will detract from the heritage values of the streetscape in its proposed location (S.79C(1)(b))

C. The proposed site is unsuitable and unsafe for the congregating of a large number of persons likely to gather there for civic and festive events (S.79C(1)(b))

D. The Council received a number of public submissions against the proposal which, by virtue of the issues raised and the number received, are considered significant (S.79C(1)(d))

E. The proposed structure will increase the Council's public liability, being located within the road reserve, which is not in the broader public interest (S.79C(1)(e))

Advice to Applicant

The Council encourages the applicant to investigate other possible locations for the Bell at Nimmitabel which may address the above reasons for refusal and lodge a new development application for installation of the Bell at an alternative location.

Notes

1) An applicant may request a review of this determination under Section 82A of the Environmental Planning and Assessment Act 1979. A request for a review must be lodged within 6 months of the date of this notification. A review under Section 82A cannot be made for Integrated, Designated or Crown Development.

2) Section 97 of the Act confers on an applicant or an objector who is dissatisfied with the determination of Cooma-Monaro Shire Council, a right of appeal to the Land and Environment Court exercisable within 6 months after receipt of this notice.

On behalf of the above Council:

Mark Adams
Planning Manager – Cooma Branch
for
Peter Smith
Director of Service Planning

16|35550

2 - 8 - 2016

Snowy Monaro Regional Council
81 Commissioner St,
Cooma.
Planning Dept.

Reference number 10.2016.1006.1

D.A. for installation of the Nimmity Bell

My husband and I live in [redacted], near to the corner of [redacted] St where the Nimmitabel Bell will be placed and rung 12 times per day. This proposal is ridiculous and does not take into account those of us who are close residents. We were told that the Bell would only be rung on the Bell Celebration weekend and the clanger removed for the rest of the year. The bell's ringing is loud where we are and it should be placed further from homes at the lake or some other location and rung only as it was originally promised at town meetings i.e. one day of the year!

Unless the bell is moved to a suitable location, I urge Council to reject the Development Application as proposed.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, I declare that I have not made any political donations or gifts within the last 2 years, nor any associate.

Director of Environmental Services,
Snowy Monaro Regional Council,
81 Commissioner St.,
COOMA. 2630

3/8/16

Dear Sir,

RE: INSTALLATION OF THE NIMMITY BELL IN CLARKE STREET,
NIMMITABEL BY NIMMITABEL LIONS CLUB.
APPLICATION NO. 10.2016.1006.1

I refer to the Development Application by the Lions Club to install the Nimmity Bell on the footpath at the Clarke St. and Monaro Highway intersection. The C.W.A. Hall is the "weatherboard building" marked on the site plan, which makes it the closest building to the proposed Bell installation.

While the [redacted]. has no objection in principal to the installation of the Bell, we do have a number of concerns:

- the ringing of the Bell needs to be strictly controlled to avoid disturbance to nearby residents and users of local facilities. We acknowledge that the purpose of a bell is that it is rung, however it needs to be rung only at certain times, e.g. mid-day on Saturdays and Sundays and celebration days and only by a designated bell ringer. The clanger needs to be removed at other times. This does not stop the general public from using rocks and beer bottles to try to achieve a tone out of the Bell, (as was demonstrated when the Bell was temporarily residing in the Geldmacher yard). Perhaps raising the Bell even higher than is proposed, out of arms reach, should be considered.

- The intersection of the Highway and Clarke Street can be a very busy intersection and a surprising number of heavy vehicles turn off the Highway into Clarke Street and vice-versa. If cars are parked on either side of Clarke Street near the intersection, a truck turning into Clarke Street has to travel in the middle of the road to avoid them. Two heaviy vehicles could not pass if there were vehicles parked on either side of Clarke Street. The road is too narrow to permit car parking and traffic.

There are two solutions to this problem as we see it. One is to encourage the public to park behind the Geldmacher building. There is a driveway off Clarke Street that takes traffic to the carparking area. However, this driveway is washed out and only vehicles with a higher

than usual clearance can currently use it. This driveway needs repairing and signs need to be erected directing traffic to the parking area. A concrete footpath needs to be installed leading people from the carparking area to the Bell and meeting up with the footpath in Bombala Street. Parking in front of the proposed Bell site needs to be forbidden.

The second option would be to move the Bell to another site. Lake Williams is an obvious alternative.

Yours faithfully,

[redacted]

3/8/16

Political Donations & Gifts Disclosure Statement

Please complete this form and attach to your submission/application. DA No. 10. 2016.1006.1

Have you or any other person with financial interest in this development application made a political donation or gift within the last 2 years?

☑ NO ☐ YES – please complete and attach a Political Donations and Gifts Disclosure Statement*.

35922

8/1/2016

Mr Joseph Vescio
General Manager
Snowy Monaro Regional Council
Cooma NSW 2630

Development Application for Installation of the Nimmity Bell

Dear Sir
Firstly I would like it known that I am a keen supporter of the Nimmity Bell and have supported the Nimmitabel Lions Club with their project from the begining. After several community gatherings it was decided that the bell would only be rung on special occasions, including the Nimmity Bell Festival, averaging a possible five times in a year. Daily ringing of the bell certainly does not constitute special occasions.

I am a committed member of the Nimmity Bell Festival Committee and saw the ` Nimmity Bell' as a symbol of new beginnings for our strong and harmonious community however the decision to ring the bell daily has bought animosity, division and ill feelings to not only our village but also amongst the Nimmity Bell Festival committee members. Unfortunately the majority of the residents who would like to see the bell rung daily live many kilometers away and I feel that they haven't taken into consideration the impact it would have on those residents that live nearby.

The proposed bell site, corner of Clarke St. and Bombala St. is on the main intersection in Nimmitabel and has historic significance to our village. The corner is home to the Geldmacher Museum, adjacent is the Nimmitabel Police Station and further along Clarke St. is the Geldmacher Mill and Community Centre. I feel that this area is the Historic Hub of Nimmitabel and the `Nimmity Bell' would look out of place. The proposal to place the bell in the middle of our village continues to divide the community. Lake Williams could be an alternate site for the bell where tourist facilities already exist and is in a less populated area of our village.

In view of the animosity and division of residents caused by the proposed site and ringing of the bell I am requesting that Snowy Monaro Regional Council as the approving body, take into account all factors and make a well-considered decision for an alternate site for the bell and where the impact on residents is reduced.

16| 35802

NIMMITY BELL SUBMISSION

To: Snowy Monaro Regional Council
Cooma Office - Town Planning.

Re: Application Number 10.2016.1006.1
Installation of the Nimmity Bell.

9 - 8 - 2016

Submission to : Snowy Monaro Regional Council

COVERING LETTER 9 - 8 - 2016

We are writing to Council to express our deep concerns with the Nimmitabel Lions Club's proposal to install a large 2 metre high bell in a basic frame on a stone decorated stepped plinth on the corner of Bombala St and Clarke St in Nimmitabel.

Normal and proper protocols of consultations with local residents have not been followed by the Nimmitabel Lions Club to find a suitable location for the bell somewhere in or around Nimmitabel. Considering its proposed location on public land, proper process should have been undertaken by starting with a Development Application to Council before a single dollar was spent on buying and importing the American bell.

Due to the huge costs now already expended it is obvious that strong pressure is being brought to bear on Council staff to approve rather than reject the bell in Nimmitabel. In the location proposed the so called Nimmity Bell will forever be the symbol of Nimmitabel's community division. A community member charged with ringing the bell will have to run the gauntlet of angry local residents hurling abuse, or worse, as that person attempts a daily round of bell ringing against resident's express wishes.

As custodians of the public areas of village of Nimmitabel, Snowy Monaro Regional Council is chartered with the responsibility of administering many Acts that directly impact on the lives of residents. In my experience Council and staff have by and large worked well in partnership with residents to deliver the best possible outcomes for the community without sacrificing the wellbeing of individuals whose voices sometimes remain unheard. Council staff has always understood there is wide scope to be considered and solutions needed to contentious issues that must transcend personalities and the cycles of our population.

The proposal to site this bell in the middle of our village continues to divide the community!

Unaffected Lions Club members seem determined to force local residents to endure the loud bell's peeling every day of their lives regardless of their protestations.

On behalf of the other closest residents, we strongly urge Council to understand the points raised in this submission and take the heat out of the situation by approving a less contentious site, possibly at Lake Williams where the distance from homes can be measured in hundreds of metres rather than just metres. The Lions Club have a continuing connection with Lake Williams and its infrastructure, so placing the bell there would be a logical step, already supported in writing by so many Nimmitabel residents.

To sum up, we are not philosophically opposed to the bell ringing and we would like to see the Lions Club achieve their goals of finding an appropriate home for the bell. Whilst we cannot support the DA as proposed - ringing every day of the year on the corner of Bombala and Clarke Streets, we would support an alternative site where neighbourhood impacts of the bell ringing are greatly reduced.

We declare that we have not made any political donations or gifts in the last 2 years.

Submission to: Snowy Monaro Regional Council

NIMMITABEL BELL FACTS

1. ORIGINAL PROPOSALS

After early conceptual discussions about locating the bell near the Lions gazebo at Lake Williams, the proponent sought support from the general community to display the bell outside the Pioneers Hall with the strict condition that it would only be rung on the day of the Bell Festival. The clapper would then be removed and stored in the local police station every other day of the year.

Regardless of the number of witnesses at town meetings the bell's proponent surprisingly has no recollection of making this definitive promise to the community! The breaking of this promise by proposing ringing the bell 12 times every day of the year is at the core of the division in our community.

The Pioneer Hall site was rejected due to the possibility of issues with underground services. The proposed second site inside the Geldmacher Estate boundary was agreed to, but later rejected by the Geldmacher House group as not in keeping with the historic nature of that site. The bell was temporarily displayed there over last summer and the noise issues immediately became apparent to nearby residents and those who had not understood the possible impacts.

The third and current proposed site on the road reserve outside the Gelmacher Estate is the least acceptable to the landholders and residents closest to the bell, stated in the Lions Club DA as close as 15 metres.

2. PROPONENTS NOT AFFECTED

The bell is proposed and advocated for by a few misguided enthusiastic Lions Club members who live many K's out of town. There is a reasonable expectation that on still days the peeling of this large church bell will be heard many kilometres from the township. The thought of hearing the bell ring many times every day from 30 metres distance is unbearable to our family. No reasonable person should ask another to tolerate this "offensive" noise at short range.

Even the Nimmity Bell Festival Committee is divided on the issue of imposing a daily round of bell ringing on nearby residents. Daily continuous ringing of the bell would make its "special occasion" status null and void!

3. AMENITY EFFECTS

Background noise in the main street precinct in Nimmitabel often falls to zero depending on traffic flow etc. but particularly at night and based on the summer period on site trial of the bell we can confirm that the central village amenity will change for the worse.

The DA Statement of Environmental Effects 4.2 re Neighbourhood Amenity does not make mention of, nor address, how to stop "offensive noise" impacting on local residents due to daily ringing or nuisance ringing at other times. The bell was temporarily sited in the Gelmacher Estate around Christmas time and during its short tenure at the site demonstrated the fact that ringing of the bell (with clanger or without) is available to any so inclined passers-by at any time day or night. The bell was presumably removed by the proponents to minimise any ill-will caused by nuisance ringing before a DA was submitted. The issues will return if the DA is approved as submitted.

Submission to: Snowy Monaro Regional Council

4. POSSIBLE PROPERTY DEVALUATION

As the closest and largest landholder to the proposed bell site, we are extremely concerned about the proximity of the large actively ringing open bell and the deleterious effect it may have on all surrounding property prices and financial returns from our rental property only 25 metres across the street from bell. It is a demonstrable fact that loss of amenity near homes is directly proportional to diminished property values and income from rental, particularly from unwanted noise. Locating a prospective buyer or tenant for our properties opposite the bell may also be made more difficult.

4. HISTORIC LOCATION

Following other unsuitable site selections, the bell is now proposed in the most historic precinct in Nimmitabel on the corner of Bombala and Clarke Streets, essentially unchanged and uncluttered for over 150 years. There is no historic context for the bell in the proposed location. The bell is simply a "play on words" of the town's name or, at best, vaguely symbolic in the minds of the proponents.

Therefore the bell and plinth will seriously impact on the historic streetscape of the site that, to date, has been well administered by Council and nearby trustees. The bell is more akin to a noise producing Hollywood theme park object and can play no suitable role in this setting.

5. SAFETY ISSUES

Previous operations of the Bell have highlighted to the safety conscious the dangers of possible serious crush injuries to the user or the public from the swinging bell. The bell, designed for use in an isolated bell tower, swings through its frame with a narrow gap posing a life threatening scenario for any user or abuser. The very open and exposed proposed low bell supporting stone structure actually provides a double step up to access the bell for improper purposes or otherwise. There is no mention of fencing in the DA to isolate public access.

6. LOCAL TRUSTEES AND RESIDENTS REJECT THE PROPOSAL ON MANY GROUNDS

All close neighbours living near the bell site do not support the ringing of the bell, nor its proposed location and have written submissions against the DA. Gelmacher Estate

CWA members, all NAG executive,

) have written submissions or voiced opposition to the Applicants proposal.

