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REVIEW OF ENVIRONMENTAL FACTORS

BRIDGE REPLACEMENT
ROSSY'S CREEK
CORROWONG ROAD, DELEGATE

FAIRLIGHT
CONSULTING ENGINEERS

SNOWY MONARO
REGIONAL COUNCIL
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NOVEMBER 2023
Project: 39-23

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ROSSY'S CREEK
CORROWONG ROAD, DELEGATE

This report has been prepared by:

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Dabyne Planning Pty Ltd

NOVEMBER 2023

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EXECUTIVE SUMMARY

Fairlight Consulting Engineers, on behalf of Snowy Monaro Regional Council (SMRC) have commissioned Dabyne Planning Pty Ltd to prepare a Review of Environmental Factors (REF) for the proposed replacement of a timber bridge with a concrete bridge over Rossy's Creek, Corrowong Road, Delegate. SMRC is the proponent and determining authority under Part 5 of the Environmental Planning and Assessment Act, 1979 (EP&A Act).

The purpose of the REF is to describe the proposal, to document the likely impacts of the proposal on the environment, and to detail the protective measures to be implemented.

The description of the proposed activity and associated environmental impacts have been undertaken in the context of Section 171 of Environmental Planning and Assessment Regulations 2021 (EP&A Regs), the Biodiversity Conservation Act, 2016 (BC Act), the Fisheries Management Act 1994 (FM Act), and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). In doing so, the REF helps to fulfill the requirements of Section 5.5 of the EP&A Act, 1979 so that SMRC examines and takes into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the activity.

The findings of the REF will be considered when assessing:

- Whether the proposal is likely to have a significant impact on the environment and therefore the necessity for an Environmental Impact Statement (EIS) under Division 5.1 of the EP&A Act 1979.

- The significance of any impact on threatened species as defined by the BC Act and/or FM Act, in Section 1.7 of the EP&A Act and therefore the requirement for a Species Impact Statement.

- The potential for the proposal to significantly impact a matter of national environmental significance or Commonwealth land and the need to make a referral to the Commonwealth Environment and Heritage Minister in accordance with the EPBC Act.

1. BRIEF DESCRIPTION OF THE PROPOSAL

The proposed works are located over Rossy's Creek, which is located on Corrowong Road, Delegate.

The top of the catchment of Rossy's Creek extends to the south and south-west and downstream the creek flows into Corrowong Creek and then into the Snowy River.

The location of the site is identified on the topographical and aerials maps provided in Figures 1 & 2 below.

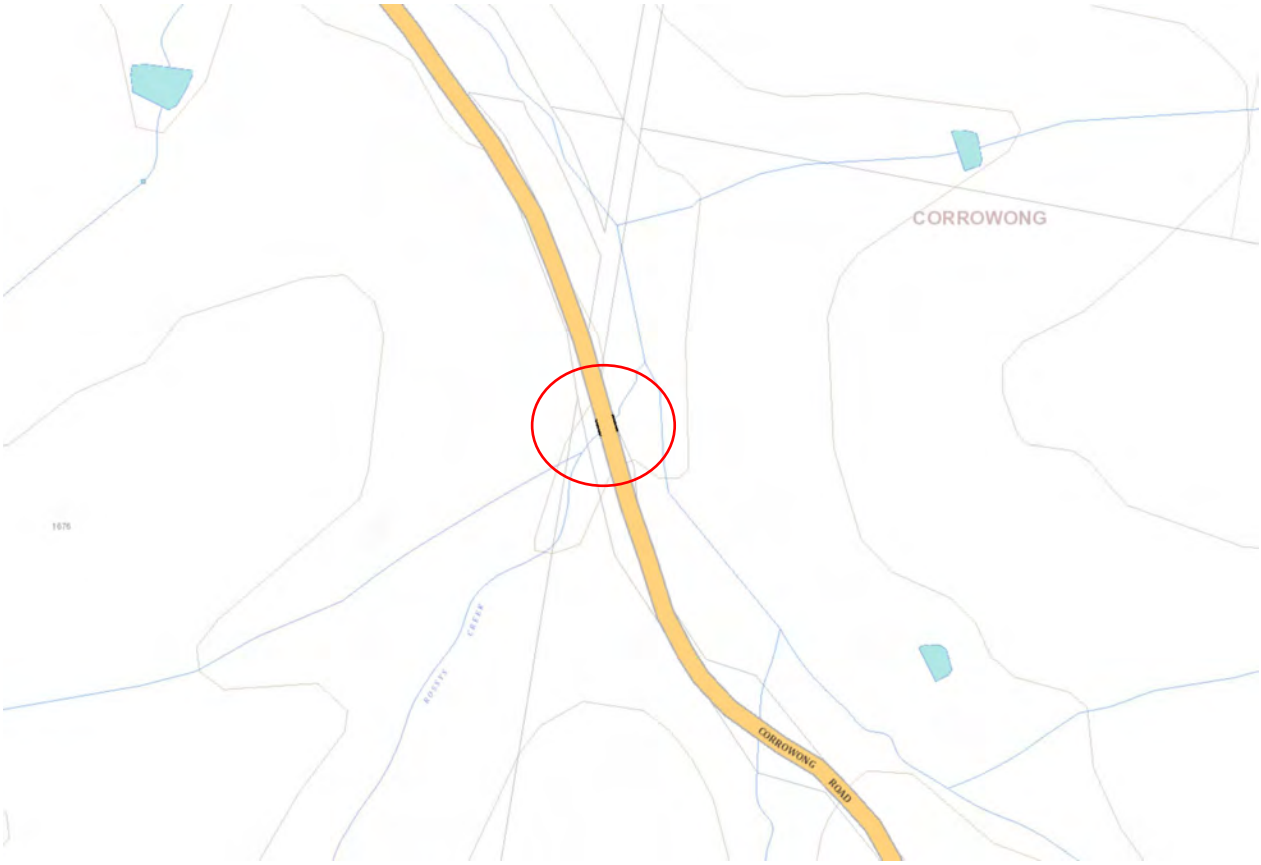

Figure 1: Location of the site in context with the locality (topographical)

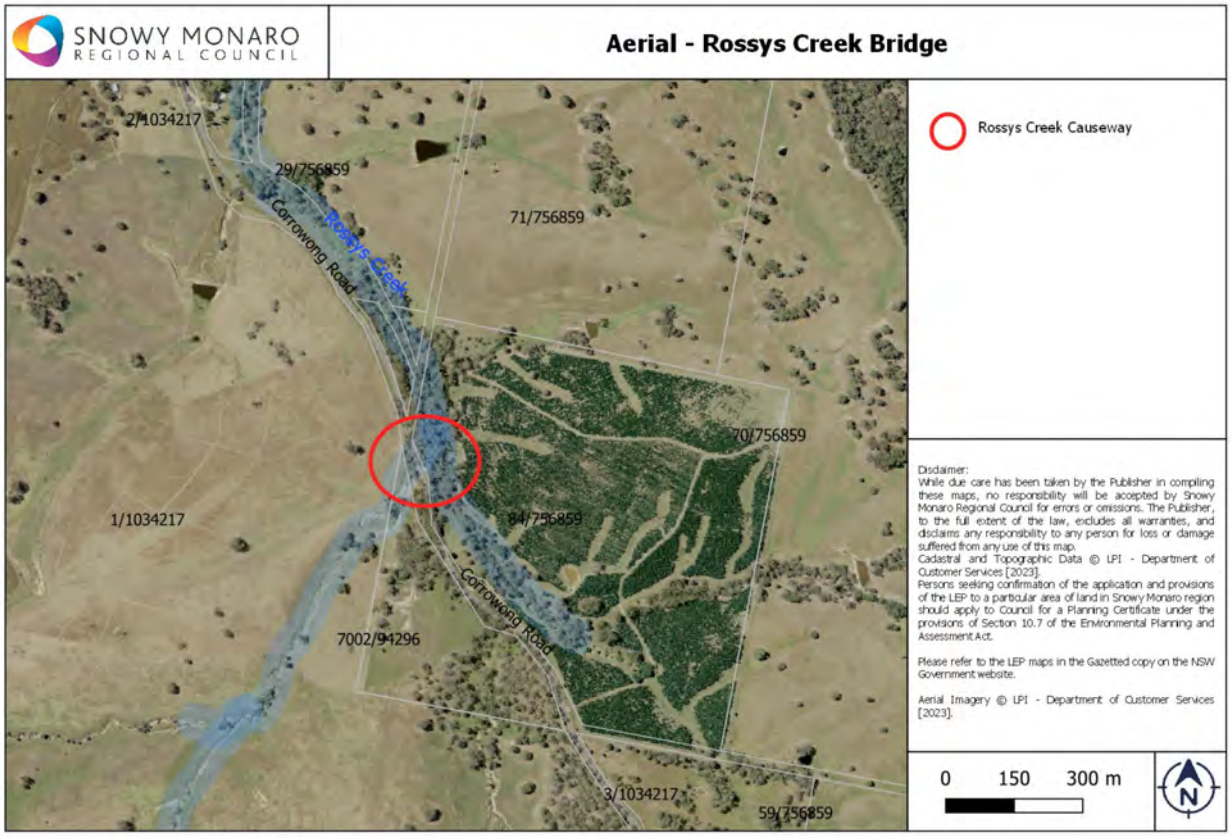

Figure 2: Location of the site in context with the locality (aerial) (Source: SMRC)

The proposed activity consists of replacing an existing timber bridge with a permanent concrete bridge. During construction works, an alternate detour is available via Browns Camp Road back to Delegate.

Photos of the site are provided in Appendix A.

2. PROPONENTS DETAILS

The proponent is Snowy Monaro Regional Council.

Details of the proponent are provided below:

Proponent	Snowy Monaro Regional Council
Contact:	Arthur Wilkinson
Address:	PO Box 714, Cooma, NSW 2630
Phone:	1300 345 345
Email:	arthur.wilkinson@snowymonaro.nsw.gov.au

3. PERMISSABILITY

3.1 Legal Permissibility

3.1.1 State Environmental Planning Policies

State Environmental Planning Policy (Transport & Infrastructure) 2021

State Environmental Planning Policy (Transport & Infrastructure) 2021, known as SEPP (Transport & Infrastructure) 2021 applies to infrastructure projects undertaken by or on behalf of a public authority.

A review of SEPP (Transport & Infrastructure) 2021 has identified the proposed works fall within Chapter 2, Division 17 – Roads and Traffic.

Pursuant to Section 2.109, the proposed development can be undertaken without consent (Under Part 4 of the EP&A Act) as the proposed works are consistent with the clause as provided below:

2.109 Development permitted without consent—general

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

(a) is authorised by or under the *National Parks and Wildlife Act 1974*, or

(b) is, or is the subject of, an existing interest within the meaning of section 39 of that Act, or

(c) is on land to which that Act applies over which an easement has been granted and is not contrary to the terms or nature of the easement.

(2) Development for any of the following purposes may be carried out by or on behalf of a public authority without consent on land in a prescribed zone—

(a) bus depots,

(b) permanent road maintenance depots and associated infrastructure (such as garages, sheds, tool houses, storage yards, training facilities and workers' amenities).

(2A) The following development for the purposes of bus depots may be carried out by or on behalf of a public authority without consent on land within the boundaries of an existing bus depot—

(a) the erection of a building that is—

(i) no more than 12.5m high, and

(ii) not located within 5m of a property boundary for a lot in a residential or conservation zone,

(b) the demolition of a building.

(3) In this section and section 2.112, a reference to development for the purpose of ***road infrastructure facilities*** includes a reference to development for any of the following purposes if the development is in connection with a road or road infrastructure facilities—

(a) construction works (whether or not in a heritage conservation area), including—

(i) temporary buildings or facilities for the management of construction, if they are in or adjacent to a road corridor, and

(ii) creation of embankments, and
(iii) extraction of extractive materials and stockpiling of those materials, if—
(A) the extraction and stockpiling are ancillary to road construction, or
(B) the materials are used solely for road construction and the extraction and stockpiling take place in or adjacent to a road corridor, and
(iv) temporary crushing or concrete batching plants, if they are used solely for road construction and are on or adjacent to a road corridor, and
(v) temporary roads that are used solely during road construction,
(b) emergency works or routine maintenance works,
Note—
See section 2.7(4) regarding emergency works and routine maintenance works on land to which clauses 10 and 11 of *State Environmental Planning Policy (Coastal Management) 2018* apply.
(c) alterations or additions to an existing road (such as widening, narrowing, duplication or reconstruction of lanes, changing the alignment or strengthening of the road),
(d) environmental management works, if the works are in or adjacent to a road corridor.

Although the proposed works do not fall within the definition of 'Exempt development' under Section 2.113, the works can be undertaken without consent as identified above and thus are subject to Part 5 of the EP&A Act.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

State Environmental Planning Policy (Biodiversity and Conservation) 2021 known as the SEPP (Biodiversity and Conservation) 2021 includes provisions to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.

The koala habitat protection provisions of Biodiversity and Conservation SEPP apply to a range of local government areas including Snowy Monaro. The koala habitat protection provisions of the SEPP (Biodiversity and Conservation) 2021 do not affect the permissibility of the proposal as a Division 5.1 or 5.2 assessment, and furthermore, the proposed works do not pose as a significant risk or potential impact on koala habitat.

3.1.2 NSW Environmental Planning & Assessment Act, 1979

As outlined above, Section 2.109 of SEPP (Transport & Infrastructure) 2021 provides that development for the purpose of a road or road infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land. This removes the need for development consent under Part 4 of the EP&A Act, meaning that the activity is to be assessed under Part 5.

The proposed development is therefore to be assessed under Part 5 of the EP&A Act. SMRC is therefore the determining authority.

