

June 2024

Planning approvals discussion paper

Wolgan Road reconstruction project

Contents

Executive summary	5
The Project	5
Key environmental constraints	5
Planning approval pathway	6
Items for further consideration	6
1 Introduction.....	8
1.1 Background to the project	8
1.1.1 <i>Current situation</i>	8
1.1.2 <i>Disaster recovery funding</i>	8
1.2 Purpose of this report.....	8
1.3 Methodology.....	10
1.4 Key assumptions and limitations.....	10
2 Overview of the project.....	12
2.1 Project need and objectives	12
2.1.1 <i>Project need</i>	12
2.1.2 <i>Project objectives</i>	12
2.2 Investigations carried out to date	12
2.3 Project description.....	13
2.4 Community and stakeholder consultation	15
3 Environment context.....	16
3.1 Aboriginal heritage	16
3.2 Property and land use	17
3.2.1 <i>Native title and land claims</i>	17
3.2.2 <i>National Parks Estate</i>	18
3.2.3 <i>Crown land</i>	19
3.3 Non-Aboriginal heritage.....	20
3.3.1 <i>Listed items</i>	20
3.3.2 <i>Nomination for National heritage listing</i>	20
3.4 Biodiversity	21
3.4.1 <i>Vegetation</i>	21
3.4.2 <i>Threatened species</i>	24
3.5 Catchments	24
4 NSW planning considerations.....	25
4.1 Permissibility	25
4.1.1 <i>Lithgow Local Environment Plan (LEP) 2014</i>	25
4.1.2 <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>	25
4.2 Environmental Planning and Assessment (EP&A) Act 1979.....	25

4.2.1	<i>Environmental impact assessment pathway – an REF or EIS?</i>	25
4.2.2	<i>Guidelines for Division 5.1 assessments</i>	26
4.2.3	<i>State significant infrastructure (SSI) considerations</i>	26
4.3	Other relevant NSW Environmental Planning instruments (EPIs) and legislation	27
4.3.1	<i>NSW Reconstruction Authority Act 2022</i>	27
4.3.2	<i>Environmental Planning and Assessment Regulation 2021</i>	28
4.3.3	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>	28
4.3.4	<i>National Parks and Wildlife Act 1974</i>	29
4.3.5	<i>Aboriginal Land Rights Act 1983</i>	30
4.3.6	<i>Crown Land Management Act 2016</i>	30
4.3.7	<i>Biodiversity Conservation Act 2016</i>	31
4.3.8	<i>Protection of the Environment Operations Act 1997</i>	32
4.3.9	<i>Protection of the Environment Operations (Waste) Regulation 2014</i>	33
4.3.10	<i>Fisheries Management Act 1994</i>	33
4.3.11	<i>Other NSW legislation</i>	33
5	Commonwealth planning considerations	36
5.1	<i>Environment Protection and Biodiversity Conservation (EPBC) Act 1999</i>	36
5.2	<i>Native Title Act 1993</i>	37
6	Key findings and items for further consideration	38
6.1	<i>Key findings</i>	38
6.1.1	<i>Planning approval pathway</i>	38
6.1.2	<i>Property</i>	38
6.1.3	<i>Aboriginal heritage</i>	39
6.1.4	<i>Biodiversity</i>	39
6.1.5	<i>Non-Aboriginal heritage</i>	39
6.2	<i>Items for further consideration</i>	39
6.2.1	<i>Design development</i>	39
6.2.2	<i>Property considerations</i>	40
6.2.3	<i>Project development (program and scope) considerations</i>	40
6.2.4	<i>Consultation</i>	41
	Attachment A – Framework stakeholder engagement strategy	42
	Attachment B – Environmental constraints mapping	43
	Attachment C – EP&A Regulation Section 171(2) factors	44
	Attachment D – Preliminary consideration of biodiversity offset costs	48
	Attachment E – EPBC Act protected matters search report	49

Quality control

List of tables

Table 3-1: PCTs within the Project footprint	21
Table 4-1: Reconstruction Authority Act Section 68 authorisation requirements	28
Table 4-2: Biodiversity offset requirements	32
Table 5-1: Potential relevance of each of the MNES, and Commonwealth land, to the Project area	36

List of figures

Figure 1-1: Location of Wolgan Road and the Project.....	9
Figure 2-1: Preliminary Project design alignment.....	14
Figure 3-1: Aboriginal sites and places relative to the Project footprint.....	17
Figure 3-2: Native Title claim NSD857/2017 – Warrabinga-Wiradjuri #7 relative to the Project footprint	18
Figure 3-3: National Parks Estate relative to the Project footprint.....	19
Figure 3-4: Crown land relative to the Project footprint	20
Figure 3-5: PCTs mapped as part of the survey carried out by WSP	22
Figure 3-6: PCTs as per the State Vegetation Type Map.....	23

Executive summary

The Project

Wolgan Road was closed to traffic in November 2022 by Lithgow City Council (Council) due to geotechnical risks and land slips and rock falls. This has isolated a community of about 150 residents and businesses in Wolgan Valley. Soon after the road was closed to traffic Council engaged Public Works to construct an interim alternate access road along the eastern side of the Wolgan Gap based closely on the route of an existing historic track known as the Donkey Steps. This access has provided some relief by allowing restricted access for residents but is not suitable as a permanent all vehicle access solution.

Council are currently in the process of investigating options for the construction of a new road alignment further south from the existing road (the Project) for which disaster recovery funding will be sought. bd infrastructure has been engaged by Council to develop a planning approvals discussion paper that identifies planning approval pathway options for the Project and documents environmental constraints and related legislative considerations relevant to the Project.

Key environmental constraints

Key environment and property considerations that will need to be managed as part of the planning approval for the Project include:

- property and land use constraints including:
 - potential for National Parks estate (Gardens of Stone State Conservation Area) revocation
 - direct impacts to Crown land with native title claim across part of the Crown land (no acquisition of Crown land can progress until any Aboriginal land claim or native title claim over the land are reconciled with the proposed acquisition)
- biodiversity constraints including:
 - five threatened species (one flora and four fauna) with confirmed presence at the Project site based on survey and Bionet records
 - eight threatened flora species assessed having a moderate likelihood of occurrence (none assessed as having a high likelihood of occurrence) in the area surrounding the project site
 - 31 fauna species assessed having a moderate likelihood of occurrence and seven assessed as having a high likelihood of occurrence in the area surrounding the project site
 - none of the plant community types (PCTs) identified during surveys (or State Vegetation Type Map (SVTM) PCTs beyond the survey limits) are listed as Threatened Ecological Communities (TECs)
- Aboriginal heritage constraints including:
 - direct impacts to a registered Aboriginal site (Blackfellows Hand) protected under the *National Parks and Wildlife Act 1974* and also subject to The *Blackfellows Hand Reserve (Maiyingu Marragu) Management and Biodiversity Plan* (EcoLogical Australia, 2013)
 - a relatively high likelihood (based on density of known Aboriginal items and the undisturbed nature of the area surrounding the Project site) that other Aboriginal items (artefacts) and/ or areas of cultural and social significance could be present
- the southern most part of the Project is within the declared Greater Sydney Drinking Water Catchment (the Project area is not identified as a Schedule 1 controlled area or Schedule 1 or Schedule 2 special area)
- a large proportion of the Gardens of Stone State Conservation Area (along with other areas) is being considered for National Heritage listing (nomination, not currently listed) by the Australian Heritage Council under the EPBC Act.

Planning approval pathway

The Project is permissible without consent under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Part 5, Division 5.1 of the EP&A Act applies, and an REF or EIS will need to be prepared.

Preliminary (desk-top based) consideration of the factors set out in clause 171(2) of the EP&A Regulation has been carried out to further understand the likely impact of the Project on the environment. The assessment identified the following key issues that warrant further investigation as to the significance of their impact (to support Council form a view as to whether the Project is likely to have a significant impact on the environment and as such whether an EIS is required):

- extent of impact within the Blackfellows Hand Aboriginal Place, an area of Crown land seen as an important meeting and educational place with special meaning for Wiradjuri people the wider Aboriginal community
- biodiversity impacts to threatened species listed under the NSW *Biodiversity Conservation Act 2016* (BC Act) and/ or Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) due to clearing of land for both construction access and the proposed road alignment itself
- potential for a substantial reduction in the aesthetic quality/ value of the locality (from particular viewpoints within Wolgan Valley looking south/ southeast towards Wolgan Gap) with some cuttings (excavation into the mountain side) for the Project reaching around 65 metres in height in order to achieve road gradients.

Based on the above, for the purposes of the funding application process, and based on the need for further investigations to confirm the significance of impacts, it is recommended that the Project team assume program, cost and consultation requirements associated with the development of an EIS rather than an REF.

The requirements of the EP&A Act would not however apply if the Minister for Planning and Public Spaces were to authorise the Project to be undertaken without the need for an EP&A Act approval or assessment under (and consistent with the requirements of) Section 68 of the NSW Reconstruction Authority Act 2022.

Items for further consideration

In developing the planning approvals discussion paper, the following items have been identified for further consideration as part of the project development process:

- all other alignment options (Options 2, 3 and 5) performed better than the preferred alignment option in relation to environment and cultural heritage factors. As the project design develops Council should continue to focus on identifying opportunities to avoid and further minimise environment and heritage impacts
- given the importance of the site to Aboriginal people, and the potential landscape impacts of the Project, consider input from appropriately experienced urban and landscape designers to support the Project to achieve positive outcomes per the DPHI guideline *Better Placed – Connecting with Country* (DPE, 2023)
- consultation requirements and timeframes required in preparing an Aboriginal Cultural Heritage Assessment Report (ACHAR) should inform the master program for the Project and commence as early as possible
- specialist property advice should be sought on program and cost impacts associated with National Parks revocation (including property offset requirements), Crown land acquisition or lease, impacts to land subject to native title claims and (as applicable) Aboriginal land rights claims
- on-site investigations including geotechnical or survey investigations, require separate planning approvals. Access to desired investigation locations (depending on property ownership) can also be restrictive (e.g. access to National Park estate). Preparation of planning approval documentation (including consultation requirements/ timeframes) for site investigations should be considered in the master program for the Project
- consider carrying out further detailed biodiversity investigations (in accordance with the BAM) early in the project development process to inform design development and to assist Council in determining whether the Project may have significant biodiversity impacts and whether an EIS (or REF and SIS) is required. Consideration should also be given to potential program impacts associated with requirements for spring surveys as part of any biodiversity assessment/ BDAR
- based on an indicative Project footprint, around 24.43 hectares of native vegetation removal is required. Allowance (cost and program) for biodiversity offsets should be considered. Preliminary (desktop-based) biodiversity offset calculations suggest an allowance of around \$6,000,000 should be made

- other 'related' cost and program considerations linked to securing and managing licenses and permits during construction should be allowed for. For example, an Environment Protection License (EPL) or to meet conditions of a resource recovery order and exemption as part of any spoil re-use strategy.

1 Introduction

1.1 Background to the project

1.1.1 Current situation

In November 2022, heavy rain caused a landslide and rockfall, severely damaging a section of Wolgan Road, around four kilometres north of Lidsdale. Damage to the road rendered the road impassable and isolated properties in the Wolgan Valley situated north of Wolgan Gap. Wolgan Road, a two-lane, all-weather road, is the only access to Wolgan Valley and the village of Newnes.

It connects private properties, Cranbrook School's rural campus, and popular tourist destinations including Wollemi National Park, Gardens of Stone National Park, and the Emirates Resort.

To restore emergency vehicle and resident access, Lithgow City Council (Council) built an emergency access road to bypass the damaged area in early 2023. The temporary emergency road is only used by residents, Council, and emergency vehicles. This single-lane route requires four-wheel drive vehicle access with traffic managed by a pilot vehicle guide. It has been used as an interim measure while Council investigated ways to stabilise the cliff face and repair the road.

Since Wolgan Road has been closed, additional active landslides and slope hazards have occurred, and further investigations have deemed repairs to Wolgan Road as unviable. Council are currently in the process of investigating options for the construction of a new road alignment further south from the existing road (the Project). Figure 1-1 shows the location of Wolgan Road and the Project.

1.1.2 Disaster recovery funding

Under the NSW Disaster Assistance Guidelines (DAG), the NSW Government provides financial assistance to councils to restore essential public assets that are damaged as a direct result of an eligible disaster. This assistance is partially supported by the Australian Government under the Disaster Recovery Funding Arrangements (DRFA).

Wolgan Road is defined as an essential public asset and disaster assistance for its reinstatement is captured under the 'essential public asset reconstruction works' category of the DAG and DRFA. Council must secure funding approval from Transport for NSW (Transport), the administering agency, prior to commencing essential public asset reconstruction works.

1.2 Purpose of this report

bd infrastructure has been engaged by Council to develop a planning approvals discussion paper that identifies planning approval pathway options for the Project, and legislative considerations in relation to environmental aspects and constraints relevant to the area surrounding the Project site.

The objective of this planning approvals discussion paper is to identify Commonwealth and State legislation that may be relevant to the Project and to inform Council of their options in relation to planning approval pathways. Potential program and/ or project delivery risks relating to environment and planning requirements have been identified to assist with informing the disaster recovery funding application process.

Broad consideration, based on desktop review, has been given to the potential impacts of the Project, however it is not possible based on a desktop level of assessment to definitively advise on whether the Project should be subject to a Review of Environmental Factors (REF) or an Environmental Impact Statement (EIS) under Part 5, Division 5.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).



Figure 1-1: Location of Wolgan Road and the Project

1.3 Methodology

This planning approvals discussion paper has been developed based on a detailed review of background information relating to the Project, including design and technical options reports and previous on-site investigations. Publicly available environmental databases have been used to present desktop-based environmental constraints mapping relevant to the area surrounding the Project site.

The preparation of this planning approvals discussion paper has not included commissioning of any new site-specific studies or assessments by technical specialists (ie only reports that have previously been prepared to support other project development processes have supported development of this discussion paper).

Examples of the information sources utilised in preparing this planning approvals discussion paper include:

- planning - review of relevant environmental legislation and planning instruments to identify any potential planning issues or considerations
- biodiversity - data sources including:
 - State Vegetation Type Map, Bionet species sighting data and the Bionet vegetation classification system
 - Ecological constraints paper (WSP, April 2024)
 - Review of Environmental Factors – Wolgan Road Emergency Bypass Project (The Environmental Factor, November, 2022)
- Aboriginal heritage:
 - Aboriginal Heritage Information Management System (AHIMS)
 - *Blackfellows Hand Reserve (Maiyingu Marragu) Management and Biodiversity Plan* (EcoLogical Australia, 2013)
- Non-Aboriginal heritage: identification of built, archaeological and landscape items and statutory status from available data sources, including:
 - Australian Heritage Database
 - State Heritage Inventory (including the State Heritage Register)
 - Various non-statutory lists
 - Lithgow Local Environment Plan 2014
- Water and catchment management via watercourse layers from the Digital Topographic Database and data from WaterNSW regarding drinking water catchments
- Land use and property: identification of existing land uses and zoning and property types and any special lands (e.g. National Parks, Aboriginal Land Council Land, land subject to Native Title, Crown land, etc), including review of:
 - National Native Title Tribunal's Native Title Vision website
 - search of the Land Claim Register with the office of the Registrar (*Aboriginal Land Rights Act 1983*)
 - DPE planning portal data
 - existing plans of management relevant to the area surrounding the Project
- Topography, geology and soils via the Digital Topographic Database, geological mapping, soil landscape mapping, acid sulfate soil risk mapping and eSpade.

1.4 Key assumptions and limitations

Key assumptions and limitations in relation to the development of this planning approvals discussion paper include:

- legislative and policy change is constant. Observations made in relation to the suitability of the approval pathway options raised may change over time. This document presents a point in time evaluation of the Project against existing legislation and policy frameworks

- this discussion paper has been prepared from the perspective of experienced planning practitioners and should not be interpreted as any form of legal review or legal advice. Any legal issues raised should be reviewed by a legal practitioner
- observations made in relation to whether the Project may significantly affect the environment are preliminary in nature and based on desktop analysis/ literature review with limited site-specific information. As proponent for the Project, Council is responsible for forming its own view in this regard.
- observations about the existing environment are primarily based on publicly available datasets and some biodiversity field survey carried out by others in late 2023. There has been no field verification of desktop data carried out in preparing this discussion paper.

2 Overview of the project

2.1 Project need and objectives

2.1.1 Project need

Wolgan Road was closed to traffic in November 2022 by Lithgow City Council (Council) due to geotechnical risks and land slips and rock falls. This has isolated a community of about 150 residents and businesses in Wolgan Valley. The following is a summary of the key issues associated with the current condition of Wolgan Road:

- numerous rockfall and landslide hazards are present above and below the road and the road is severely damaged over large sections
- the road is considered to present an unacceptable loss of life risk to motor vehicle users and an unacceptable property risk
- due to the nature of the terrain and identified slope hazards, safe investigation and permanent remediation would be a complex, costly and lengthy exercise.
- a valley wide slope hazard susceptibility assessment found the existing closed road to lie in the most susceptible terrain and even with large investments in investigation and remediation, the road and its users would remain at significant risk from rockfall and landslide hazards.

Council engaged Public Works to construct an interim alternate access road along the eastern side of the Wolgan Gap based closely on the route of an existing historic track known as the Donkey Steps. This access has been used by four-wheel drive vehicles since January 2023 in accordance with Council's *Donkey Steps Emergency Bypass Route Access Strategy Plan* (Lithgow City Council, 2023).

This access has provided some relief by allowing restricted access for residents but is not suitable as a permanent all vehicle access solution in replacement of the original (now closed) road on the western side of the valley.