Ourselves,

are all close Bombala/Clarke St residents and cannot support the location or the ringing every day.

7. THE BENEFITS OF A WELL CHOSEN SITE

Unsurprisingly all reasonable local persons, living further from the proposed bell site, have baulked at the thought of this large church bell being sited adjacent to their own homes and places of repose.

Every ambition of the bell proponents can be achieved by the installation of the bell at, for example, Lake Williams. The opportunity exists here for the bell to be located up to 300 metres from any local residents.

Pluses for a re-siting to this area include:-

Submission to: Snowy Monaro Regional Council

a. a less divisive location at a much greater distance from homes.
b. a more visible and pleasant backdrop at a site with a history more contemporary to the bell.
c. the historic streetscape of heritage listed buildings at the cnr of Bombala and Clarke Streets will be maintained.
d. the existing central village amenity remains,
e. ideal off street parking to view the bell for tourist buses and cars greatly exceeds the proposed site.
f. easy access to the CBD businesses. With better parking they may benefit even more from tourist walkabout.
g. a highly desirable gathering point, already well used for community events eg Australia Day celebrations.
h. well lit and maintained public toilets.
i. an existing weather proof Lions Club gazebo with large undercover twin plate BBQ and multiple covered tables and bench seating.
j. existing access to public power outlets for use at events.

8. RISK OF VANDALISM

The risk of vandalism may need to be addressed regardless of the site approved by Council. It is, however, worth noting that Council has owned and maintained infrastructure at Lake Williams since 1994 with little or no vandalism for over twenty years and the bell is, by its nature, more robust than any object there. Also attesting to the fact of the area's minimal risk is the large plaque on a boulder in a prominent location facing the lake that has not been stolen and has remained free of graffiti / vandalism since the opening of Lake Williams.

9. ECONOMIC BENEFITS OF THE BELL'S PROPOSED LOCATION.

The applicants espouse a panacea of benefits for all businesses near the bell's proposed location. Other shop-front owners are more sceptical. As owners of the Nimmitabel General Store, the closest commercial building to the bell site, we have the most to lose if the bell is relocated to another site. We have almost completed the construction phase of our project with the next step being a full fit out before reopening the General Store. I have recently met with Council's heritage consultant, who has roundly congratulated our efforts to revive and restore the building's fine architectural detail in keeping with the streetscape's history. When we bought the property to develop our business, we saw the building's historic background and surrounds as a critical tool in our business model to instil into the rejuvenated General Store. The bell's presence and its daily ringing will forever change our vision for the store's amenity and outlook on the most historic crossroad in the village.

The owners of the famous Nimmitabel Bakery are keen supporters of the bell's relocation to Lake Williams based on the events of the first Bell Festival, when their normal parking was locked up by celebrants parking outside the Bakery all day which resulted in an almost complete loss of their usual weekend trade. The Bell Festival itself has just been declared a bi-annual event by the committee as sustained enthusiasm wanes. It is drawing a long bow to claim there will be some financial benefit for our business. According to our tenants living happily in the store's residence (an integral part of our return from the property) only 25 metres from the bell, they will be moving out when the bell starts tolling. No benefits for our business there!

Submission to: Snowy Monaro Regional Council

Not all submissions or arguments for economic benefits from local landholders hold any substance, for example: The owners of the commercial premises at 30 Bombala St, Nimmitabel, currently on sale, are strong and vocal advocates for the bell's economic benefits. However, except for a few hours per day, they stayed closed on all the weekends that the bell was on display over last summer when tourism was at its greatest. The owners also reside many kilometres from the village and will never endure unwanted noise from the bell's ringing at night or weekends.

1613-804

4 - 8 - 2016

Planning - Cooma Office.
Snowy Monaro Regional Council
81 Commissioner St,
Cooma.

Reference number 10.2016.1006.1

Re : Installation of the Nimmity Bell.

We have been and we stress to Council that we cannot support this Development Application on a number of important points including:-

1. The applicant's chosen location of the bell demonstrates no concern for nearby residents who will forever have to listen to the ringing of bell at any time day or night when rung or hit by any passer-by.

2. When rung every person in town will hear the noise - the bell's proposers won't.

3. The bell should be mounted in a properly constructed belltower-like structure more in keeping with its original home.

4. This bell needs to be housed in an appropriate structure for a large church bell at a suitable location as far away from homes as possible (Lake Williams?) and rung only as per the original proposal to the community - on the Bell Festival weekend! It should be disabled for the rest of the year.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, we declare that we have not made any political donations or gifts within the last 2 years, nor any associate.

16/35805

Submission to Snowy Monaro Regional Council:

Proposed Development: **Installation of Nimmity Bell.**

Application Number: 10.2016.1006.1

Property Description: **Nimmitabel Bell/Clark Street NIMMITABEL 2631.**

L: 1 DY: 92, Lot: 8 Sec: 36 DP: 758776, Lot 19 Sec: 28 DP: 758776

The Bell has certainly created discussions with some of the residents of Nimmitabel. And it is clear that the two most concerning facts that we all agree on are as follows:

1. **The safety in regards to the proposed location.**
   The Proposed site is on the corners of Bombala and Clarke Streets. In real language it is the main intersection, the Monaro Highway and Old Bega Road intersection. Unless the Council proposes road closures, traffic diversions etc, we feel there is a real likelihood of injury. With constant Heavy vehicle traffic on both roads and the interest the Bell is likely to generate, the safety implications surely must be considered. There is also a suggestion of an annual Bell Festival. We are not opposed to a Bell Festival however it seems counterproductive to disrupt the only major intersection in the centre of town, put public safety at risk and create a logistical nightmare where parking is concerned.
2. **The suggested times the bell should be rung in its current proposed location.**
   Bell peel is connected with church, celebration and or emergency. Wall clocks chime regularly and bells peel in towers. The design on the proposal is neither. For what reason would the bell need to be rung in the middle of town every day?

We have an established park,(that being Lake Williams,)already used for community events. There is ample parking, BBQ facilities, powered site, covered table sites and amenities. There is a good 300meters distance from any dwelling depending on where you look.
This position seems to us a foregone conclusion.
We as part of the community do support anything that promotes our beautiful village. We are thankful for a democracy that gives us a voice. Let us be heard.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, we declare that we have not made any political donations or gifts within the last 2 years, nor any associate.

5/8/2016

16/35807

6 - 8 - 2016

Planning - Cooma Office.
Snowy Monaro Regional Council
81 Commissioner St,
Cooma.

D. A. No ... *10.2016.1006.1*

Proposed Development ... *Installation of the Nimmity Bell.*

I do not support the Development Application's intention to locate the Nimmity Bell on the corner of Bombala and Clarke Street so close to people's homes and ring it 12 times every day. The best alternative is for the proponents to put the bell at Lake Williams and erect a high lockable fence around the bell that allows only authorised people to access the site.

To minimise the effects of nuisance ringing (throwing of rocks and other objects) a suitable clear material should be placed around the bell to act as a sound damper when not being used. I am keen to stress that the bell should only be rung on special occasions.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, we declare that we have not made any political donations or gifts within the last 2 years, nor any associate.

16/35809
4/8/16

Submission to: Snowy Monaro Regional Council re:

Nimmitabel 'Bell' (DA) Location.

My family live outside the town of Nimmitabel, yet totally feel for and understand the local residents objection to a huge, loud bell being placed close to residential houses and the proposal of it being rung 12 times daily. Unlike the 'original' promise of it being rung only on the Bell Festival day, which would have been far more acceptable and fair, however, all the very valid points and the community have pointed, out make absolute sense.

Common courtesy, logical reasoning and understanding need to be observed by members wishing to install the Bell in close proximity to houses, as noise pollution is a very real concern for many.

The proposal for the 'Bell' being placed at Lake Williams seems a very reasonable proposal/plan, however, if I lived in the village I'd still think it was too close to homes and may still prove to be too loud.

Why not build a tower on top of the hill, far from residents, homes and passers-by, tempted to toy ring or vandalise it. Most small villages in Europe locate their bells on hill tops, a great solution for all.

'IN ACCORDANCE WITH SECTION 147 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979, I DECLARE THAT I HAVE NOT MADE ANY POLITICAL DONATIONS OR GIFTS WITHIN THE PAST 2 YEARS, NOR ANY ASSOCIATE'

16/35811

5 August 2016

Dear Sir/ Madam,

RE: Proposed Development – Installation of the Nimmity Bell
Application No: 10.2016.1006.1

As a resident of Nimmitabel, actually living within the township, I would like to suggest an alternative location for the above proposed development. I can understand that people want the Bell in a prominent position and encourage people to stop in the town. However, the current proposed site could be an issue for safety – parking spaces are limited, the intersection of Bombala & Clarke Streets is already hazardous when no vehicles are parked on the crest of the road, and the Bell may not be clearly seen by passing traffic. My interpretation from the plans makes the Nimmity Bell look like it is 'tucked away at the side'! It would be more appropriate, aesthetically pleasing and perhaps more functional to locate the Nimmity Bell's installation site in the surrounds of Lake Williams. I consider this to be a viable alternative for the following reasons:

1. Lake Williams is tailored for family, community and passing visitors in regards to amenities – toilets, BBQ facilities, designated parking areas and a safe area that does not require crossing roads. This would be a plus for parents with children (and pet lovers to take their animals for a walk)
2. Ample space for siting the 'Bell' on a raised area overlooking the Lake – may be a community garden project to continue to beautify the area.
3. The Lake Williams area could be further developed to provide a cement path around the entire area – obviously this would have health benefits for locals and visitors alike.
4. This site is also close to the showground – a regularly used facility – and could link the showground to the township via the Lake and Bell and incorporate this 'track' into the town walk information/ brochure.
5. If the intention is to have a Nimmity Bell festival day then the Lake Williams area can be used for stalls/concerts/displays etc without having to contend with traffic passing through a crowded main street.
6. Siting the Nimmity Bell at the Lake would also restrict the noise of the Bell – when rang – and not impact needlessly on residents living in close proximity to the proposed site. May not be conducive for locals and visitors alike who enjoy a quiet cup of coffee at local food outlets.

I look forward to hearing the outcome of the proposed development site application. I can be to discuss any of the points I have listed. I have not contributed, donated or gifted to any political party within the last two (2) years

Yours Faithfully

16/35813

6 - 8 - 2016

Planning - Cooma Office.
Snowy Monaro Regional Council
81 Commissioner St,
Cooma.

D. A. No 10.2016.1006.1

With regards to ... Installation of the Nimmity Bell.

*and I are not supportive of the proposal to put this large chur*ch bell on the Clarke St intersection with the main highway. Proposing to site the bell a few metres from homes and ringing it is not something that any reasonable person would inflict on others, particularly if the applicants could never hear it themselves.

It must be placed as far away as possible from resident's homes and rung only a few times per year if at all. Between the lake and showground may be acceptable.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, we declare that we have not made any political donations or gifts within the last 2 years, nor any associate.

16/35814

Submission to: Snowy Monaro Regional Council

[redacted]

Re: Development Application 10.2016.1006.1 - Installation of the Nimmity Bell

To Whom It May Concern,

I am writing to state my opposition to the presence of the large chapel bell on the nature strip at the corner of Bombala and Clarke St, Nimmitabel, and the proposal to chime it twelve times every day of the calendar year. In its current location the bell is much too close to neighbouring residences including my own family home just [redacted] The negative impact of its regular sounding and any sporadic "nuisance" ringing on those who would be subjected to it on a daily basis far outweighs any possible perceived benefits to the town.

In addition to the noise that would be imposed upon me as a regular visitor to my family home, I am concerned about the possible devaluation of the dual tenancy property at [redacted] have a financial interest. I foresee both short and long term personal financial losses arising from noise-related issues and the deleterious visual effect of the bell and its plinth on the historic streetscape.

Should the daily ringing of the bell be deemed truly necessary, the most suitable solution would be its removal and transfer to Lake Williams on the edge of town where the impact of the noise pollution would be minimised. If the bell is to be a mascot for the town as those submitting the DA appear to hope, its positioning at this rest stop with amenities for travellers seems most appropriate. As a side note in this regard, however, I find the use of the bell as a town icon objectionable in principle. While I recognise that it is a play on the town's name, the bell symbolism is irrelevant to its history and irreverent to the original indigenous meaning of the term *Nimmitabel*, "the dividing of the waters", referencing the directionality of the water runoff from the town.

Thank you for your consideration in this matter.

[redacted]

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, I declare that I have not made any political donations or gifts within the past 2 years, nor any associates.

16/35815

2 - 8 - 2016

Snowy Monaro Regional Council
81 Commissioner St,
Cooma.

Your reference … 10.2016.1006.1

Re … Installation of the Nimmity Bell

As business owners in the main street of Nimmitabel and Bell Festival committee members, we strongly oppose the proposal to install the bell at the Bombala / Clarke St site as stated in the D.A.

The injustice of imposing the impacts of the bell on its surrounding residents is not lost on us, nor many other people of Nimmitabel. We would definitely support the bell being erected at Lake Williams where more bell-related parking is available during town events. We could only support the bell ringing for special events.