Local Environmental Plans – Bombala LEP 2012:

The subject site is located within the RU1 – Primary Production Zone under the Bombala Local Environmental Plan 2012 (BLEP, 2012), as illustrated below:

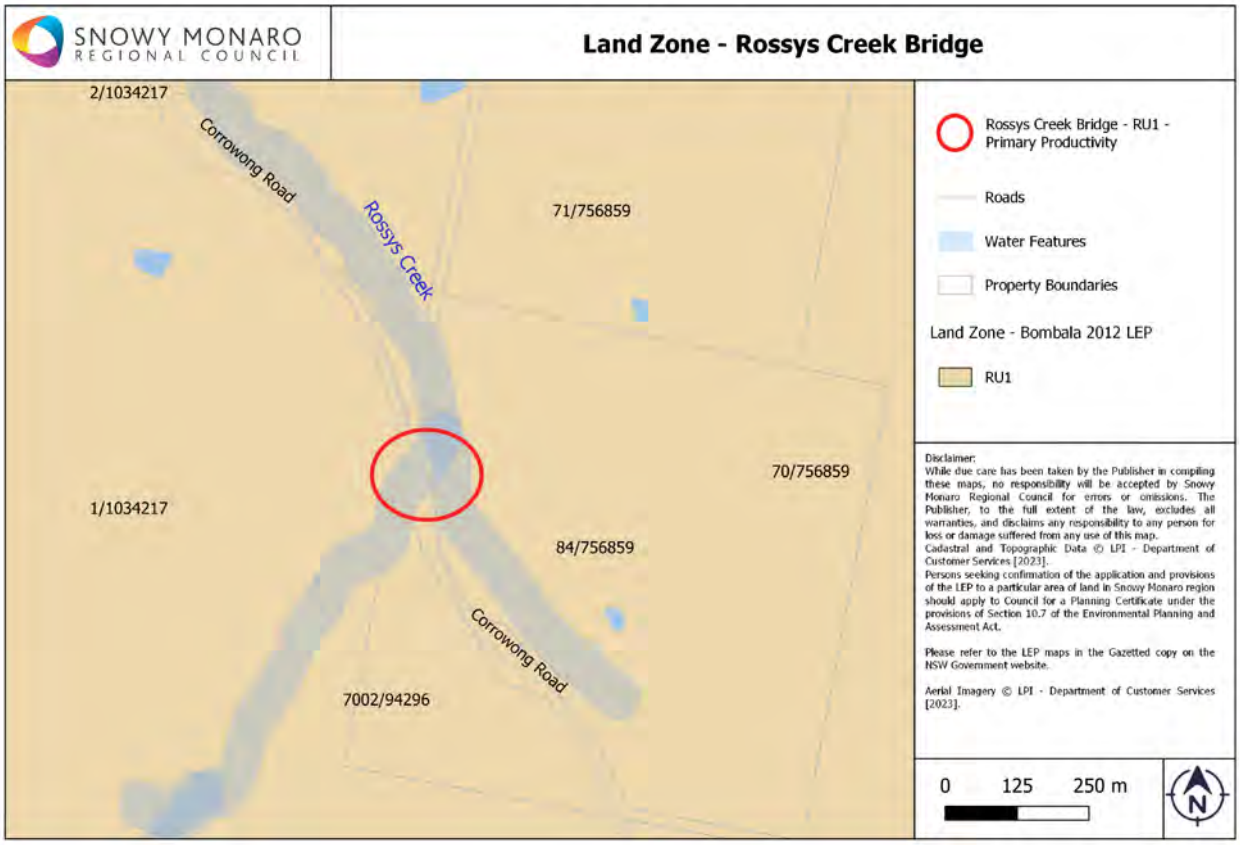

Figure 3: Bombala LEP 2012 – Land Zone Map (Source: SMRC)

The proposed bridge replacement works relate to works to a public road, which is defined as a 'road', which is a permissible land use under the RU1 zone of the BLEP, 2012.

Furthermore, clause 5.12 of the LEP applies, and states:

> ***5.12 Infrastructure development and use of existing buildings of the Crown***
>
> *(1) This Plan does not restrict or prohibit, or enable the restriction or prohibition of, the carrying out of any development, by or on behalf of a public authority, that is permitted to be carried out with or without development consent, or that is exempt development, under State Environmental Planning Policy (Infrastructure) 2007.*
> *(2) This Plan does not restrict or prohibit, or enable the restriction or prohibition of, the use of existing buildings of the Crown by the Crown.*

This clause sets out that the LEP does not restrict or prohibit the carrying out of development of any description permitted to be carried out under SEPP (Infrastructure) 2007.

As the proposed works do not require development consent under Part 4 of the EP&A Act, by virtue of SEPP (Transport & Infrastructure) 2021 which overrides the BLEP, 2012, approval under Part 5 is therefore required.

An assessment of the environmental factors to be taken into account when considering the environmental impact of an activity (as listed in Section 171(2)) of the EP&A Regs is provided in Section 8 of this report.

3.1.3 Heritage Act,1977

The Heritage Act, 1997 (HAct) is concerned with all aspects of the conservation of heritage places and items. Heritage items of state significance are listed on the State Heritage Register. The HAct provides protection for non-Aboriginal historic artefacts and/or sites.

A search of the State Heritage Register was completed for the proposed development, with one heritage listed Aboriginal Landscape site, the Bundian Way (#01906) identified. The Bundian Way is comprised of a traditional Aboriginal pathway traversing and connecting Kosciuszko (Targangal) and Fisheries Beach (Bilgalera) on Twofold Bay (Tullemullerer).

In many areas, the Bundian Way's influence on the old land management is still obvious and it is the first Aboriginal pathway to be listed on the NSW State Heritage Register.

The alignment and curtilage of this State Heritage registered site passes along Corrowong Road, and therefore the current project area, as shown in the extract from the NSW Planning Portal, below.

Figure 4: NSW Planning Portal– Heritage Search Map

A Statement of Heritage Impact has been prepared by Past Traces Heritage Consultants, with a copy of the report provided in full in Appendix B.

The report identifies that one State Heritage Registered Aboriginal landscape (Bundian Way - #01906) is present. The proposed works fall under Exemption 8 of Schedule "C" of the listing (Bridge upgrades) as no significant fabric will be impacted by the current project.

The report recommends that the development proposal should be able to proceed with no additional archaeological investigations. No areas of potential archaeological deposits or heritage objects have been identified within the development area and the potential for Aboriginal or historical heritage objects within the development area has been assessed as low.

3.1.4 Biodiversity Conservation Act, 2016

The Biodiversity Conservation Act 2016 (BC Act) and Local Land Services Amendment Act 2016 (LLS Act) together with the Biodiversity Conservation Regulations 2017 (BC Regs, 2017) were enacted on the 25 August 2017 and came into effect on the 25 February 2018.

Clause 7.2 of the BC Act identifies the following circumstances where an activity is likely to significantly affect threatened species:

(a) it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or
(b) the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or
(c) it is carried out in a declared area of outstanding biodiversity value.

Clause 7.2 includes a provision that subclause (1)(b) does not apply to development that is an activity subject to environmental impact assessment under Part 5 of the EP&A Act.

In accordance with (1)(c), the subject site is not located within a declared area of 'outstanding biodiversity value' as defined under the BC Regs.

To determine whether the development is likely to significantly affect threatened species or ecological communities, or their habitats, an 'assessment of significance' has been undertaken in accordance with Section 7.3. This is provided in Appendix D.

Accordingly, a Species Impact Statement is not required.

Furthermore, a Biodiversity Development Assessment Report (BDAR) in accordance with the Biodiversity Offsets Scheme (BOS) is also not required, even though the subject site is mapped under the Biodiversity Values Map, as illustrated in figure 5 below.

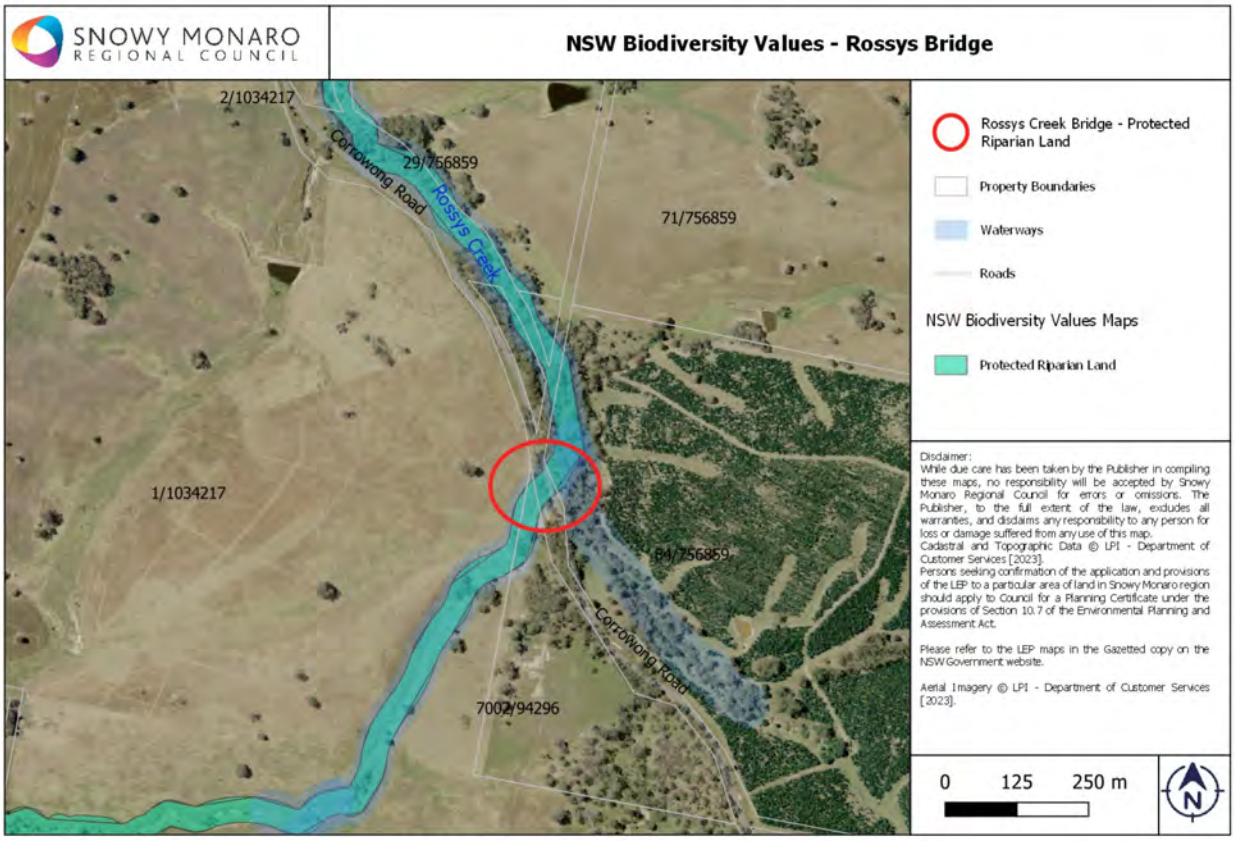

Figure 5: Biodiversity Values Map (Source: SMRC)

This is due to the project being assessed and determined under Part 5 of the EP&A Act and the proponent electing to not "opt-in" to obtaining a biodiversity development assessment report in connection with environmental impact assessment under the provisions of the BC Act.

3.1.5 Fisheries Management Act, 1994

As the proposed activity does not require dredging or reclamation, notification to the Minister for Primary Industries in accordance with Section 199 of the FM Act is not required.

Although the proposed activity will not permanently block fish passage, the construction works may temporarily impact fish passage and therefore a permit from DPI (Fisheries) under Section 219 of the FM Act will be sought.

3.1.6 Commonwealth Environment Protection and Biodiversity Assessment Act, 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate.

An assessment of the impact of the proposed development on all listed threatened species and communities as identified in the Protected Matters Report provided in Appendix E has been undertaken.

The assessment has concluded that the proposal is unlikely to have a significant impact on matters of National Environmental Significance or Commonwealth land, and a referral to the Commonwealth Environment Minister is not necessary.

3.1.7 Water Management Act 2000

In accordance with clause 41 of the Water Management (General) Regulations 2018 (WM Regs), a public authority is exempt from Section 91E(1) of the Act in relation to all controlled activities that it carries out in, on or under waterfront land.

4. CONSULTATION

4.1 Public Consultation

SMRC Community Participation Plan is silent on whether an REF is required to be notified or advertised. The proposed works are however of a minor nature and therefore do not necessarily need to be advertised or notified.

4.2 Landowners

The proposed bridge works could impact on the adjacent farming land and its operations, SMRC therefore should notify all adjacent landowners in regard to the proposed works.

5. THE PROPOSAL

5.1 Location of activity

The proposed works are located over Rossy's Creek, which is located on Corrowong Road, Delegate.

The top of the catchment of Rossy's Creek extends to the south and south-west and downstream the creek flows into Corrowong Creek and then into the Snowy River.

The location of the site has been identified above in figures 1 and 2 and further below in figure 6 below.

Figure 6: Aerial map of the site

Photos of the site are provided in Appendix A.

5.2 Description of the Activity

The proposed activity consists of replacing an existing timber bridge with a new concrete bridge.

The replacement bridge will be constructed using InQuick Modular Bridge Components.

The proposed works include:

- Demolition of the existing timber bridge. Bridge timbers to be recycled.

- Installation of an InQuick Concrete Modular Bridge, 12.1m x 7.24m, see 3D image below.
- Found the new bridge on new concrete abutments.
- Reconstruct the approach roads to achieve horizontal and vertical alignment blending the new construction to the existing road.
- New guard railing, signage and line marking.

Figure 7: 3D image of the modular bridge

Site Compound and Material Storage Area

The site compound and materials storage area is proposed to be located on the northern side of the bridge, western side of the road where access to the adjacent farm can be achieved.

This is a relatively flat site that has been previously disturbed, as shown in the photos provided in Appendix A, and considered suitable for this temporary use, subject to appropriate sediment and erosion controls being implemented to protect the watercourse.

5.3 Reasons for Activity and Consideration of Alternatives

5.3.1 Reasons for the Activity

The current timber bridge has been identified to be inadequate with previous failures including a collapsed timber wing wall which has been in part remedied by an upgraded stone wall.

The bridge has a current load rating of 9 tonnes (for single axle), which limits the use of the bridge for heavy vehicles.

As part of an ongoing program, existing timber bridges, have been identified to be removed and replaced with modular concrete bridges.

These provide a safer longer term option, than upgrading the bridges.

5.3.2 Alternatives

Option 1: 'Do nothing approach'

One alternative is to leave the bridge as is, however the timber bridge is at the end of its construction life and requires replacement.

Primarily for safety reasons, this option would not be viable for either a medium or long term basis.

Option 2: Upgrade the Bridge

The other option is to upgrade the bridge, however due to the age of the bridge and its condition, this is not considered a viable option.

Option 3: Replace the Bridge

The third option is to replace the bridge, the proposal outlined in this REF.

5.3.3 Justification for Preferred Option

Option 3 is the preferred option as Option 2 it is not viable long term to upgrade the timber bridge.

Option 3 is preferred over Option 1, which is the 'do nothing' option. Option 3 provides the benefits of replacing the bridge without generating significant impacts on the environment.

The 'do nothing' approach would not result in the economic, social and environmental benefits that could be achieved by undertaking the works as proposed.

6. DESCRIPTION OF THE EXISTING ENVIRONMENT

6.1 General Description

The subject site comprises of the bridge, its abutments and Rossy's Creek below.

The existing bridge is approximately 6.6m wide and 7m in length and includes a combination of timber and stone supports and wing walls, with a bitumen road surface.

Rossy's Creek is predominantly a perennial stream at the bridge site with a stream width approximately 1-2m wide and approximate depth of 1m, at its current flow. The creek flows down to the north where it flows into the Corrowong River and then into the Snowy River.

Both sides and under the bridge are disturbed due to the previous bridge and road works.

The embankments and riparian corridor, including proposed site compound and material storage area is largely devoid of native ground vegetation comprising of exotic grasses and weeds, with established Eucalypts further setback from the bridge.

6.2 Flora and Fauna

A fauna and flora investigation and assessment of the subject site was undertaken to assess the biological environment and the potential effects of the proposal.

The primary focus of this assessment was to identify the presence and potential presence of significant flora and fauna, including threatened species, populations, endangered ecological communities and habitats, so that any impact associated with the proposed work upon such biota could be assessed. Significant flora and fauna included those species listed under the BC Act and the FM Act. Information was gathered from a field survey, database records and literature review.