2.1.2 Project objectives

The objectives for the Project during the disaster relief funding application phase are detailed below:

- obtain financial assistance under the NSW Disaster Assistance Guidelines (DAG) to fully fund the reconstruction of Wolgan Road, Wolgan Valley
- design and construct a new Wolgan Valley permanent access road suitable for all vehicle access in replacement of the original (now closed) road on the western side of the valley
- maintain historic track known as the Donkey Steps.

Various criteria were adopted as outlined in the *Wolgan Valley Access Road – Alignment Options Assessment Report* (WSP, October 2023) to inform design solutions, for example standards and specifications to be adopted, general road design criteria, cross section design criteria, bridge design criteria, drainage design criteria etc.

2.2 Investigations carried out to date

Investigations carried out to date for the Project area as part of delivering the emergency access arrangement and as part of investigations to support a permanent solution have included:

- Wolgan Road Corridor Assessment Report (WSP, December 2022)
- Review of Environmental Factors for the Wolgan Road Emergency Bypass Project (The Environmental Factor, November 2022)
- Addendum Review of Environmental Factors for the Wolgan Road Emergency Bypass Project (The Environmental Factor, December 2022)

- Wolgan Valley Access Road – Alignment Options Assessment Report (WSP, October 2023)
- Biodiversity constraints investigation for Project alignment options (WSP, April 2024).

2.3 Project description

Based on the investigations carried out to date, including in relation to corridor options and design alignment options within the preferred corridor, the preferred design alignment for the Project is shown in Figure 2-1.

The Project would be around 2.5 kilometres in length and would have a variable posted speed of between 40 and 50 kilometres per hour. It would be a two-lane road (one lane in each direction) with a desired gradient of 10 percent where achievable and a maximum gradient of 17 percent. It would connect with the existing (closed) Wolgan Road in the north and south.

To cater for desired and maximum gradients, at the southern end of the project (passing through the escarpment at Wolgan Gap) the current (preliminary) design includes two cut faces up to 65 metres in height and a switch-back arrangement.

The existing emergency access track (the Donkey Steps) would need to be used to support construction and would also require some widening and improvements at the southern end to cater for construction vehicles. This access would also be used by property owners in Wolgan Valley. Construction activities are expected to be carried out during standard working hours.



Figure 2-1: Preliminary Project design alignment

2.4 Community and stakeholder consultation

Since the existing Wolgan Road was closed in November 2022, Council has carried out the following key consultation activities with stakeholders and the community:

- November 2022 and ongoing – weekly meetings with the Wolgan Valley community to keep them informed of progress on emergency access arrangements and involvement in the development of access strategies and the alternative route analysis
- a dedicated page on Council’s website. The website provides access to key supporting documents on the Wolgan Road disaster response, including:
 - Wolgan Road alternate corridor assessment report (December 2022)
 - Alignment options report and preferred option status update (November 2023)
 - Review of Environmental Factors (REF), Addendum REF for ‘donkey steps’ emergency access (November/ December 2023)
 - Donkey steps access strategy (February 2024)
 - Project update (April 2024)
- early 2023 - Mingaan Wiradjuri Aboriginal Corporation involvement in assessment and safeguarding of Aboriginal heritage during emergency access works for the donkey steps
- November 2023 – community meeting
- April 2024 – briefing of Emirates representative on progress of disaster relief funding application process
- May 2024 – briefing with the Department of Planning, Housing and Infrastructure (DPHI) on the project and preliminary views on the planning approval pathway and environmental constraints
- May 2024 – on-site briefing with the Mingaan Wiradjuri Aboriginal Corporation on the project and current design.

As project development continues there will be a need to continue to engage with key stakeholders and the community. A framework stakeholder and engagement strategy has been included as **Attachment A** that could be used as the basis for development of community and stakeholder engagement plan that would support all stages of project development, importantly including dovetailing of consultation driven by planning approval processes with broader consultation needs.

3 Environment context

This chapter outlines the potential environment and property constraints related to the Project site. Environmental constraints mapping is included at **Attachment B**.

3.1 Aboriginal heritage

An Aboriginal Heritage Information Management System (AHIMS) search was carried out in April 2024 for the following area [*Lat, Long from: -33.3315, 150.0814 - Lat, Long to: -33.2956, 150.1432*]. This search identified:

- 22 Aboriginal sites are recorded in or near the above location
- one Aboriginal place has been declared in or near the above location (Blackfellows Hand Aboriginal Place).

The Project footprint encroaches the Blackfellows Hand Aboriginal Place. The footprint does not encroach any known Aboriginal sites (although there may be sites in the landscape at this location which have not yet been surveyed and included in the AHIMS).

The Project footprint may include some landscape features (as identified by the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales) that indicate a higher likelihood of Aboriginal objects being present, namely:

- within 200m of waters,
- located on a ridge top, ridge line or headland
- located within 200m below or above a cliff face
- within 20m of or in a cave, rock shelter, or a cave mouth.

Impacts on Aboriginal objects and places will need to be considered as part of the environmental assessment process. Given the encroachment of the (Blackfellows Hand Aboriginal Place, and unless the Project becomes State Significant Infrastructure (SSI) (refer to Section 4.2.3), an Aboriginal Heritage Impact Permit (AHIP) (including consultation with Registered Aboriginal Parties) will need to be sought (refer to Section 4.3.4).

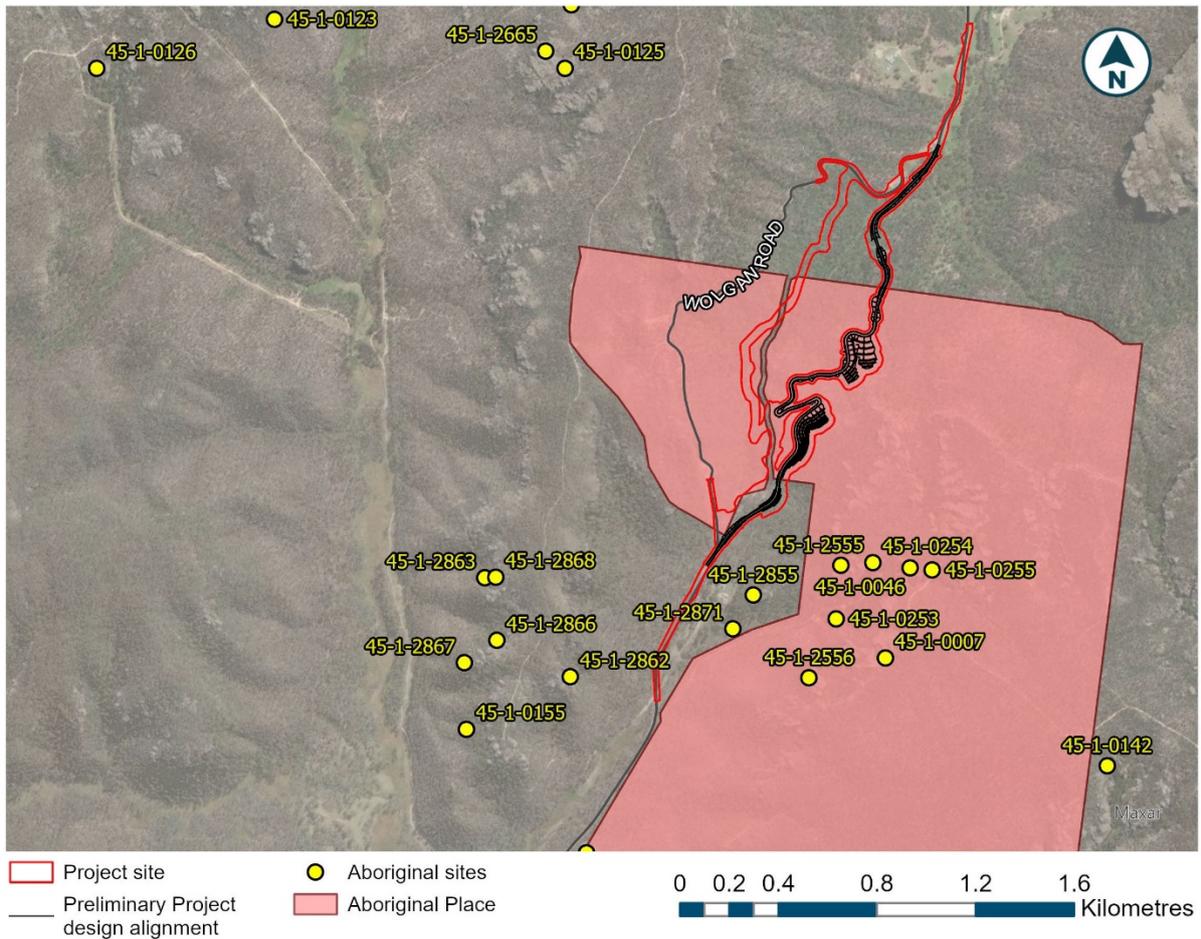


Figure 3-1: Aboriginal sites and places relative to the Project footprint

3.2 Property and land use

3.2.1 Native title and land claims

3.2.1.1 Commonwealth native title

A search of the National Native Title Tribunal's Native Title Vision website (accessed 23 May 2024) identified that the southern portion of the Project site is located within the boundary of claim NSD857/2017 – *Warrabinga-Wiradjuri #7*. The relevant provisions of the Native Title Act 1993 are discussed further in 5.2.

3.2.1.2 NSW Aboriginal land claim

The area surrounding the Project includes an area of Crown land. A request for search of Land Claim Register with the office of the Registrar has been submitted to confirm whether the land is vested in Lithgow City Council (Council) or an Aboriginal Land Council.

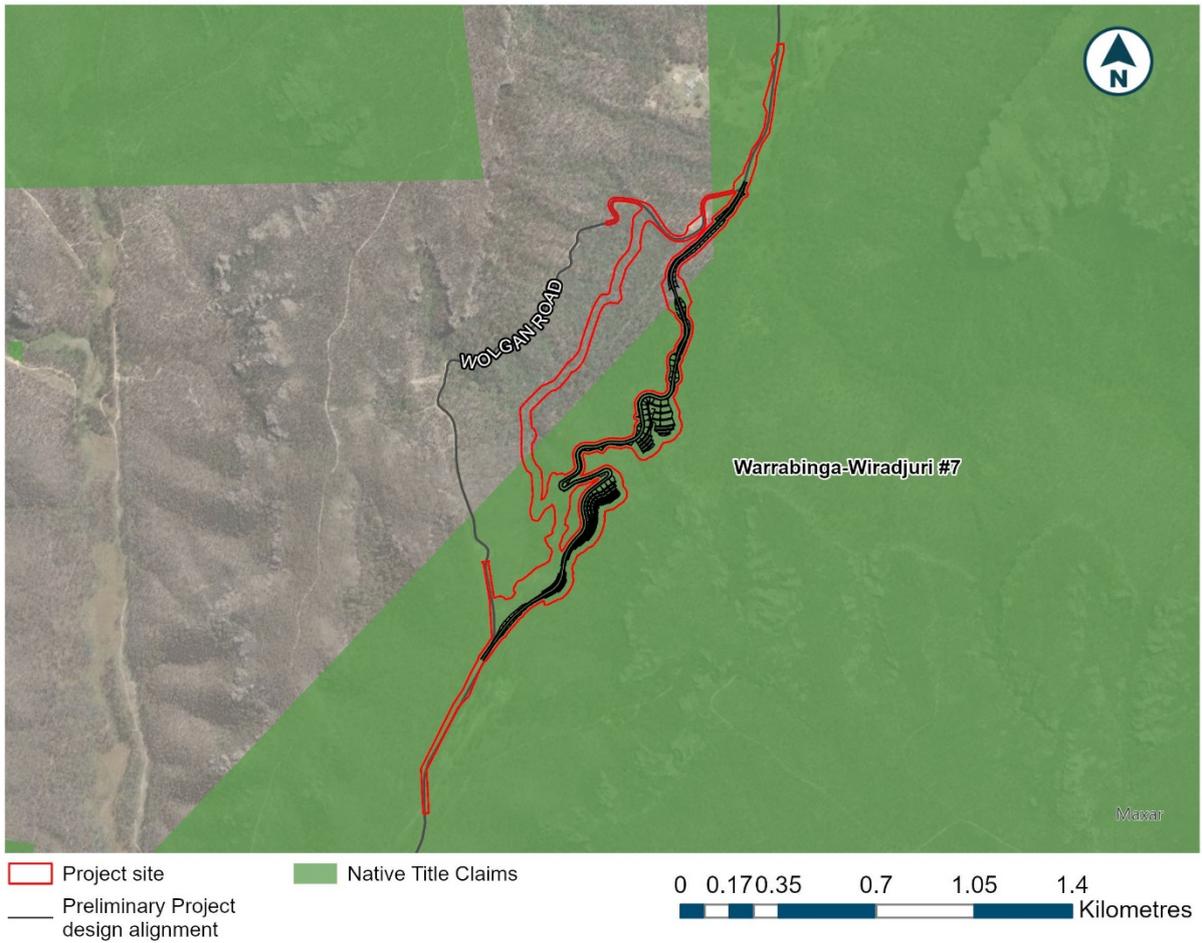


Figure 3-2: Native Title claim NSD857/2017 – Warrabinga-Wiradjuri #7 relative to the Project footprint

3.2.2 National Parks Estate

The Project encroaches the Gardens of Stone State Conservation Area at its northern and southern extent (refer to Figure 3-3). Property related considerations relevant to encroachment of National Parks Estate are discussed further in Section 4.3.4.2.

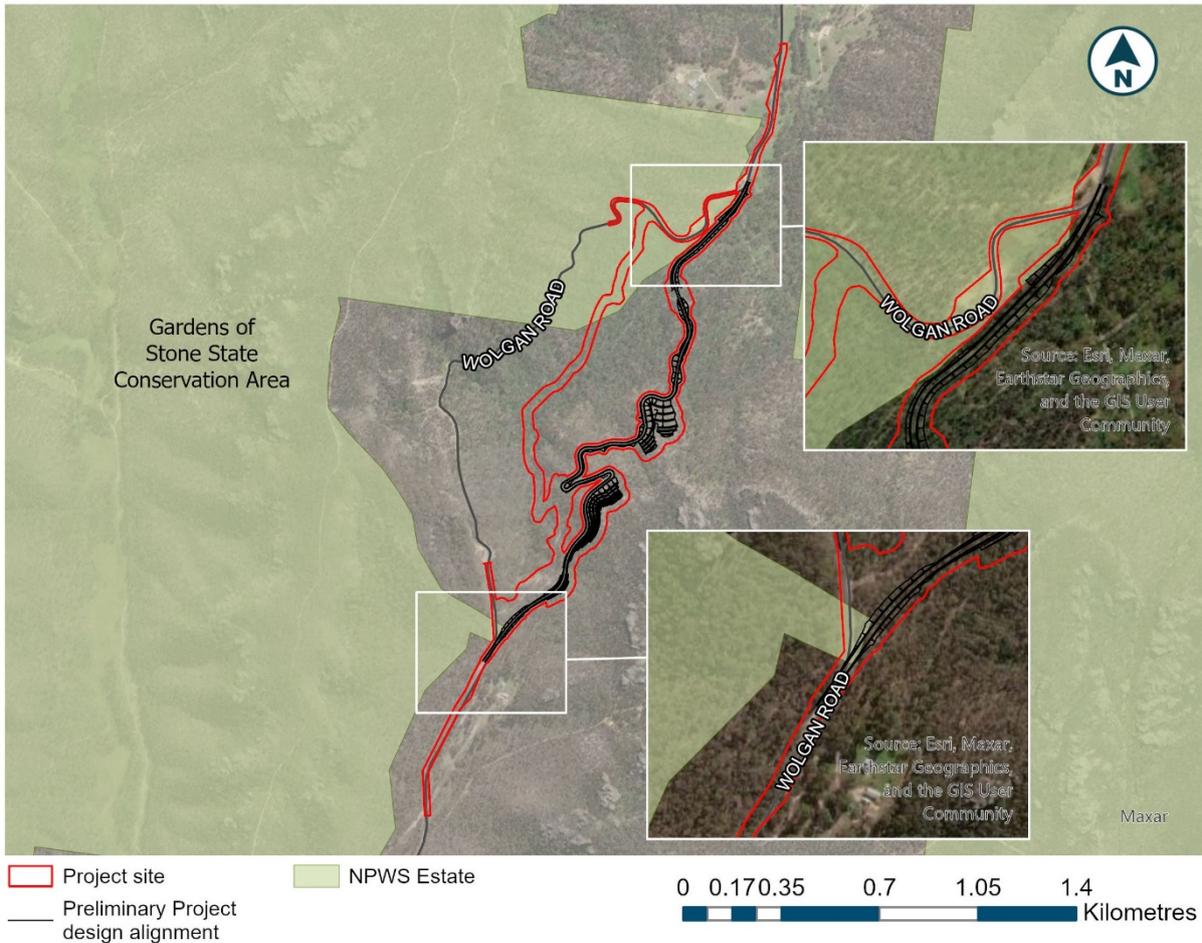


Figure 3-3: National Parks Estate relative to the Project footprint

3.2.3 Crown land

The Project encroaches several parcels of Crown land (refer to Figure 3-4). Statutory requirements affecting dealings with Crown land are discussed in Section 4.3.6).