Due to our overseas travels, we have asked David Wicks to prepare and submit this letter on our behalf. Please contact us to confirm the content of this letter on our return to the country after 14th August.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, I declare that I have not made any political donations or gifts within the last 2 years, nor any associate.

16/35816

9-8-2016

Snowy Monaro Regional Council
Cooma Office
Town Planning

I have read the development application for the proposed 'Nimmity Bell' located beside the Geldmacher House in township of Nimmitabel.

I have significant concerns about the proposed construction as it is laid out in the application.

I am a resident at in Nimmitabel and I have grown up in the township and resided there for a significant proportion of my life. I have a strong connection with the town itself and its historical development.I also declare I have a financial interest and part ownership of the closest business premises to the bell site.

I am entirely unaware of any significance that a bell or anything bell related has in the cultural background of the area. I can only assume that a bell bears a resemblance to the last three letters of the name 'Nimmita-bel'. Noting that the Geographical Names Board of NSW states the township name has historical groundings in local Aboriginal heritage and has evolved over time from 'Nimmitibel', 'Nimmitybelle' and then finally 'Nimmitabel'. It states: "NIMMITABEL - said to be a contraction of an English word inimitable; Aboriginal meaning 'the place where many waters start, or divide'. (P 24. (Infor. from Back to Cooma Celebrations) P.172-176 RAHS Journal Vol 9 Pt 3)"

Apart from the obvious noise impacts, I would consider the construction of a large ringing bell in the heart of Nimmitabel to be a regrettable distraction from the historical background of the township simply for the purpose of word-play. Considerable research and effort has been undertaken to accurately represent the cultural heritage of Nimmitabel by many of the local residents in the form of Geldmacher House, the Mill, the Heritage Trail, etc. A centrepiece of this heritage is in the form of the afore mentioned Geldmacher House. The proposed bell construction is located immediately outside the grounds of this historical museum. The construction would very obtrusively stand as a krass and culturally irrelevant distraction.

In a township with a relatively few number of residents it is difficult to maintain and preserve the cultural heritage of the township for future generations. Because of the few individuals who are willing to be custodians, it is a fragile body of history which is vulnerable to the pressures placed onto it, even by a small number of proponents who wish to erect these types of structures. It would be easy to

theorise that for any of those visiting or passing through the township that such a bell would be somehow representative of the town or its people.

I appreciate that, over time, a town continues to grow and change with the generations people who reside there. There are many changes which have occurred even within Nimmitabel's modern history which I would be very supportive to see being represented within the town in one form or another. However the proposed construction does not achieve this. The efforts and funding would be far better spent on representations which are historically or contemporarily relevant.

I would like to conclude this submission by saying that, if Council is placed in the invidious position of being forced to facilitate a permanent home for this bell, I would urge Council to only approve a location as far as possible from the village's outlying homes on a site with little comparative historic value. Various sites at Lake Williams would fall into this category.

I declare that I have made no political donations or gifts to any parties or persons in the past two years.

16/35817

5 - 8 - 2016

Planning - Cooma Office.
Snowy Monaro Regional Council
81 Commissioner St,
Cooma.
D. A. No 10.2016.1006.1
Proposed Development; Installation of the Nimmity Bell.

Nimmitabel. We will be the closest and most affected residents to the bell if it ends up there on the nature strip. Based on our experience the trial display earlier in the year, we urge Council to reject Development Application's proposition.

We have 2 small pre-kindergarten children and our bedrooms overlook the site. Before the bell was taken away, we were witness to the bell being rung by anyone passing by on foot, in cars and buses. This happened either with the donger in place or not! The effects on the 4 of us being woken at night time, by nuisance ringing, were annoying and wearing. The bell's gong, when hit hard, is incredibly loud and a few times after we were woken up by bell, I looked out the window to see people in cars driving away after banging the bell.

As our work currently requires unusual working hours, the daily midday ringing will pose obvious health risks or our future and that of our children.

The bell's presence on the Clarke St site has already proven to degrade the enjoyment of our new home in Nimmitabel and will be intolerable if the DA is approved. Council must stand up for we local residents by asking the Applicant to consider moving the bell to the lake near the showgound or somewhere else where locals lives aren't trashed by useless, offensive noise every day! If the Lions Club can't accept a move to a suitable site then Council should decline the DA.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, we declare that we have not made any political donations or gifts within the last 2 years, nor any associate.

16/35819

3 - 8 - 2016

Planning - Cooma Office.
Snowy Monaro Regional Council
81 Commissioner St,
Cooma.

Reference number 10.2016.1006.1

Re : Installation of the Nimmity Bell.

We are a family living on the corner of Nimmitabel and some of the closest residents to where the bell is suggested to be placed (fifty metres from our boundary). We feel strongly that the bell should be located at Lake Williams and operated only on special occasions.

In accordance with Section 147 of the Environmental Planning and Assessment Act 1979, we declare that we have not made any political donations or gifts within the last 2 years, nor any associate.

Sharon Thompson

From:
Sent: Monday, 1 August 2016 3:26 PM
To: Council@Cooma
Subject: Installation of Nimmity Bell

Sir/Madam,

Installation of Nimmity Bell
Ref: 10.2016.1006.1
Nimmitabel Bell/ Clarke St., Nimmitabel 2631

From:

Firstly, may we thank you for the opportunity to comment on this proposal.

The Bell is without doubt a handsome piece of metal work, but we have a number of reservations about the proposal to site it in the centre of Nimmitabel. We feel sure that its original design was intended to have it installed in some form of tower, as in a church or public building, where it would be heard at a distance, rather than close up at ground level.

We also have some concerns about the stability of the proposed structure. It is a very heavy piece of metal to be sat upon four steel posts 2.5 m high (200 x 200, but how thick?), but we presume your engineers will already have scrutinised this. The repercussions of a capsize during heavy weather, or a public event, or just some vandalistic misadventure must at least be taken into account.

It should also be emphasised that the Bell has no historical connection with the name of the village and is merely a convenient play on words.

Statement of Environmental Effects

We were very disappointed at the lack of detail in this Statement. In our view, it is so deficient in relevant detail that it is rendered invalid.

2. Proposal

Parking: If this is to be a public attraction, should not additional vehicle parking be provided or at least considered? At its earlier launching, cars were parked everywhere, and normal traffic was severely impeded.

Landscaping proposed: Paved area 4m x 4m does not provide any detail as to depth, reinforcing, source of material, jointing material, etc., nor even drainage.

3. Site & Surrounding Area

3.1 Site Analysis

Mr Joseph Vescio
Snowy Monaro Regional Council
PO Box 714
Cooma NSW 2630

30th July 2016

Dear Sir,

Re:; DA for the Installation of the Nimmity Bell

Dear Sir

Firstly let me state I do support this enterprise but I have objections to some of the proposals.

1) Noise pollution to nearby residents if as proposed by some that the bell be rung daily.

2) When the idea of the bell was first mooted the tongue was to be removed & the bell rung on **SPECIAL OCCASIONS ONLY.** Daily ringing of the bell would not constitute a special occasion.

3) Many supporting the daily ringing of the bell live out of the township& therefore are not affected by the noise.

4) I have serious reservations regarding road safety issues at the proposed site. Clarke Street is a cross street with the Monaro Highway. Clarke Street carries traffic from Kybeyan, the garbage facility & 200 metres approx from a pedestrian refuge on the Monaro Highway. I fear drivers could be distracted looking at the bell causing minor accidents or worse the possibility of more serious consequences, considering the volume of large trucks using the highway.

5) Remember also the Monaro Highway is main arterial road from Bombala, the coast & certain areas of Victoria. Looking to the future the traffic on the Monaro Highway will only increase.

6) The subject of vandalism of the bell has arisen but this already happened when previously the Bell was situated in Clarke Street. Patrons leaving the hotel were throwing bottles to ring the bell.

A better site to install the bell would be at Lake Williams where tourist facilities already exist, such as toilets,bbq, tourist information boards, seating & off street parking able to facilitate caravans.

Yours faithfully

Sunday, 31 July 2016

To: Snowy Monaro Regional Council

Attention: Director Environmental Services

P.O. Box 714

COOMA NSW 2630

RECEIVED
- 4 AUG 2016
BY: .....

RE: DA Nimmity Bell No: 10.2016.1006.1

I wish to make an objection to the above mentioned erection of the Nimmity Bell proposed to be situated at the cnr Clarke st and Bombala St, Nimmitabel.

Firstly, the bell before it was purchased, was to be placed down at Lake Williams away from any very close neighbours.

Secondly, then no, that wasn't going to happen, outside the Pioneer Hall, Council inspected finding underground cables etc which was then thought unsuitable for the "bell".

Thirdly, the bell was placed at the above address, propped up on a couple of wooden pallets. Everytime that bell was rung, by locals, passers bys, drunks vacating the pub in close vicinity, we were inundated with offensive deafening clanging noise coming from the bell, living just across the road at 30 Clarke St. It woke us up at all hours of the night, even when the clanger had been removed. No matter who it was bashing the bell with no clanger in it, people used bricks, rocks, walking sticks, umbrellas to make the thing sound a tune, all day and night. I found it so offensive, that the day of the bell celebrations, we made sure we did not hang around as we knew it was going to be a bad day for noise and a bad night for noise which it was. All the surrounding neighbours copped the bell echoing through their houses. Great.

We moved years ago to Nimmitabel, thinking that we were going to have a quiet life in a small country town, well how wrong was I. I have never endured so much offensive noise in all my life. The Nimmitabel hotel being the main offender, now the clanging of a bell, which is to be rung every hour. Great. I already have a case going on with the OLRG with offensive noise regarding the pub, I hope I don't have to pursue other authorities with regards to noise pollution coming from the bell if it goes ahead and is permanently placed at the above address.

None of the Lions club members live in Nimmitabel town, so of course they would want it to go there, they don't and won't hear a thing, it's very convenient for them.

My suggestion is to place it down at Lake Williams, where it was originally intended. Plenty of off road parking, plenty of room for buses to park, it has a lovely bbq area, toilets, what more could you want to bang and clang a bell. Hardly anyone would be impacted then, it is common sense, not a hard decision.

I hope you take my objection on board, as myself and my family are not at all happy with the suggestion of permanently placing the "bell" so close to a lot of concerned neighbours.

Awaiting an early reply.

To: Town Planning- Cooma Office, Snowy Monaro Regional Council

Reference Number: 10.2016.1006.1
Installation of the Nimmity Bell

To whom it may concern,

I am writing to voice my significant concerns about the negative impacts of the proposed location of a large 'Bell' in the town of Nimmitabel, particularly in how it affects my interests in the properties listed above.

I resided for my first 19 years in the town of Nimmitabel and believe in that time I got a feel for its community and ambience. I see no continuity or relevance in the introduction of an operational bell to the township of Nimmitabel, beyond a loose play on words, it seems irrelevant and of no benefit to the community feel, tourist attraction and overall feel of the town.

I have always found to area to draw new community members that are searching for, or value the relaxing and quiet of a small historic rural town. And the sharp, anxiety inducing ring of a large Bell will surely break one of the town's key values, peace. Based on the size of this Bell, it's sure to violently break through the lives of all the town's inhabitants, of which nearly all took up residence before this Bell.

While I no longer reside in Nimmitabel, several times a year I visit family living at 31-35 Bombala St. I also maintain contact with other community members, all of which have passed on the deep concern of the long term negatives of having the Bell project go ahead.

My most grave concern is the damage the Bell will have to property prices. Being part of a family trust for the aforementioned addresses, I feel I have a say in anything that will reduce the value of our family's financial assets. With the properties mentioned being located in such close proximity to the proposed location of the bell in the center of town, it is surely going to see the biggest reduction in value. With the promise of a relaxed atmosphere a primary reason to draw new community members, the removal of the peace and quiet logically removes that primary attraction, with what I as foresee longer times required to find buyers for property (town wide), coupled with lower values.

Nimmitabel
7-08-2016

To the Administrator,
Snowy Monaro Regional Council

I am registering a strong protest against the installation of "the Bell" in the centre of Nimmitabel (with the clanger permanently attached). It would be more preferable to install it at the Lake, with the clanger attached only on special occasions, as per original plan.

While most people like the Bell, the town was not consulted about it's purchase or arrival - only informed this was to happen. So, to have it rung on a daily basis, & freely available to any passing hoons to create mischief at any hour of the day (as has already occurred several times), would be a great intrusion to the everyday lives of the people in the town. Also, the people involved in it's purchase, mostly do not reside in the town, & won't hear it. This all seems like an unfair imposition on the town of Nimmitabel.

Submission to Snowy Monaro Regional Council.

Ref D.A. The Bell

NIMMITABEL means dividing of the waters.
The BELL means the dividing of the people.