6.2.1 Desktop Study

Flora

In summary, seven (7) forbs, five (5) shrubs, two (2) trees, three (3) orchids and three (3) ecological communities of significance (including three critically listed) were identified as possibly occurring in the vicinity of the survey area as per the Threatened Species Table provided in Appendix C for the Monaro IBRA sub-region.

In addition to the above, a further endangered ecological community (EEC) known as the Snowy River Aquatic Ecological Community listed under the FM Act) is also likely to occur as it applies to Rossy's Creek (as a tributary to the Snowy River) as identified below in figure 8 and includes the bed, banks, floodplains and associated vegetation of the Snowy River and all its tributaries.

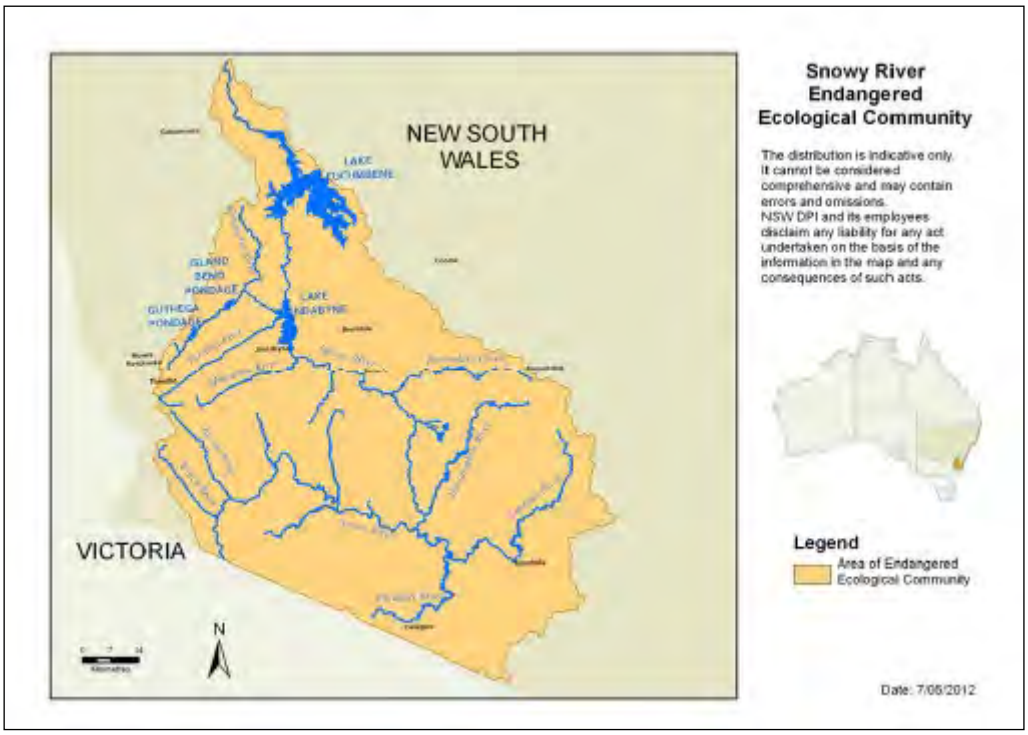

Figure 8: Snowy River EEC Area

Fauna

Records of threatened and other significant fauna that were gathered and assessed for possible occurrence are listed in the table provided in Appendix C.

Five (5) of the species are listed as critically endangered, fourteen (14) of the species are listed as endangered with another forty-six (46) species listed as vulnerable. The likelihood of occurrence for each species was identified based upon reconciling known habitat, including special niche requirements, with the habitats recorded in the study area.

6.2.2 Field Study

Flora

The areas within the subject site have been largely disturbed through the construction of the current bridge and associated roadworks.

Both the approaches to the creek, its embankment and in-stream vegetation are predominantly exotic and also include weeds with very little to no native ground cover vegetation present. The sites does include Eucalypts, however these are located over 8m from the bridge.

Of the eleven (11) forbs, seventeen (17) shrubs, two (2) trees, four (4) orchids and five (5) ecological communities of significance listed in the table provided in Appendix C, none were identified to likely to occur.

As identified above, the Snowy River Aquatic EEC is likely to occur. Given the extent of the previous disturbance at the subject site and the lack of any significant native vegetation, the impacts of the proposed works are highly unlikely to have a significant impact on the Snowy River Aquatic EEC which is supported by the Assessment of Significance (5-Part Test) provided in Appendix D.

Fauna

The potential for fauna habitat within the proposed disturbed area was considered overall very low.

Of the sixty-six (66) significant fauna possibly occurring within or adjacent to the proposed development site as extracted from NPWS Wildlife Atlas, DEH Protected Matters, literature review and field survey, none (0) were observed.

With regard to providing potential fauna habitat, the study area did not comprise of old growth forest and no hollow-bearing trees within the road reserve were observed, however numerous wombat burrow entrances for the Common Wombat *Vombatus ursinus* were identified within the stream embankments.

As the proposed excavation works will be located below the bridge on the flat ground on the edge of the stream, the burrow entrances are not likely to be affected. A recommendation in relation to these burrows is provided in Section 7.

6.2.3 Conclusion

Given the disturbed nature of the road reserve and existing bridge, ongoing activities along the road and the unlikely impacts on any potential Threatened Species or Communities as discussed above, impacts on native fauna and flora are not considered to be significant and are considered overall minimal.

6.3 Areas of outstanding biodiversity value (BC Act, 2016)

No areas of outstanding biodiversity value relate to the subject site.

6.4 Wilderness

The subject site is not located within any listed wilderness areas and the proposal is not anticipated to have any direct or indirect impacts on these areas.

6.5 Aboriginal cultural heritage

See Section 6.6 below and Appendix B.

6.6 National/state/local heritage values

As discussed above, the site forms part of an item on the State Heritage Register, forming part of a heritage listed Aboriginal Landscape site, the Bundian Way (#01906). The Bundian Way is comprised of a traditional Aboriginal pathway traversing and connecting Kosciuszko (Targangal) and Fisheries Beach (Bilgalera) on Twofold Bay (Tullemullerer).

The alignment and curtilage of this State Heritage registered site passes along Corrowong Road, and therefore the current project area.

A Statement of Heritage Impact has been prepared by Past Traces Heritage Consultants, with a copy of the report provided in full in Appendix B.

The Statement recommends that the proposed works can proceed without further assessment as no Aboriginal or historical heritage sites will be impacted by the current proposal. The potential for impacting on unrecorded heritage sites within the project area is assessed as extremely low, based on landform analysis and field survey.

6.7 Recreation values

The subject site does not offer or provide any recreational values.

6.8 Scenic and visually significant areas

The site does not contain any scenic or visual qualities of any significance.

6.9 Education or scientific values

No areas of educational or scientific values are known to exist on site.

6.10 Matter or National Environmental Significance under the EPBC Act

The works do not involve a matter of national environmental significance.

7. ENVIRONMENTAL SAFEGUARDS

The following environmental safeguards and mitigation measures are recommended for the construction of the proposed activity (and can be included in the preparation and implementation of a Construction Environmental Management Plan).

7.1 Water Pollution Control and Soil Protection

- Prepare an erosion and sediment control plan as part of the construction environmental management plan.
- Instream and bank work areas to be clearly delineated and other areas declared 'no go zones'.
- No machinery to enter the waterway unless in accordance with an approved Fisheries permit. Such machinery must be appropriately cleaned, degreased and serviced.
- Works are to manage debris created by the demolition of the bridge entering Rossy's Creek using devices such as drop nets, shade clothes or instream booms.
- A flood contingency plan would be prepared to identify any potential flood threats and the evacuation procedure for dispersible materials, hazardous materials and equipment containing hazardous or dispersible materials.
- Maintenance and checking of the erosion and sedimentation controls to be undertaken on a regular basis and records kept and provided at any time upon request. Sediment to be cleared from behind sediment controls on a regular basis and all controls to be managed in order to work effectively at all times.
- Imported fill required for the proposal should be treated and sourced from the local area.
- The stripping of topsoil and stockpiling activities should not be undertaken during weather conditions conducive to increasing the chance of soil erosion.
- Site rehabilitation of disturbed areas should be undertaken progressively as stages are completed.

7.2 Air and Noise

- Noise should be principally controlled through appropriate hours of construction as follows:
  - 7am until 8pm on weekdays and Saturdays
  - 8am until 8pm on Sundays and public holidays
- Any stockpiles and general areas with the capacity to cause dust is to be dampened to suppress dust emissions and located at least 30m from watercourses with appropriate erosion and sediment controls.
- Any materials transported in trucks are to be appropriately covered to reduce dust generation.
- Rehabilitation of disturbed surfaces should be undertaken as soon as possible.

7.3 Waste Management

- There is to be no burning of waste.
- All noxious weeds are to be sprayed on site prior to the commencement of works.

- Construction materials, surplus soils and wastes generated from the proposal may need to be stockpiled or stored prior to reuse, recycling or disposal.
- Wastes are not stored for long periods during construction of the proposal. Empty drums of fuels, oils or chemicals and fluids should be removed in a timely manner for reuse, recycling or landfill disposal.
- All working areas would be maintained, kept free of rubbish and cleaned up at the end of each working day.

7.4 Aboriginal Heritage/Cultural Heritage

- All work must cease in the vicinity of the find and project manager notified immediately.
- A buffer zone of 10m should be fenced in all direction of the find and construction personnel made aware of the 'no go' zone.
- NSW Heritage must be notified of the find and advice sought on the proper steps to be undertaken.
- After confirmation from NSW Heritage a heritage consultation should be engaged to undertake assessment of the find and provide appropriate management recommendations to the proponent.

7.5 Vegetation Management

- Engage Council Biosecurity Officer to inspect the site and treat any noxious weeds prior to the commencement of works.
- Only weed free straw, natural thatch/litter, or natural fibre jute matting will be used in sediment control activities.
- All machinery and vehicles to be used during construction must be clean in accordance with SMRC Plant Hygiene Policy, to minimise the potential of introducing weed seeds and Chytrid fungus. Particularly, transporting wet soil from one site to another will be avoided.
- Declared priority weeds should be managed according to the requirements stipulated by the Biosecurity Act, and recommendations made by the local control authority (SMRC) and the Noxious and Environmental Weed Handbook (DPI, 2011), which contains details as to the management of specific priority weeds.
- Targeted control of priority weeds should take place in consultation with Council Biosecurity Officer following rehabilitation of disturbed areas.
- Stabilise and reseed disturbed areas with sterile stabilising crop. Riparian areas would require separate revegetation strategy.

7.6 Access, Traffic and Site Safety

- The site is to be appropriately fenced off to secure the site and ensure the public cannot access the construction works.
- Appropriate traffic control devices (e.g. fencing and signage) are to be implemented.
- All works are to conform with relevant occupational health and safety requirements, which will minimise risk to construction workers.
- A Traffic Management Plan (TMP) should be prepared and include:
    - Avoidance of stablisation and no-go areas related to the Construction Environmental Management Plan.

- Site specific traffic control measures (including signage) to manage and regulate traffic movement.
- Requirements and methods to consult and inform the local community of impacts on the local road network.
- Access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads.
- A response plan for any construction traffic incident.
- Consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic.
- Monitoring, review and amendment mechanisms.
- Consultation would be undertaken with landowners adjoining Currawong Road site who will be directly affected by access disruptions to inform of detour, timing and complaints mechanism.
- If any impacts occur to any private accesses, the access tracks must be restored to prior condition, in consultation with the landowner.
- Notification to the local community of any changed traffic conditions (i.e. road closures, detours, lane closures) in advance of the works commencing. A contact number would be provided for community queries in relation to the works.
- Roads would be closed for the least amount of time and closures would be avoided whenever possible.
- Emergency services would be notified prior to the works commencing to inform them of the proposal and detours.

7.7 Fauna Management

- If any cut and fill within the embankments or any location where wombat burrow entrances are expected to extend more than 1m below the surface, then trapping should be undertaken immediately prior to the commencement of the proposed works to remove any wombats from the burrows within the area. Captured wombats should be held during the clearing operation with a suitable wildlife handler and released into a woodland area in the locality after the clearing operations have finished.
- A visual inspection of the waterway for fish would be undertaken daily during construction. Observations of dead or distressed fish would be immediately reported to NSW Fisheries.
- Construction activities would be undertaken in a manner that avoids direct contact with amphibians.
- All machinery and vehicles to be used during construction must be clean to minimise the potential of introducing weed seeds and Chytrid fungus. Particularly, transporting wet soil from one site to another will be avoided.

8. SUMMARY OF IMPACTS

The factors which need to be taken into account when considering the environmental impact of an activity are listed in Section 171(2) of the EP&A Regs 2021. Those factors have been addressed in Table 1 below to ensure that the likely impacts of the proposed activities on the natural and built environment are fully considered.

Table 1 - Summary.		
	Impact level (negligible, low, medium or high; negative or positive; or N/A)	**Reasons** (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)
(a) the environmental impact on a community,	*Negligible*	*The proposed bridge replacement works will result in a safer use of the road by all vehicles.* *The minor impacts that will be generated through the bridge replacement works will be offset by these positive outcomes.*
(b) the transformation of a locality,	*Negligible*	*The proposed activity is will not transform the locality.*
(c) the environmental impact on the ecosystems of the locality,	*Low*	*Environmental impacts on the ecosystems of the locality are expected to be minimal.*
(d) reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality,	*Negligible*	*The proposed works are not expected to reduce any qualities or values within the locality.*
(e) the effects on any locality, place or building that has— (i) aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance, or (ii) other special value for present or future generations,	*Low*	*As identified above, the proposed activity is located along the Bundian Way, a registered item on the State Heritage register with a Statement of Heritage Impact provided in Appendix B.*
(f) the impact on the habitat of protected animals, within the meaning of the *Biodiversity Conservation Act 2016*,	*Low*	*The proposed works are not expected to have detrimental impacts on fauna.*
(g) the endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air,	*Low*	*The potential to endanger any species of animal, plant of other life form is considered to be minimal given the nature of the proposed activities in relation to the highly disturbed nature of the subject site.*

Table 1 - Summary.		
	Impact level (negligible, low, medium or high; negative or positive; or N/A)	**Reasons** (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)
(h) long-term effects on the environment,	*Negligible*	*The proposed works are not expected to generate any long-term effects on the environment through the proper implementation of environmental safeguards and mitigation measures given its pervious disturbance.*
(i) degradation of the quality of the environment,	*Low*	*The quality of the environment is highly disturbed and therefore the proposed works will not result in any further degradation of the environment.*
(j) risk to the safety of the environment,	*Negligible*	*The proposed activity does not pose any risk to the environment, subject to the proper implementation of environmental safeguards and mitigation measures*
(k) reduction in the range of beneficial uses of the environment,	*Negligible*	*The beneficial uses of the environment are unlikely to be reduced through the undertaking of the proposed activity.*
(l) pollution of the environment,	*Low*	*Through the implementation of appropriate environmental safeguards and mitigation measures, the proposed works are not expected to generate any unnecessary pollution of the environment.*
(m) environmental problems associated with the disposal of waste,	*Negligible*	*The proposed works will not incur any issues with the generation of waste.*
(n) increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply	*Negligible*	*No increase demand on resources is likely to be generated by the bridge replacement works.*
(o) the cumulative environmental effect with other existing or likely future activities.	*Negligible*	*Cumulative environmental effects are expected to be negligible.*
(r) other relevant environmental factors.		