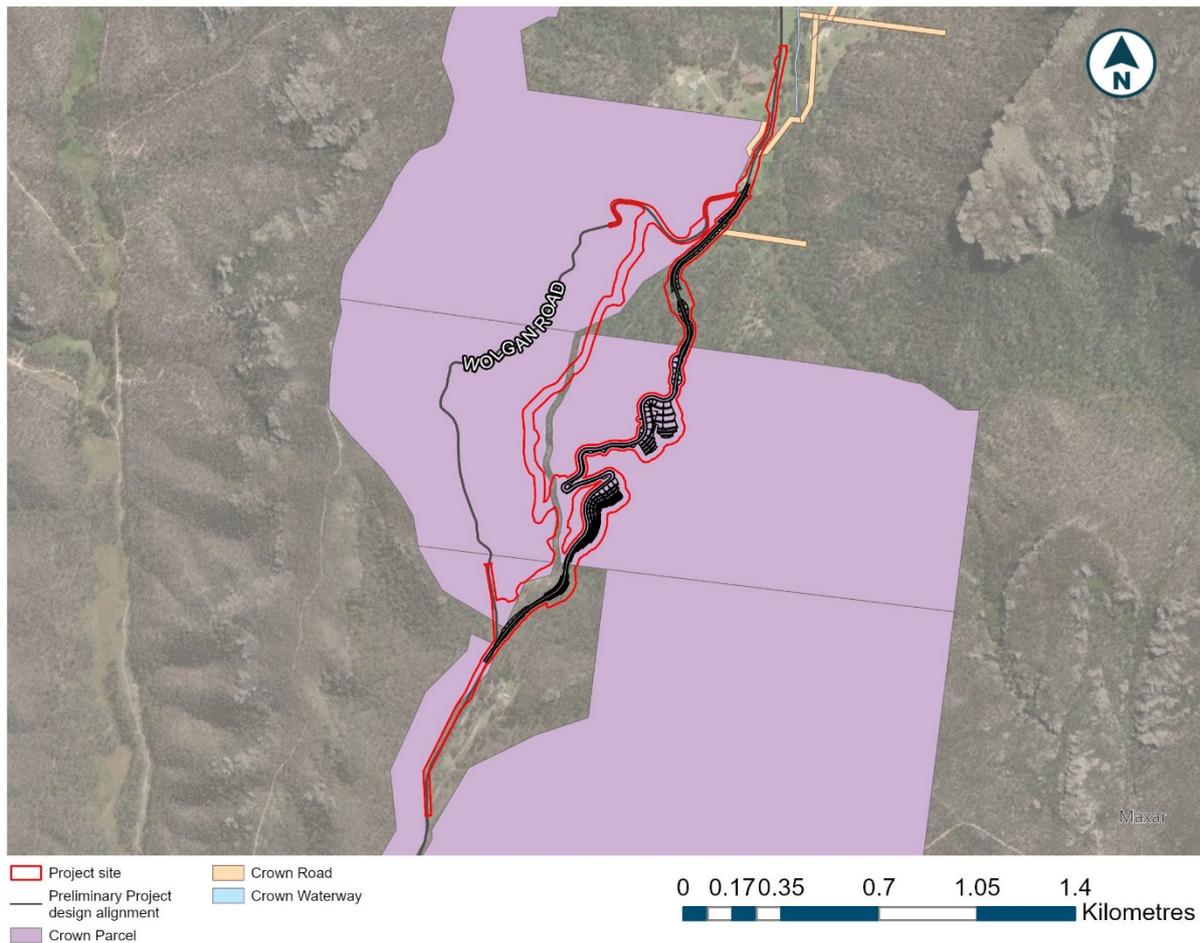


Figure 3-4: Crown land relative to the Project footprint

3.3 Non-Aboriginal heritage

3.3.1 Listed items

There is one heritage item (Wolgan Homestead (Wolgan Valley Station)) listed as occurring within the Wolgan locality under *Lithgow Local Environmental Plan 2014*. This item is identified as having local heritage significance and is several kilometres outside the Project footprint. There are no Heritage conservation areas and two Archaeological sites identified as having local heritage significance within the Wolgan locality (Newnes Historic Site Group and Christiana Williams grave) under *Lithgow Local Environmental Plan 2014*, neither of which are likely to be affected by the Project.

There are no State Heritage Register listed items within or near the project footprint.

The Greater Blue Mountains Area National Heritage place and Greater Blue Mountains World Heritage Area are located (at the nearest point) about 1.5 kilometres to the north-west of the Project.

3.3.2 Nomination for National heritage listing

The Project may have minor direct impacts on the Gardens of Stone State Conservation Area (an area that forms part of the National Parks estate). This property/ area is immediately adjacent and to the west of the Project.

A large proportion of the Gardens of Stone State Conservation Area (along with other areas) is being considered for National Heritage listing (nomination, not currently listed) by the Australian Heritage Council under the EPBC Act. The nomination is for expansion of, and listing of additional nationally significant heritage values, for the Greater Blue Mountains Area National Heritage place (<https://www.dcceew.gov.au/parks-heritage/heritage/places/world/blue-mountains/additional-values-areas>).

3.4 Biodiversity

There have been some biodiversity investigations carried out in the general area of the Project site as part of the planning approval process for the Wolgan Road Emergency Bypass Project (The Environmental Factor, November, 2022) and as part of project development investigations for current Project alignment options (WSP, April 2024). Due to ongoing design development and timing for investigations, the study area for biodiversity investigations carried out by WSP does not wholly align with the Project footprint and has been supplemented with information from the State Vegetation Type Map (SVTM).

In addition to the below discussion on vegetation and threatened species, mapped Key Fish Habitat also occurs within the Project footprint.

3.4.1 Vegetation

The Plant Community Types (PCTs) identified during field surveys (and the PCTs identified by the SVTM for those parts of the Project footprint outside the biodiversity survey area) are identified in Table 3-1 and in Figure 3-5 and Figure 3-6 respectively.

Table 3-1: PCTs within the Project footprint

PCT ID	PCT name	Conservation status
3495	Western Blue Mountains Monkey Gum Gully Forest	No associated threatened community
3510	Capertee Slopes Stringybark-Box Forest	No associated threatened community
3694	Upper Blue Mountains Ridgetop Woodland	No associated threatened community
3732	Capertee Uplands Enriched Stringybark Forest	No associated threatened community
3735	Central Tableland Peppermint Shrub-Grass Forest	No associated threatened community
3747	Southern Tableland Western Hills Scribbly Gum Forest	No associated threatened community
3749	Western Blue Mountains Scribbly Gum Forest	No associated threatened community
3916	Sandstone Cliff Soak	No associated threatened community
4064	Central Eastern Ranges River Oak Forest	No associated threatened community

Note: Conservation status is preliminary and for SVTM vegetation has been derived from the Bionet Vegetation Classification System

None of the PCTs identified during surveys (or SVTM PCTs beyond the survey limits) are listed as Threatened Ecological Communities (TECs) under the BC Act or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

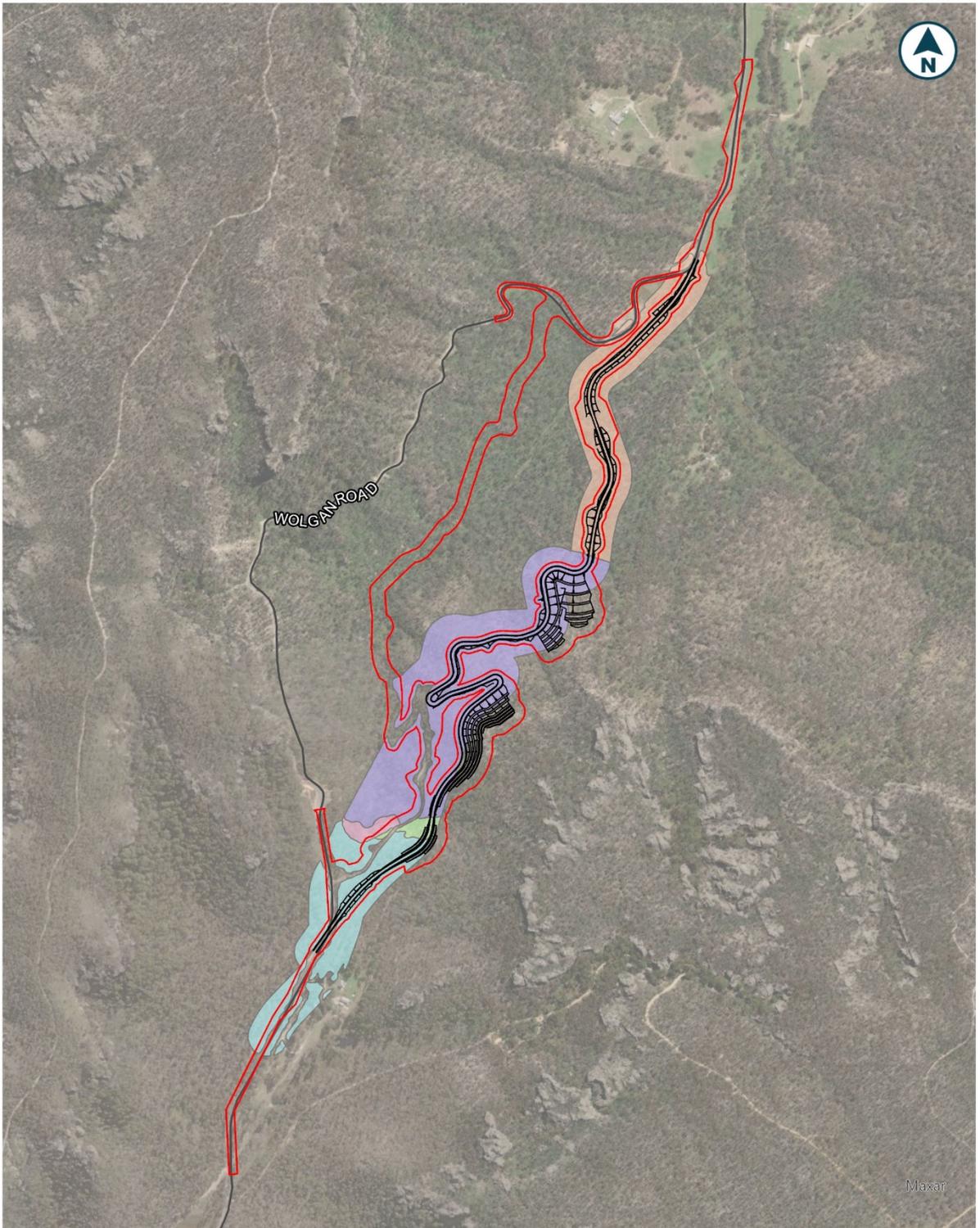
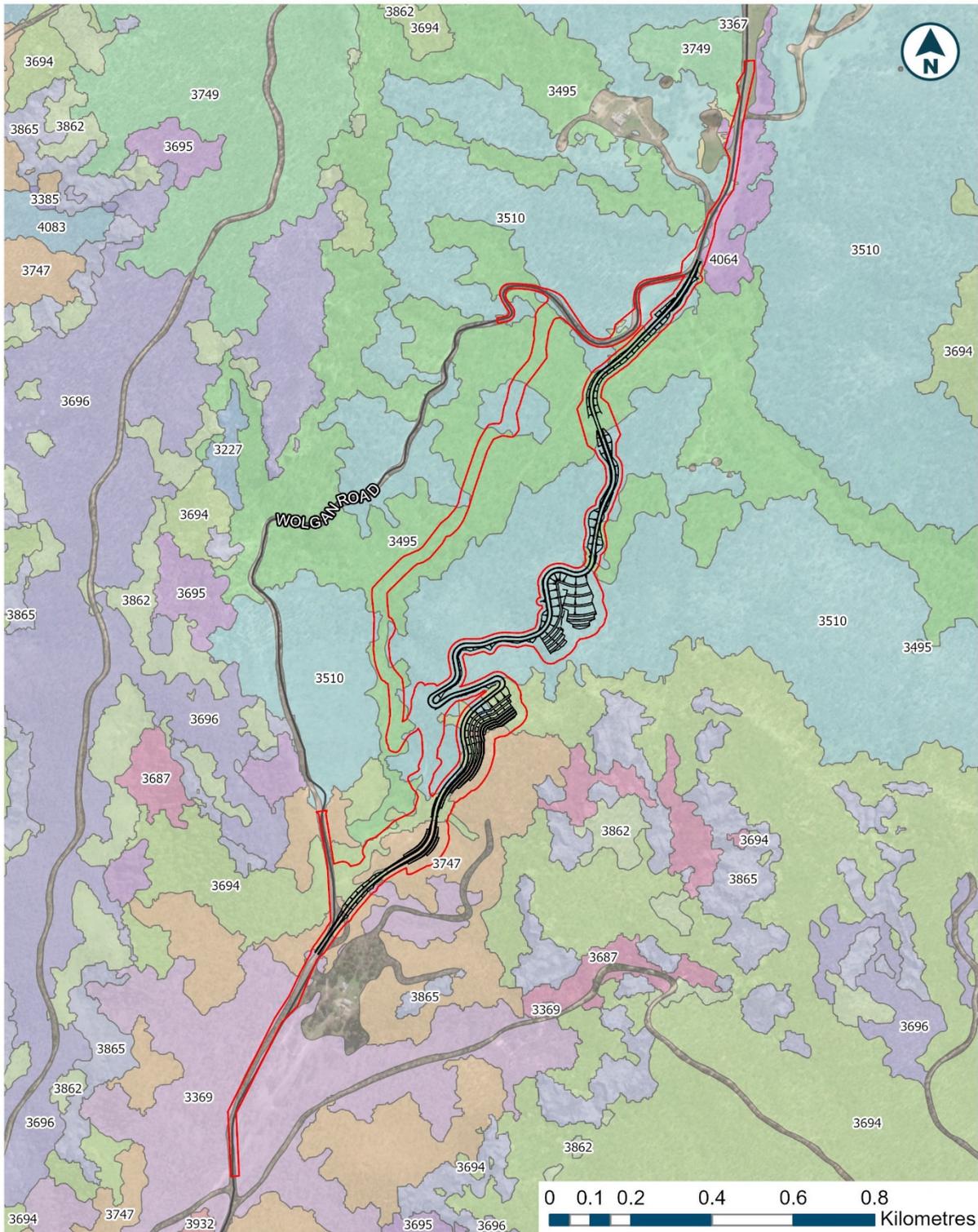


Figure 3-5: PCTs mapped as part of the survey carried out by WSP



- ▭ Project site
- Preliminary Project design alignment
- 3227, Western Blue Mountains Sheltered Shale Forest
- 3367, Central Tableland Granites Grassy Box Woodland
- 3369, Central Tableland Ranges Peppermint-Gum Grassy Forest
- 3385, Southern Tableland Creekiat Swamp Woodland
- 3495, Western Blue Mountains Monkey Gum Gully Forest
- 3510, Capertee Slopes Stringybark-Box Forest
- 3687, Newnes Plateau Peppermint-Ash Tall Forest
- 3694, Upper Blue Mountains Ridgetop Woodland
- 3695, Western Blue Mountains Peppermint Sheltered Forest
- 3696, Western Blue Mountains Rocky Scribbly Gum Woodland
- 3747, Southern Tableland Western Hills Scribbly Gum Forest
- 3749, Western Blue Mountains Scribbly Gum Forest
- 3862, Newnes Plateau Rockplate Heath
- 3865, Western Blue Mountains Pagoda Scrub
- 3932, Central and Southern Tableland Swamp Meadow Complex
- 4064, Central Eastern Ranges River Oak Forest
- 4083, Southeast Tableland Rocky Riparian Scrub

Figure 3-6: PCTs as per the State Vegetation Type Map

3.4.2 Threatened species

On-site investigations have confirmed the presence of one threatened flora species (Capertee Stringybark, *Eucalyptus cannonii*, vulnerable under the BC Act) and two threatened fauna species (Flame Robin, *Petroica phoenicea* and Glossy Black Cockatoo, *Calyptorhynchus lathami*, both also vulnerable under the BC Act) within the biodiversity survey area. There are also Bionet records Sooty Owl (*Tyto tenebricosa*) (BC Act vulnerable) and Powerful Owl (*Ninox strenua*) (BC Act vulnerable) within the Project footprint.

Analysis carried out as part of the most recent WSP investigation (April 2024) included likelihood of occurrence assessments for threatened flora and fauna species. This assessment considered occurrence for 49 flora species and of these there were 40 species (33 listed under the EPBC Act) considered as having a low likelihood of occurrence, eight (five listed under the EPBC Act) with 'moderate' likelihood of occurrence, none identified as having a 'high' likelihood of occurrence.

In relation to fauna species, the WSP investigation indicated that there were:

- 32 bird species considered, with 13 species (8 listed under the EPBC Act) considered as having a low likelihood of occurrence, 17 (five listed under the EPBC Act) with 'moderate' likelihood of occurrence, five (one listed under the EPBC Act) as having a 'high' likelihood of occurrence
- four amphibian species (all EPBC Act listed and with an assessed low likelihood of occurrence)
- 17 mammal species, with three species (two listed under the EPBC Act) considered as having a low likelihood of occurrence, 12 (five listed under the EPBC Act) with 'moderate' likelihood of occurrence, two (one listed under the EPBC Act) as having a 'high' likelihood of occurrence and none with confirmed presence on-site
- five reptile species, with three species (all listed under the EPBC Act) considered as having a low likelihood of occurrence, two (one listed under the EPBC Act) with 'moderate' likelihood of occurrence, none as having a 'high' likelihood of occurrence and none with confirmed presence on-site
- two invertebrate species (one listed under the EPBC Act and both assessed as low likelihood of occurrence).

The WSP report (April 2024) notes that the habitat areas at the Project site are part of a large area of native vegetation within Council managed Crown Land and private property which is connected to the adjacent Gardens of Stone State Conservation Area and that habitat connectivity is high.

3.5 Catchments

The Project is located at the top of the Hawkesbury Nepean Catchment (the Wolgan River flows into the Colo River in the upper reaches of the Hawkesbury Nepean Catchment). The southern most part of the Project is within the declared Greater Sydney Drinking Water Catchment. The Project area is not identified as a Schedule 1 controlled area or Schedule 1 or Schedule 2 special area.