Dear Councillors,

I hearby submit my most strong objection to the bell being erected within the town CBD for reasons as explained herewith:

1. It is an unattractive metal object - an eye sore.
2. It has no relevance to the town historical or otherwise
3. It is not even spelled the same (Nimmitabel not Nimmitabell)
4. It poses a traffic safety concern in regards to pedestrians crossing the Clarke street/Monaro highway in either direction, as this intersection has fall in it to the south thus on approach from the north drivers have difficulty seeing any traffic off to the left.
5. It limits parking space for visitors to the monthly CWA market days
6. As for ringing it 12 times a day, this is absurd. Why?
7. I note that the person/s trying to rush this idea through, all live outside of town, and mustn't have ears.
8. There wasn't any consulting carried out with the residents.
9. $70,000 has been raised of which $10,000 came from state coffers, which should have gone to the upgrade of public toilets as was planned some 12 years ago.
10. If this eye sore is to be erected then I would like to see it erected in the middle of Lake Williams then there would not have to be a fence erected around it thus far enough away from residents to be seen and not heard.
11. The DA is proposing that there be plaques placed around the base of the bell. For what reason? Are they pioneers, fallen soldiers, prime ministers or maybe has-beens that want to be?

I remain
Sincerely yours,

To Looma Council Application NO. 10.2016.1006.1.
I would like to voice my support for the Nimmitabel Bell, to be located in the centre, of town. I also support the 'Ringing' of the bell, at Regular Times.

TO WHOM IT MAY CONCERN:

I WOULD LIKE TO VOICE MY SUPPORT FOR THE NIMMITABEL BELL TO BE LOCATED IN THE CENTRE OF TOWN. I ALSO SUPPORT THE "RINGING" OF THE BELL AT REGULAR TIMES.

YOURS SINCERELY

NIMMITABEL NSW
2631.

APPLICATION NO: 10.2016.1006.1

To Snowy Monaro Regional Council,

Re the installation of the Nimmity Bell,

Application number 10.2016.1006.1

I wish to submit my support to this application as a business owner in Nimmitabel. I own and manage Nimmitabel Leather adjacent to the Geldmacher Museum, I feel the Bell well deserves to be installed as per the proposal where locals and tourists alike will have the pleasure of viewing it in a prominent position.

Received
Cooma-Monaro Shire Council
17/2/12016

COOMA-MONARO
SHIRE COUNCIL

81 Commissioner Street
(PO Box 714)
COOMA NSW 2630
Phone: 6455 1777
Email: council@cooma.nsw.gov.au

Statement of Environmental Effects

A STATEMENT OF ENVIRONMENTAL EFFECTS MUST BE SUBMITTED WITH ALL DEVELOPMENT APPLICATIONS.
If an answer requires additional details to be provided, details of likely impact(s) and the proposed means of mitigating or reducing such impact(s) are to be attached (some space is provided on the last page). This Statement of Environmental Effects is not exhaustive and should be expanded where appropriate.
If more space is required, attach additional sheets.

1 Author

Name/Company:	Chris & Donna Mould.
Contact Name (if Company):	
Signature:	[redacted] Date: 10/2/16.

2 Proposal

Proposal:	Describe:	Construct a small dwelling with carport			
	☑ Residential	☐ Subdivision	☐ Commercial/Industrial	☐ Other	
Lot/DP/SP:	166	DP 750524			

3 Context and Setting (Site Analysis)

Character

3.1 Provide a general description of the site and its surrounds, including the site's broader context within the neighbourhood or area and the current use of the site.
Lot 166 is a 17 hectare small rural block which is disected by dry plains road. The portion on the eastern side of the road (approx 1.7 ha) is lightly timbered vacant land.

3.2 Is the development out of character with the area? ☑ No ☐ Yes
If yes, provide details.

3.3 Will the development be visually prominent within the existing landscape? ☑ No ☐ Yes
If yes, provide details.

3.4 Will be development impact on any item of heritage or cultural significance? ☑ No ☐ Yes
If yes, provide a Heritage Impact Assessment Report.

Statement of Environmental Effects

Visual & Acoustic Privacy (not required for Subdivision proposals)
Describe how the following will be affected/addressed:

		Provide details:
3.5	Window placement in relation to adjacent dwellings	See Plans.
3.6	Views between living areas and private yards of other dwellings	N/A
3.7	Use of screen planting, hedges, walls or fences to improve privacy (please provide details on site plan)	N/A
3.8	Headlight glare, light spill	N/A
3.9	Noise transmission between dwellings	N/A
3.10	Measures to mitigate external noise sources (ie. traffic noise, air conditioning units, exhaust systems etc)	N/A

Views
Describe how the following will be affected/addressed:

		Provide details:
3.11	Impact of the proposed development on views from adjoining or nearby properties and roads	NO IMPACT
3.12	Design options used to protect views	
3.13	Views from the proposed development	

Overshadowing

3.14 Is overshadowing expected on neighbouring properties as a result of the proposed development? ☑ No ☐ Yes
If yes, provide Shadow Diagram.

3.15 Multi-unit development only: ☑ No ☐ Yes
Is overshadowing expected on on-site dwellings as a result of the proposed development?
If yes, provide Shadow Diagram.

Materials & Finishes (not required for Subdivision proposals)
Provide a description of the proposed materials and colours of the development:

		Provide details:
3.16	Walls	Timber stud - Metal. Clad.
3.17	Roof	Timber Trusses - Corri Metal.
3.18	Fences	
3.19	Other	

4 Traffic, Access & Provision of Services

4.1 Will local traffic movements and volumes be affected? ☑ No ☐ Yes
If yes, provide details.

4.2 Will a new entrance and/or internal road/driveway be required? ☐ No ☑ Yes
If yes, provide details – eg grade, site distances, materials, construction etc

4.3 Is there legal access to the site at present? ☐ No ☑ Yes
If no, provide details

4.4 Is the access currently suitable for 2WD vehicles in all weather? ☐ No ☑ Yes
If no, provide details.

4.5 What services are currently available on site? What services are to be established/provided?
Please tick appropriate column and provide detail

	Currently Available	To Be Provided	Provide Detail
Water		✓	Rain water from roof to tank.
Sewer		✓	Septic system
Electricity	✓		
Gas		✓	LPG.
Telephone			

5 Waste Disposal

Effluent

5.1 Will effluent be disposed of in Council's wastewater system? ☑ No ☐ Yes
If yes, ensure details of the location of Council's wastewater system are provided on your plans.

5.2 Will effluent be disposed of in a **new** on-site sewage management system (eg septic) ☐ No ☑ Yes
If yes, please provide a Site & Soil Assessment Report in accordance with Council's On-Site Sewage Management Strategy. A list of Consultants is available on Council's website. Include details of NSW Health accreditation and location of the proposed system on the plans.

5.3 Will effluent be disposed of in an **existing** on-site sewage management system (eg. septic) ☑ No ☐ Yes
If yes, please provide details of the location, capacity and NSW Health accreditation details (if available) of current system.

Stormwater
Describe how the following will be affected addressed:

5.4 How will stormwater be disposed of from the proposed development on-site?
All roof water harvested.

5.5 Will the proposal lead to direct discharges of stormwater or waste into a natural water course? ☑ No ☐ Yes
If yes, provide details.

Other Wastes

5.6 Will other wastes (eg chemicals, odour, air pollution etc) be generated by this development? ☑ No ☐ Yes
If yes, provide details.

Statement of Environmental Effects

6 Environmental Impacts (Air, Soil, Water, Flora, Fauna)

6.1 Could the proposal result in soil contamination? ☑ No ☐ Yes
If yes, provide details

6.2 Does the proposal involve: ☐ No ☑ Yes
a) the disturbance of the soil; and/or
b) the placement of buildings on the soil; and/or
c) development that that may change the rate and volume of run-off entering a water course or flowing over land?
If yes, please provide an erosion/sediment control Plan in accordance with *Development Control Plan 17 – Erosion & Sediment Control*.

6.3 What excavation and/or filling is required (include heights and details of both existing and proposed ground level on plans)?
No excavation required
Proposed. Building site - relatively flat.

6.4 Will the proposal involve the removal of trees/vegetation (inclusive of grassland)? ☐ No ☑ Yes
If yes, provide details (eg area (m^2) to be removed, type of vegetation).
approx 80m^2 - native grasses.

6.5 Will the proposal disturb any artefacts or relics (Aboriginal or European)? ☑ No ☐ Yes
(A free basic Aboriginal Heritage Information Management System (AHIMS) search can be undertaken on the Office of Environment of Heritage website: www.environment.nsw.gov.au)
If yes, please provide an Archaeological Report. A list of Consultants is available on Council's website.

6.6 Is the proposed development likely to have a significant impact on any threatened flora or fauna on the site? ☑ No ☐ Yes
If yes, please provide a Threatened Species Report. A list of Consultants is available on Council's website.

6.7 Does the site contain bushfire prone land (map available on Council's website)? ☐ No ☐ Yes
If yes, please provide a Bushfire Report.
For building work you may use the publication *"Single Dwelling Kit"*. For subdivisions, please see *"Planning for Bush Fire Protection 2006 - Appendix 4"*. Both are available from Council or www.rfs.nsw.gov.au

6.8 Is the site subject to subsidence? ☑ No ☐ Yes
If yes, please provide a Report prepared by an Engineer.

6.9 Is the development close to a river or stream, or is the site likely to be affected by flooding (Flood Map 1994 is available on Council's website – map covers Cooma Urban area only)? ☑ No ☐ Yes
If yes, please provide a Flood Study Report. A list of Consultants is available from Council's website.

6.10 Is the site subject to soil contamination, or has the site previously been used for activities which may have lead to contamination? ☑ No ☐ Yes
If yes, you may need to provide a Contamination Report. Please consult Council before lodging your application to determine if a Contamination Report is required. A list of Consultants is available from Council's website.

6.11 Are any street trees/vegetation to be removed? ☑ No ☐ Yes
If yes, provide details.

7 Construction Issues

Demolition

7.1 Are any buildings to be demolished? ☑ No ☐ Yes
If yes, please provide details of size, age, materials, proposed disposal, etc.

7.2 Is any internal demolition proposed (eg, walls, kitchens, bathrooms etc)? ☑ No ☐ Yes
If yes, please provide details of size, materials, proposed disposal, etc.

Asbestos

7.3 Does the proposal involve the removal of any fibrous cement products which may contain asbestos? ☑ No ☐ Yes
If yes, provide details on amount (m^2), materials, proposed disposal, location, details of licensed asbestos removal contractors to be used etc.

Erosion & Sediment Control Measures

7.4 Complete an Erosion & Sediment Control Plan for all developments that include construction and/or demolition works. You may attach a Plan or use the table below.

Aspect	Management Strategy
Disturbed areas - access roads/tracks/driveways	
Disturbed areas – cut/fill areas	
Stormwater runoff	
Equipment washing area	
Stockpiles	

8 Social and Economical Impacts

8.1 Will the proposal create an increase in demand for community services and/or infrastructure? ☑ No ☐ Yes
If yes, provide details.

8.2 Will the proposal have significant economic consequences on the area? ☑ No ☐ Yes
If yes, provide details.

9 Sheds (All)

9.1 What is the intended use(s) of the building?

9.2 What type of vehicle/s will routinely visit or house and/or what will be stored and/or what will be manufactured/ assembled etc.
Include details of any hazardous or flammable substances which could be dangerous, and the quantity.

10 Commercial/Industrial Development Only

Provide details on the following:

	Provide details:
10.1 Parking arrangements – current *(number of spaces/area etc)*	
10.2 Parking arrangements – proposed *(number of spaces/area etc and detail on site plan)*	
10.3 Outdoor dining or goods on the footpath (Please note additional approvals/licences may be required)	
10.4 Number of seats proposed (for food premises only)	
10.5 Existing signage *(sizes, location etc)*	
10.6 Proposed signage *(sizes, location etc. Provide plans of any proposed signage)*	
10.7 Maximum number of employees on-site at any one time	
10.8 Days/hours of operation	
10.9 Size and types of vehicles expected to use the site	
10.10 Number of vehicular movements expected per day	

11 Subdivision Only

Provide details on the following:

	Provide details:
11.1 Details on how proposed lots obtain a sustainable water supply *(number of tanks, volume)*	
11.2 Rational behind the specific location of any building envelopes shown on the site	
11.3 How the proposed lots will have practical and concurrent legal vehicular access	

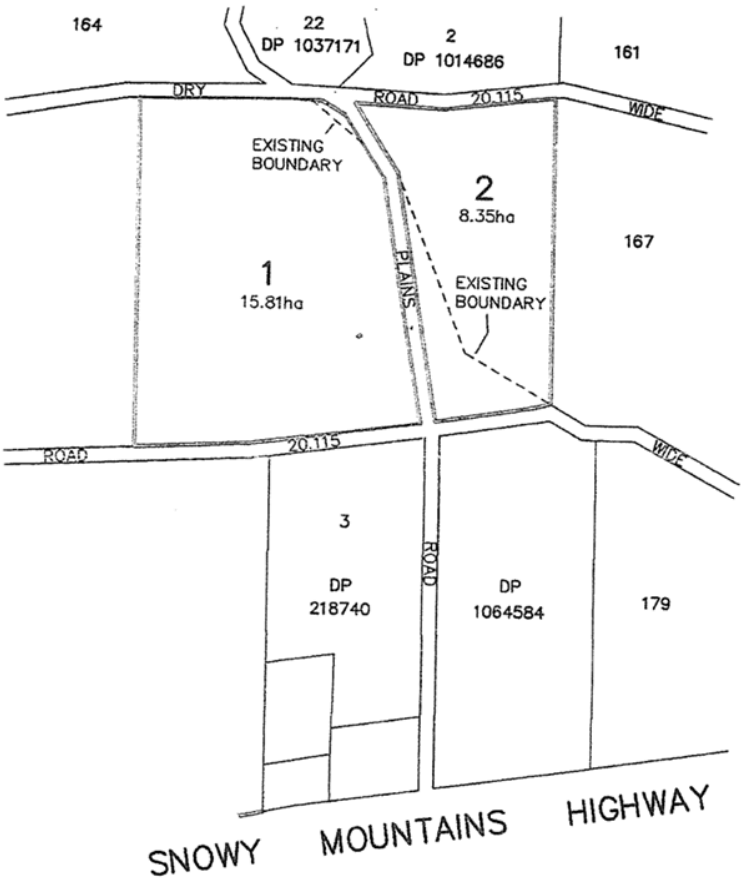
12 Waste Management Plan

Complete a Waste Disposal Plan for all developments that include construction and/or demolition works. You may attach a Plan or use the table below. Wastes include, but are not limited to: vegetation, trees, soil, construction waste, demolition waste, timber, asbestos, metals.