9. CONCLUSION

The proposed bridge replacement works are being undertaken to improve access and safety along Corrowong Road.

Given that the site has been previously disturbed, the impacts on the natural environment are expected to be low, which is supported in the fauna and flora assessment undertaken.

The summary table and assessment demonstrate that the activity is likely to have only a negligible to low environmental impact, as well as a low impact on heritage values with regard to the Stage Heritage listed Bundian Way, as such it is not likely to significantly affect the environment. Therefore, an Environmental Impact Statement is not required.

To further minimise any environmental impacts, the recommended management measures identified in Section 7 of the report should be undertaken.

On balance, given the nature and extent of the works and the potential benefits accruing from them, it is recommended that the proposed works be implemented in accordance with this REF.

10. AUTHOR(S) OF REF

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Date:	17 November 2023

APPENDIX A

PHOTOS

Figure 1: View of the approach to the bridge from the south

Figure 2: Closer view of the approach to the bridge from the south

Figure 3: Photo of the western side of the bridge

Figure 4: Photo of the eastern side of the bridge

Figure 5: Photo of the eastern side of the bridge and the failed support and embankments

Figure 6: Photo of the laydown area available on the north-western side of the bridge

Figure 7: Photo of the laydown area available on the north-western side of the bridge

Figure 8: Photo of the western side of the bridge

APPENDIX B

STATEMENT OF HERITAGE IMPACT

PastTraces Heritage Consultants

Statement of Heritage Impact

Rossy's Creek Bridge, Corrowong NSW

Report Prepared for Snowy Monaro Regional Council

Date: 4 October 2023

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email: office@pasttraces.com.au

Document Control

Revision	Date	Author	Reviewed
D1	4/10/2023	N. Cracknell	L. O'Brien

Disclaimer

Past Traces Pty Ltd has undertaken this assessment in accordance with the relevant Federal, State and Local Government legislation. Past Traces accepts no liability for any damages or loss incurred as a result of use for any purpose other than that for which it was commissioned.

Restricted Information

Information contained within this report is culturally sensitive and should not be made publicly available. The information that is restricted includes (but is not limited to):

- Maps, Mapping Grid Reference Co-ordinates or images for Aboriginal heritage sites, places and objects.
- Location or detailed information regarding places of Aboriginal cultural significance, as expressed or directed by Representative Aboriginal Organisations, Aboriginal elders, or members of the wider Aboriginal community.
- Other culturally appropriate restricted information as advised by Aboriginal representatives and traditional knowledge holders.

Information in the report covered by the above categories should be redacted before being made available to the general public. This information should only be made available to those persons with a just and reasonable need for access.

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EXECUTIVE SUMMARY

This report provides heritage impact advice for the proposed upgrade to the Rossy's Creek Bridge. The project area is within the Corrowong Road easement with an existing bridge crossing Rossy's Creek. The bridge is located approximately 10km from Corrowong and 11km from Delegate. The area has been highly impacted by the construction of the existing bridge and sealed bitumen road connection to Corrowong Road. The study area is shown on Figure 1 in a regional context with details of the proposed bridge works in Figure 2.

This Statement of Heritage Impact (SOHI) has been undertaken in accordance with the *Guidelines for Preparing a Statement of Heritage Impact* (Department of Planning and Environment 2023).

The proposal would involve the following impacts:

- Removal of the current bridge structure.
- Upgrade of bridge infrastructure to meet safety and operational standards.
- Reinstallation of road pavement to connect the bridge to Corrowong Road.
- Temporary pedestrian scaffold bridge for workers.

One State Heritage Registered Aboriginal landscape (Bundian Way - #01906) is present on the verge of the project area. No physical artefacts, culturally modified trees or areas of Potential Archaeological Deposit (PAD) were identified within the project area based on a review of previous reports and field survey of the project area.

Field survey was undertaken across the project area in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b). The field survey covered areas of the Rossy's Creek Bridge and the surrounding area. Ground visibility was moderate at the time of field survey, with areas of exposed soils along the creek line, and road verges. No heritage sites or areas of potential were identified during the field survey.

As a result of the field survey and background research completed for the project, the following recommendations have been developed:

- One State Heritage Registered Aboriginal landscape (Bundian Way - #01906) is present. The proposed works fall under Exemption 8 of Schedule "C" of the listing (Bridge upgrades) as no significant fabric will be impacted by the current project.
- The development proposal should be able to proceed with no additional archaeological investigations. No areas of potential archaeological deposits or heritage objects have been identified within the development area and the potential for Aboriginal or historical heritage objects within the development area has been assessed as low.

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- All Aboriginal objects are protected under the *NSW National Parks and Wildlife Act 1974*. It is an offence to disturb an Aboriginal site without a consent permit issued by NSW Heritage. Should any Aboriginal objects be encountered during works then works must cease and the find should not be moved until assessed by a qualified archaeologist.
- Further archaeological assessment would be required if the proposal activity extends beyond the area of the current investigation.

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1 INTRODUCTION

This report provides heritage impact advice for the proposed upgrade to the Rossy's Creek Bridge. The project area is within the Corrowong Road easement with an existing bridge crossing Rossy's Creek. The bridge is located approximately 10km from Corrowong and 11km from Delegate. The area has been highly impacted by the construction of the existing bridge and sealed bitumen road connection to Corrowong Road. There is no bridge bypass planned, with an alternative route via Brown's Camp Road. The study area is shown on Figure 1 in a regional context with details of the proposed bridge works in Figure 2.

The proposal would involve the following impacts:

- Removal of the current bridge structure.
- Upgrade of bridge infrastructure to meet safety and operational standards.
- Reinstallation of road pavement to connect the bridge to Corrowong Road.
- Temporary pedestrian scaffold bridge for workers.

These works are high impact and would have a negative impact on any heritage located within the project boundary. Heritage sites may be located on the surface or subsurface in areas of high potential for the preservation of archaeological remains of historical events or past usage by Aboriginal groups.

To assess the potential impacts of the proposed works on heritage, this Statement of Heritage Impact has been undertaken.

This report, field survey and associated research has been conducted in accordance with the *Guidelines for Preparing a Statement of Heritage Impact* (Department of Planning and Environment 2023).

1.1 PROJECT OBJECTIVES

This heritage impact assessment is being undertaken to complete the following objectives:

1. Review of the NSW Heritage Aboriginal Heritage Information Management System (AHIMS), to identify any recorded heritage sites within the project area.
2. Review of historic registers to identify any historic heritage.
3. Review of previous reports in area to develop predictive model of site location
4. Assess landforms present in project area against predictive model to determine potential for heritage sites and determine level of disturbance
5. Complete site visit to visually inspect impact areas and record any identified heritage sites. The site visit will also document levels of disturbance within project area.

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6. Complete a Statement of Heritage Impact with management recommendations to avoid or minimise impacts within the project area.

1.2 ABORIGINAL CONSULTATION

Due to the small size of the project area and an existing bridge, no consultation with the local Aboriginal community has been undertaken. Consultation with the Aboriginal community is not a requirement of the Statement of Heritage Impact assessment, which is undertaken at the preliminary planning stage of the project.

If the assessment finds that impacts to Aboriginal heritage will occur as a result of the development then consultation will be undertaken with the Local Aboriginal Land Council (LALC) and the wider Aboriginal community, in accordance with the consultation guidelines required by NSW Heritage.

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Figure 1: Regional Context

Legend

- Study Area
- Watercourse
- Major Road
- Minor Road
- Track - vehicular

N

1:50,000

0 0.5 1 2

Kilometers
Coordinate System:
GDA2020 MGA Zone 55

PastTraces Heritage Consultants

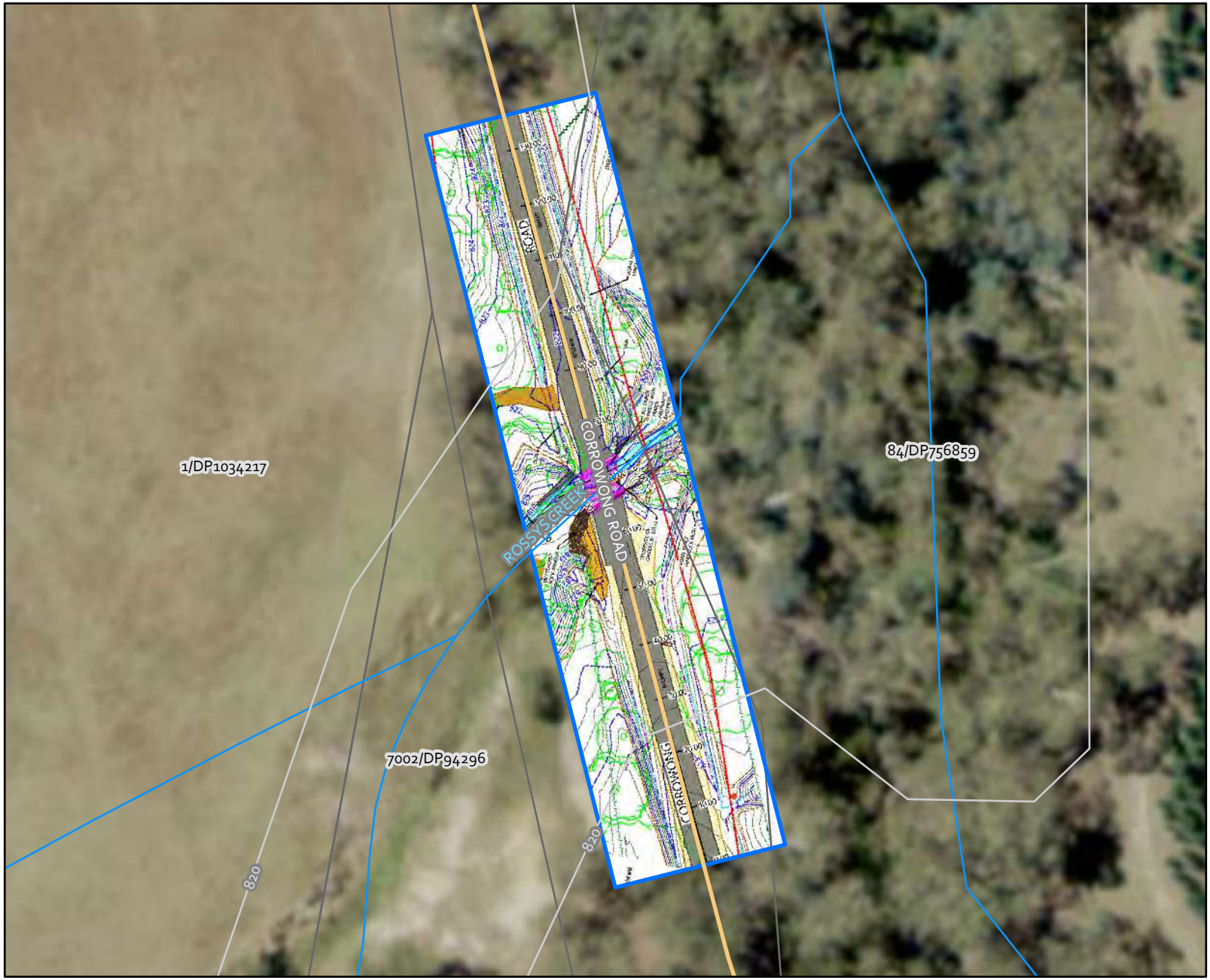

Figure 2: Study Area

Legend

- Contour -10m
- Watercourse
- Major Road
- Project Area
- Cadastre

N

1:1,000

0 12.5 25 50

Meters
Coordinate System:
GDA2020 MGA Zone 55

Imagery: © NSW Imagery

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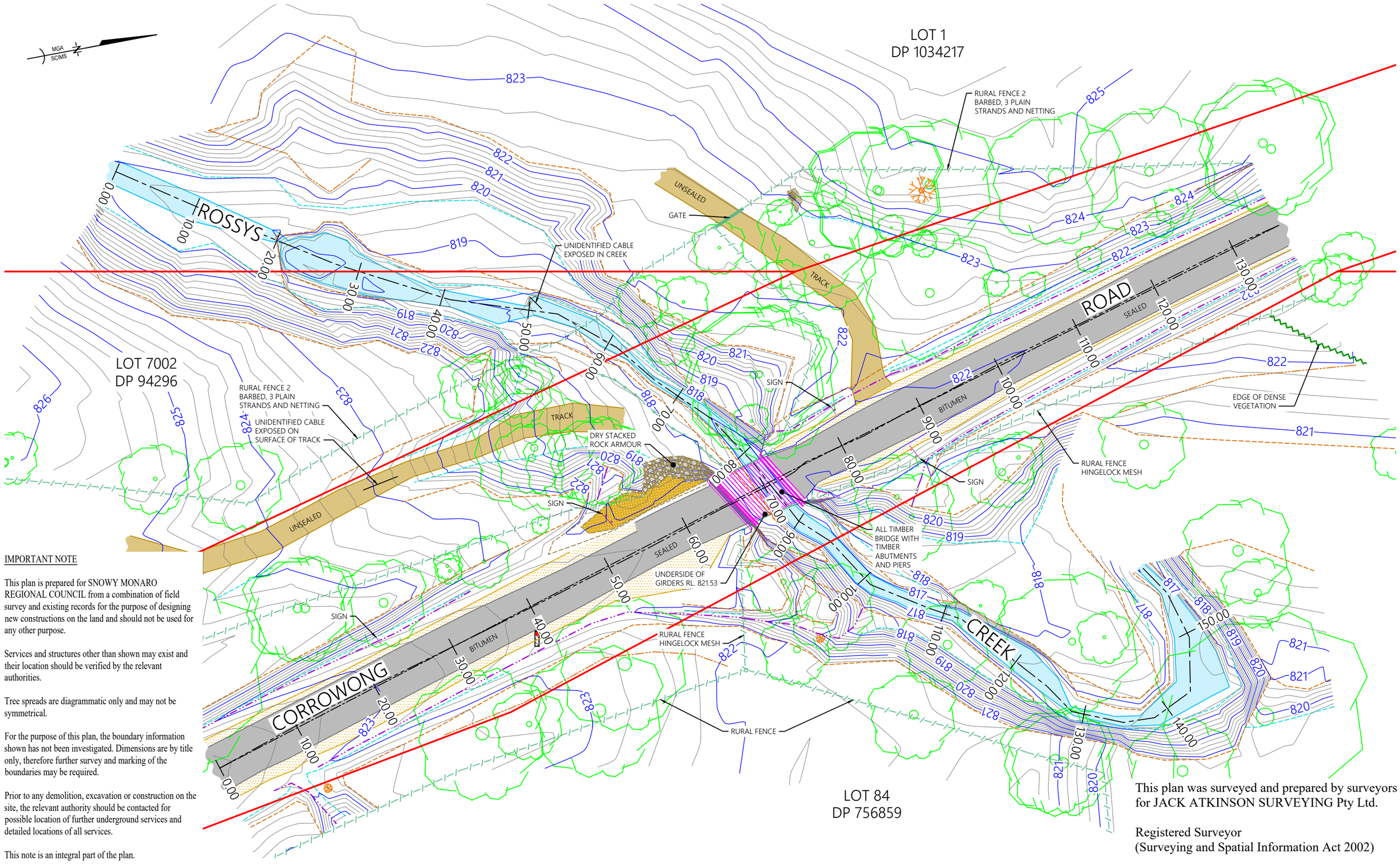

IMPORTANT NOTE

This plan is prepared for SNOWY MONARO REGIONAL COUNCIL from a combination of field survey and existing records for the purpose of designing new constructions on the land and should not be used for any other purpose.