The Greater Sydney Drinking Water Catchment is a regulated catchment as defined by State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP). See section 4.3.3 for further information.

4 NSW planning considerations

4.1 Permissibility

This section outlines the general permissibility for the Project. This section confirms that the Project is permissible without consent under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and as such the appropriate planning approval pathway for the Project would be assessment under Part 5 of the EP&A Act.

4.1.1 Lithgow Local Environment Plan (LEP) 2014

A vast majority of the land affected by the Project is zoned RU2 (Rural landscape) under the Lithgow LEP 2014. Under the Lithgow LEP 'extensive agriculture, home occupations and roads' are permitted without consent in RU2 zoning.

According to the Lithgow LEP there is a small area of RU3 (Forestry) zoning located at the southern end of the project – the area of tie-in with the existing Wolgan Road. Although zoned RU3 under the Lithgow LEP, this area forms part of the Gardens of Stone State Conservation Area (and is discussed further in section 4.3.4 below). Notwithstanding, under the Lithgow LEP 'roads and uses authorised under the *Forestry Act 2012* or under Part 5B (Private native forestry) of the *Local Land Services Act 2013*' are permitted without consent in RU3 zoning.

4.1.2 State Environmental Planning Policy (Transport and Infrastructure) 2021

State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP) is the key environmental planning instrument which determines the permissibility of an activity and under which part of the EP&A Act an activity or development may be assessed.

Division 17 Road and Traffic of the Transport and Infrastructure SEPP, specifically, clause 2.109(1) 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. 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.*

The Project may impact on land reserved under the *National Parks and Wildlife Act 1979* (NPW Act), which is discussed further in section 4.3.4 below and is unlikely to impact the Project's permissibility under Part 5 of the EP&A Act.

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

Section 4.1 above establishes that the Project is permissible without consent under Part 4 of the EP&A Act and as such Part 5 of the EP&A Act applies. This section discusses the assessment pathways within Part 5 of the EP&A Act.

4.2.1 Environmental impact assessment pathway – an REF or EIS?

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) (NSW) are the primary pieces of legislation regulating land use planning and development assessment in NSW. This legislation is supported by various environmental planning instruments including State environmental planning policies (SEPPs) and local environmental plans (LEPs).

Part 5, Division 5.1 of the EP&A Act outlines the environmental impact assessment requirements for activities undertaken by public authorities, such as Lithgow City Council (Council), which do not require development consent under Part 4 of the EP&A Act.

In accordance with section 5.5 of the EP&A Act, proponents and determining authorities, must examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment as a result of the activity. As such, in progressing a planning approval for a particular project under Part 5, Division 5.1 of the EP&A Act, Council should also consider if the Project is likely to significantly affect the environment (see section 4.2.2 for further discussion regarding the potential significance of Project impacts).

Typically, where a proponent considers that a Project is unlikely to significantly affect the environment a Review of Environmental Factors (REF) is prepared. Where a proponent considers that a Project is likely to significantly affect the environment an Environmental Impact Statement (EIS) is prepared. If in the opinion of the proponent, its likely significant effect on threatened species is the only significant effect on the environment, then section 7.8 of the *Biodiversity Conservation Act 2016* (BC Act) provides for the preparation of an REF with a species impact statement or biodiversity development assessment report (see section 4.2.2 below).

Part 5, Division 5.1 of the EP&A Act may also provide suitable planning approval pathway options for some investigative works (such as geotechnical investigations) and early / enabling works.

4.2.2 Guidelines for Division 5.1 assessments

When considering the likely impact of an activity on the environment, the proponent and determining authority must take into account the factors set out in clause 171(2) of the EP&A Regulation. These are listed in Table 1 of the DPHI *Guidelines for Division 5.1 assessments* (DPE, 2022) and a preliminary consideration of these factors has been included as **Attachment C** in line with those guidelines. The analysis has been carried out based on known (desktop level) environmental constraints and current understanding of the project scope and overarching principles in the construction strategy for the project.

In summarising the content in **Attachment C**, two, possibly three, aspects stand out as having more substantial impacts in the context of guidance provided in the *Guidelines for Division 5.1 assessments*, being:

- extent of impact within the Blackfellows Hand Aboriginal Place, an area of Crown land seen as an important meeting and educational place with special meaning for Wiradjuri people the wider Aboriginal community. This area is subject to the *Blackfellows Hand Reserve (Maiyingu Marragu) Management and Biodiversity Plan* (EcoLogical Australia, 2013) and is partially subject to a registered National Native Title Claim
- Biodiversity impacts related to clearing of land for both construction access and the proposed road alignment itself. The potential significance relating to habitat impacts for threatened species listed under the BC Act and/ or Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- the introduction of an additional road footprint in a highly visible and relatively untouched bushland area, there would likely be a substantial reduction in the aesthetic quality/ value of the locality (from particular viewpoints, including from Wolgan Valley looking south/ southeast towards Wolgan Gap) with some cuttings (excavation into the mountain side) reaching around 65 metres high in order to achieve road gradients.

4.2.3 State significant infrastructure (SSI) considerations

Where Council has formed a view that the Project is likely to significantly affect the environment, and that an EIS is required, Division 5.2, section 5.12 of the EP&A Act identifies the type of development that may be declared State Significant Infrastructure (SSI). For example, section 5.12(2) of the EP&A Act indicates that a SEPP may declare any development, or any class or description of development, to be SSI without a specific declaration by the Minister for Planning.

Clause 2.13 of *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP) declares development as SSI if it is (a) by the operation of a State environmental planning policy, permissible without development consent under Part 4 of the Act, and (b) is specified in Schedule 3 of the Planning Systems SEPP. 'General public authority activities' (Schedule 3(1)) of the Planning Systems SEPP would be the applicable pathway for the Project to be declared SSI under a SEPP, however this section does not apply to development if the proponent is a council. As such, section 5.12(4) of the EP&A Act would be the only mechanism under which the Project could be declared SSI. This would require the Minister for Planning and Public Spaces to declare the Project as SSI.

Per section 2.4 of the *Declaration of SSI and CSSI State Significant Infrastructure Guide* (DPHI, 2021) there are key reasons why the Minister may consider declaring the Project as SSI, and the proponent would need to demonstrate how the project meets these requirements. The requirements include:

- the infrastructure delivers major public benefits such as large-scale essential transport
- the infrastructure proposal is complex, unique, multifaceted or geographically broad in scale and may have conflicting or multiple planning pathways
- the infrastructure would assist in implementation of State plans, strategies and policy frameworks
- the infrastructure is a strategic priority for the State and/or the benefits of the infrastructure will extend beyond the site of the development
- the infrastructure will generate employment, attract investment or provide other economic, social, or environmental benefits to the State.

Approved SSI projects do not require a range of additional planning related approvals and authorisations that would ordinarily be needed before the project could proceed (third party approvals). This includes (as per clause 5.23 of the EP&A Act):

- a permit under s201, 205 or 219 of the *Fisheries Management Act 1994*
- an approval under Part 4 or excavation permit under s139 of the *Heritage Act 1977*
- an Aboriginal heritage impact permit under s90 of the *National Parks and Wildlife Act 1974*
- a bush fire safety authority under s100B of the *Rural Fires Act 1997*
- a water use approval under s89, a water management work approval under s90 or an activity approval (other than an aquifer interference approval) under s91 of the *Water Management Act 2000*.

Additionally, the following authorisations cannot be refused if necessary for carrying out an approved SSI project and are to be substantially consistent with the approval (as per clause 5.24 of the EP&A Act):

- an aquaculture permit under a144 of the *Fisheries Management Act 1994*
- an approval under section 22 of the *Coal Mine Subsidence Compensation Act 2017*
- a mining lease under the *Mining Act 1992*
- a production lease under the *Petroleum (Onshore) Act 1991*
- an environment protection licence under Chapter 3 of the *Protection of the Environment Operations Act 1997* (for any of the purposes referred to in section 43 of that Act)
- a consent under section 138 of the *Roads Act 1993* (Roads Act)
- a licence under the *Pipelines Act 1967*.

Another key benefit of SSI is that once the SEARs are issued, investigation works that would otherwise require certain approvals (i.e. geotechnical / borehole testing etc) can be undertaken without such approvals (clause 5.23(4) of the EP&A Act). However, these investigative works are only allowed where they are undertaken to comply with the SEARs.

4.3 Other relevant NSW Environmental Planning instruments (EPIs) and legislation

This section provides an overview of other relevant NSW legislation considered relevant to the project. This is not an exhaustive list and is based on our understanding of the Project and the environmental constraints outlined in Chapter 3 above.

4.3.1 NSW Reconstruction Authority Act 2022

The NSW Reconstruction Authority Act 2022 (Reconstruction Authority Act) has the primary objective of promoting community resilience to the impact of disasters in New South Wales through disaster prevention, preparedness and adaptation, and recovery and reconstruction following disasters.

Section 68 of the Reconstruction Authority Act allows the Minister for Planning and Public Spaces to authorise the undertaking of development without the need for an approval or assessment under the EP&A Act Minister for Planning and Public Spaces or consent from any person. Any such authorisation would need to meet the specific requirements of Section 68(3), or in exceptional circumstances Section 68(4). These requirements are outlined below in Table 4-1.

Table 4-1: Reconstruction Authority Act Section 68 authorisation requirements

Provision	Requirement
Section 68(3)	<ul style="list-style-type: none"> • request from chief executive officer, and • given <ul style="list-style-type: none"> – during a state of emergency, or – in relation to a declared project, reconstruction area or disaster prevention area, and • authorisation is necessary to protect the safety and welfare of members of the public <ul style="list-style-type: none"> – following a disaster that resulted in the declaration of the state of emergency, or – because of the disaster or likely disaster that resulted in the declaration of the declared project, reconstruction area or disaster prevention area, and • the development is in a part of the State that has been, or is likely to be, directly or indirectly affected by the disaster.
Section 68(4)	<ul style="list-style-type: none"> • exceptional circumstances exist, and • immediate action is required to protect the safety and welfare of members of the public, and • no other mechanism available under this Act would be appropriate in the circumstances. <p>'exceptional circumstances' are prescribed by the NSW Reconstruction Authority Regulation 2023 to be:</p> <ul style="list-style-type: none"> • a disaster that has resulted in significant and widespread harm to life or damage to property or the environment has occurred, • a disaster may occur that is likely to result in significant and widespread harm to life or damage to property or the environment.

4.3.2 Environmental Planning and Assessment Regulation 2021

Section 171 of the EP&A Regulation sets out the matters a determining authority (under Part 5 of the EP&A Act) must consider in identifying the likely impact of an activity on the environment. Attachment B considers the factors set out in Section 171(2) of the EP&A Regulation that help inform a proponent whether the Project may have a significant impact on the environment.

Section 171A of the EP&A Regulation addresses activities in regulated catchments and requires consideration various matters set out in the Biodiversity SEPP (including various matters relating the Greater Sydney Drinking Water Catchment.

4.3.3 State Environmental Planning Policy (Biodiversity and Conservation) 2021

State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity SEPP) includes the koala habitat protection provisions of the now repealed *State Environmental Planning Policy (Koala Habitat Protection) 2021*. These provisions aim 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 Biodiversity SEPP applies to a range of local government areas, including Lithgow LGA. Part 3.2 of the Biodiversity SEPP regulates impact on koala habitats.

Chapter 6 of the Biodiversity SEPP relates to Water Catchments. The southern most part of the Project is within the declared Greater Sydney Drinking Water Catchment. Chapter 6 requires applications in the Sydney Drinking Water Catchment to consider the following:

- impacts on aquatic ecology (Clause 6.7)
- impacts on flooding (Clause 6.8)
- impacts on recreation and public access (Clause 6.9)
- impacts on local government areas downstream of the development (Clause 6.10).

While the SEPP does not affect the permissibility of the Project as a Division 5.1 or 5.2 assessment, consideration would be required regarding the Project's impact on koala habitat and the Sydney Drinking Water Catchment. See section 4.3.1 and section 4.3.11.3 for further information.

4.3.4 National Parks and Wildlife Act 1974

4.3.4.1 Aboriginal heritage

The harming or desecrating of Aboriginal objects or places is an offence under section 86 of the NPW Act. Under Section 90, an AHIP may be issued in relation to a specified Aboriginal object, Aboriginal place, land, activity or person or specified types or classes of Aboriginal objects, Aboriginal places, land, activities or persons.

This permit would be required for the Project where the planning approval pathway falls under Part 5, Division 5.1 of the EP&A Act (REF or EIS). Where the Project is declared to be SSI (see section 4.2.3 above) an AHIP would not be required (but similar outcomes achieved through the Part 5, Division 5.2 process that includes DPHI/ Minister for Planning and Public Spaces approval).

There are a number of guidelines that should be considered as part of investigations and management of potential impacts to Aboriginal objects or places, including:

- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011)
- *Aboriginal cultural heritage consultation requirements for proponents* (NSW DECCW, 2010)
- *The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (Department of Environment, Climate Change and Water, 2010).

4.3.4.2 Property-related considerations

The Gardens of Stone State Conservation Area (an area that forms part of the National Parks estate) would be directly affected by the Project footprint based on current design and constructability information.

The National Parks and Wildlife Service (NPWS) is responsible for the care, control and management of most land reserved or acquired under the NSW *National Parks and Wildlife Act 1974* (NPW Act). The NPW Act provides that land may be reserved as a national park, nature reserve, historic site, state conservation area, regional park, Aboriginal area or karst conservation reserve.

Where an infrastructure project directly impacts land reserved under the NPW Act, being National Park land, a revocation of the land is required. Currently, only the Government (via a Cabinet proposal) and ultimately the NSW Parliament (via an Act of Parliament) can decide if land reserved under the NPW Act can be revoked. Lands reserved under the NPW Act will generally only be revoked as a last resort and where no other practical options are available.

If the affected land was to be successfully revoked, it would be rezoned SP2 Infrastructure. As a result, the restrictions on permissibility of development on land reserved under the NPW Act (presented in Section 2.109 of the Transport and Infrastructure SEPP) would not apply to the Project. Generally, compensation for the revocation of land reserved under the NPW Act involves the transfer of land to the Minister for reservation under the NPW Act (and preferably as an addition to the park that is subject to the revocation). This proposed compensatory land (to be transferred) should:

- result in an overall public good outcome having regard to all of the conservation, cultural heritage and other values of the land being revoked and the values of any land provided as compensation
- preferably be of greater size than the area of land being revoked, and must at least be of equal size
- match the area, type and quality of habitat, and cultural heritage values on land being revoked with the area of land proposed as compensation where possible.

Although this process would not affect the ability for a planning approval to proceed (under SSI), a revocation process would need to be completed before physical work can commence.

Section 188C of the NPW Act enables the boundary of land reserved or acquired under that Act which adjoins a public road to be adjusted to follow the formed path of the road, or to provide an appropriate setback from the formed road. A policy guide *Revocation, recategorisation and road adjustment policy* (DEH, 2021)

(<https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-policies/revocation->

[recategorisation-and-road-adjustment](#)) provides additional clarity on this provision. It is noted that these provisions:

- only apply to public roads
- primary function is to address anomalies between ‘paper’ roads and constructed roads to be resolved
- policy states that it does not apply to construction of a new road.

In addition, there are currently no provisions which allow access to National Park land for investigative / inspection purposes. Although these activities would generally be exempt development, access to undertake the work would need to be secured with National Parks through negotiation. This may be challenging in circumstances where the investigation or inspection does not meet the objectives of the relevant Plan of Management.

4.3.5 Aboriginal Land Rights Act 1983

Through the NSW *Aboriginal Land Rights Act 1983*, vacant Crown land not lawfully used or occupied or required for an essential purpose or for residential land, is returned to Aboriginal people (and vested in Aboriginal land councils).

Under Section 36(1) of the *Aboriginal Land Rights Act 1983*, claimable lands do not include:

- lands that are subject to an application for determination of native title (other than a non-claimant application that is an unopposed application) that has been registered in accordance with the Commonwealth Native Title Act, and
- lands that are the subject of an approved determination of native title (within the meaning of the Commonwealth Native Title Act) (other than an approved determination that no native title exists in the lands).

In accordance with Section 42B of the *Aboriginal Land Rights Act 1983*, land vested in an Aboriginal land council can only be acquired through an Act of Parliament.

The lodgement of an Aboriginal land claim by an Aboriginal land council creates what is known as an inchoate (unformed) interest in the land, the full extent of the interest only being known when the claim is assessed, and a determination is made by the relevant Minister. The NSW Government will generally not authorise any dealing in land subject to a claim that will: prevent the land being transferred to a claimant Aboriginal land council in the event it is found to be claimable; or impact on the physical condition of the land. The proponent must therefore usually seek consent from the claimant Aboriginal land council for the proposed works or activity before any landowner’s consent can be provided.

Also see section 4.3.6 below in relation to *Crown Land Management Act 2016*.

4.3.6 Crown Land Management Act 2016

The NSW *Crown Land Management Act 2016* sets out the framework for the management of Crown land in NSW. A large proportion of the Project construction footprint is on Crown land (see **Attachment B**). Where Crown land is affected, and the land is not acquired, a lease, licence or permit under the Act may be required.

The *Guideline—compulsory acquisition of Crown land* (DPIE, 2020) has been developed by DPHI in relation to the process of acquisition of Crown land. The department administers Crown land on behalf of the State of New South Wales in accordance with the *Crown Land Management Act 2016*. This legislation *ensures decision making around Crown land encompasses environmental, social, cultural heritage and economic considerations and facilitates enhanced community engagement* (DPIE, 2020).

When Crown land is made subject to a proposed compulsory acquisition, the department’s role is to represent the registered owner’s interest in that land. Under both the NSW *Aboriginal Land Rights Act 1983* and the Commonwealth *Native Title Act 1993*, Aboriginal peoples may make claims over NSW Crown land. No acquisition of Crown land can progress until any Aboriginal land claim or native title claim over the land are reconciled with the proposed acquisition.