Type of waste	Estimate Amount/Volume	Where/how it will be stored on site	Where it will be disposed	Method of transport/disposal

PRIVACY INFORMATION: The information you provide in this Statement will enable your application to be assessed by Council and any relevant state agency. If the information is NOT provided, your application may not be accepted. Your application will be publicly notified in accordance with Council's Public Notification Policy. The application details will also be kept by Council in a register that may be viewed by the public at any time. The Act provides that for the purposes of public notification, specific internal layout of a dwelling maybe excluded from a plan prepared for such exhibition.

ZONE RS

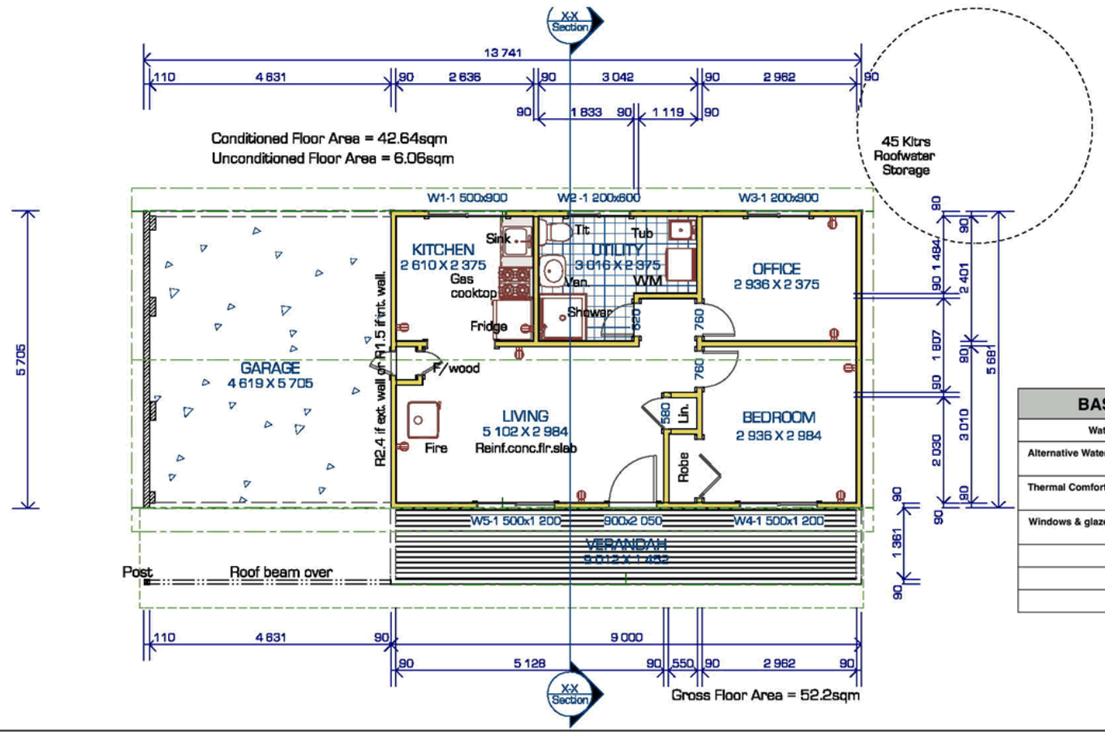


THIS IS A PROPOSAL PLAN ONLY. ALLOTMENT AREAS AND DIMENSIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO FINAL SURVEY AND REQUIREMENTS OF THE RELEVANT AUTHORITIES.

WILLIAMS MOXON CONSULTING SURVEYORS 8 DAWSON STREET COOMA NSW 2630	PLAN OF PROPOSED BOUNDARY ADJUSTMENT BETWEEN LOTS 166 AND 205 DP 750524 PARISH OF BINJURA COUNTY OF BERESFORD DRY PLAINS ROAD COOMA
REFERENCE 12010 DATE 28/02/2012	FOR MR D CRAWFORD — SCALE 1:8000

PAGE 3 OF 3

Received
Snowy Monaro Regional Council
6/9/2016



BASIX CERTIFICATE - No. 700305S_02 - Issued: 06 Sept. 2016
Water: Install 3 star showerheads (<9L/min.) , 3 star toilet flushing systems, kitchen taps and all bathroom taps
Alternative Water: Min 5,000 litres individual water tank as alternative water supply system connected to cold water to washer. (Roof area for collection 110 sqm) Rainwater must be connected to all toilets, HWS and one outdoor garden tap.
Thermal Comfort: Floor - nil req'd; External wall - framed/fc/metal clad - R 2.4 Incl. constr. Internal wall shared with garage R1.5; Ceiling & Roof - flat ceiling - R2.55(up) 55mm foil backed blanket & med.solar absorbance.
Windows & glazed doors: Comply with minimum selections with regards to SHGC and total u values specified in this certificate - Refer to Window & External doors elevation and glazed area drawings;
Energy: 5.5star gas instantaneous Hot Water System. - Provide Wood heater to 1 living area.
Ventilation: Nil mechanical ventilation proposed.
Energy/Artificial lighting: Fluorescent or LED lighting to Kitchen.

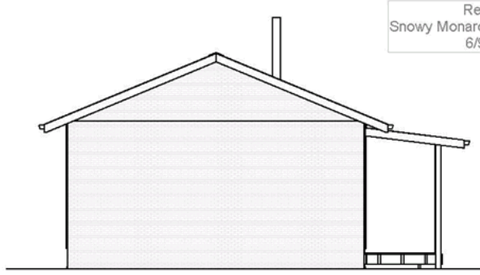
	NO.	DESCRIPTION	DATE
		Floor plan changes;Basix reissued;	

NOTE: FLOOR PLANS AND ELEVATIONS ARE SCALED AT 1:100 FOR A3 SHEET SIZE HARD COPY.

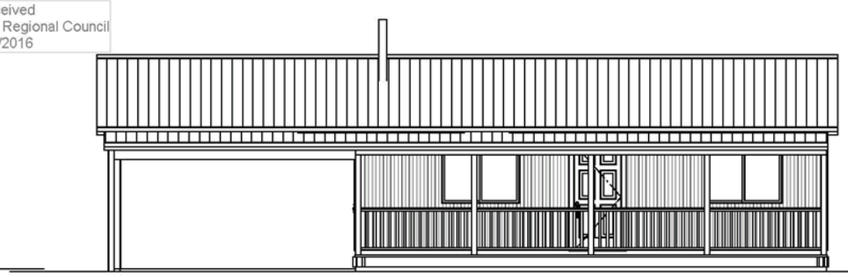
DRAWINGS PROVIDED BY:
Jeff Robinson Jindabyne

PROJECT DESCRIPTION:
PROPOSED DUAL OCCUPANCY DWELLING
PROPERTY SITE ADDRESS:
Lot 166 DP 7505 Dry Plains Road, COOMA.
For: C. and D. Mould

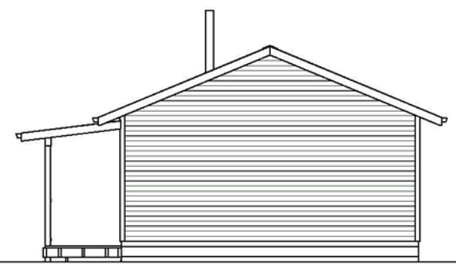
Sheet 2 of 2
DATED:
6/09/2016



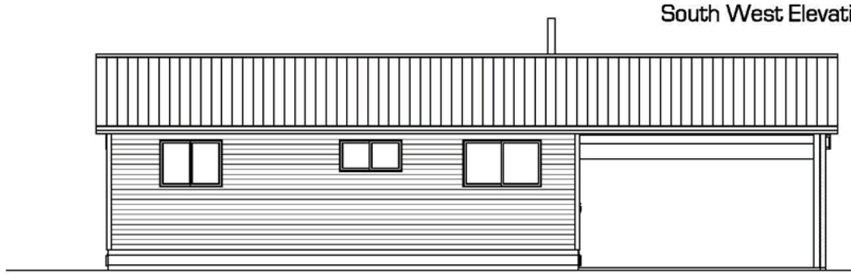
North West Elevation



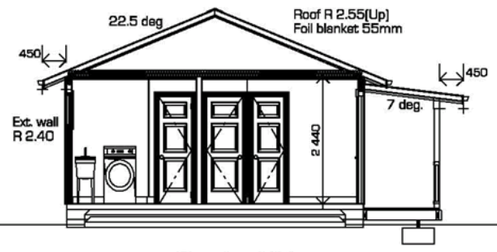
South West Elevation



South East Elevation



North East Elevation



Section X-X

BASIX CERTIFICATE - No. 700305S_02 - Issued: 06 Sept. 2016
Water: Install 3 star showerheads (<9L/min.) , 3 star toilet flushing systems, kitchen taps and all bathroom taps
Alternative Water: Min 5,000 litres individual water tank as alternative water supply system connected to cold water to washer. (Roof area for collection 110 sqm) Rainwater must be connected to all toilets, HWS and one outdoor garden tap.
Thermal Comfort: Floor - nil req'd; External wall - framed/fc/metal clad - R 2.4 Incl. constr. Internal wall shared with garage R1.5; Ceiling & Roof - flat ceiling - R2.55(up) 55mm foil backed blanket & med.solar absorbance.
Windows & glazed doors: Comply with minimum selections with regards to SHGC and total u values specified in this certificate - Refer to Window & External doors elevation and glazed area drawings;
Energy: 5.5star gas instantaneous Hot Water System. - Provide Wood heater to 1 living area.
Ventilation: Nil mechanical ventilation proposed.
Energy/Artificial lighting: Fluorescent or LED lighting to Kitchen.

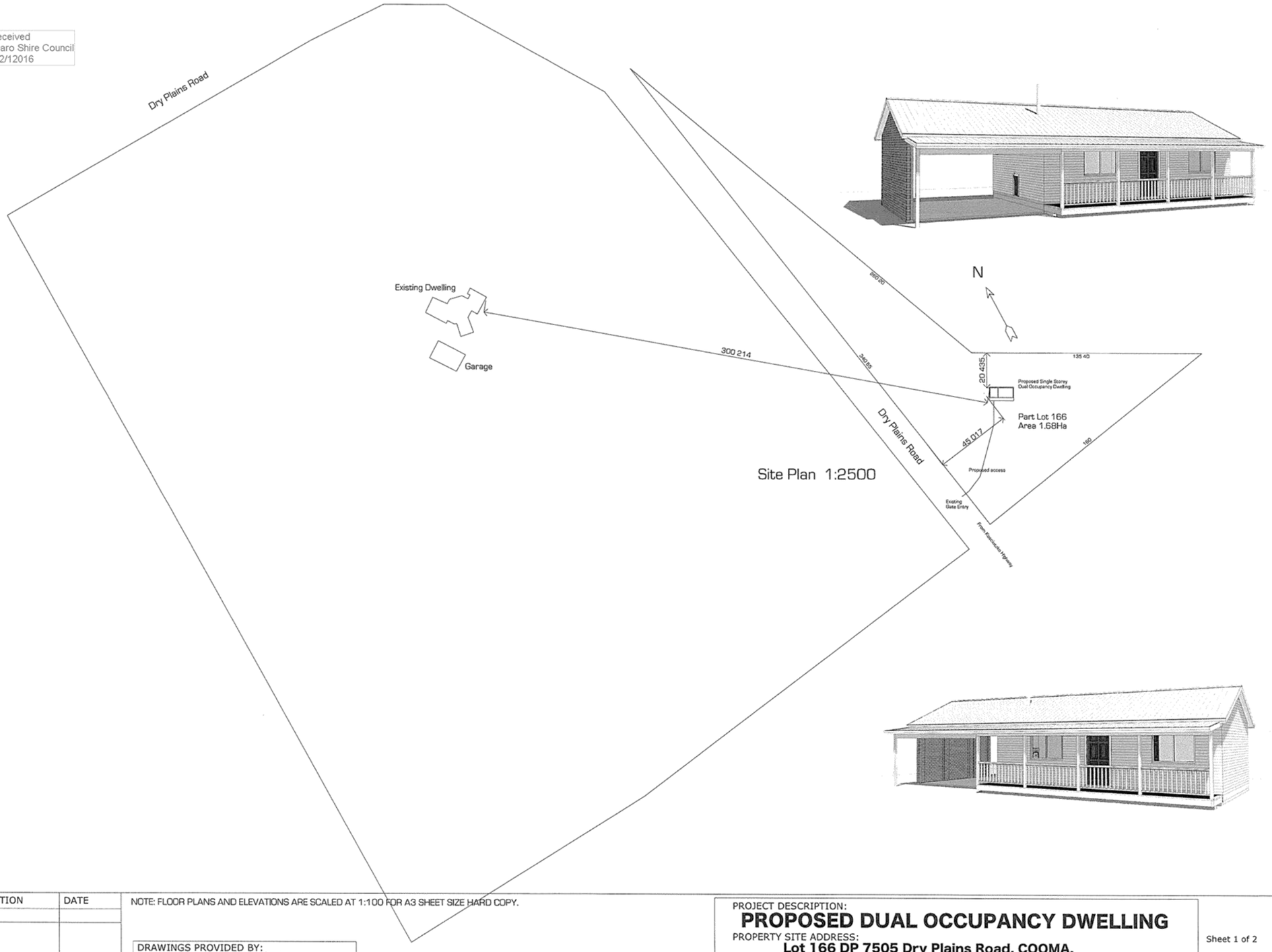
	NO.	DESCRIPTION	DATE
		Floor plan changes;Basix reissued;	