Services and structures other than shown may exist and their location should be verified by the relevant authorities.

Tree spreads are diagrammatic only and may not be symmetrical.

For the purpose of this plan, the boundary information shown has not been investigated. Dimensions are by title only, therefore further survey and marking of the boundaries may be required.

Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

This note is an integral part of the plan.

This plan was surveyed and prepared by surveyors for JACK ATKINSON SURVEYING Pty Ltd.

Registered Surveyor
(Surveying and Spatial Information Act 2002)

Surveyed on 16 June 2023

NOTE: SYMBOLS DENOTE POSITION OF OBJECT & ARE NOT NECESSARILY TRUE SIZE OR SHAPE

JACK ATKINSON SURVEYING

CLIENT: SNOWY MONARO REGIONAL COUNCIL

PROJECT: ROSSYS CREEK BRIDGE CORROWONG ROAD, CORROWONG NSW

LEGEND:
- LOT BOUNDARY
- MAJOR CONTOUR
- MINOR CONTOUR
- TIMBER BRIDGE
- TOP OF BANK
- CHANGE OF GRADE
- BOTTOM OF BANK
- DRAIN
- RURAL FENCE
- SILT FENCE
- ROAD/CREEK CENTRELINE
- DEAD TREE
- ROCK INDIVIDUAL
- ROCKY OUTCROP

COORD DATUM: AUSPOS
HEIGHT DATUM: AHD AUSPOS

AMENDMENTS		DATE	AMENDMENT DETAILS
	F		
	E		
	D		
	C		
	B		
	A		
		23/06/2023	FIRST ISSUE

DRAWING TITLE: DETAIL SURVEY

DRAWING NAME:	DRAWN:	CHECKED:	DATE:
JAS599-1	JK	JA	23/06/2023

SCALE 1:400 AT A3

0 4 8 12 16 20 METRES

2 DESKTOP ASSESSMENT RESULTS

2.1 ABORIGINAL HERITAGE INFORMATION MANAGEMENT SYSTEM (AHIMS) SEARCH

A search of the NSW Heritage AHIMS database was undertaken on the 15 September 2023 covering the 5 to 10km surrounding area centred on the project area. The total area captured in the AHIMS search was Lat, Long from: -37.0491, 148.7396 to -36.912, 148.9868. The extensive search revealed no previously recorded heritage sites within the project area with six sites and one Aboriginal Place (Delegate Aboriginal Reserve) within the wider search area, with the closest site (52-4-0238), 6.2km from the proposed works. The recorded sites consisted of moderately dense artefact scatters and a stone arrangement recorded within the wide search area.

Within the wider Corrowong/Delegate area very few studies have been undertaken (Stone 2000 & Feary 2017) which have resulted in the identification of a number of Aboriginal sites, mainly consisting of artefact scatters or isolated finds. These studies have resulted in a site location model being developed for the region. This model predicts the majority of sites will consist of small artefact sites located on level ground or terrace features in proximity to water sources, with larger sites with subsurface deposits being present in proximity to water features such as a creek confluence or major water sources. This predictive model is discussed in more detail in Section 2.2.

The recorded sites on AHIMs for the area are listed in Table 1 and shown on Figure 3 in relation to the project area.

Table 1. AHIMS Site Details

Site ID	Site name	Datum	Zone	Easting	Northing	Site features	Recorders
62-4-0238	Delegate 1	GDA94	MGA55	659063	5906784	Stone Arrangement: 1	T. Stone
62-4-0233	Delegate 2	GDA94	MGA55	658413	5908134	Artefact: 23	T. Stone
62-4-0239	Delegate 3	GDA94	MGA55	658863	5908334	Artefact: 30	T. Stone
63-1-0038	Site 1 Karachi Fire Trail	GDA94	MGA55	655523	5902902	Artefact: 20	V. Mason
63-1-0039	Site 2 Karachi Fire Trail	GDA94	MGA55	655851	5902926	Artefact: 15	V. Mason
62-4-0250	Site 3 Karachi Fire Trail	GDA94	MGA55	655159	5905800	Artefact: 30	V. Mason
91	Delegate Aboriginal Reserve	GDA94	MGA55	669325	5898592	Aboriginal Place	Eden LALC

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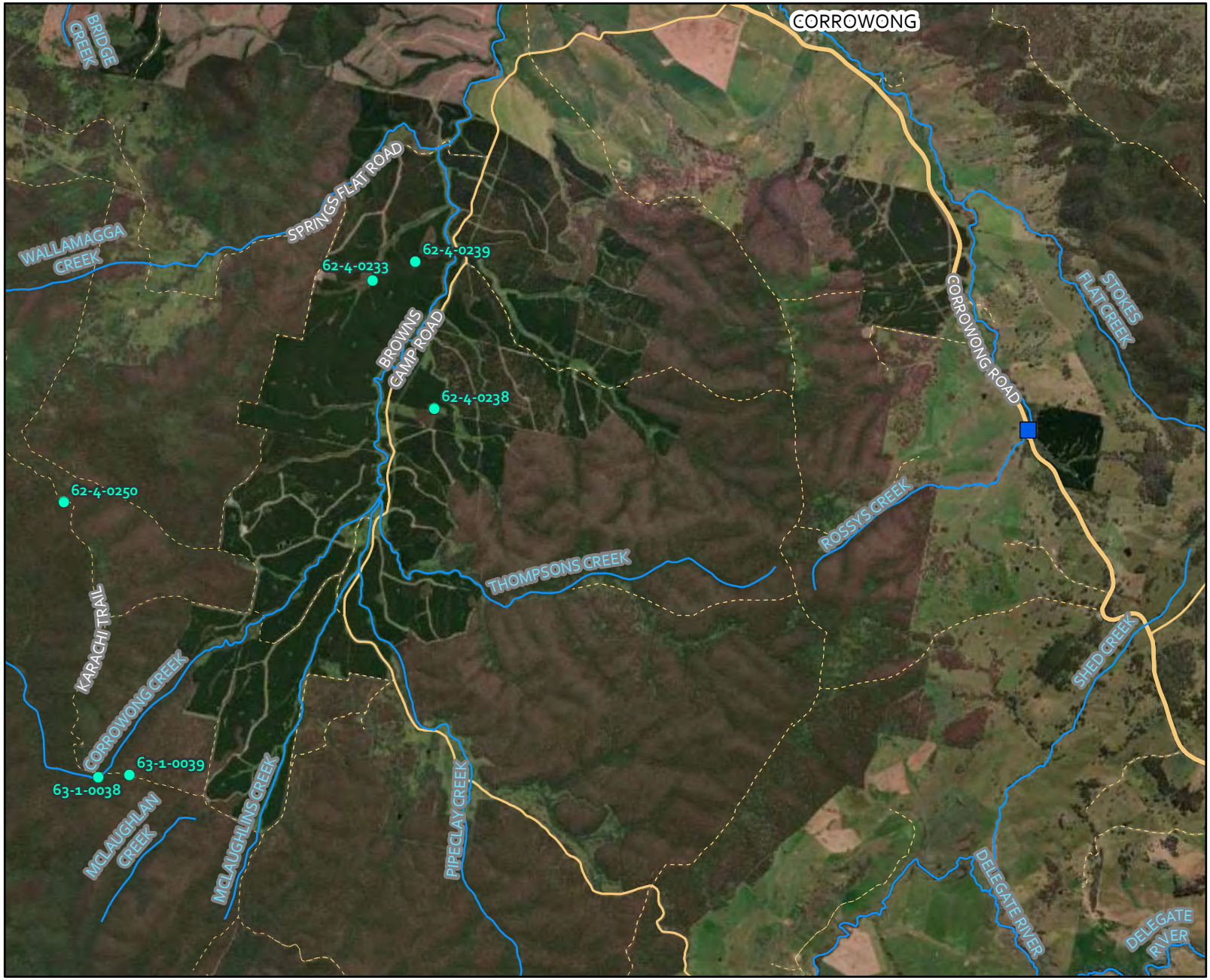

Figure 3: Previously Recorded Sites

Legend

- Study Area
- AHIMS Site
- Watercourse
- Major Road
- Minor Road
- Track - vehicular

N

1:60,000

0 0.5 1 2

Kilometers
Coordinate System:
GDA2020 MGA Zone 55

Imagery: © NSW Imagery

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2.2 HISTORICAL HERITAGE SEARCH

Within NSW Local government is responsible for managing heritage items. This responsibility is mainly fulfilled by listing heritage items in the Local Environmental Plans (LEPs) under the *Environmental Planning & Assessment Act 1979*. Council approval is required to impact any listed item.

Heritage items can also be of 'state significance' in which case they are listed on the NSW Heritage Register by the NSW Heritage Council under the *Heritage Act 1977*. These items are usually substantial and consist of buildings, bridges or other structures that represent events in the local area.

A search of the NSW Heritage Register and Bombala LEP 2012 was undertaken for the project. One State Heritage Registered site, Bundian Way (Listing No. 01906), is registered within the vicinity. A review of historical parish maps was also undertaken with no known structures or items identified within the project area.

2.3 STATE HERITAGE REGISTER – BUNDIAN WAY

2.3.1 Description

A search of the State Heritage Register revealed one heritage listed Aboriginal Landscape site, the Bundian Way (#01906). The Bundian Way is comprised of a traditional Aboriginal pathway traversing and connecting Kosciuszko (Targangal) and Fisheries Beach (Bilgalera) on Twofold Bay (Tullemullerer). In many areas, the Bundian Way's influence on the old land management is still obvious and it is the first Aboriginal pathway to be listed on the NSW State Heritage Register.

The alignment and curtilage of this State Heritage registered site passes along Corrowong Road, and therefore the current project area.

2.3.2 Site History

The existence of the ancient route was noted in a variety of 19th century survey reports and journals often referring to it as a route between the high country and the sea. The journals of Oswald Brierly (as described in Blay 2011) describe his journey from Twofold Bay in 1842 along a traditional route through the mountains under the guidance of an Aboriginal man, Budgibro. The journal also includes several notes and drawings of the route taken and details of the journey. In 1945, surveyor Francis McCabe surveyed a portion of the route between the Monaro and Twofold Bay.

The State Heritage listing also notes the story of Al.mil.gong, who walked all the way from Omeo to Bilgalera on Twofold Bay for corroboree on the 14th August, 1844, and that in 1866, A.W. Howitt observed:

> *". . . a very old mark made by the blacks who used this very track in going to Maneroo . . . A little beyond was a new mark - evidently Harry's (who had already*

taken there by Omeo Jack a year or so back and we then found ourselves on the old black's trail..." (Blay 2011, quoting A.W. Howitt)

The Bundian Way was physically surveyed by John Blay and members of the Eden Local Aboriginal Land Council through 2010 and 2011, utilising Aboriginal objects along the path, historical writings and maps, oral history and surveyors marked trees to identify the route. The listed heritage route is approximately 265km in length, with a width curtilage of 20m. Approximately half of the route now follows fire trails, forestry roads and Crown and Council roads, with the other half passing through proclaimed wilderness.

2.3.3 Physical Analysis

The physical area of the Bundian Way within the current project is limited to the alignment of Corrowong Road, with a 20m wide curtilage. The State Heritage listing for the site details that the route 'follows the main track and road through Wallendibby and Corrowong to Delegate, with the significant features of this length being the vista from McGuigans Gap and the southernmost reach of the 'Treeless Plains' at Corrowong. The main road from Corrowong to Delegate is Corrowong Road, on which the Rossy's Creek bridge is situated.

The listing does not refer to any physical fabric (items or places) within the vicinity of the road impact area.

2.4 HERITAGE ACT 1977 – EXEMPTION ORDER UNDER SECTION 57(2)

The State Heritage Register's listing for the Bundian Way (#01906) features a site-specific exemption to allow work. This list of exemptions was ordered by The Hon. Robyn Parker, Minister for Heritage, on the 20th December 2012, and actioned on the 18th January 2013. The Minister's order is as follows:

I, the Minister for Heritage, on the recommendation of the Heritage Council of New South Wales, in pursuance of section 57(2) of the Heritage Act 1977 (NSW), do, by this my order, grant an exemption from section 57(1) of that Act in respect of the engaging in or carrying out of any activities described in Schedule "C" by the [owner, mortgagee or lessee of the land] described in Schedule "B" on the item described in Schedule "A".

The exemptions are broken down into the relevant Schedules below.

2.4.1 SCHEDULE "A"

The item known as the Bundian Way (#01906), situated on the land described in Schedule "B".

2.4.2 SCHEDULE "B"

All those pieces or parcels of land known as a 265km route following fire trails, tracks, roads and road reserves with a continuous width of 20 metres located in Parish of Tumbarumba, County of Selwyn; Parish of Towamba, County of Auckland; Parish of Hayden, County of Wellesley; Parish of Corrowong, County of Wellesley; Parish of Nungatta, County of Auckland; and Parish of Kiah, County of Auckland and shown on the plan catalogued HC 2551 in the office of the Heritage Council of New South Wales.

This includes the current project area which falls within the Corrowong Road reserve in the County of Wellesley; Parish of Corrowong.

2.4.3 SCHEDULE "C"

The following activities do not require approval under 57(1) of the Heritage Act 1977 providing they do not impact the significant fabric or cultural landscapes of the Bundian Way. Some examples of significant fabric include Aboriginal objects, trees with historic surveyor's marks, culturally significant trees and campsites, historic settler's fences and middens. An example of a cultural landscape includes Mountaintop (Bondi Springs) which has significant food plant concentrations such as the yam garden.

The most relevant of the exempt activities are as follows: (Bolded for reference)

5. Maintenance of existing roads, fire and other trails and tracks, including sub-grade, pavement and drainage works.
7. Vegetation management to maintain sight lines on existing roads and along easements of utilities such as powerlines and pipelines.
8. Maintenance and upgrading of existing bridge structures.
9. Use of existing road maintenance gravel pits.
10. Signage associated with the use of the road and management of public land including Travelling Stock Reserves, Crown reserves and Crown roads, Commons and Showgrounds.
15. The removal of isolated, dead or dying vegetation.

Therefore, the maintenance and upgrading of the existing bridge structure over Rossy's Creek and its connection to Corrowong Road is exempt from Section 57(1) of the Heritage Act 1977 in carrying out of the activities listed in Schedule "C", for the land described in Schedule "B", on the item described in Schedule "A".

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2.5 PREVIOUS HERITAGE STUDIES

The project area is located in the locality of Corrowong within the Snowy Monaro Regional area. Very few heritage studies have been undertaken in the Corrowong region, and fewer still within proximity of the Project area. The few recorded sites in the region reflect this lack of survey, and should not be considered representative of rates of occupation.