All Crown land is considered to be subject to Native title rights unless a determination of Native title has been made by the Federal Court. As part of pre-acquisition procedures and to inform their process, the authority must establish the Native title status of the land through a historic and current status review. As discussed in

section 5.2 below, the Register of Native Title Claimants identifies that part of the Project area is subject to an application under the Commonwealth *Native Title Act 1993*.

The *Guideline—compulsory acquisition of Crown land* (DPIE, 2020) also provides indicative timing to navigate the process for acquisition of Crown land.

4.3.7 Biodiversity Conservation Act 2016

4.3.7.1 Threatened species and communities

The NSW *Biodiversity Conservation Act 2016* (BC Act) sets out the assessment framework for threatened species and ecological communities for activities subject to assessment under Part 5 of the EP&A Act (amongst other types of development).

Under Part 7 of the BC Act, a species impact statement (SIS) or biodiversity development assessment report (BDAR) is required in relation to an activity that is likely to significantly affect threatened species (which is defined to include ecological communities, or their habitats). As noted in section 4.2.1 above, if in the opinion of the proponent, the Project's likely significant effect on threatened species is the only significant effect on the environment, then Section 7.8 of the *Biodiversity BC Act* provides for the preparation of an REF with an SIS or BDAR. Where an SIS is prepared the concurrence of the Environment Agency Head may be required.

The Project area includes threatened flora and fauna records but does not include threatened ecological communities.

4.3.7.2 Biodiversity offsets

Threatened species listed under the BC Act are present within the Project area. There have been some biodiversity investigations carried out in the general area of the Project site as part of the planning approval process for the Wolgan Road Emergency Bypass Project (The Environmental Factor, November 2022) and as part of project development investigations for current Project alignment options (WSP, April 2024). Further detail on the biodiversity of the Project area is provided in section 3.4 above.

Road projects in NSW are required to apply the 'avoid, minimise, offset' hierarchy to addressing biodiversity impacts. Where impacts cannot be avoided or further minimised, offsets may be required. In NSW consideration of biodiversity offsets for road infrastructure projects fall into one of the following categories:

- retiring credits under the Biodiversity Offsets Scheme for projects with likely significant biodiversity impacts
- meeting offset requirements under a concurrence for projects with likely significant biodiversity impacts
- meeting offset obligations under an agency or organisation offset policy
- no offset obligations

Each of the above categories is considered in Table 4-2.

Table 4-2: Biodiversity offset requirements

Scenario	Description
Retiring credits under the Biodiversity Offsets Scheme	<p>The Biodiversity Offsets Scheme provides a mechanism to offset the impacts of development and some types of clearing on biodiversity in NSW. Under the scheme biodiversity credit obligations are created at project impact sites, and biodiversity credits are created at biodiversity stewardship sites.</p> <p>The Biodiversity Offsets Scheme applies to a range of developments, land clearing and activities that meet certain thresholds, including (most relevant to the Project) ¹:</p> <ul style="list-style-type: none"> • all SSI projects (unless the Environment Agency Head and Secretary of the Planning Agency Head determine that the project is not likely to have any significant impact on biodiversity values) • activities under Part 5 of the EP&A Act that are likely to significantly impact biodiversity values and that opt into the scheme as an alternative to preparing a species impact statement.
Offsets under a concurrence	<p>If a project is likely to have a significant impact on biodiversity but is not SSI and the proponent has not opted into the Biodiversity Offsets Scheme and SIS can be prepared and the concurrence of the Environment Agency Head is required (as noted above in 4.3.6.1). Concurrence may be subject to conditions and the BC Act provides that conditions may include a requirement to provide biodiversity offsets (including the retirement of biodiversity credits).</p>
Agency or organisation policy	<p>Some proponents have policies which commit to no net loss of biodiversity and use offsets to help meet that commitment (even where significant biodiversity impacts are not likely, and offsets would not otherwise be required). Council does not currently have a biodiversity offset or tree replacement policy.</p>
No offset obligation	<p>If the proposed activity is not likely to significantly affect threatened species, the environmental impact of the activity will continue to be assessed in accordance with Division 5.1 of the EP&A Act, but there is not specific obligation for biodiversity offsets.</p>

As there is a potential requirement to offset Project impacts (depending on the approval pathway and level of biodiversity impact), strategic level consideration of biodiversity offset costs have been provided (see **Attachment D**).

4.3.8 Protection of the Environment Operations Act 1997

The NSW *Protection of the Environment Operations Act 1997* (POEO Act) administers environment protection licences (EPL) for specific activities relating to the pollution of water, air, land and waste, and noise. The NSW EPA and local government, where relevant, administer the POEO Act.

Section 120 of the POEO Act prohibits the pollution of waters. Consideration would be given to measures to prevent water pollution during the design development, detailed environmental assessment, and construction phase of the proposal.

Air pollution-related sections 124 to 126 (Chapter 5, Part 5.4, Division 1) of the POEO Act require activities to be conducted in a proper and efficient manner, while Section 128 (Chapter 5, Part 5.4, Division 1) of the POEO Act requires that all necessary practicable means are used to prevent or minimise air pollution. Consideration would be given to measures to prevent or minimise impacts to air quality during the design development, detailed environmental assessment, and construction phase of the proposal.

Pollution of land and waste is covered by Part 5.6 of the POEO Act. The Act defines 'waste' for regulatory purposes and establishes management and licensing requirements for waste. It defines offences relating to waste and sets penalties. The POEO Act also establishes the ability to set various waste management requirements via the Protection of the Environment Operations (Waste) Regulation 2014. Waste management

¹ The Biodiversity Offsets Scheme is also activated by local development and clearing proposals that involve clearing native vegetation that exceeds the area clearing threshold (this process applies to Part 4 of the EP&A Act rather than Part 5 of the EP&A Act). The biodiversity offset scheme threshold trigger (for Part 4 EP&A Act developments) does not apply to the Project, however in a situation where the Project required assessment under Part 4 of the EP&A Act it is highly likely that the biodiversity offset strategy thresholds would be exceeded.

would be considered during the design development, environmental assessment, and construction phase of the proposal.

Part 3.2 of the POEO Act requires an EPL for development activities described in Schedule 1 of the Act. Clause 35 of Schedule 1 of the POEO Act applies to road construction, meaning the construction, widening or rerouting of roads. Development activities require an EPL under the POEO Act if those activities meet the following assessment criteria:

- Clause 35(3)(a) – the extraction or processing (over life of construction) of more than:
 - 50,000 tonnes of materials in the case of premises in the regulated area or in the local government areas of Bega Valley, Eurobodalla, Goulburn Mulwaree, Queanbeyan-Palerang Regional or Snowy Monaro Regional, or
 - 150,000 tonnes of material in any other case
- Clause 35(3)(b) – the existence of 4 or more traffic lanes (other than bicycle lanes or lanes used for entry or exit), which would not apply to the Project.

For the purposes of the above, the Project is not located within the regulated area and would not propose to introduce four or more traffic lanes. As such the requirement for an EPL would likely be dependent on the volume of material extraction or processing being greater than 150,000 tonnes, which would be confirmed during design development, when the Project scope is further defined. Based on the preliminary design supporting the funding application for the Project there is in excess of 150,000 tonnes of material extraction or processing and it is likely that an EPL would be required.

4.3.9 Protection of the Environment Operations (Waste) Regulation 2014

Resource recovery orders (orders) and resource recovery exemptions (exemptions) allow some wastes to be beneficially and safely re-used independent of the usual NSW laws that control applying waste to land, using waste as a fuel, or using waste in connection with a process of thermal treatment. A resource recovery waste means a waste that has a resource recovery order and exemption. Resource recovery orders and exemptions are made under the *Protection of the Environment Operations (Waste) Regulation 2014*.

Before you use an order and exemption, you must have a planning approval for the Project, and permission from the owner and occupier of the place where the resource recovery waste will be re-used.

4.3.10 Fisheries Management Act 1994

The NSW *Fisheries Management Act 1994* (FM Act) aims to conserve, develop and share the fishery resources of the State for the benefit of present and future generations.

Section 219 of the FM Act includes a prohibition on the blocking of fish passage. A permit is required from the Department of Primary Industries (DPI) if the Project would permanently or temporarily block fish passage.

Notice under Section 199 and a permit under Section 219 may be required in relation to mapped Key Fish Habitat. As noted in section 3.4 above, mapped Key Fish Habitat occurs within the Project footprint.

4.3.11 Other NSW legislation

4.3.11.1 Contaminated Land Management Act 1997

The NSW *Contaminated Land Management Act 1997* (CLM Act) establishes a process for investigating, managing and remediating contaminated land. The NSW Environment Protection Authority (EPA) regulates contaminated land under the CLM Act. This includes maintaining a register of contaminated sites and determining the remediation requirements. Where contamination is known to be present but does not pose an unacceptable risk to the current or approved land use, management of the contamination and identification of remediation requirements may be dealt with under the planning and development framework of the EP&A Act.

As noted in Appendix B below, given the relatively untouched nature of a majority of the Project site, it is unlikely that large volumes of contaminated material would be encountered, however the Project site is mapped as having 'severe limitations' for Acidification hazard (<https://www.environment.nsw.gov.au/eSpade2Webapp/>).

4.3.11.2 Heritage Act 1977

The NSW *Heritage Act 1977* (Heritage Act) provides for the conservation of buildings, work, relics and places that are of non-Aboriginal historic, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance to the State. Matters protected under the Act include items subject to an Interim Heritage Order and items listed on the State Heritage Register, the heritage schedules of local council LEPs, and the heritage and conservation registers established under Section 170 of the Act by NSW state government agencies (Section 170 Registers). The Act also provides for the protection of archaeological 'relics', being any deposit, object or material evidence that relates to the non-Aboriginal settlement of NSW and is of State or local heritage significance.

Approval under Section 60 of the Act is required for any action that would adversely affect an item that is subject to an Interim Heritage Order or a listing on the State Heritage Register. An excavation permit under Section 139 of the Act is required for activities that will result in or are likely to result in the disturbance/ excavation of a 'relic'.

Archaeological features such as historic public works and services are not considered relics under this definition and therefore not subject to the s139(4) relics provision of the Heritage Act. Examples of these 'works' include previous road infrastructure features and services like culverts, previous road formation, buried road retaining walls, tramlines, cisterns and conduits.

Section 57(2) of the Heritage Act provides for the making of exemptions to the Section 60 approval requirement. The application or otherwise of exemptions for the Project should be determined during the environmental assessment process.

4.3.11.3 Water NSW Act 2014 and Water NSW Regulation 2020

The *Water NSW Regulation 2020* prohibits the carrying out of certain activities on land within declared catchment areas (including within areas defined as Schedule 1 Controlled Areas or Schedule 1 or Schedule 2 Special Areas) except with consent granted by Water NSW under Section 9.

Under Section 50 of the Water NSW Act, notice would need to be given to the Regulatory Authority, being Water NSW, in relation to a project within a Special Area. Once notice has been given under Section 50, Water NSW may make representations regarding the relevant parts of the project within the special areas. If these parts of the project are contrary to any representations made by Water NSW, then Transport would need to give Water NSW 28 days further notice before commencing those works.

4.3.11.4 Coal Mine Subsidence Compensation Act 2017

Subsidence Advisory NSW is the NSW Government agency responsible for administering the NSW *Coal Mine Subsidence Compensation Act 2017*. The construction or alteration of any building or infrastructure in a declared mine subsidence district requires approval under Section 22 of the *Coal Mine Subsidence Compensation Act 2017*.

The Project area is not located within a mine subsidence district. The closest mine subsidence districts are Lithgow and Lithgow South, over 10 kilometres from the Project site (refer <https://www.nsw.gov.au/subsidence-advisory/districts> for maps of mine subsidence districts).

4.3.11.5 Wilderness Act 1987

Section 5.5 of the EP&A Act also requires that the determining authority 'consider the effect of an activity on any wilderness area (within the meaning of the *Wilderness Act 1987*) in the locality in which the activity is intended to be carried on'.

The Greater Blue Mountains park system includes five wilderness areas declared under the Wilderness Act 1987 (Wollemi, Kanangra-Boyd, Nattai, Yengo and Grose). The Wollemi wilderness area is the closest wilderness area to the Project and is around 10 kilometres to the northeast of the Project footprint.

The environmental assessment should consider any potential impacts of the Project on wilderness areas.

4.3.11.6 Land Acquisition (Just Terms Compensation) Act 1991

Council is defined as an 'Authority of the State' under the *Land Acquisition (Just Terms Compensation) Act 1991* (Land Acquisition Act). Council has the authority to acquire land under Chapter 8, Part 1, Section 186(1) of the *Local Government Act 1993* either by negotiation and agreed sale or through a compulsory acquisition process. An owner's entitlement to compensation for their land being acquired is provided by the Land Acquisition Act.

Chapter 8, Part 1, Section 187(2) of the *Local Government Act 1993* identifies that a council may not give a proposed acquisition notice under the Land Acquisition Act without the approval of the Minister.

The acquisition process is governed by Division 4 of Part 3 of the Land Acquisition Act, outlines the matters that are considered when assessing compensation:

- market value (the market value of the property as unaffected by the road proposals)
- special value
- severance
- disturbance
- solatium (compensation for non-financial disadvantage resulting from the need to relocate principal place of residence)
- any increase or decrease in the value of adjoining or severed land (as affected by the road proposals).

Both Crown land and private property is likely to be directly affected by the Project.

5 Commonwealth planning considerations

5.1 Environment Protection and Biodiversity Conservation (EPBC) Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) protects matters of national environmental significance (MNES) and the environment of Commonwealth land.

Under the provisions of the EPBC Act, an action that is likely to result in a significant impact on a matter of national environmental significance or on Commonwealth land must be referred to the Department of Climate Change, Energy, the Environment and Water. If the Project is determined to be a 'controlled action' under the EPBC Act, approval from the Minister for the Environment would be required and any conditions of approval would need to be complied with.

An EPBC Act protected matters search (see **Attachment E**) was carried out using the protected matters search tool (<https://www.dcceew.gov.au/environment/epbc/protected-matters-search-tool>). Items of potential relevance relating to each of the MNES, and Commonwealth land, to the Project area is outlined in Table 5-1 below.

Table 5-1: Potential relevance of each of the MNES, and Commonwealth land, to the Project area

MNES	Relevance to Project area
World Heritage properties	There are no World Heritage properties located within one kilometre of the Project site. Note: At its closest point, the Greater Blue Mountains world heritage area is located around 1.5 kilometres northeast of the Project site.
National Heritage places	There are no National Heritage places located within one kilometre of the Project site. Note 1: the Greater Blue Mountains world heritage area is also identified as a National Heritage place and, at its closest point, is located around 1.5 kilometres northeast of the Project site. Note 2: The Project may have minor direct impacts on the Gardens of Stone State Conservation Area (an area that forms part of the National Parks estate). This property/ area is immediately adjacent and to the west of the Project. A large proportion of the Gardens of Stone State Conservation Area (along with other areas) is being considered for National Heritage listing (nomination, not currently listed) by the Australian Heritage Council under the EPBC Act. The nomination is for expansion of, and listing of additional nationally significant heritage values, for the Greater Blue Mountains Area National Heritage place (https://www.dcceew.gov.au/parks-heritage/heritage/places/world/blue-mountains/additional-values-areas). The planning approval for the project should consider the heritage values of the National Heritage Listing.
Wetlands of international importance (RAMSAR)	There are no RAMSAR wetlands located within one kilometre of the Project site.
Nationally listed threatened species or ecological communities	The protected matters search tool indicated that 57 Commonwealth listed threatened species and three Commonwealth listed threatened ecological communities have the potential to occur within one kilometre of the Project site. The EPBC Act protected matters search identified 19 listed marine species which may occur or have habitat within one kilometre of the Project site (some of these species are also counted as migratory species in the row below). Further information is included in section 3.4 above.
Migratory species (under international agreements)	The EPBC Act protected matters search identified 11 migratory species which may occur or have habitat within one kilometre of the Project site.

MNES	Relevance to Project area
Commonwealth marine area	There are no Commonwealth marine areas located within one kilometre of the Project area.
Great Barrier Reef Marine Park	The Great Barrier Reef Marine Park is not located within one kilometre of the Project area.
Nuclear action (including uranium mining)	The Project would not be a nuclear action.
Water resource, in relation to coal seam gas development and large coal mining development	The Project would not comprise coal seam gas development or large coal mining development.
Commonwealth land	According to the protected matters search tool report, there is no Commonwealth marine areas located within one kilometre of the Project area. Note: Detailed property searches should be carried out and that compulsory acquisition powers do not apply to Commonwealth land (including Commonwealth leased land). In these cases, the proponent would need to acquire the necessary land by negotiation.

5.2 Native Title Act 1993

Native title is the name Australian law gives to the traditional ownership of land and waters that have always belonged to Aboriginal people according to their traditions, laws and customs. The Commonwealth *Native Title Act 1993* (Native Title Act) recognises and protects native title. Native title rights are different to and separate from the statutory right of Aboriginal land councils to make claims for land under the NSW *Aboriginal Land Rights Act 1983* (see section 4.3.5 above).

The Native Title Act covers actions affecting native title and the processes for determining whether native title exists and compensation for actions affecting native title. It establishes the Native Title Registrar, the National Native Title Tribunal, the Register of Native Title Claims and the Register of Indigenous Land Use Agreements, and the National Native Title Register.

The Native Title Act also sets out procedures that governments have to follow before going ahead with a 'future act'. A future act is a proposal to deal with land in a way that affects native title rights and interests. Examples of future acts include the grant of a mining tenement or the compulsory acquisition of land. As the Project footprint is partly subject to a Native Title Claim consultation with claimants and NTSCORP (Native Title Service Provider for Aboriginal Traditional Owners in NSW) will likely be required.