NOTE: FLOOR PLANS AND ELEVATIONS ARE SCALED AT 1:100 FOR A3 SHEET SIZE HARD COPY.

DRAWINGS PROVIDED BY:
Jeff Robinson Jindabyne

PROJECT DESCRIPTION:
PROPOSED DUAL OCCUPANCY DWELLING
PROPERTY SITE ADDRESS:
Lot 166 DP 7505 Dry Plains Road, COOMA.
For: C. and D. Mould

Sheet 2 of 2
DATED:
6/09/2016



	NO.	DESCRIPTION	DATE

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DRAWINGS PROVIDED BY:
Jeff Robinson Jindabyne

PROJECT DESCRIPTION:
PROPOSED DUAL OCCUPANCY DWELLING
PROPERTY SITE ADDRESS:
Lot 166 DP 7505 Dry Plains Road, COOMA.
For: C. and D. Mould

Sheet 1 of 2

DATED:
15/02/2016

BASIX® Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 700305S_02

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 18/09/2014 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 700305S lodged with the consent authority or certifier on 18 February 2016 with application 10.2016.552.1.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Secretary
Date of issue: Tuesday, 06 September 2016
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT Planning & Environment

Project summary		
Project name	Mould - Small House_02	
Street address	Dry Plains Road Cooma 2630	
Local Government Area	Cooma-Monaro Council	
Plan type and plan number	deposited 7505	
Lot no.	166	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	2	
Project score		
Water	✔ 57	Target 30
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 43	Target 25

Certificate Prepared by
Name / Company Name: Jefferson M Robinson & Associates Pty Ltd
ABN (if applicable): 45002206742

Description of project

Project address	
Project name	Mould - Small House_02
Street address	n/a Dry Plains Road Cooma 2630
Local Government Area	Cooma-Monaro Council
Plan type and plan number	Deposited Plan 7505
Lot no.	166
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	2
Site details	
Site area (m²)	16800
Roof area (m²)	114
Conditioned floor area (m2)	42.64
Unconditioned floor area (m2)	6.06
Total area of garden and lawn (m2)	0

Assessor details and thermal loads		
Assessor number	n/a	
Certificate number	n/a	
Climate zone	n/a	
Area adjusted cooling load (MJ/m².year)	n/a	
Area adjusted heating load (MJ/m².year)	n/a	
Other		
none	n/a	
Project score		
Water	✔ 57	Target 30
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 43	Target 25

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✔	✔
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		✔	✔
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✔	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✔	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 5000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✔	✔	✔
The applicant must configure the rainwater tank to collect rain runoff from at least 110 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✔	✔
The applicant must connect the rainwater tank to:			
• all toilets in the development		✔	✔
• the cold water tap that supplies each clothes washer in the development		✔	✔
• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)		✔	✔
• all hot water systems in the development		✔	✔
• all indoor cold water taps (not including taps that supply clothes washers) in the development		✔	✔

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Floor, walls and ceiling/roof			
The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.	✔	✔	✔

Construction	Additional insulation required (R-Value)	Other specifications
floor - concrete slab on ground	nil	
external wall - framed (weatherboard, fibre cement, metal clad)	2.00 (or 2.40 including construction)	
internal wall shared with garage - other/undecided	1.50 (or 1.50 including construction)	
ceiling and roof - flat ceiling / pitched roof	ceiling: 2.55 (up), roof: foil backed blanket (55mm)	unventilated; dark (solar absorptance > 0.70)

Note	Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Windows, glazed doors and skylights			
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.	✔	✔	✔
The dwelling may have 1 skylight (<0.7 square metres) and up to 2 windows/glazed doors (<0.7 square metres) which are not listed in the table.	✔	✔	✔
The following requirements must also be satisfied in relation to each window and glazed door:	✔	✔	✔
• Except where the glass is 'single clear' or 'single toned', each window and glazed door must have a U-value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) +/-10% of that listed. Total system U-values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions.			✔
• The leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 millimetres above the head of the window or glazed door, except that a projection greater than 500 mm and up to 1500 mm above the head must be twice the value in the table.	✔	✔	✔
• Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.		✔	✔
• Unless they have adjustable shading, pergolas must have fixed battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm.		✔	✔

Window/glazed door no.	Orientation	Maximum area (square metres)	Type	Shading	Overshadowing
W1	NE	1.35	standard aluminium, single clear (or U-value:7.63, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
W2	NE	0.72	standard aluminium, single clear (or U-value:7.63, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
W3	NE	1.08	standard aluminium, single clear (or U-value:7.63, SHGC:0.75)	eave/verandah/pergola/balcony 451-600 mm	not overshadowed
W4,W5	SW	3.60	standard aluminium, single clear (or U-value:7.63, SHGC:0.75)	eave/verandah/pergola/balcony 1,201-1,500 mm	not overshadowed

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✔	✔	✔
Cooling system			
The living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✔	✔
The bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✔	✔
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: wood heater; Energy rating: n/a		✔	✔
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✔	✔
The wood heater must have a compliance plate confirming that it complies with the relevant Australian standards, and must be installed in accordance with the requirements of all applicable regulatory authorities.			✔
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		✔	✔
Kitchen: no mechanical ventilation (ie. natural); Operation control: n/a		✔	✔
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✔	✔
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• the kitchen;		✔	✔
Natural lighting			

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✔	✔	✔
The applicant must install a window and/or skylight in 1 bathroom(s)/toilet(s) in the development for natural lighting.	✔	✔	✔
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✔	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✔	

Legend
In these commitments, "applicant" means the person carrying out the development.
Commitments identified with a ✔ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
Commitments identified with a ✔ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
Commitments identified with a ✔ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate(either interim or final) for the development may be issued.

Enquiries Mark Adams
Planning - Cooma Office
Our Ref 10.2016.552.1
Your Ref

Donna M Mould & Christopher C Mould
PO Box 760
COOMA NSW 2630

Notice of Determination of a Development Application

Issued under the *Environmental Planning and Assessment Act 1979* (the 'Act')

Application Number	**10.2016.552.1**
Property Description	**117 Dry Plains Road DAIRYMANS PLAINS 2630** **Lot: 166 DP: 750524**
Development Description	**Dual Occupancy**

Determination

Pursuant to Section 80(1)(a) of the *Act*

Notice is hereby given of the determination by Snowy Monaro Regional Council of Development Application **10.2016.552.1** relating to the land described above.

The Development Application has been **APPROVED** subject to the Conditions specified in this Notice.

Authority: Council (Meeting Date 28th September 2016)

Determination Date:

Consent to Operate from:

Consent will Lapse on:

Integrated Approval Bodies

Pursuant to Section 93 of the *Act*

The development application proposal was not Integrated Development. INT_01

Conditions

General

1) The development being carried out substantially in accordance with the approved documents/plans listed in the Schedule below and development application except where amended by the conditions of this Consent as set out in the following conditions or by any subsequently approved Section 96 modification.

Document/Plan Schedule			
Ref	Description	Prepared/Drawn By	Received
-	Statement of Environmental Effects	Applicant	17/02/2016
1/2	Site Plan	Jeff Robinson Jindabyne	17/02/2016
-	Location Plan	Applicant	17/02/2016
2/2	Floor Plan & BASIX Commitments	Jeff Robinson Jindabyne	06/09/2016

2/2	Elevations & BASIX Commitments	Jeff Robinson Jindabyne	06/09/2016
700305S_02	BASIX Certificate	Jefferson M Robinson	06/09/2016

Reason: Requirement that the development is completed in accordance with Council's consent.

2) All asset protection zones required by this consent are to be created and maintained in accordance with the NSW Rural Fires Service's Standards for Asset Protection Zones and are not to be implemented through a process of clear felling.
Note: This document emphasises the importance of maintaining groundcover and non-threatening vegetation as a means of preventing soil erosion.

Reason: To ensure that proposed bushfire protection measures do not result in any additional environmental impacts. BF_1_08

3) All erosion and sedimentation control devices shall be maintained until the site has been adequately revegetated and no soil remains exposed. Revegetation or stabilisation of disturbed areas shall be commenced as soon as possible on all sites. This includes turfing, seeding, bitumen straw mulching, and landscape planting.

Reason: To establish site stability as soon as possible following earthworks. P_5_01

4) No raw zincalume products are to be used for building facades or roofing of any structures subject to this development consent.

Reason: To comply with the requirements of *Cooma-Monaro Shire Development Control Plan 2014.* P_0_01

5) Hay-bales are not to be used as a means of sediment control without prior consent from Council.

Reason: To comply with the requirements of *Cooma-Monaro Development Control Plan 2014.* P_0_02

Design Related Conditions

6) Construction shall comply with Sections 3 & 6 (BAL 19) of Australian Standard AS 3959-2009 "Construction of buildings in bush fire prone-areas" and section A3.7 Addendum Appendix 3 of *Planning for Bushfire Protection*.

Reason: To minimise the risk of bushfire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities. BF_1_05

Required Works

7) A vehicular entrance/s is to be constructed from the road carriageway to lots 166 (part – Eastern section) in the locations shown on the approved plans.
Construction standards are to be as follows:
a) An all weather, compacted gravel pavement of not less than 100 mm thickness.
b) Provision of a reinforced concrete pipe culvert across the table drain, of not less than 375 mm diameter or an alternative structure complying with the requirements of Council's Specification for Engineering Works.
c) Provision of reinforced concrete or mortared rock headwalls on the culvert.
d) Any culvert shall be located such that the culvert structure is at least 2.5 metres from the edge of pavement in accordance with Roads and Traffic Authority 'Road Design Guide - Section 3 Clear Zone'.
e) The access, including culvert and headwalls, shall be designed to provide at least a 6 metre radius to the edge of pavement for turning vehicles.
f) Any gate constructed at the allotment access shall be located at least 15 metres from the edge of pavement.
g) Complying with Standard Drawing B 238.
h) Vehicular entrances shall be sealed to a minimum of 15 metres from the edge of the traffic lane.
i) Vehicular entrances shall be located so as to provide a sight distance in each direction along the road carriageway of not less than 140 metres, when measured 3 metres back from the edge of the road carriageway, in accordance with *Austroads Guide to Traffic Engineering Practice Part 5 – Intersections at Grade*.
j) The longitudinal gradient of the vehicular access located on the low side of the road carriageway shall not exceed 3% for a minimum distance of 10 metres measured from the edge of the road carriageway.

Reason: In accordance with *Cooma-Monaro Shire Council Development Control Plan 2014* and

Specification for Engineering Works. R_6_01

Conditions to be met prior to commencement of work

8) NO WORK IS TO COMMENCE until a Construction Certificate is issued by Council or a private Principal Certifying Authority.

Reason: Requirement of the *Environmental Planning and Assessment Act* and *Regulations*. B_1_02

9) Before commencing any work a sign MUST be erected on the land, visible from the road and indicating:

a) The owner's name and contact number (including after-hours contact number).
b) Allotment number
c) Construction Certificate number.
d) Principal Contractor's name and contact number.
e) Principal Certifying Authority's name, address and contact number.
Note: Where Council is the Principal Certifying Authority list details as:

Cooma-Monaro Shire Council
81 Commissioner Street, Cooma
(02) 6455 1777

The sign must also state 'Unauthorised entry to the work site is prohibited'.
The sign must be maintained while building works are carried out and must be removed once works are completed.