Two studies have been undertaken of the surrounding pine plantations in the Delegate (south of project area) and Pericoe (west of project area) areas as part of intention of harvesting these plantations.

Archaeologist Tim Stone in 2000 conducted several heritage assessments for the proposed planting of softwood lumber forests in the Corrowong and Delegate areas. At the time of survey, these areas namely consisted of farmed and pastoral areas with a far higher Ground Surface Visibility (GSV) than the pine forests would reveal now. The pine plantation adjacent to the current project area was included in the survey with no sites identified, which Stone attributed to being due to poor GSV rather than a low potential for sites. A total of five Aboriginal sites were recorded in the Pericoe areas and nine in the Delegate areas, with sites ranging from a few to an estimated 1,500 artefacts.

In 2017, Snowy Mountains Forests engaged Sue Feary to relocate the previously recorded Aboriginal and historical sites, assess their condition and provide recommendations for their ongoing management and protection. For each of the sites, the original grid coordinate locations were inspected for artefacts. Where the grid coordinates did not match the site descriptions and/or the positions shown on maps in the reports, the survey team used Stone's (2000) descriptions/maps to try and locate the sites. It was noted that for the Pericoe sites, it proved very difficult to find several of the recorded sites due to incorrect grid coordinates. For all sites, either no artefacts or very few were identified attributed namely to a low GSV at the time of survey and the 16 years since their recording. It is also noted that Delegate 1 (62-4-0238) is incorrectly identified by AHIMS as a stone arrangement when it is a potential quarry site for material.

2.5.1 Predictive Model

Predictive modelling has been undertaken to broadly predict the type and location of Aboriginal cultural heritage sites within the boundaries of the project area. The model is based primarily on Stone's (2000) assessment, the landforms present within the project area and the degree of disturbance which has occurred historically.

This site prediction model is shown in Table 2 and is based on:

- Site distribution in relation to landscape features within the project area
- Potential Aboriginal use of natural resources present or once present within the project area
- Degree of disturbance.

Table 2 Site Prediction Model

Probability	Site Type	Definition	Landform
Low	Isolated finds and surface scatters of stone artefacts	Stone artefacts ranging from single artefact to high numbers	Most frequent on creek lines and spur crests. - Highly disturbed from bridge construction
Low	Potential Archaeological Deposits (PADS)	Area considered on landform to hold higher potential for unidentified subsurface deposits	Most frequent on elevated terraces along creek lines and spurlines. – Highly disturbed from bridge construction
Low	Culturally Modified Trees (CMTs)	Trees which have been modified by scarring, marking or branch twining	May be present on old remaining trees – proximity to Bundian way increases potential
Nil	Rock Engravings	Images engraved on flat rock surfaces	Escarpments, rock platforms or rock shelters - not present
Nil	Stone arrangements	Arrangements of stones by human intention, including circles lines or patterns.	Crest lines or large ceremonial areas on creekflats, - not present
Nil	Stone quarries/Ochre sources	Quarry sites where resources have been mined.	Any landform that has not been disturbed – not present
Nil	Axe grinding grooves	Grooves in stone caused by the grinding of stone axes	Usually in creek lines, as water is used as abrasive with sand - not present
Nil	Burials	Burials of Aboriginal persons	Usually requiring deep sandy soils on eastern facing slopes – not present

2.6 LANDFORM AND DISTURBANCE LEVEL ASSESSMENT

The landforms within the project area consist of gently undulating valley flats. Water sources are present in the form of Rossy's Creek. This creek line would have been a continuous source of water for the area and would have formed a string of ponds during periods of drought.

The project area has been impacted by European settlement from the mid nineteenth century. The project area having been used as a pedestrian and vehicle track over a lengthy period of time. These past use impacts are typical for the Snowy Monaro region and consist of the following:

- Vegetation and tree clearance
- Stock impacts

- Fencing
- Construction of infrastructure and road upgrades over time

All of these landscape and soil impacts reduce the potential for archaeological or heritage sites to remain intact within the landscape. Confined areas of disturbance are present at gates and along fence lines on road verges. Exposed ground is present in areas of vehicle tracks, fence lines, under trees and large areas of erosion adjacent to the road and bridge.

The areas of impact within the project area are limited to the existing bridge and road infrastructure and are considered highly disturbed. The banks of Rossy's Creek have been landscaped in preparation for the bridge's footings and foundations. Corrowong Road has been converted to a bitumen surface and connected to the Rossy's Creek bridge.

As a result of the landform assessment the study area contains low potential to contain any unrecorded heritage sites or areas of PAD and has suffered a high degree of previous impact.

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3 FIELD SURVEY RESULTS

A site visit and field survey of the project area was undertaken on the 1st October 2023 to verify the findings of the desktop review of landforms and disturbance. The aim of the investigation was to identify heritage objects or places and if any areas of potential archaeological Deposit (PAD) are present.

All surveyed areas and items of interest were recorded on a topographic map of the study area (using a GPS and GDA94 coordinates), along with levels of visibility, erosion, soil conditions, and evidence of land disturbance.

Ground surface visibility (GSV) is the percentage of ground surface that is visible during the field inspection. GSV increases in areas of exposures such as stock impact trails, roads, gates and along areas of erosion such as creek banks and dam walls. As a result, surveys undertaken in areas with high exposure rates result in a more effective survey coverage.

The site visit resulted in the following findings.

3.1.1 Ground Surface Visibility

GSV over the study area was moderate due to grass and fallen bark coverage surrounding the Rossy's Creek bridge and Corrowong Road. Bare earth was visible in small to large exposures on road verges and the gate entrance to the north of Rossys Bridge. Across the project area the average GSV was estimated at 30%.

Due to the prevailing vegetation, areas of exposed ground were present under trees, along the road edge and along the banks of Rossy's Creek and on impact trails. Exposures were common at a moderate frequency across the project area.

The degree of disturbance across the study area was very high in the area of the Rossy's Creek bridge. This high disturbance stems from the current bridge structure, the asphalt Corrowong Road, and the significant landscaping along the Rossy's Creek banks in the form of stone retaining walls.

The conditions at the time of the field survey are shown in plates 1 to 6.

Plate 1: View North to bridge

Plate 2. Current Rossy's Creek bridge with high levels of disturbance from construction (North)

Plate 3: GSV example with fallen bark coverage (North)

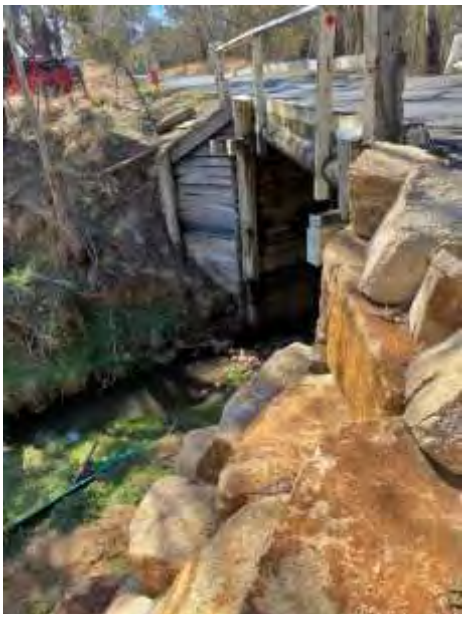

Plate 4: Looking across the bridge with erosion present along steep creek bank (South)

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Plate 5: Rock retaining wall along north side of the bridge/creek bank (Northeast)

Plate 6: Adjacent vegetation and grass coverage (South)

3.1.2 Results - Aboriginal Heritage Sites

No areas of Aboriginal heritage were identified during the field survey despite a careful search of the surrounding area and trees surrounding the area of impact. No significant fabric will be impacted by the current project.

3.1.3 Results - Areas of Potential Archaeological Deposit (PAD)

Areas of PAD are defined as landforms that hold higher potential than their surrounds to contain subsurface deposits of past Aboriginal occupation. Based on a review of previous studies completed for the region, areas of PAD would be located in association with waterways (1st or 2nd order streams) on level ground or along spur crest and ridge lines.

As a result, of the landforms and prior impacts, no areas of PAD have been identified and the project area is considered to hold low potential.

3.1.4 Results – Historical Heritage

No areas or items of historical heritage were identified within the project area as a result of the background review or field survey.

4 IMPACT ASSESSMENT

The impacts from the upgrade to the Rossy's Creek bridge would be confined to the boundaries of the existing bridge disturbance area. These areas have been assessed and a field survey undertaken. No physical heritage sites were identified and the area of the proposed bridge upgrade is considered to hold low potential for unrecorded heritage sites or subsurface deposits.

The project area has a high degree of disturbance stemming from the construction of the existing bridge and Corrowong Road. Due to these high-level disturbances, any heritage items that may have been present within the impact area are considered to have been removed.

One State Heritage Registered Aboriginal landscape (Bundian Way - #01906) falls within the area of impact for the proposed bridge upgrade. However, Exemption 8 'Maintenance and upgrading of existing bridge structures', of Schedule "C" of the listing, states that bridge upgrades do not require approval under 57(1) of the Heritage Act 1977 providing they do not impact the significant fabric or cultural landscapes of the Bundian Way. Considering the high levels of disturbance from the existing bridge, and the lack of any physical fabric (artefacts or CMTs), the proposed upgrade with have no impact on any significant fabric or cultural landscapes associated with the Bundian Way.

Based on the assessment the impacts from the project are as follows:

- One State Heritage Registered Aboriginal landscape (Bundian Way - #01906) is present. The proposed works fall under Exemption 8 of Schedule "C" of the listing as no significant fabric will be impacted by the current project.
- No known Historical objects or places are present in the project area.
- No areas of high potential to contain unrecorded Aboriginal or historical objects or places are present in the project area.

4.1 RECOMMENDATIONS

Based on this Statement of Heritage Impact assessment the following actions are recommended for the project.

Recommendation 1: Works to proceed without further heritage assessment with caution.

The proposed works can proceed without further assessment as no Aboriginal or historical heritage sites will be impacted by the current proposal. The potential for impacting on unrecorded heritage sites within the project area is assessed as extremely low, based on landform analysis and field survey.

Recommendation 2: Discovery of Unidentified Aboriginal cultural material during works.

Under the *NPW Act 1977* all Aboriginal places and objects are protected from harm, even if they have not been previously identified during the assessment process. If Aboriginal material is discovered during works then the steps as outlined below should be followed:

- All work must cease in the vicinity of the find and project manager notified immediately.
- A buffer zone of 10m should be fenced in all direction of the find and construction personnel made aware of the 'no go' zone.
- NSW Heritage must be notified of the find and advice sought on the proper steps to be undertaken.
- After confirmation from NSW Heritage a heritage consultation should be engaged to undertake assessment of the find and provide appropriate management recommendations to the proponent.

Recommendation 3: Alteration of impact footprint

Further archaeological assessment would be required if the proposal activity extends beyond the area of the current investigation.

Implementation of the above management recommendations will result in low potential for the project to impact on heritage values or result in damage to heritage sites.

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5 REFERENCES

Blay, J. (2011). *Report on a Survey of The Bundian Way 2010-2011*. Report was developed in conjunction with Eden LALC and funded through the Indigenous Heritage Program.

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Heritage Office and Department of Urban Affairs and Planning. (1996). *Regional Histories of New South Wales*.

OEH. (2011). Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales. Office of Environment and Heritage.

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APPENDIX C

THREATENED SPECIES TABLES

Threatened Species found in Monaro IBRA sub-region

Search using criteria below or filter existing results

Status

☐ Show nationally listed species only

Search

Matching records: 145

Save to CSV

Click on column headers to sort

Scientific name	Common name	Conservation project	Type of species	NSW status	Occurrence	Vegetation class
Heleioporus australiacus	Giant Burrowing Frog	Heleioporus australiacus conservation project	Animal > Amphibians	Vulnerable	Known	Show 45 linked vegetation classes
Litoria aurea	Green and Golden Bell Frog	Litoria aurea conservation project	Animal > Amphibians	Endangered	Known	Show 41 linked vegetation classes
Litoria booroolongensis	Booroolong Frog	Litoria booroolongensis conservation project	Animal > Amphibians	Endangered	Known	Show 35 linked vegetation classes
Litoria castanea	Yellow-spotted Tree Frog	Litoria castanea conservation project	Animal > Amphibians	Critically Endangered	Known	Show 16 linked vegetation classes
Litoria raniformis	Southern Bell Frog	Litoria raniformis conservation project	Animal > Amphibians	Endangered	Known	Show 22 linked vegetation classes
Litoria verreauxii alpina	Alpine Tree Frog	Litoria verreauxii alpina conservation project	Animal > Amphibians	Endangered	Known	Show 10 linked vegetation classes
Pseudophryne corroboree	Southern Corroboree	Pseudophryne corroboree conservation	Animal >	Critically		

	Frog	**project**	Amphibians	Endangered	Known	**Show 12 linked vegetation classes**
Falsistrellus tasmaniensis	**Eastern False Pipistrelle**	**Falsistrellus tasmaniensis conservation project**	Animal > Bats	Vulnerable	Known	**Show 56 linked vegetation classes**
Miniopterus orianae oceanensis	**Large Bent-winged Bat**	**Miniopterus orianae oceanensis conservation project**	Animal > Bats	Vulnerable	Known	**Show 76 linked vegetation classes**
Myotis macropus	**Southern Myotis**	**Myotis macropus conservation project**	Animal > Bats	Vulnerable	Known	**Show 58 linked vegetation classes**
Pteropus poliocephalus	**Grey-headed Flying-fox**	**Pteropus poliocephalus conservation project**	Animal > Bats	Vulnerable	Known	**Show 71 linked vegetation classes**
Saccolaimus flaviventris	**Yellow-bellied Sheathtail-bat**	**Saccolaimus flaviventris conservation project**	Animal > Bats	Vulnerable	Known	**Show 81 linked vegetation classes**
Anseranas semipalmata	**Magpie Goose**	**Anseranas semipalmata conservation project**	Animal > Birds	Vulnerable	Known	**Show 22 linked vegetation classes**
Botaurus poiciloptilus	**Australasian Bittern**	**Botaurus poiciloptilus conservation project**	Animal > Birds	Endangered	Known	**Show 25 linked vegetation classes**
Calyptorhynchus lathami lathami	**South-eastern Glossy Black-Cockatoo**	**Calyptorhynchus lathami lathami conservation project**	Animal > Birds	Vulnerable	Known	**Show 75 linked vegetation classes**
Climacteris picumnus victoriae	**Brown Treecreeper**	**Climacteris picumnus victoriae conservation**	Animal > Birds	Vulnerable		**Show 64 linked**