6 Key findings and items for further consideration

6.1 Key findings

The following sections provide a summary of the key findings of this planning approvals discussion paper.

6.1.1 Planning approval pathway

Part 5, Division 5.1 of the EP&A Act applies, and an REF or EIS will need to be prepared for the Project (this assumes Lithgow City Council (Council) would not seek declaration of the Project as SSI by the Minister for Planning and Public Spaces under Section 5.12(4) of the EP&A Act). Attachment B considers the factors set out in Section 171(2) of the EP&A Regulation that help inform a proponent whether the Project may have a significant impact on the environment.

Key issues that warrant further investigation as to the significance of their impact are outlined in Attachment B and include:

- extent of impact to the Blackfellows Hand Aboriginal Place (an important meeting and educational place with special meaning for Wiradjuri people the wider Aboriginal community) and related impacts to Crown land, a portion of which is subject to native title claim *NSD857/2017 – Warrabinga-Wiradjuri #7*
- biodiversity impacts, focussing on threatened flora and fauna species (both BC Act and EPBC Act listed) known to occur in the area surrounding the Project site as well as those with assessed moderate and high likelihood of occurrence
- impacts to landscape character of the Wolgan Valley with the introduction of an additional road footprint in a highly visible and relatively untouched bushland area. There would likely be a material change in the aesthetic quality / value of the locality with some cuttings (excavation into the mountain side) reaching around 65 metres high to achieve desired road gradients.

For the purposes of the funding application process, and based on the need for further investigations to confirm the significance of impacts, it is recommended that the Project team assume program, cost and consultation requirements associated with the development of an EIS rather than an REF.

The requirements of the EP&A Act would not however apply if the Minister for Planning and Public Spaces were to authorise the Project to be undertaken without the need for an EP&A Act approval or assessment under (and consistent with the requirements of) Section 68 of the Reconstruction Authority Act.

6.1.2 Property

In addition to some private property impacts, the Project site has a number of complex and interrelated property issues that require further consultation with relevant agencies including DPHI, NPWS and State and local Aboriginal land councils. The following property-related constraints have been identified:

- the Gardens of Stone State Conservation Area (an area that forms part of the National Parks estate) would be directly affected by the Project footprint and would require either revocation and/or adjustment.
- the Project would directly impact Crown land. No acquisition of Crown land can progress until any Aboriginal land claim or native title claim over the land are reconciled with the proposed acquisition (the Register of Native Title Claimants identifies that part of the Project area is subject to an application under the Commonwealth *Native Title Act 1993* and any land claims under the NSW *Aboriginal Land Rights Act 1983* are yet to be confirmed)
- Crown land affected by the Project is also a registered Aboriginal site (Blackfellows Hand) protected under the *National Parks and Wildlife Act 1974* and also subject to The *Blackfellows Hand Reserve (Maiyingu Marragu) Management and Biodiversity Plan* (EcoLogical Australia, 2013).

6.1.3 Aboriginal heritage

In addition to impacts the Project would have on an Aboriginal Place, there is a relatively high likelihood (based on density of known Aboriginal items and the undisturbed nature of the area surrounding the Project site) that other Aboriginal items (artefacts) and/ or areas of cultural and social significance could be present and would need to be considered as part of the project development process.

The AHIP process (addressing impacts on Aboriginal places and objects) requires archaeological survey, consultation with Registered Aboriginal Parties and preparation of a Cultural Heritage Assessment Report. The duration of this process can vary depending on the complexity of the issues raised, however recent experience suggests 10 months as a guide.

6.1.4 Biodiversity

There are no PCTs associated with TECs within the Project footprint. There are several threatened flora and fauna species (both BC Act and EPBC Act listed) either occurring within or assessed moderate or high likelihood of occurrence in the area surrounding the Project site. There are three threatened species (one flora, two fauna) that have been identified by surveys as occurring within the biodiversity survey area. Bionet records show a further two threatened fauna species within the Project footprint.

The sandstone cliff environment at the southern end of the Project near Wolgan Gap is considered important as it has the potential to provide habitat for a number of threatened plant and animal species.

6.1.5 Non-Aboriginal heritage

Although there are no listed non-Aboriginal heritage items in the immediate vicinity of the Project site, much of the Gardens of Stone State Conservation Area (including small areas affected by the Project) are being considered for National Heritage listing (nomination, not currently listed) by the Australian Heritage Council under the EPBC Act. The nomination is for expansion of, and listing of additional nationally significant heritage values, for the Greater Blue Mountains Area National Heritage place.

The nationally significant heritage values related to the nomination of the area for National heritage listing should be considered in all relevant environmental assessment documentation for the Project.

6.2 Items for further consideration

6.2.1 Design development

A key element in the planning approval process is to demonstrate how the Project has responded to a variety of constraints and challenges, specifically this would include demonstrating how the Project design has been developed to avoid or minimise impacts to the environment.

To identify benefits and disbenefits (ie overall performance) of each project alignment option, a multi-criteria assessment (MCA) has been carried out as discussed in Chapter 4 of the Alignment Options Assessment Report (WSP, June 2024). The criteria adopted for this assessment included transport outcomes, risk, deliverability, environment and cultural heritage, affordability and stakeholder and community support.

In relation to environment and cultural heritage factors, section 4.3.1 of the Alignment Options Assessment Report (WSP, June 2024) shows that all other alignment options (Options 2, 3 and 5) performed better than the preferred (Project) alignment. It will be important that as the project design develops Council continue to focus on identifying opportunities to avoid and further minimise environment and heritage impacts.

Given the importance of the site to Aboriginal people, and the potential landscape impacts of the Project, Council should consider input from appropriately experienced urban and landscape designers to support the Project achieve positive outcomes in line with the DPHI guideline *Better Placed – Connecting with Country* (DPE, 2023) (<https://www.planning.nsw.gov.au/sites/default/files/2023-10/connecting-with-country.pdf>).

6.2.2 Property considerations

Council should consider obtaining specialist property advice to inform project development and planning regarding processes and timeframes relating to the various property constraints associated with National Parks revocation (including property offset requirements), Crown land acquisition or lease, impacts to land subject to native title claims and (as applicable) Aboriginal land rights claims.

These property issues have both consultation requirements and statutory timeframes that should be accommodated in the master program for the Project.

6.2.3 Project development (program and scope) considerations

6.2.3.1 Approvals for investigations

In most instances, on-site investigations required to support design development, including geotechnical or survey investigations, require separate planning approvals. Access to desired investigation locations (depending on property ownership) can also be restrictive (for example access to National Parks estate for investigations requires various approvals/ permits).

Allowance for the preparation of planning approval documentation as well as consultation requirements and timeframes related to site investigations should be considered as part of the master program for the Project.

6.2.3.2 Biodiversity

In planning for the Project, consideration should be given to potential program impacts associated with requirements for spring surveys as part of any biodiversity assessment/ BDAR. Survey effort would be substantial where a BDAR needs to be prepared in accordance with the Biodiversity Assessment Method (BAM). In March 2024 the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) published recommendations in relation to the statutory 5-year review of the BAM (<https://www.environment.nsw.gov.au/research-and-publications/publications-search/five-year-review-of-the-biodiversity-assessment-method>), which should be considered (as relevant) when scoping further biodiversity assessment for the Project.

Based on an indicative Project footprint, there could be around 24.43 hectares of native vegetation removal required. Allowance (both in terms of cost and program) for biodiversity offsets should be considered. Preliminary (desktop-based) biodiversity offset calculations (see **Attachment D**) suggest in the order of \$6,000,000 allowance should be made for biodiversity offsets.

Council should consider carrying out further detailed biodiversity investigations (in accordance with the BAM) early in the project development process to inform design development and to assist Council in determining whether the Project may have significant biodiversity impacts and whether an EIS (or REF and SIS) is required.

6.2.3.3 Aboriginal heritage

The consultation requirements and timeframes outlined in the guideline *Aboriginal cultural heritage consultation requirements for proponents 2010* (DCCEEW, 2010) and the steps required in preparing an Aboriginal Cultural Heritage Assessment Report (ACHAR) as outlined in the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011) should inform the master program for the Project and commence as early as possible and continue throughout project development and (as relevant) delivery.

6.2.3.4 Resourcing planning approvals and relevant licensing and permitting

Council should consider appropriate resourcing, program allowance and budget allocation to carry out detailed site investigations (and related consultation requirements) to support the planning approval process. The master program should adopt timeframes for an EIS, with statutory and agency timeframes longer for an EIS.

Other 'related' cost and program considerations linked to securing and managing licenses and permits during construction. For example, an Environment Protection License (EPL) under the POEO Act or spoil testing and management as part of any spoil re-use strategy (ie meeting conditions of a resource recovery order and exemption made under the *Protection of the Environment Operations (Waste) Regulation 2014*).

6.2.4 Consultation

There are a variety of planning, environment and property and land use considerations outlined above that highlight the need for a continued clear approach to stakeholder and community engagement. A framework stakeholder and engagement strategy has been included as **Attachment A** that could be used as the basis for development of community and stakeholder engagement plan (CSEP) that would support all stages of project development.

The CSEP should be developed in line with broader project development milestones, including dovetailing with consultation required as part of the planning approval process.

Attachment A – Framework stakeholder engagement strategy

Wolgan Road reconstruction

Framework stakeholder engagement strategy

Lithgow City Council

Contents

1	Introduction	4
1.1	Background	4
1.2	Site context.....	4
2	Stakeholders	5
2.1	Categorising stakeholders.....	5
2.1.1	<i>Relevant agencies and regulators</i>	5
2.1.2	<i>Aboriginal stakeholders</i>	5
2.1.3	<i>Community</i>	6
2.2	Stakeholder matrix	6
3	Engagement plan - next steps	11
3.1	Engagement approach.....	11
3.2	Creating an engagement plan.....	11
3.2.1	<i>Areas of focus for the CSEP</i>	11
3.2.2	<i>Engagement objectives</i>	11
3.2.3	<i>Overarching key messages</i>	12

bd infrastructure Pty Ltd
ABN 84 161 384 596
www.bdinfrastucture.com

Quality control

Document: Framework stakeholder engagement strategy – Wolgan Road
Version: v1-0
Date: 13 June 2024
File: Attachment A_Framework stakeholder engagement strategy_Wolgan Road_v1-0

List of tables

Table 2-1: Stakeholder matrix	8
-------------------------------------	---

List of figures

Figure 2-1: IAP2's public participation spectrum	7
--	---

1 Introduction

This strategy has been developed by bd infrastructure to effectively guide the engagement process for the Wolgan Road upgrade. This strategy provides a framework to navigate regulatory considerations and ensure that stakeholder interactions are managed efficiently and responsibly.

1.1 Background

In November 2022, heavy rain caused a landslide and rockfall, severely damaging a section of Wolgan Road, around four kilometres north of Lidsdale. Damage to the road rendered the road impassable and isolated properties in the Wolgan Valley situated north of Wolgan Gap. Wolgan Road, a two-lane, all-weather road, is the only access to Wolgan Valley and the village of Newnes.

It connects private properties, Cranbrook School's rural campus, and popular tourist destinations including Wollemi National Park, Gardens of Stone National Park, and the Emirates Resort.

To restore emergency vehicle and resident access, Lithgow City Council built an emergency access road to bypass the damaged area in 2023. The temporary emergency road is only used by residents, Council, and emergency vehicles. This single-lane route requires four-wheel drive vehicle access with traffic managed by a pilot vehicle guide. It has been used as an interim measure while Council investigated ways to stabilise the cliff face and repair the road.

Since Wolgan Road has been closed, additional active landslides and slope hazards have occurred, and further investigations have deemed repairs to Wolgan Road as unviable. Lithgow City Council are currently in the process of investigating options for the construction of a new road alignment further south from the existing road.

1.2 Site context

The site is in a remote, mountainous, rural region within the Blue Mountains area. It is surrounded by Newnes State Forest to the east and south and Ben Bullen and Wolgan State Forests to the north and the west of the site.

The proposed alignment would traverse National Parks Land and Crown Lands land under a current native title claim application. Construction of the road would be large-scale and include considerable ancillary infrastructure activity including construction off-sites, tree felling, excavation, cut-and-fill, levelling, and some form of property acquisition. Environmentally, the proposed alignment would intersect mapped waterway and clear native vegetation and habitat areas of threatened species.

The proposed alignment would be in an area with considerable Aboriginal heritage value, including several reported Aboriginal items (artefacts) and Maiyingu Marragu (Blackfellows Hand) Aboriginal site. There is the potential for more objects of Aboriginal heritage value to be identified as part of the project development process.

Considering the proposed alignment would result in the construction of a new road on a different alignment to the existing Wolgan Road, the project would result in substantial visual changes to the existing landscape.

2 Stakeholders

2.1 Categorising stakeholders

We have identified the people or groups that could have an interest in or are likely to be affected by the project. These stakeholders have been categorised based on their impact and/ or interest, along with their key focus area. Further stakeholder identification is included in Table 2-1 below.

Stakeholder identification was undertaken using desktop analysis and should be updated during the development of the project post funding approval. Other methods to identify stakeholders include:

- compilation of land ownership information
- consideration of the local and wider community, industry and service providers
- networking with different individuals and community organisations
- media advertisements and publications
- door knocking residents around the project site
- discussion with regulators.

2.1.1 Relevant agencies and regulators

These stakeholders have an interest in understanding the impacts of the project including property, biodiversity, heritage, fire, water, traffic, land uses, zoning, and connections. Some of these stakeholders are also relevant based on potential authorisation or approval roles through the planning approvals process.

Relevant regulators, agencies, and service providers to be consulted may include:

- NSW Department of Planning, Housing and Infrastructure (DPHI) (subject to planning approval process undertaken)
- NSW Crown Lands
- NSW National Parks and Wildlife Service (NPWS)
- NSW Office of Environment and Heritage (OEH)
- NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW)
- Department of Climate Change, Energy, the Environment and Water
- WaterNSW
- Rural Fire Service (RFS)
- NSW Department of Primary Industries (DPI) (Fisheries).
- [Others – update as project progresses]

2.1.2 Aboriginal stakeholders

Consultation with the Aboriginal community undertaken in accordance with the Aboriginal cultural heritage consultation requirements is required for the project. Engagement with relevant Aboriginal stakeholders should be undertaken, including through:

- Future Registered Aboriginal Parties (RAPs) identified through Aboriginal Cultural Heritage Assessment Report (ACHAR) process
- Local Aboriginal Land Councils (LALCs) and Mingaan Wiradjuri Aboriginal Corporation
- NSW Aboriginal Affairs (and NSW Aboriginal Land Council) and the National Native Title Council (NNTC) for property related aspects.

2.1.3 Community

The community is any individual, business, or group who interested in or are likely to be affected by the project. This section outlines the subgroups that make up the community or who are likely to be affected by the project.

2.1.3.1 Surrounding landowners, connected business and occupiers

This community subgroup is made up of the landowners, connected business and occupiers in an eight (8) kilometre radius from the site. The eight-kilometre zone surrounding the site has been used for several reasons:

- previous engagement: the directly impacted landowners and occupiers within this zone have been previously involved in engagement by being involved in the development of the emergency access road.
- potential direct impact: these landowners and occupiers are likely to experience visual, noise, traffic, and vibration impacts associated with the proposed new alignment during construction and potentially during operation.
- indirect impacts: the broader community of Lidsdale and Wallerawang could show an interest in the potential environmental impacts of the project, such as clearing of land, impacts to flora and fauna and Aboriginal heritage.
- operational benefits: landowners and occupiers within this zone may show interest in restoring social and economic benefits, such as tourism operations, related to the proposed road.

2.1.3.2 Community groups

Community groups outside the immediate area have been identified as having an interest in and could potentially be affected by the project. These organisations could become concerned with the potential direct and indirect environmental and economic impacts of the project. They include:

- Wallerawang Lidsdale Progress Association
- 'Lidsdale NSW 2790' (local Facebook community group)
- Lithgow District Chamber of Commerce
- Lithgow Tourism
- Mingaan Landcare Group
- Lithgow Oberon Landcare Association
- Lithgow Lions Club.

2.1.3.3 Broader community

While not located directly within the direct area of the project, the broader community of Lithgow may still have an interest in the development site and should be informed about the project.

2.1.3.4 Elected representatives

Elected representatives reflect the values and interests of the community while also serving as a source of information for community members. Elected representatives in the project area, or with functions relevant to the project include:

- State Member for Bathurst, the Hon. Paul Lawrence Toole, MP
- the Member for Calare, the Hon. Andrew Gee MP
- the Hon. Jenny Aitchison MP, State Minister for Regional Transport and Roads.

2.2 Stakeholder matrix

Stakeholder mapping is a crucial step in any project development process. It allows the project team to identify and understand the various stakeholders involved, their respective interests and if they are likely to be affected by the project. Table 2-1 outlines the key stakeholders who could be involved throughout the engagement process.

The International Association for Public Participation (IAP2) is the peak body for the community and stakeholder engagement sector in Australasia. They develop strategies that champion engagement that improves environmental, social and governance outcomes and increases trust in the democratic process. The stakeholder mapping carried out below uses the *International Association of Public Participation* (IAP2) *public participation spectrum* to guide appropriate levels of engagement for each stakeholder group, along a spectrum ranging from 'inform' to 'empower'.

IAP2 Spectrum of Public Participation



IAP2's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and it is found in public participation plans around the world.