Reason: Prescribed condtion in accordance with clause 98A(2) of the *Environmental Planning and Assessment Regulations*. B_2_01

10) Where earthworks are undertaken to accommodate a new building, precautionary measures must be undertaken to ensure soil mixed in with run-off is contained on the site. It is an offence to allow soil and other runoff to escape from the building site. On-the-spot fines may be issued for offences.

Reason: To minimise erosion of land and siltation of waterways, and a requirement of the *Protection of the Environment Operations Act*. B_2_08

11) The applicant shall obtain a Section 138 (Roads Act 1993) consent from Council for the following works:

a) Construction and sealing of rural vehicular access off Dry Plains Road

The applicant shall make application to Council for approval under Section 138 of the Roads Act 1993 using the Application for Works within a Road Reserve form. All works shall be in accordance with Cooma-Monaro Shire Council Development Control Plan 2014, Specification for Engineering Works and Conditions of this Consent.

The Section 138 approval must be sought prior to commencement of the works.
All works shall be carried out in accordance with the Section 138 Approval.

The access to Dry Plains Road shall be sealed in accord with Council's standard drawing and specifications. The fencing and gateway will need to be set back as per Council's standard drawing.

Reason: In accordance with *Roads Act 1993*. R_1_02

12) Prior to commencement of work and throughout the construction process silt fences are to be installed on the down slope side of the construction area above the existing stormwater channel. Such fences are to be installed in accordance with the provisions of Appendix 8 of the *Cooma-Monaro Development Control Plan 2014*.

Reason: To ensure that all sediment material is appropriately contained on site. P_5_02

Conditions to be met prior to release of Construction Certificate

13) Notwithstanding the issue of this development consent, separate approval from Council under section 68 of the *Local Government Act 1993* is required for the installation of any on-site sewage management facility. An application for assessment under section 68 LGA 1993 must be submitted on Council's standard application form and be accompanied by the required information and appropriate fees for an on-site sewage management facility prior to the release of construction certificate.(to ensure compliance with the *Local Government Act 1993*)

Reason: to comply with the *Local Government Act 1993.*

14) Residential building works requires that the builder or person who does any residential building work complies with the applicable requirements of Part 6 of the *Home Building Act* whereby a person must not contract to do any residential building work unless a contract of insurance that complies with this Act is in force in relation to the approved work.

The builder or person shall obtain and have in force Home Building Insurance and supply to Council a copy of the certificate in respect of insurance complying with the *Home Building Act 1989* prior to the commencement of any residential building work together with the Notice of Commencement required by the Act.

If arrangements for doing the residential building work change while the work is in progress, further work must not be carried out unless Council has been provided with written notice of the updated information.

Reason: Prescribed conditions in accordance with clause 98(1)(b) and 98B(2)&(3) of the *Environmental Planning and Assessment Regulation* and requirement of the *Home Building Act 1989*. B_1_07

15) All timber framework to comply with the SAA Timber Framing Code *AS1684* or be designed in accordance with the SAA Timber Structures Code *AS1720*, and SAA Loading Code 1170.1, 1170.2 and 1170.3.

Certification is required from a suitably qualified person that nominal fixings comply with the provisions of the NSW Timber Framing Manual, incorporating Ground Snow Load of 2.064 kPa, and a Wind Load Classification of N3.

Reason: Requirement of the *Building Code of Australia*. B_4_05

16) The applicant shall pay the current fee for issue of a rural address number/s. The fee shall be paid prior to issue of the Construction Certificate.

Reason: To allow identification of rural properties. R_6_05

Conditions to be met during Construction

17) All Building Work is to comply with the Building Code of Australia.

Reason: Prescribed condition in accordance with clause 98(1)(a) of the *Environmental Planning and Assessment Act* and *Regulation*. B_1_01

18) The following are Critical Stage Inspections as prescribed by the *Environmental Planning and Assessment Act* and *Regulations*, whereby the Principal Certifying Authority must inspect.

a) after excavation for, and prior to the placement of any footings;
b) prior to pouring any in-situ reinforced concrete building element;
c) prior to covering of the framework of any floor, wall, roof or other building element;
d) prior to covering water proofing in any wet areas;
e) prior to covering any stormwater drainage connections;
f) after the building work has been completed and prior to any Occupation Certificate being issued in relation to the building;
g) Council also requires that an inspection be made prior to covering any sanitary plumbing or drainage work.

Note carefully that unless all of the Mandatory Critical Stage Inspections are carried out, an Occupation Certificate cannot be issued for the building.

Reason: Requirement of the *Environmental Planning and Assessment Act* and *Regulations*.

NOTE: IF ANY ADDITIONAL COUNCIL INSPECTIONS ARE REQUIRED AN ADDITIONAL FEE WILL BE CHARGED IN ACCORDANCE WITH COUNCIL'S FEES SCHEDULE. B_1_04

19) The builder must at all times maintain on the site a legible copy of the plans and specifications bearing the stamp and Construction Certificate issued by the Principal Certifying Authority.

Reason: Requirement of the *Environmental Planning and Assessment Act and Regulations*. B_1_08

20) Working hours involving machinery or noisy activies being confined within the hours of 7.00am to 8.00pm, Monday to Saturday and 8.00am to 8.00pm on Sundays or Public Holidays. Please contact Council for further advice regarding noise control.

Reason: Requirement of the Protection of the *Environment Operations Act* and *Regulations* and to protect the amenity of residents in homes in the vicinity. B_1_09

21) During building operations the builder shall provide approved temporary closet accommodation - 1 toilet for each 20 persons or part thereof engaged upon the building at any time. In town and village areas, such toilet must be either a temporary water closet (connected to wastewater or septic tank) or an approved type of chemical closet, properly maintained.

Reason: To ensure adequate sanitary facilities are available. B_2_03

22) Provision is required to be made for the storage and disposal of all waste building materials.

Reason: To ensure the site is kept in a satisfactory condition. B_2_05

23) The builder shall keep the building site tidy and shall ensure no waste material escapes at any time during construction or otherwise causes any nuisance.

Reason: To ensure the site is kept in a satisfactory condition. B_2_06

24) Adequate measures for erosion and sediment control shall be implemented prior to, during and following construction works. Such treatment shall include the revegetation of all disturbed areas.

Reason: In accordance with Council's *Specification for Engineering Works*. R_9_01

25) Sediment control structures should be inspected daily and maintained. If the control structure is more than 50% full, the sediment is to be removed and disposed of appropriately (so that it will not move into watercourses).

Reason: To prevent the movement of sediment from the site. P_5_03

Conditions to be met prior to release of Occupation Certificate

26) The building MUST NOT be occupied until an Interim or Final Occupation Certificate has been issued by the Principal Certifying Authority (PCA). If Council is the PCA, an Application for Occupancy must be made and payment of any applicable fees prior to inspection and issue of an Occupation Certificate.

Reason: Requirement of *Environmental Planning and Assessment Act* and *Regulations*. B_4_01

27) It is a condition of this Development Consent that all the commitments listed in the Basix Certificate No 700305S for the development are fulfilled.

Reason: Requirement of the *Environmental Planning and Assessment Regulation*. B_4_04

28) Prior to the release of any Occupation Certificate and in perpetuity the property around the building shall be maintained as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standard for asset protection zones' as follows:

- North, West and East for a minimum distance of 20 metres;
- South for a minimum distance of 25 metres.

The inner protection area shall comprise of the following:

a) Minimal fine fuel at ground level
b) Vegetation that does not provide a continuous path to buildings for the transfer of fire
c) Shrubs and trees that do not form a continuous canopy and vegetation is planted /cleared into clumps rather than continuous rows
d) Species that retain dead material or deposit excessive quantities of ground fuel are avoided
e) Shrubs and trees are pruned or removed so that they do not touch or overhang the building/s; and

f) Vegetation is located far enough away from the building so that plants will not ignite the building/s by direct flame contact or radiant heat emission

Reason: To provide sufficient space and maintain reduced fuel loads, so as to ensure radiant heat levels at buildings are below critical limits and to prevent flame contact with a building. BF_1_01

29) Prior to the release of any Occupation Certificate and in perpetuity water, electricity and gas services on the site are to comply with the following requirements of section 4.1.3 of Planning for Bushfire Protection 2006:
a) In recognition that no reticulated water supply exists, a 2,500 litre dedicated water supply shall be provided for fire fighting purposes
b) The water tank if located above ground shall be of a non-combustible material
c) All fittings to the tank shall be non-combustible
d) A 65mm Storz outlet with agate valve shall be provided
e) Reticulated or bottled gas is to be installed and maintained in accordance with Australian Standard 1596:2002 'The Storage and handling of LP gas' and the requirements of relevant authorities. Metal piping is to be used
f) All fixed gas cylinders are to be kept clear of flammable materials to a distance of 10 metres and be shielded on the hazard side of the installation
g) Gas cylinders kept close to the building shall have release valves directed away from the building. Connections to and from gas cylinders are to be metal. Polymer sheathed flexible gas supply to gas meters adjacent to building are not to be used.

Reason: To provide adequate services of water for the protection of buildings duing and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building. BF_1_03

30) Prior to the release of any Occupation Certificate and in perpetuity internal roads shall comply with the following requirements of section 4.2.7 of *Planning for Bushfire Protection 2006*.
a) Internal roads are two wheel drive, all weather roads.
b) A minimum vertical clearance of 4 metres to any overhanging obstructions, including tree branches is provided.
c) Curves have a minimum inner radius of 6 metres and are minimal in number to allow for rapid access and egress.
d) Internal roads are to have a minimum carriageway width of 4 metres.
e) Internal roads are to feature passing bays at a maximum intervals of 200m being 20 metres and 2 metres wide, making a minimum trafficable width of 6 metres at the passing bay.

Reason: To provide safe access to/ from the public road system for firefighters providing property protection during a bush fire and for occupants faced with evacuation. BF_1_04

31) Prior to the release of any Occupation Certificate and in perpetuity landscaping to the site is to comply with the principles of Appendix 5 *Planning for Bushfire Protection 2006*. In this regard the following landscaping principles are to be incorporated into the development:
a) Suitable impervious areas being provided immediately surrounding the building such as courtyards, paths and driveways;
b) Grassed areas/mowed lawns/ or ground covers plantings being provided in close proximity to the building;
c) Restrict planting in the immediate vicinity of the building which may over time if not properly maintained come into direct contact with the building;
d) Planting should not provide a continuous canopy to the building
e) When considering landscape species consideration needs to be given to estimated size of the plant at maturity
f) Avoid planting of deciduous species that may increase fuel at surface/ground level
g) Avoid climbing species to walls and pergolas
h) Use low flammability vegetation species

Reason: To prevent flame contact to a structure, reduce radiant heat to below the ignition thresholds for various elements of a building, to minimise the potential for wind driven embers to cause ignition and reduce the effects of smoke on residents and firefighters. BF_1_06

32) A rural address number sign for this/each lot shall be installed by the applicant, with numerals at least 75 mm in height. The sign shall comply with Australian/New Zealand Standard AS/NZS 4724.2 – Geographic information – Rural addressing (details are available from Council).

The rural address number(s) applicable are:

Lot & DP Number	Rural Address Details

	Number	Street/Road	Locality
Lot 66 DP 750524	52	Dry Plains Road	DAIRYMANS PLAINS

Reason: To allow identification of rural properties. R_6_03

33) Prior to the release of any Occupation Certificate an Outdoor Clothes Drying Area including a minimum 20 linear metres of line space is to be installed on the site.

Reason: To ensure compliance with the requirements of the Cooma-Monaro Development Control Plan 2014. P_4_01

34) Prior to the release of any Occupation Certificate and in perpetuity the internal vehicle access roads shown on approved plans shall comply with the construction standards for a Category 1 road in accordance with Appendix 5 and Note G of the *Cooma-Monaro Shire Development Control Plan 2014*.

Reason: To ensure compliance with the requirements of the *Cooma-Monaro Development Control Plan 2014* and provide suitable access to lots. P_0_03

35) Prior to the release of any Occupation Certificate a rainwater tank/s of a minimum volume of 45,000l is to be installed on the site in addition to any dedicated water storage requirements for bushfire protection.

Reason: To ensure compliance with the requirements of the *Cooma-Monaro Development Control Plan 2014*. P_4_02

36) The solid fuel heater is to be installed in accordance with the National Construction Code Part 3.7.3, Australian Standard 2918 & Manufacturers specifications for the proposed heater. The heater shall not be operated until an installation inspection has been carried out and Council clearance received to operate the heater.

Reason: To ensure compliance with the NCC and AS 2918. B_0_02

37) The solid fuel heater shall have a compliance plate affixed to the rear of the heater stating that the heater meets the current Australian Standard AS/NZS4013:1999.