	(eastern subspecies)	**project**			Known	**vegetation classes**
Ephippiorhynchus asiaticus	**Black-necked Stork**	**Ephippiorhynchus asiaticus conservation project**	Animal > Birds	Endangered	Known	**Show 71 linked vegetation classes**
Grantiella picta	**Painted Honeyeater**	**Grantiella picta conservation project**	Animal > Birds	Vulnerable	Known	**Show 80 linked vegetation classes**
Lathamus discolor	**Swift Parrot**	**Lathamus discolor conservation project**	Animal > Birds	Endangered	Known	**Show 77 linked vegetation classes**
Lophoictinia isura	**Square-tailed Kite**	**Lophoictinia isura conservation project**	Animal > Birds	Vulnerable	Known	**Show 87 linked vegetation classes**
Melanodryas cucullata cucullata	**Hooded Robin (south-eastern form)**	**Melanodryas cucullata cucullata conservation project**	Animal > Birds	Vulnerable	Known	**Show 82 linked vegetation classes**
Neophema pulchella	**Turquoise Parrot**	**Neophema pulchella conservation project**	Animal > Birds	Vulnerable	Known	**Show 54 linked vegetation classes**
Ninox connivens	**Barking Owl**	**Ninox connivens conservation project**	Animal > Birds	Vulnerable	Known	**Show 71 linked vegetation classes**
Ninox strenua	**Powerful Owl**	**Ninox strenua conservation project**	Animal > Birds	Vulnerable	Known	**Show 53 linked vegetation classes**
Oxyura australis	**Blue-billed Duck**	**Oxyura australis conservation project**	Animal > Birds	Vulnerable	Known	**Show 8 linked vegetation classes**

Pachycephala olivacea	**Olive Whistler**	**Pachycephala olivacea conservation project**	Animal > Birds	Vulnerable	Known	**Show 50 linked vegetation classes**
Petroica rodinogaster	**Pink Robin**	**Petroica rodinogaster conservation project**	Animal > Birds	Vulnerable	Known	**Show 19 linked vegetation classes**
Polytelis swainsonii	**Superb Parrot**	**Polytelis swainsonii conservation project**	Animal > Birds	Vulnerable	Known	**Show 37 linked vegetation classes**
Chthonicola sagittata	**Speckled Warbler**	**Chthonicola sagittata conservation project**	Animal > Birds	Vulnerable	Known	**Show 57 linked vegetation classes**
Rostratula australis	**Australian Painted Snipe**	**Rostratula australis conservation project**	Animal > Birds	Endangered	Known	**Show 26 linked vegetation classes**
Stagonopleura guttata	**Diamond Firetail**	**Stagonopleura guttata conservation project**	Animal > Birds	Vulnerable	Known	**Show 62 linked vegetation classes**
Stictonetta naevosa	**Freckled Duck**	**Stictonetta naevosa conservation project**	Animal > Birds	Vulnerable	Known	**Show 12 linked vegetation classes**
Tyto novaehollandiae	**Masked Owl**	**Tyto novaehollandiae conservation project**	Animal > Birds	Vulnerable	Known	**Show 75 linked vegetation classes**
Anthochaera phrygia	**Regent Honeyeater**	**Anthochaera phrygia conservation project**	Animal > Birds	Critically Endangered	Known	**Show 43 linked vegetation classes**

Callocephalon fimbriatum	**Gang-gang Cockatoo**	**Callocephalon fimbriatum conservation project**	Animal > Birds	Vulnerable	Known	**Show 65 linked vegetation classes**
Glossopsitta pusilla	**Little Lorikeet**	**Glossopsitta pusilla conservation project**	Animal > Birds	Vulnerable	Known	**Show 63 linked vegetation classes**
Petroica phoenicea	**Flame Robin**	**Petroica phoenicea conservation project**	Animal > Birds	Vulnerable	Known	**Show 62 linked vegetation classes**
Hieraaetus morphnoides	**Little Eagle**	**Hieraaetus morphnoides conservation project**	Animal > Birds	Vulnerable	Known	**Show 94 linked vegetation classes**
Petroica boodang	**Scarlet Robin**	**Petroica boodang conservation project**	Animal > Birds	Vulnerable	Known	**Show 75 linked vegetation classes**
Circus assimilis	**Spotted Harrier**	**Circus assimilis conservation project**	Animal > Birds	Vulnerable	Known	**Show 75 linked vegetation classes**
Daphoenositta chrysoptera	**Varied Sittella**	**Daphoenositta chrysoptera conservation project**	Animal > Birds	Vulnerable	Known	**Show 88 linked vegetation classes**
Epthianura albifrons	**White-fronted Chat**	**Epthianura albifrons conservation project**	Animal > Birds	Vulnerable	Known	**Show 34 linked vegetation classes**
Calidris ferruginea	**Curlew Sandpiper**	**Calidris ferruginea conservation project**	Animal > Birds	Endangered	Known	**Show 23 linked vegetation classes**
Falco subniger	**Black Falcon**	**Falco subniger conservation project**	Animal >	Vulnerable		

			Birds		Known	**Show 53 linked vegetation classes**
Artamus cyanopterus cyanopterus	**Dusky Woodswallow**	**Artamus cyanopterus cyanopterus conservation project**	Animal > Birds	Vulnerable	Known	**Show 103 linked vegetation classes**
Haliaeetus leucogaster	White-bellied Sea-Eagle	**Haliaeetus leucogaster conservation project**	Animal > Birds	Vulnerable	Known	**Show 92 linked vegetation classes**
Neophema chrysostoma	**Blue-winged Parrot**	**Neophema chrysostoma conservation project**	Animal > Birds	Vulnerable	Known	
Synemon plana	**Golden Sun Moth**	**Synemon plana conservation project**	Animal > Invertebrates	Vulnerable	Known	**Show 5 linked vegetation classes**
Keyacris scurra	**Key's Matchstick Grasshopper**	**Keyacris scurra conservation project**	Animal > Invertebrates	Endangered	Known	**Show 2 linked vegetation classes**
Cercartetus nanus	**Eastern Pygmy-possum**	**Cercartetus nanus conservation project**	Animal > Marsupials	Vulnerable	Known	**Show 68 linked vegetation classes**
Dasyurus maculatus	**Spotted-tailed Quoll**	**Dasyurus maculatus conservation project**	Animal > Marsupials	Vulnerable	Known	**Show 73 linked vegetation classes**
Petaurus australis	**Yellow-bellied Glider**	**Petaurus australis conservation project**	Animal > Marsupials	Vulnerable	Known	**Show 38 linked vegetation classes**
Petaurus norfolcensis	**Squirrel Glider**	**Petaurus norfolcensis conservation project**	Animal > Marsupials	Vulnerable	Known	**Show 61 linked vegetation classes**

Petrogale penicillata	**Brush-tailed Rock-wallaby**	**Petrogale penicillata conservation project**	Animal > Marsupials	Endangered	Known	**Show 54 linked vegetation classes**
Phascogale tapoatafa	**Brush-tailed Phascogale**	**Phascogale tapoatafa conservation project**	Animal > Marsupials	Vulnerable	Predicted	**Show 57 linked vegetation classes**
Phascolarctos cinereus	**Koala**	**Phascolarctos cinereus conservation project**	Animal > Marsupials	Endangered	Known	**Show 87 linked vegetation classes**
Potorous tridactylus	**Long-nosed Potoroo**	**Potorous tridactylus conservation project**	Animal > Marsupials	Vulnerable	Predicted	**Show 44 linked vegetation classes**
Sminthopsis leucopus	**White-footed Dunnart**	**Sminthopsis leucopus conservation project**	Animal > Marsupials	Vulnerable	Predicted	**Show 20 linked vegetation classes**
Petauroides volans	**Southern Greater Glider**	**Petauroides volans conservation project**	Animal > Marsupials	Endangered	Known	**Show 56 linked vegetation classes**
Aprasia parapulchella	**Pink-tailed Legless Lizard**	**Aprasia parapulchella conservation project**	Animal > Reptiles	Vulnerable	Known	**Show 21 linked vegetation classes**
Delma impar	**Striped Legless Lizard**	**Delma impar conservation project**	Animal > Reptiles	Vulnerable	Known	**Show 14 linked vegetation classes**
Suta flagellum	**Little Whip Snake**	**Suta flagellum conservation project**	Animal > Reptiles	Vulnerable	Known	**Show 5 linked vegetation classes**

Tympanocryptis lineata	**Canberra Grassland Earless Dragon**	**Tympanocryptis lineata conservation project**	Animal > Reptiles	Critically Endangered	Known	**Show 3 linked vegetation classes**
Varanus rosenbergi	**Rosenberg's Goanna**	**Varanus rosenbergi conservation project**	Animal > Reptiles	Vulnerable	Known	**Show 46 linked vegetation classes**
Tympanocryptis osbornei	**Monaro Grassland Earless Dragon**	**Tympanocryptis osbornei conservation project**	Animal > Reptiles	Endangered	Known	**Temperate Montane Grasslands**
Mastacomys fuscus	**Broad-toothed Rat**	**Mastacomys fuscus conservation project**	Animal > Rodents	Vulnerable	Known	**Show 11 linked vegetation classes**
Pseudomys fumeus	**Smoky Mouse**	**Pseudomys fumeus conservation project**	Animal > Rodents	Critically Endangered	Predicted	**Show 9 linked vegetation classes**
White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions	**Box-gum Woodland**	**White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions conservation project**	Community > Threatened Ecological Communities	Critically Endangered Ecological Community	Known	**Show 19 linked vegetation classes**
Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions	**Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian**	**Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions conservation project**	Community > Threatened Ecological Communities	Endangered Ecological Community	Known	**Show 5 linked vegetation classes**

	Alps bioregions					
Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions	**Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions**	**Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions conservation project**	Community > Threatened Ecological Communities	Endangered Ecological Community	Predicted	**Show 4 linked vegetation classes**
Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands Bioregion	**Monaro Tableland Cool Temperate Grassy Woodland**	**Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands Bioregion conservation project**	Community > Threatened Ecological Communities	Critically Endangered Ecological Community	Known	**Show 4 linked vegetation classes**
Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions	**Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions**	**Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions conservation project**	Community > Threatened Ecological Communities	Critically Endangered Ecological Community	Known	**Show 4 linked vegetation classes**
Calotis glandulosa	**Mauve Burr-daisy**	**Calotis glandulosa conservation project**	Plant > Herbs and Forbs	Vulnerable	Known	**Show 12 linked vegetation classes**
Euphrasia scabra	**Rough Eyebright**	**Euphrasia scabra conservation project**	Plant > Herbs and Forbs	Endangered	Known	**Show 4 linked vegetation classes**
Gentiana baeuerlenii	**Baeuerlen's Gentian**	**Gentiana baeuerlenii conservation project**	Plant > Herbs and Forbs	Endangered	Known	**Show 4 linked vegetation classes**
Lepidium hyssopifolium	**Aromatic Peppercress**	**Lepidium hyssopifolium conservation project**	Plant > Herbs and Forbs	Endangered	Known	**Show 8 linked vegetation classes**
Rutidosis leiolepis	**Monaro Golden Daisy**	**Rutidosis leiolepis conservation project**	Plant >	Vulnerable		

			Herbs and Forbs		Known	**Show 4 linked vegetation classes**
Rutidosis leptorrhynchoides	**Button Wrinklewort**	**Rutidosis leptorrhynchoides conservation project**	Plant > Herbs and Forbs	Endangered	Known	**Show 5 linked vegetation classes**
Swainsona recta	**Small Purple-pea**	**Swainsona recta conservation project**	Plant > Herbs and Forbs	Endangered	Known	**Show 6 linked vegetation classes**
Swainsona sericea	**Silky Swainson-pea**	**Swainsona sericea conservation project**	Plant > Herbs and Forbs	Vulnerable	Known	**Show 28 linked vegetation classes**
Thesium australe	**Austral Toadflax**	**Thesium australe conservation project**	Plant > Herbs and Forbs	Vulnerable	Known	**Show 26 linked vegetation classes**
Pelargonium sp. Striatellum	**Omeo Storksbill**	**Pelargonium sp. Striatellum conservation project**	Plant > Herbs and Forbs	Endangered	Known	**Show 3 linked vegetation classes**
Leucochrysum albicans subsp. tricolor	**Hoary Sunray**	**Leucochrysum albicans subsp. tricolor conservation project**	Plant > Herbs and Forbs	Endangered	Known	**Show 17 linked vegetation classes**
Eucalyptus parvula	**Small-leaved Gum**	**Eucalyptus parvula conservation project**	Plant > Mallees	Endangered	Known	**Show 8 linked vegetation classes**
Eucalyptus pulverulenta	**Silver-leafed Gum**	**Eucalyptus pulverulenta conservation project**	Plant > Mallees	Vulnerable	Known	**Show 7 linked vegetation classes**
Caladenia tessellata	**Thick Lip Spider Orchid**	**Caladenia tessellata conservation project**	Plant > Orchids	Endangered	Known	**Show 10 linked**

						vegetation classes
Diuris aequalis	**Buttercup Doubletail**	**Diuris aequalis conservation project**	Plant > Orchids	Endangered	Known	**Show 7 linked vegetation classes**
Prasophyllum petilum	**Tarengo Leek Orchid**	**Prasophyllum petilum conservation project**	Plant > Orchids	Endangered	Known	**Show 7 linked vegetation classes**
Prasophyllum sandrae	**Majors Creek Leek Orchid**	**Prasophyllum sandrae conservation project**	Plant > Orchids	Critically Endangered	Known	**Show 3 linked vegetation classes**
Bossiaea oligosperma	**Few-seeded Bossiaea**	**Bossiaea oligosperma conservation project**	Plant > Shrubs	Vulnerable	Known	**Show 5 linked vegetation classes**
Dillwynia glaucula	**Michelago Parrot-pea**	**Dillwynia glaucula conservation project**	Plant > Shrubs	Endangered	Known	**Show 7 linked vegetation classes**
Dillwynia tenuifolia	***Dillwynia tenuifolia***	**Dillwynia tenuifolia conservation project**	Plant > Shrubs	Vulnerable	Known	**Show 10 linked vegetation classes**
Discaria nitida	**Leafy Anchor Plant**	**Discaria nitida conservation project**	Plant > Shrubs	Vulnerable	Known	**Show 9 linked vegetation classes**
Dodonaea procumbens	**Creeping Hop-bush**	**Dodonaea procumbens conservation project**	Plant > Shrubs	Vulnerable	Known	**Show 7 linked vegetation classes**
Monotoca rotundifolia	**Trailing Monotoca**	**Monotoca rotundifolia conservation project**	Plant > Shrubs	Endangered	Known	**Show 4 linked vegetation classes**

Pomaderris delicata	**Delicate Pomaderris**	**Pomaderris delicata conservation project**	Plant > Shrubs	Critically Endangered	Known	**Show 2 linked vegetation classes**
Pomaderris pallida	**Pale Pomaderris**	**Pomaderris pallida conservation project**	Plant > Shrubs	Vulnerable	Known	**Show 8 linked vegetation classes**
Commersonia prostrata	**Dwarf Kerrawang**	**Commersonia prostrata conservation project**	Plant > Shrubs	Endangered	Known	**Show 21 linked vegetation classes**
Westringia kydrensis	**Kydra Westringia**	**Westringia kydrensis conservation project**	Plant > Shrubs	Endangered	Known	**Show 2 linked vegetation classes**
Wilsonia rotundifolia	**Round-leafed Wilsonia**	**Wilsonia rotundifolia conservation project**	Plant > Shrubs	Endangered	Known	**Show 7 linked vegetation classes**
Zieria adenophora	**Araluen Zieria**	**Zieria adenophora conservation project**	Plant > Shrubs	Critically Endangered	Predicted	**Show 4 linked vegetation classes**
Zieria citriodora	**Lemon Zieria**	**Zieria citriodora conservation project**	Plant > Shrubs	Endangered	Known	**Show 2 linked vegetation classes**
Dampiera fusca	**Kydra Dampiera**	**Dampiera fusca conservation project**	Plant > Shrubs	Endangered	Known	**Show 7 linked vegetation classes**
Bossiaea bombayensis	**Bombay Bossiaea**	**Bossiaea bombayensis conservation project**	Plant > Shrubs	Vulnerable	Predicted	**Show 4 linked vegetation classes**