INCREASING IMPACT ON THE DECISION 					
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

© IAP2 International Federation 2018. All rights reserved. 20181112_v1

Figure 2-1: IAP2's public participation spectrum

Table 2-1: Stakeholder matrix

Stakeholder category	Individual stakeholders/ subcategory	Key drivers for engagement	IAP2 level of recommended engagement
Relevant regulators, agencies, and service providers	NSW Department of Planning, Housing and Infrastructure (DPHI)	Consultation with DPHI will only be necessary if an EIS planning approval process is undertaken.	Involve - Work with to ensure that concerns and aspirations are directly reflected in the finalised road design and provide feedback on how input would influence the decision.
	NSW Crown Lands	The proposed alignment would traverse Crown Lands. Consultation with Crown Lands on whether a special purpose lease, special purpose licence or revocation will be required. Similarly, the Crown Land traversed by the project is also under a registered native title claimant application (Warrabinga-Wiradjuri #7) and also may be subject to an <i>Aboriginal Land Rights Act 1983</i> claim (this is subject to confirmation).	
	NSW National Parks and Wildlife Service (NPWS)	The proposed alignment may directly impact a small section of National Park Estate land (Gardens of Stone State Conservation Area). At present, no provisions allow for the lease of National Parks land under the <i>National Parks and Wildlife Act 1974</i> . The proposed alignment could require the land to be revoked by government (via a Cabinet proposal) and ultimately the NSW Parliament (via an Act of Parliament). Boundary adjustments might need to be explored if revocation is to be avoided, especially along the southern end of the project.	
	NSW Office of Environment and Heritage (OEH) NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) Department of Climate Change, Energy, the Environment and Water WaterNSW	Feedback on key environmental impacts of the project, including: <ul style="list-style-type: none"> • vegetation removal of key habitat areas for threatened and endangered species • impacts to identified Aboriginal heritage and/ or non-Aboriginal heritage in the area • water management measures 	
	NSW Department of Primary Industries (DPI) (Fisheries)	The proposed alignment would likely intersect a third order waterway also identified as Key Fish Habitat. Consultation will be required regarding minimising impacts to creek lines and avoiding watercourses.	
	Rural Fire Service (RFS)	The project area is within a bushfire prone land area and the existing Wolgan Road experienced major bushfires during the 2019/20 bushfire season.	

Stakeholder category	Individual stakeholders/ subcategory	Key drivers for engagement	IAP2 level of recommended engagement
	Environment Protection Authority (EPA); Subsidence Advisory NSW	Spoil and waste management aspects of the project may require consultation with the EPA during project development based on potential for an Environment Protection License (EPL). The project does not sit on land subject to mine subsidence (i.e. not directly on an underground coal mining area). Where further consultation is required in relation to this issue it would be managed during the planning approval processes.	
Aboriginal stakeholders	NSW Aboriginal Affairs (and NSW Aboriginal Land Council) and the National Native Title Council (NNTC) Future Registered Aboriginal Parties (RAPs) identified through ACHAR process Local Aboriginal Land Councils (LALCs) and Mingaan Wiradjuri Aboriginal Corporation	Cultural significance or connection to Country impacted by the project. Specifically, a considerable number of objects of Aboriginal Heritage were identified in proximity to the project site, with the potential for more to be discovered during construction. An Aboriginal Heritage Impact Permit is expected to be required. The proposed alignment would also traverse land under a current registered native title claimant application (Warrabinga-Wiradjuri #7). Consultation would be required with native title groups in conjunction with NSW Crown Lands.	Involve - Work with to ensure that concerns and aspirations are directly reflected in the finalised road design and provide feedback on how input would influence the decision.
Community	Surrounding landowners, connected business and occupiers, including: Emirates Resort; Cranbrook School Wolgan Valley Campus; Angus Place Colliery	High interest related to the timeline of the project, the finalised design, access for residents during construction, property acquisition, environmental impacts and where visual impacts will occur. High interest in the economic and social benefits associated with the project, including the restoring of access for residents and tourism operators. Noting the remoteness of the site, construction impacts such as noise, traffic and vibration are expected to be minor concerns.	Inform - Keep informed, listen to, and acknowledge concerns and provide contact information for feedback channels.
	Community groups and peak bodies, including: Wallerawang Lidsdale Progress Association; 'Lidsdale NSW 2790' (local community Facebook group); Lithgow District Chamber of Commerce; Lithgow Tourism	Concerns regarding traffic during construction and the direct and indirect environmental, social and economic impacts of the project. Environmental concerns have the potential to become high interest and possible points of contention in the area.	
	Broader community (Lithgow)	General curiosity about the project among the community, especially regarding environmental and access impacts	
	Elected representatives, including State Member for Bathurst, the Hon. Paul Lawrence Toole, MP; Member	Addressing local community concerns and interests and considering broader community views and needs. Both State Member for Bathurst and Member for Calare have expressed support for safeguarding local employment in the region. The Hon. Jenny Aitchison MP, State Minister for Regional Transport and Roads, has been consulting	

Stakeholder category	Individual stakeholders/ subcategory	Key drivers for engagement	IAP2 level of recommended engagement
	for Calare, the Hon. Andrew Gee MP; the Hon. Jenny Aitchison MP, State Minister for Regional Transport and Roads	with Lithgow City Council regarding the challenges and complexity of reconstructing Wolgan Road. It is not anticipated that any elected representatives will oppose the project.	

3 Engagement plan - next steps

3.1 Engagement approach

Considering the nature of the site area and the number of stakeholders, a community and stakeholder engagement plan (CSEP) should be developed that outlines how identified stakeholders will be consulted. The engagement plan should factor in sufficient time for relevant government agency consultation, including in relation to property acquisition processes and aspects such as National Parks Estate revocation and/ or Crown Land licenses/ leases/ acquisition.

While it is safe to assume that the community's main priority will be restoring access to properties and tourism areas within Wolgan Valley, possible environmental concerns could become points of interest and contention for the immediate and broader community. The community places great emphasis on the natural environment and values the scenery of the area as identified in the Lithgow City Council *Community Strategic Plan 2035*.

The CSEP should be developed in line with broader project development milestones, including dovetailing with consultation required as part of the planning approval process.

3.2 Creating an engagement plan

By creating an effective CSEP, the project team can enhance understanding of the potential impacts and benefits of the proposed alignment and be well placed to respond to community concerns and aspirations for the project, leading to better outcomes for both the project team and wider community. An effective engagement plan would:

- simplify and clarify regulatory engagement requirements within planning approval documentation
- ensure timeframes are realistic and attainable
- maintain consistency in messaging and information shared with government agencies and the local community.

3.2.1 Areas of focus for the CSEP

The CSEP should include:

- **a project summary:** details of the project, including site location, existing features, size of associated infrastructure, surroundings and constraints. It should also include the strategic context of the project, and if the project aligns with any relevant strategic policies.
- **engagement approach and objectives:** details of your engagement objectives. Who and when you would consult with, as well as what level of engagement would be required.
- **stakeholder mapping and risk categorisation:** Stakeholder analysis that identifies possible stakeholders and their level of risk with the project. A preliminary stakeholder analysis is included in Table 2-1.
- **key messages,** including predicted project benefits, impacts and more information on the planning process. More details on key messaging is included in section 3.2.3.
- **an engagement action plan:** detailed information on planned engagement activities with stakeholders and dates and timeframes for all proposed consultation.

3.2.2 Engagement objectives

Based on the engagement approach above, stakeholder mapping and utilisation of the above guidelines and relevant bodies, the potential engagement objectives for this project would be to:

1. **Provide an update and inform** community and stakeholder members about the project, its impacts and benefits.

2. **Help the local community** understand the project benefits, development approval process and how (if at all) they can participate in the process.
3. **Respond to community feedback** by including appropriate mitigation measures in the planning approval documentation.

If the project proceeded to an EIS, the engagement objectives would also be to:

4. **Demonstrate a commitment to appropriate and responsive engagement**, by collecting and presenting information and outlining an engagement approach that demonstrates appropriate effort under relevant guidelines.

3.2.3 Overarching key messages

3.2.3.1 Key messages

Key messages should be developed to guide project communications and collateral and would be used across a variety of communication tools and channels outlined in an action plan. These key messages should provide jargon-free information on the proposal, impacts, benefits and the planning process to be used in all project communications to the community. They would be updated as the project develops and more specific information is made available through specialist studies.

Overarching key messages should be general messages about:

- what the project is
- who the proponent is
- why the project is being proposed (including why 'do nothing' is not an option)
- what it is trying to achieve

It should summarise key predicted benefits and impacts of the project to the community.

It should include key messages about the commitment to engagement and consultation, key contact details, and feedback channels. An example is included below:

"Lithgow City Council is consulting with the local community to provide information about the project and understand their questions to ensure we respond to these as we work to develop the project, as well as to understand local views and knowledge to help us finalise the design and operational plans."

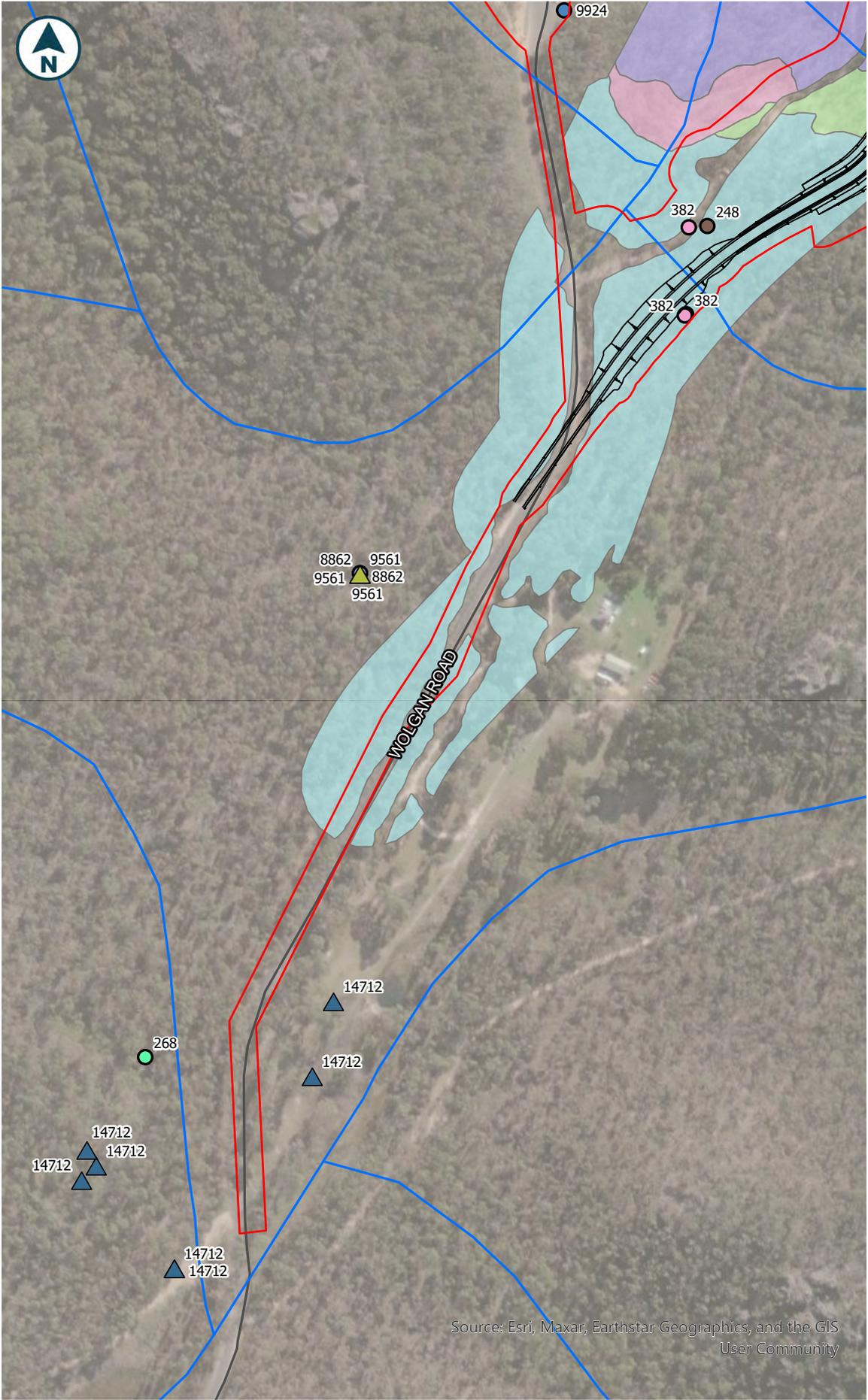
3.2.3.2 Managing impacts

Key messages should explain how the project will manage the predicted impacts through things such as studies and assessments and their management and mitigation. Some of the mitigations and management for the impacts may only be identified in later stages of planning.

3.2.3.3 Managing benefits

Key messages should centre around how the project will support or add to social, environmental, and economic values and outcomes that the project impacts.

Attachment B – Environmental constraints mapping

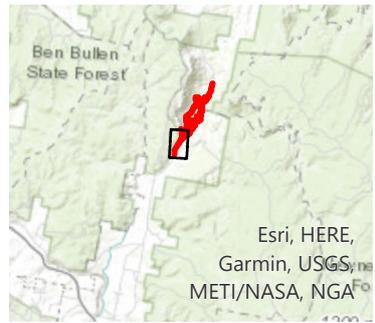


- Preliminary Project footprint
- Preliminary Project design alignment
- Watercourses
- Key Fish Habitat - Hawkesbury-Nepean
- ▲ 14712, *Veronica blakelyi*,
- ▲ 9561, *Genoplesium superbum*, Superb Midge Orchid
- 248, *Ninox strenua*, Powerful Owl
- 268, *Callocephalon fimbriatum*, Gang-gang Cockatoo
- 382, *Petroica phoenicea*, Flame Robin
- 8862, *Calyptorhynchus lathamii lathamii*, South-eastern Glossy Black-Cockatoo
- 9924, *Tyto tenebricosa*, Sooty Owl
- 3510 Capertee Slopes Stringybark-Box Forest
- 3732 Capertee Uplands Enriched Stringybark Forest
- 3735 Central Tableland Peppermint Shrub-Grass Forest
- 3749 Western Blue Mountains Scribbly Gum Forest
- 3916 Sandstone Cliff Soak

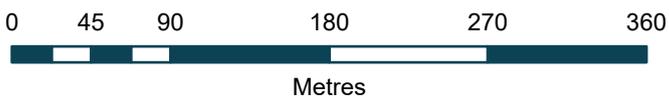


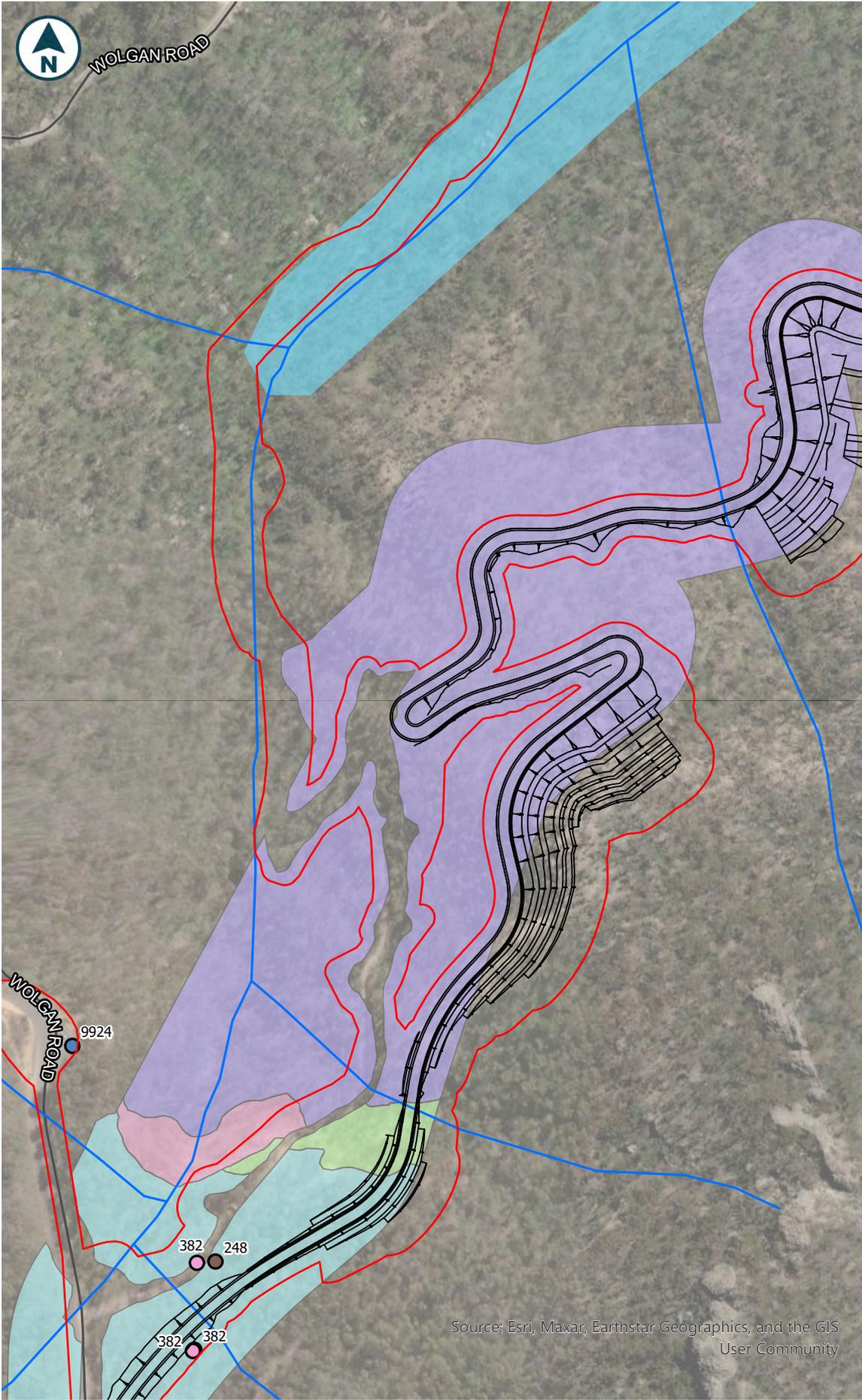
bd infrastructure
 Level 7, 45 Clarence Street, SYDNEY, NSW, 2000
 Web: www.bdinfrastucture.com.au