Reason: To ensure compliance with AS/NZS 4013. B_0_03

Fees & Contributions

38) A contribution under Section 94(1)(b) of the *Environmental Planning and Assessment Act 1979* shall be paid in accordance with the following:

a) **Cash Contribution Required**
In accordance with the *Cooma-Monaro Section 94 Contributions Plan*, a cash contribution shall be paid to Council in accordance with this condition.

b) **Amount and Purposes of Contribution**
The amount payable will be reassessed at the time of payment in accordance with Council's adopted Fees and Charges at that time.
The contribution is required and shall be held by Council in accordance with the provisions of the Environmental Planning and Assessment Act, 1979 and the Cooma-Monaro Section 94 Contributions Plan for the purposes of:

Description	Lots	$/Lot	Total
Rural Roads	1	$4,001.00	$4,001.00
TOTAL			$4,001.00

c) **Timing of Payment**
The contribution shall be paid prior to the release of Construction Certificate.

d) **Inspection**
A copy of the *Cooma-Monaro Section 94 Contributions Plan* may be inspected at the offices of Council at any time during normal office hours.

Reason: In accordance with Section 94 of the E*nvironmental Planning and Assessment Act 1979* and Council's *Section 94 Contributions Plan*. P_1_04

Ongoing Conditions

39) The inner protection area (IPA) required under Condition 28 of this consent shall be maintained in perpetuity.

Reason: To ensure the ongoing provision of adequate bushfire safety measures on the site. BF_1_02

Advice to Applicant

1) Council wishes to advise that it is the responsibility of the owner and/or applicant to determine if site security and/or safety fencing is required to be provided in accordance with clause 235 of the *Occupational Health and Safety Regulation 2001* and *Work Cover Authority* requirements. Failure to comply with these requirements may result in penalties being imposed upon the owner and/or applicant.

2) Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact *Dial Before You Dig* at www.1100.com.au or telephone 1100 before excavating or erecting structures. This is the law in NSW. If alterations are required to the configuration, size, form or design of the development upon contacting the *Dial Before You Dig* service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the *Dial Before you Dig* service in advance of any construction or planning activities.

   Note: Under the *Telecommunications Act 1997 (Commonwealth)*, Telstra (and it's authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any person interfering with a facility or installation owned by Telstra is committing an offence under the *Criminal Code Act 1995 (Cth)* and is liable for prosecution. Furthermore, damage to Telstra's infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, you are required to contact Telstra's Network Integrity Team on 1800 810 443.

3) It is the responsibility of the applicant to check, understand and seek assistance where needed so as to ensure full compliance with the conditions of this Development Consent. Please contact Planning on (02) 6455 1911 if there is any difficulty in understanding or complying with any of the above conditions.

Notes

1) An applicant may request a review of this determination under Section 82A of the Environmental Planning and Assessment Act 1979. A request for a review must be lodged within 6 months of the date of this notification. A review under Section 82A cannot be made for Integrated, Designated or Crown Development.

2) Section 97 of the Act confers on an applicant or an objector who is dissatisfied with the determination of Snowy Monaro Regional Council, a right of appeal to the Land and Environment Court exercisable within 6 months after receipt of this notice.

On behalf of the above Council:

Mark Adams
Planning Manager – Cooma Branch
for
Peter Smith
Director of Service Planning

[redacted]

Dear Sir/Madam,

This document is in response to the proposed Dual Occupancy development for:
Address: 117 Dry Plains Rd (Lot 166 DP750524)
Application number: 10.2016.552.1

My interest in the matter is based on my ownership of, and following construction, residency at the [redacted] **Old Dry Plains Road**).

I would like to lodge an objection to the proposed development due to the following concerns. Each point is elaborated upon in the following pages.

1. The proposed development is out-of-character for a Large Lot Residential (R5) area, reduces privacy and would impact on the enjoyment and seclusion of the owners of Lot 205. The development in effect creates an additional small-size Lot which is much smaller than the surrounding Lots.
2. The proposed site is at the confluence of multiple intermittent watercourses. Any effluent disposal system from the proposed development would breach recommended watercourse buffer zones and likely result in pollution to the streams and downstream farm dams including areas of Lot 205.
3. The proposed site is subject to waterlogging in the Winter months due to rainfall runoff, ground slope and low evaporation. This would prevent any effluent disposal trench from functioning effectively resulting in public health and pollution concerns as well as odour impacts on Lot 205. The water would also likely make the site poorly suited for construction of a domestic dwelling.

I object to the proposed location of the dwelling on the Eastern side of Dry Plains Road. The additional dwelling on this small section of land would be out of character for neighbourhood and create a loss of privacy to neighbours. Given the amount of land available to the owners of Lot 166 on the Western side of the road, a more suitable site with lower impact is likely to be found elsewhere. With alternative sites readily available to the Applicant and the stated concerns with the proposed site, the Applicant should be required to modify the Application to a more suitable location.

In accordance with section 147 of the Environmental Planning and Assessment Act 1979, I declare that i have not made any political donations or gifts within the last 2 years, nor any associate.

I would appreciate the opportunity to discuss this submission further if required. My preferred method of contact is either by phone or email.

I would tender the following evidence in support of the objections outlined above.

1. Proximity to adjoining Lots and impact on enjoyment and lifestyle

The development is likely to impact on the enjoyment of the owners of by placing a dwelling in a location that currently serves as a buffer zone between adjoining Lots and dwellings.

The minimum lot size applicable to this area is in place to provide an aspect of rural seclusion. The proposed dwelling on the Eastern side of the road will effectively create a small additional Lot. A Lot of this size would never be considered appropriate if a subdivision were to be proposed.

With a dwelling already approved for Lot 205, the addition of the proposed new dwelling would create a second residence on the approximately 20 acre section of land bounded by Dry Plains Rd, Old Dry plains Rd, Lot 167 and Lot 30. This is clearly out-of-character for the area with a minimum lot size of approximately 20 acres.

I would strongly argue that although this application may not technically constitute the creation of a new lot, the visual impact and the feeling of unnecessary encroachment would violate the spirit of the minimum Lot size guidelines. It will be out-of-character for the rural setting and it will impact on the privacy of adjoining residences.

The size of Lot 166, which is approximately 40 acres, provides ample opportunity to place a new dwelling on the Western side of Dry Plains Road. This would allow a suitably located development to commence with a much reduced impact.

2. Proximity to existing intermittent watercourses.

Recommended buffer distances for septic systems

System	*Recommended buffer distances*
All land application systems	• 100 metres to permanent surface waters (e.g. river, stream, lake) • 250 metres to domestic groundwater well or bore • 40 metres to other waters (e.g. farm dams, intermittent streams, drainage channels etc)

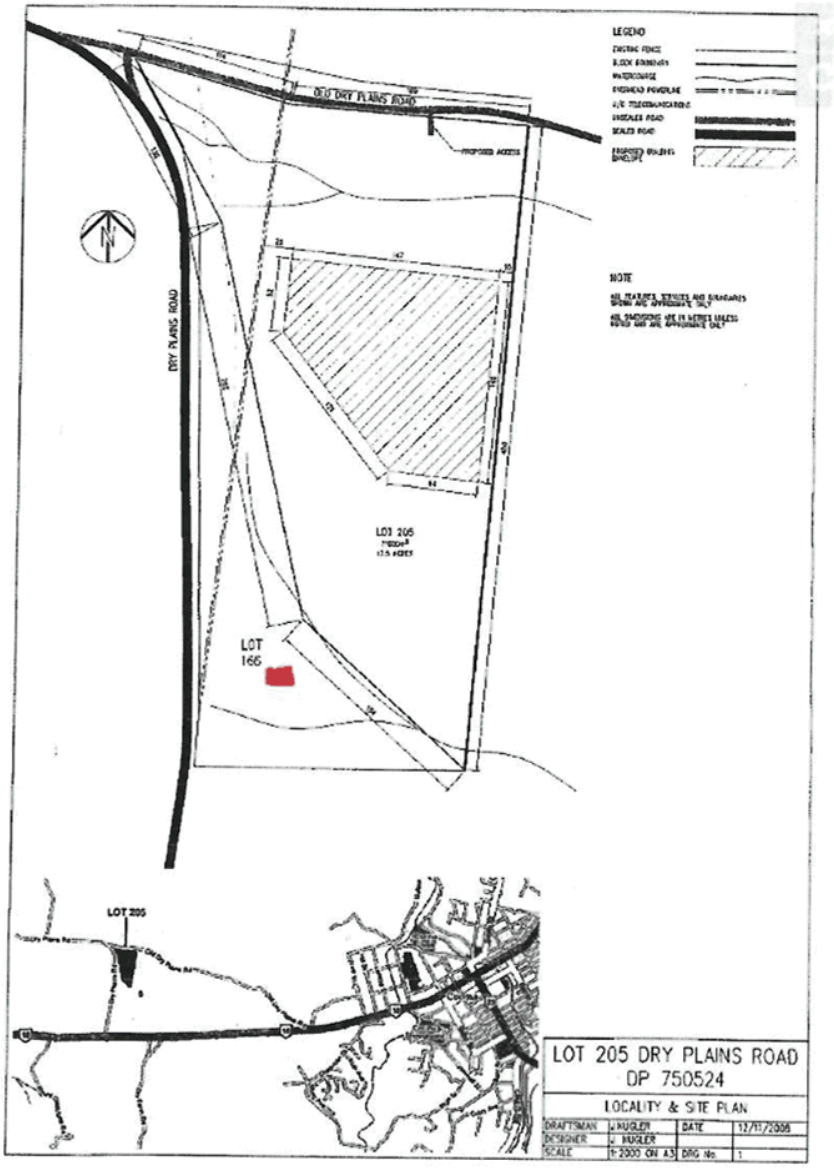
www.olg.nsw.gov.au/sites/default/files/Easy-septic-guide.pdf

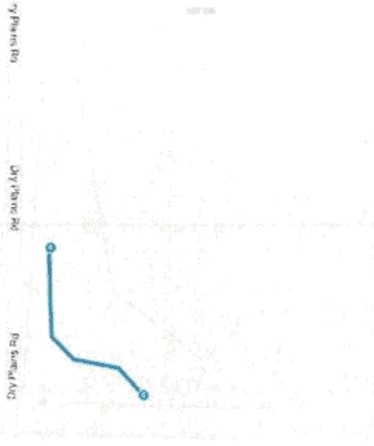
According to the recommendations set out in the NSW Office of Local Government "Easy Septic Guide" (extract above) any septic effluent dispersal system should be at least 40m from intermittent streams.

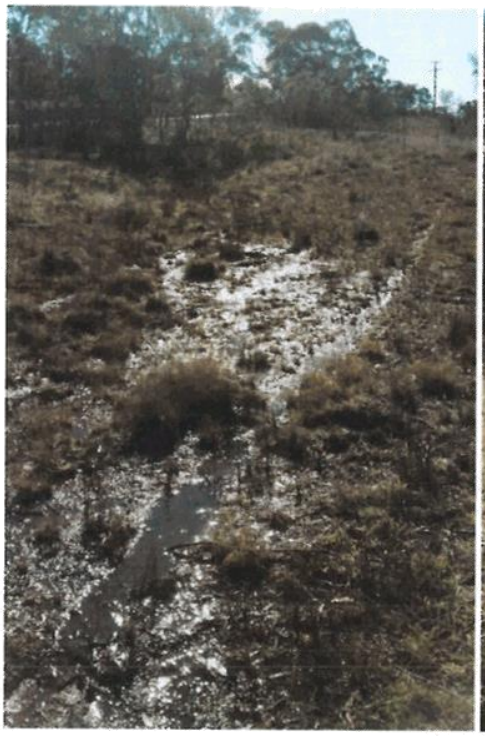
The Locality and Site plan shown below indicates two intermittent streams adjacent to the proposed development site. One roughly following the Lot boundary and another immediately South of the site. Both are well inside the 40m buffer zone.
In addition to the streams shown on the plan, there is also another stream apparent during the low-evaporation period over Winter. The approximate location of the additional intermittent

stream is shown on the Google Maps screenshot below. I have also included some photographs of this stream which remains evident several weeks after significant rain. The proposed site has insufficient clearance from intermittent streams for effluent disposal and therefore will fail to comply with environmental planning requirements.

Any pollution effects on nearby streams will impact on Lot 205 as parts of the Lot are downstream of the proposed development. The resultant pollution will impact Lot 205 and will likely encourage the growth of weeds and other exotic species.







Looking North adjacent to power lines.

Looking South adjacent to power lines.

3. Proposed site is subject to waterlogging.

Due to the runoff of the surrounding area and the intermittent stream detailed in point 2, the proposed site is subject to waterlogging. During the Winter months there is significant standing water evident at the proposed site. The two photos attached below show standing water up to 5 cm deep and the surrounding areas are also extremely boggy. The photos were taken very close to the proposed site looking roughly Southward and are typical of the site, particularly the area immediately surrounding the large central tree with fallen/felled branches adjacent.

The waterlogging that is evident in the colder Winter months is of concern because it would impact significantly on the effectiveness of any effluent disposal system resulting in health and pollution issues. It also contributes to making the site poorly suited for construction and habitation.

An ineffectual or poorly functioning effluent disposal system is likely to result in unpleasant odours for neighbours including Lot 205.