Pimelea bracteata	**Rice flower**	**Pimelea bracteata conservation project**	Plant > Shrubs	Critically Endangered	Known	**Show 8 linked vegetation classes**
Persoonia oxycoccoides	***Persoonia oxycoccoides***	**Persoonia oxycoccoides conservation project**	Plant > Shrubs	Endangered	Known	
Eucalyptus kartzoffiana	**Araluen Gum**	**Eucalyptus kartzoffiana conservation project**	Plant > Trees	Vulnerable	Predicted	**Show 7 linked vegetation classes**
Eucalyptus macarthurii	**Paddy's River Box**	**Eucalyptus macarthurii conservation project**	Plant > Trees	Endangered	Known	**Show 11 linked vegetation classes**
Eucalyptus aggregata	**Black Gum**	**Eucalyptus aggregata conservation project**	Plant > Trees	Vulnerable	Known	**Show 12 linked vegetation classes**
Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations	**Infection by Psittacine circoviral (beak and feather) disease affecting endangered psittacine species**	**Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations conservation project**	Threat > Disease	Key Threatening Process	Predicted	
Infection of frogs by amphibian chytrid causing the disease chytridiomycosis	**Infection of frogs by amphibian chytrid causing the disease chytridiomycosis**	**Infection of frogs by amphibian chytrid causing the disease chytridiomycosis conservation project**	Threat > Disease	Key Threatening Process	Predicted	
Infection of native plants by Phytophthora cinnamomi	**Infection of native plants by *Phytophthora cinnamomi***	**Infection of native plants by Phytophthora cinnamomi conservation project**	Threat > Disease	Key Threatening Process	Predicted	
Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on	**Introduction and establishment of Exotic Rust Fungi of the order Pucciniales**	**Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae conservation**	Threat > Disease	Key Threatening Process	Predicted	

plants of the family Myrtaceae	**pathogenic on plants of the family Myrtaceae**	**project**				
Alteration of habitat following subsidence due to longwall mining	**Alteration of habitat following subsidence due to longwall mining**	**Alteration of habitat following subsidence due to longwall mining conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands	**Alteration to the natural flow regimes of rivers, streams, floodplains & wetlands.**	**Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
Bushrock removal	**Bushrock Removal**	**Bushrock removal conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
Loss or degradation (or both) of sites used for hill-topping by butterflies	**Loss and/or degradation of sites used for hill-topping by butterflies**	**Loss or degradation (or both) of sites used for hill-topping by butterflies conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
Removal of dead wood and dead trees	**Removal of dead wood and dead trees**	**Removal of dead wood and dead trees conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition	**Ecological consequences of high frequency fires**	**High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
Clearing of native vegetation	**Clearing of native vegetation**	**Clearing of native vegetation conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
Anthropogenic Climate Change	**Human-caused Climate Change**	**Anthropogenic Climate Change conservation project**	Threat > Habitat Loss/Change	Key Threatening Process	Predicted	
Loss of Hollow-bearing Trees	**Loss of Hollow-bearing Trees**	**Loss of Hollow-bearing Trees conservation project**	Threat > Habitat	Key Threatening Process	Predicted	

			Loss/Change			
Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners	**Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners**	**Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners conservation project**	Threat > Other Threat	Key Threatening Process	Predicted	
Competition from feral honey bees, Apis mellifera L.	**Competition from feral honeybees**	**Competition from feral honey bees, Apis mellifera L. conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Introduction of the Large Earth Bumblebee Bombus terrestris (L.)	**Introduction of the large earth bumblebee (*Bombus terrestris*)**	**Introduction of the Large Earth Bumblebee Bombus terrestris (L.) conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Predation by the Feral Cat Felis catus (Linnaeus, 1758)	**Predation by feral cats**	**Predation by the Feral Cat Felis catus (Linnaeus, 1758) conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Invasion of the Yellow Crazy Ant, Anoplolepis gracilipes (Fr. Smith) into NSW	**Invasion of the yellow crazy ant (*Anoplolepis gracilipes*) into NSW**	**Invasion of the Yellow Crazy Ant, Anoplolepis gracilipes (Fr. Smith) into NSW conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Herbivory and environmental degradation caused by feral deer	**Herbivory and environmental degradation caused by feral deer**	**Herbivory and environmental degradation caused by feral deer conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Predation by the European Red Fox Vulpes Vulpes (Linnaeus, 1758)	**Predation by the European Red Fox**	**Predation by the European Red Fox Vulpes Vulpes (Linnaeus, 1758) conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Predation by Gambusia holbrooki Girard, 1859 (Plague Minnow or Mosquito Fish)	**Predation by the Plague Minnow (*Gambusia holbrooki*)**	**Predation by Gambusia holbrooki Girard, 1859 (Plague Minnow or Mosquito Fish) conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758	**Competition and habitat degradation by Feral Goats, *Capra hircus* Linnaeus 1758**	**Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758 conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	

Predation, habitat degradation, competition and disease transmission by Feral Pigs, Sus scrofa Linnaeus 1758	**Predation, habitat degradation, competition and disease transmission by Feral Pigs (*Sus scrofa*)**	**Predation, habitat degradation, competition and disease transmission by Feral Pigs, Sus scrofa Linnaeus 1758 conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Importation of Red Imported Fire Ants Solenopsis invicta Buren 1972	**Importation of red imported fire ants into NSW**	**Importation of Red Imported Fire Ants Solenopsis invicta Buren 1972 conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.)	**Competition and grazing by the feral European rabbit**	**Competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.) conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Invasion and establishment of the Cane Toad (Bufo marinus)	**Invasion and establishment of the Cane Toad**	**Invasion and establishment of the Cane Toad (Bufo marinus) conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Predation and hybridisation by Feral Dogs, Canis lupus familiaris	**Predation and hybridisation by Feral Dogs, Canis lupus familiaris**	**Predation and hybridisation by Feral Dogs, Canis lupus familiaris conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners, Manorina melanocephala (Latham, 1802)	**Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners *Manorina melanocephala* .**	**Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners, Manorina melanocephala (Latham, 1802) conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758	**Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758**	**Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758 conservation project**	Threat > Pest Animal	Key Threatening Process	Predicted	
Invasion of native plant communities by exotic perennial grasses	**Invasion of native plant communities by exotic perennial grasses**	**Invasion of native plant communities by exotic perennial grasses conservation project**	Threat > Weed	Key Threatening Process	Predicted	
Invasion of native plant communities	**Invasion of native plant**	**Invasion of native plant communities by**	Threat >	Key Threate		

by Chrysanthemoides monilifera	**communities by bitou bush & boneseed**	**Chrysanthemoides monilifera conservation project**	Weed	ning Process	Predicted	
Invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat)	**Invasion, establishment and spread of Lantana (*Lantana camara* L. *sens. lat*)**	**Invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat) conservation project**	Threat > Weed	Key Threatening Process	Predicted	
Invasion and establishment of exotic vines and scramblers	**Invasion and establishment of exotic vines and scramblers**	**Invasion and establishment of exotic vines and scramblers conservation project**	Threat > Weed	Key Threatening Process	Predicted	
Invasion and establishment of Scotch Broom (Cytisus scoparius)	**Invasion and establishment of Scotch Broom (*Cytisus scoparius*)**	**Invasion and establishment of Scotch Broom (Cytisus scoparius) conservation project**	Threat > Weed	Key Threatening Process	Predicted	
Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif.	**Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif.**	**Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif. conservation project**	Threat > Weed	Key Threatening Process	Predicted	
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	**Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants**	**Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants conservation project**	Threat > Weed	Key Threatening Process	Predicted	

APPENDIX D

ASSESSMENT OF SIGNIFICANCE

Appendix D: Assessment of Significance
EP&A ACT ASSESSMENT OF SIGNIFICANCE (5-PART TEST)

An assessment of the effects of the proposal on threatened species, populations and ecological communities, may be carried out by applying the factors from Section 1.7 of the amended NSW Environmental Planning and Assessment Act 1979 in accordance with gazetted assessment guidelines to each identified threatened species, population and ecological community.

This assessment of significance is presented below for the endangered ecological community, the *Aquatic Ecological Community in the Natural Drainage System of the Catchment of the Snowy River in NSW* (hereafter referred to as the Snowy River Aquatic Ecological Community).

Part a)
In the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

This factor does not apply to endangered ecological communities.

Part b)
In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

Snowy River Aquatic Ecological Community

i. Extent of Local Occurrence
The action proposed will affect <100m^2 of the local occurrence of the Snowy River Aquatic Ecological Community, however the instream bed and its embankments are predominated by exotic grasses and weeds. The extent of the local occurrence of the Snowy River Aquatic Ecological Community is not known however it is likely to very extensive and includes as a minimum the full extent of the Snowy River and its tributaries including Rossy's Creek.

ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

ii. Composition of Local Occurrence
The composition of the Snowy River Aquatic Ecological Community was not surveyed as part of this assessment, however it is highly unlikely to be significantly different to the composition in similar habitats within the Snowy River and its tributaries. That is, it is highly unlikely that the study area supports a unique assemblage of the characteristic species of the Snowy River Aquatic Ecological Community that does not occur elsewhere within the local occurrence. Aquatic fauna species utilising foraging substrates within the study area would not be restricted to the areas affected by the action proposed and would be highly likely to continue to utilise habitats in the remainder of the local occurrence after the implementation of the action proposed.

The action proposed is not anticipated to result in adverse impacts on the Snowy River Aquatic Ecological Community within or beyond the study area. The proposal can include appropriate measures to avoid fuel or chemical spills or any substantial sediment input into Rossy's Creek during the construction period (through conditions of consent). In the context of the other impacts on the Creek and previous work undertaken to the causeway, the potential indirect

impacts on water quality, and thus on the Snowy River Aquatic Ecological Community, associated with the action proposed are negligible.

Part c)
In relation to the habitat of a threatened species or ecological community:

(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and

i. Effects on Extent of Habitat

Threatened Species

There are no threatened species that would be impacted within the study area.

Endangered Populations

There are no endangered populations within the study area.

Endangered Ecological Communities

The action proposed will affect <100m^2 of the local occurrence of the Snowy River Aquatic Ecological Community, albeit being highly disturbed.

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and

ii. Effects on Habitat Connectivity

Threatened Species

There are no threatened species that would be impacted within the study area.

Endangered Populations

There are no endangered populations within the study area.

Endangered Ecological Communities

The action proposed will not have any substantial adverse impacts on the habitat connectivity for the Snowy River Aquatic Ecological Community. Similar or larger disruptions to the aquatic habitats are already present. There is no evidence to suggest that these relatively minor disruptions to habitat connectivity have resulted in substantial adverse impacts on aquatic habitats or the Snowy River Aquatic Ecological Community.

In the context of the threatening processes adversely affecting the Snowy River Aquatic Ecological Community, such as flow regulation, the impacts of the action proposed are negligible.

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

iii. Importance of Habitat to be Affected

Threatened Species

There are no threatened species that would be impacted within the study area.

Endangered Populations

There are no endangered populations within the study area.

Endangered Ecological Communities

The habitats to be affected by the action proposed are insignificant in the context of the extent of contiguous habitat for the Snowy River Aquatic Ecological Community. The habitats within the study area are not expected to support a unique or otherwise important assemblage of Snowy River Aquatic Ecological Community. In any case, the action proposed is not expected to have any substantial adverse impacts on the Snowy River Aquatic Ecological Community.

The habitats to be affected by the action proposed are not considered to be particularly important to the Snowy River Aquatic Ecological Community.

(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),

The subject site and locality is not a declared area of outstanding biodiversity area.

(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

The proposal is not likely to contribute to the increase the impact of any key threatening process.

APPENDIX E

EPBC PROTECTED MATTERS REPORT

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 07-Nov-2023

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	30
Listed Migratory Species:	10

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	17
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	4
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text
Natural Temperate Grassland of the South Eastern Highlands	Critically Endangered	Community likely to occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text
BIRD		
Anthochaera phrygia		
Regent Honeyeater [82338]	Critically Endangered	Species or species habitat may occur within area
Aphelocephala leucopsis		
Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Callocephalon fimbriatum		
Gang-gang Cockatoo [768]	Endangered	Species or species habitat likely to occur within area
Calyptorhynchus lathami lathami		
South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Climacteris picumnus victoriae		
Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area
Grantiella picta		
Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area
Hirundapus caudacutus		
White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Lathamus discolor		
Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area
Melanodryas cucullata cucullata		
South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area
Neophema chrysostoma		
Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area
Pycnoptilus floccosus		
Pilotbird [525]	Vulnerable	Species or species habitat may occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Stagonopleura guttata		
Diamond Firetail [59398]	Vulnerable	Species or species habitat likely to occur within area
FISH		
Prototroctes maraena		
Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
MAMMAL		
Dasyurus maculatus maculatus (SE mainland population)		
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text
[Petauroides volans](#) Greater Glider (southern and central) [254]	Endangered	Species or species habitat may occur within area
[Petaurus australis australis](#) Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area
[Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)](#) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat likely to occur within area
PLANT		
[Calotis glandulosa](#) Mauve Burr-daisy [7842]	Vulnerable	Species or species habitat likely to occur within area
[Dodonaea procumbens](#) Trailing Hop-bush [12149]	Vulnerable	Species or species habitat may occur within area
[Glycine latrobeana](#) Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat may occur within area
[Lepidium hyssopifolium](#) Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed [16542]	Endangered	Species or species habitat may occur within area
[Leucochrysum albicans subsp. tricolor](#) Hoary Sunray, Grassland Paper-daisy [89104]	Endangered	Species or species habitat likely to occur within area
[Prasophyllum petilum](#) Tarengo Leek Orchid [55144]	Endangered	Species or species habitat may occur within area
[Senecio macrocarpus](#) Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area
[Thesium australe](#) Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text
Xerochrysum palustre		
Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area
REPTILE		
Aprasia parapulchella		
Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat may occur within area
Delma impar		
Striped Legless Lizard, Striped Snake-lizard [1649]	Vulnerable	Species or species habitat may occur within area

Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Hirundapus caudacutus		
White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat may occur within area
Myiagra cyanoleuca		
Satin Flycatcher [612]		Species or species habitat likely to occur within area
Rhipidura rufifrons		
Rufous Fantail [592]		Species or species habitat likely to occur within area
Migratory Wetlands Species		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
Bubulcus ibis as Ardea ibis		
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area overfly marine area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area overfly marine area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat may occur within area overfly marine area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat likely to occur within area overfly marine area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area overfly marine area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Rostratula australis as Rostratula benghalensis (sensu lato)		
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area

Extra Information

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State
Southern RFA	New South Wales

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed
Not controlled action (particular manner)			
Aerial baiting for wild dog control	2006/2713	Not Controlled Action (Particular Manner)	Post-Approval
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

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-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

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