Spatial Reference
 Name: GDA2020 MGA Zone 55
 PCS: GDA2020 MGA Zone 55
 GCS: GDA2020
 Datum: GDA2020



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



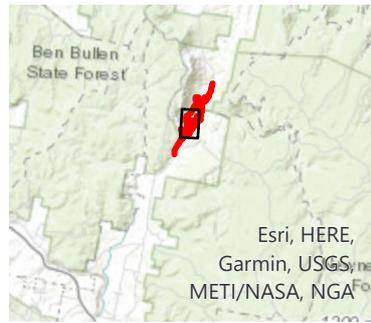


- Preliminary Project footprint
- Preliminary Project design alignment
- Watercourses
- Key Fish Habitat - Hawkesbury-Nepean
- 248, *Ninox strenua*, Powerful Owl
- 382, *Petroica phoenicea*, Flame Robin
- 9924, *Tyto tenebricosa*, Sooty Owl
- 3510 Capertee Slopes Stringybark-Box Forest
- 3732 Capertee Uplands Enriched Stringybark Forest
- 3735 Central Tableland Peppermint Shrub-Grass Forest
- 3749 Western Blue Mountains Scribbly Gum Forest
- 3916 Sandstone Cliff Soak

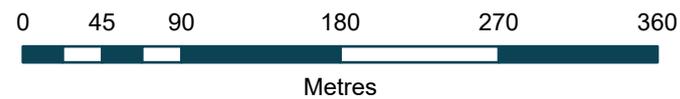


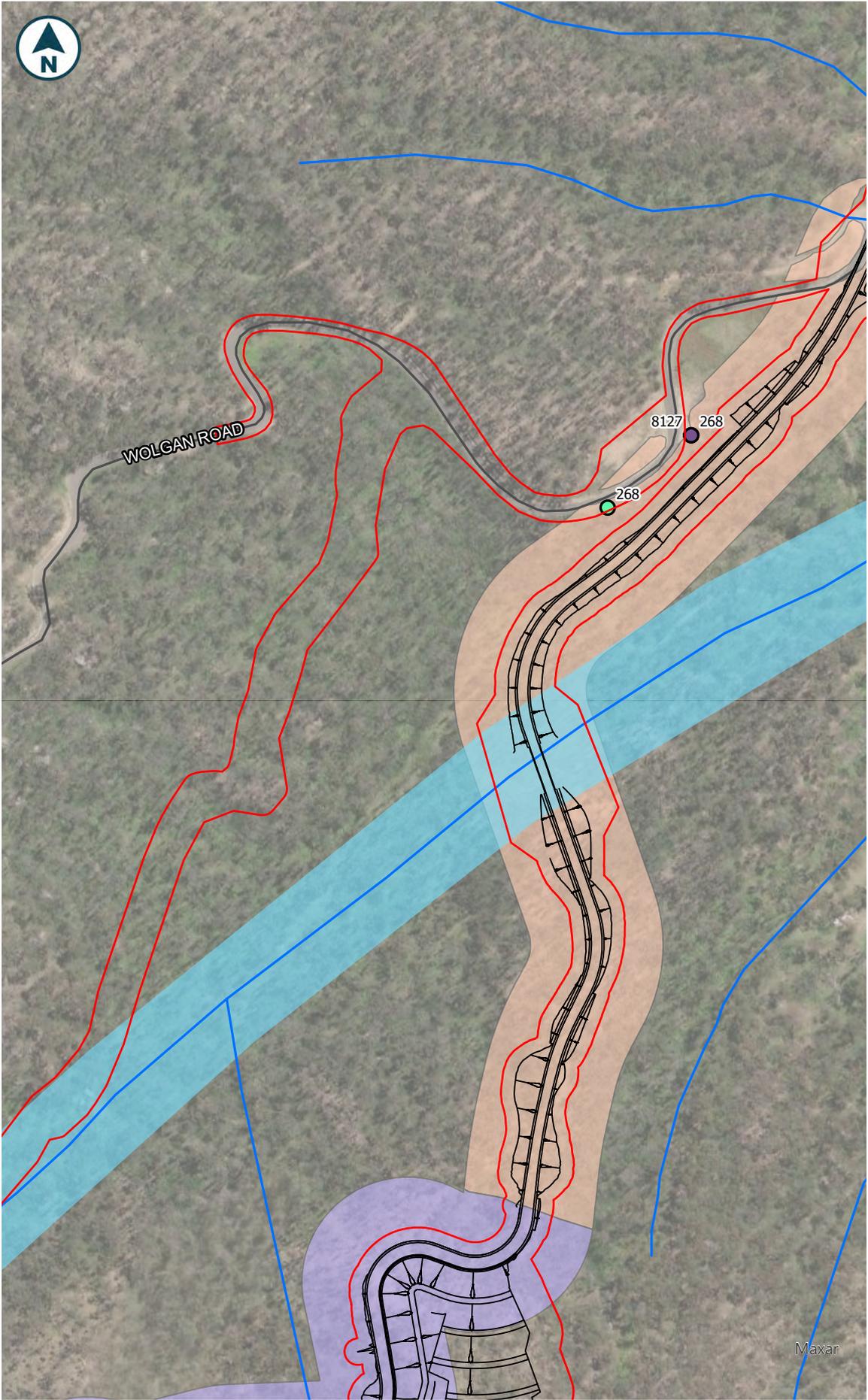
bd infrastructure
 Level 7, 45 Clarence Street, SYDNEY, NSW, 2000
 Web: www.bdinfrastucture.com.au

Spatial Reference
 Name: GDA2020 MGA Zone 55
 PCS: GDA2020 MGA Zone 55
 GCS: GDA2020
 Datum: GDA2020



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



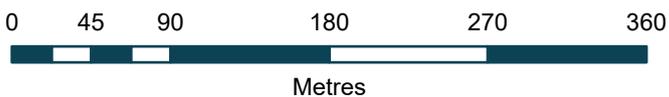
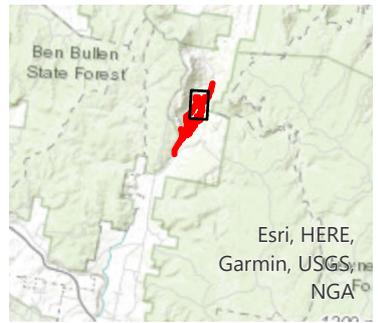


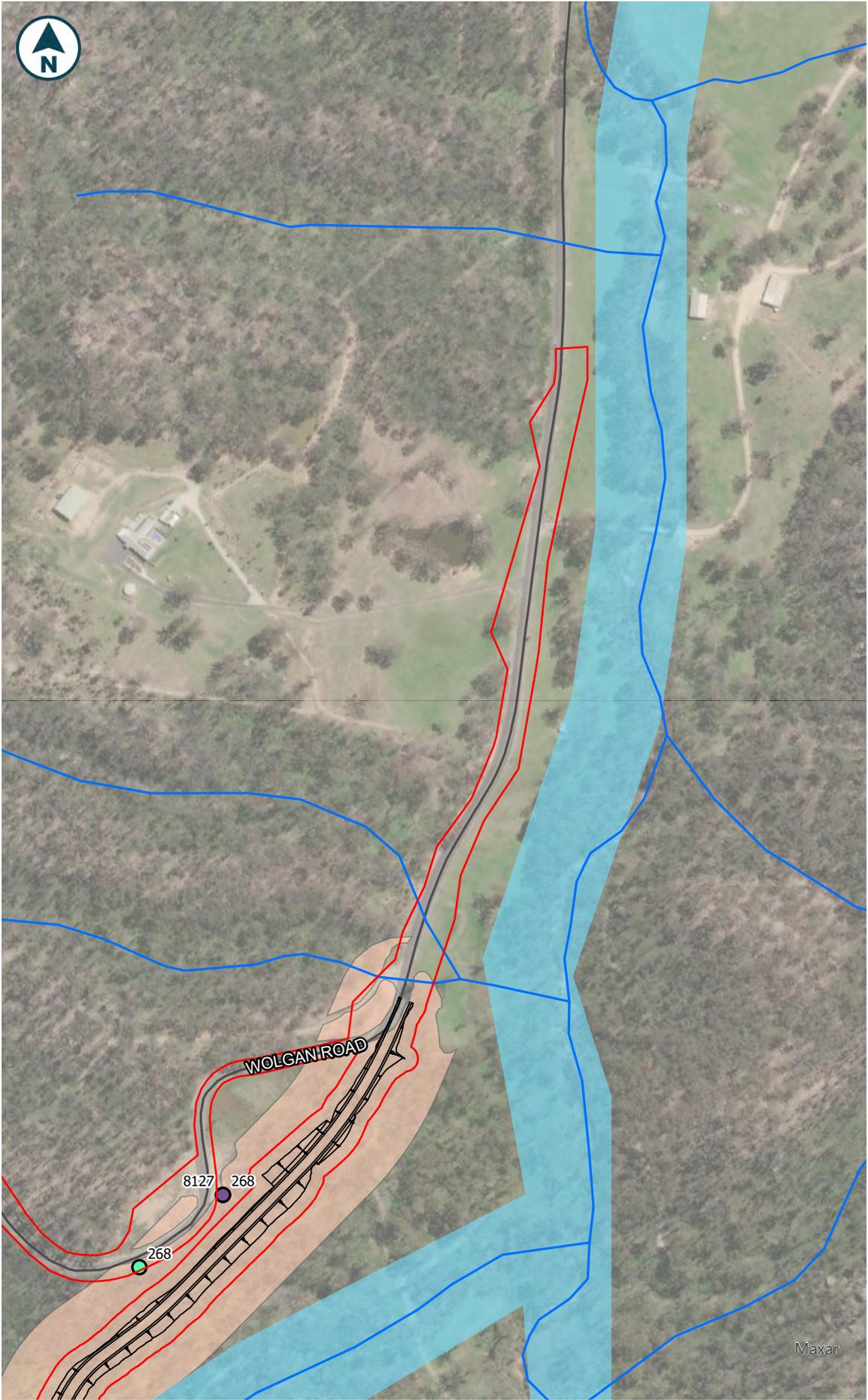
- Preliminary Project footprint
- Preliminary Project design alignment
- Watercourses
- Key Fish Habitat - Hawkesbury-Nepean
- 268, Callocephalon fimbriatum, Gang-gang Cockatoo
- 8127, Climacteris picumnus victoriae, Brown Treecreeper (eastern subspecies)
- 3510 Capertee Slopes Stringybark-Box Forest
- 3732 Capertee Uplands Enriched Stringybark Forest
- 3735 Central Tableland Peppermint Shrub-Grass Forest
- 3749 Western Blue Mountains Scribbly Gum Forest
- 3916 Sandstone Cliff Soak



bd infrastructure
 Level 7, 45 Clarence Street, SYDNEY, NSW, 2000
 Web: www.bdinfrastucture.com.au

Spatial Reference
 Name: GDA2020 MGA Zone 55
 PCS: GDA2020 MGA Zone 55
 GCS: GDA2020
 Datum: GDA2020



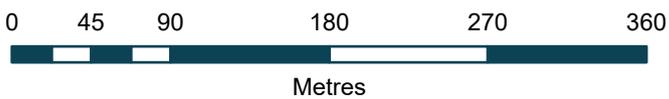
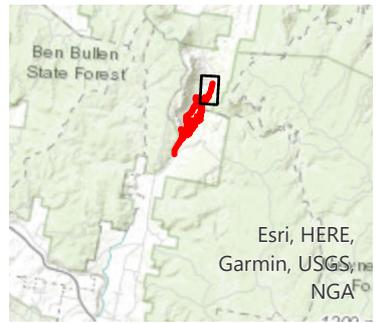


- Preliminary Project footprint
- Preliminary Project design alignment
- Watercourses
- Key Fish Habitat - Hawkesbury-Nepean
- 268, Callocephalon fimbriatum, Gang-gang Cockatoo
- 8127, Climacteris picumnus
- 268, Climacteris victoriae, Brown Treecreeper (eastern subspecies)
- 3510 Capertee Slopes Stringybark-Box Forest
- 3732 Capertee Uplands Enriched Stringybark Forest
- 3735 Central Tableland Peppermint Shrub-Grass Forest
- 3749 Western Blue Mountains Scribbly Gum Forest
- 3916 Sandstone Cliff Soak

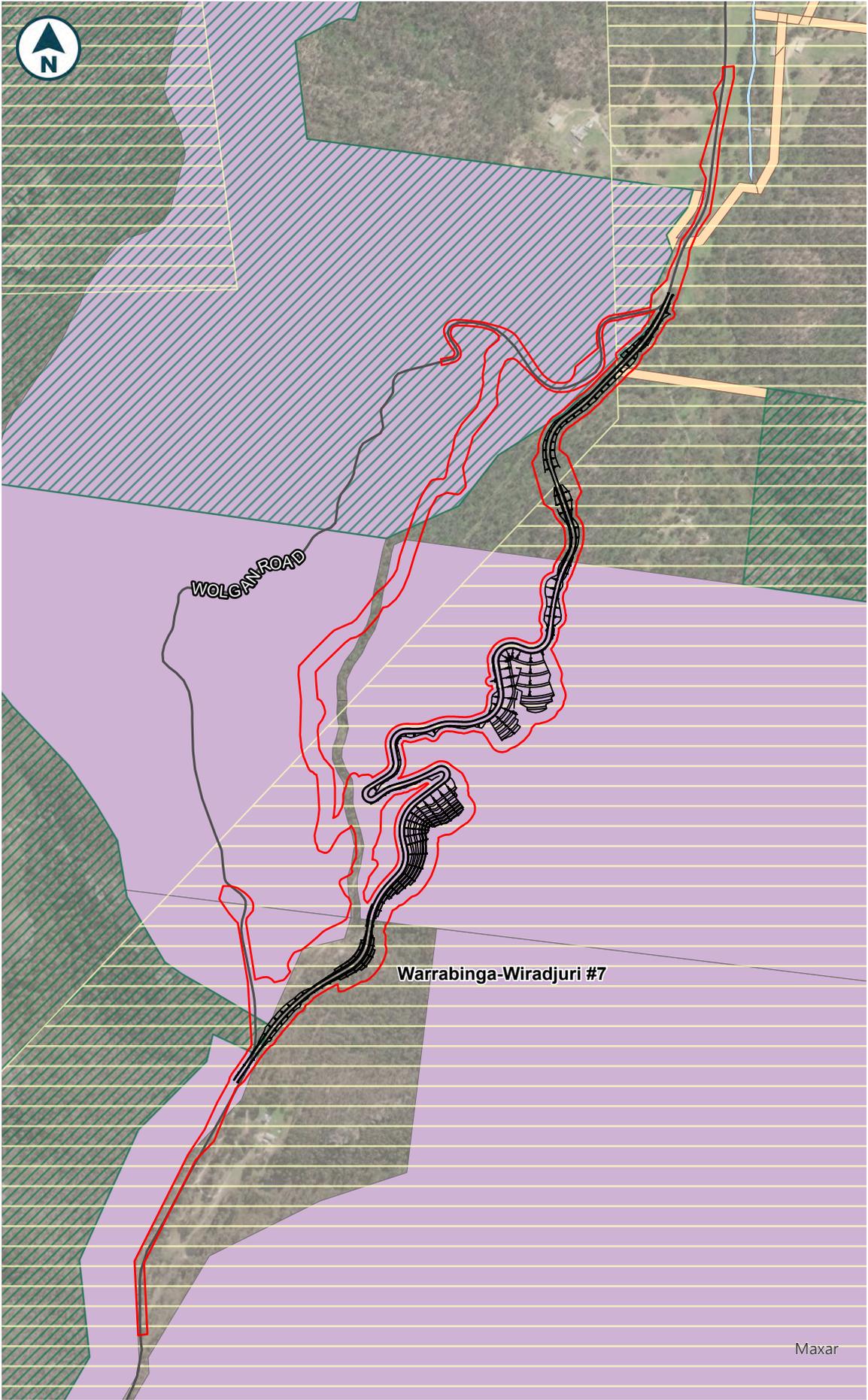


bd infrastructure
 Level 7, 45 Clarence Street, SYDNEY, NSW, 2000
 Web: www.bdinfrastucture.com.au

Spatial Reference
 Name: GDA2020 MGA Zone 55
 PCS: GDA2020 MGA Zone 55
 GCS: GDA2020
 Datum: GDA2020



Wolgan Road - Planning Approvals Strategy

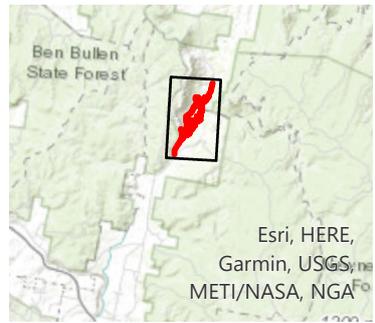


- Preliminary Project footprint
- Preliminary Project design alignment
- Native Title Claims
- NPWS Estate
- Crown Parcel
- Crown Road
- Crown Waterway



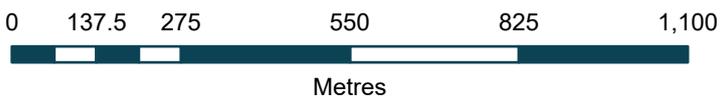
bd infrastructure
 Level 7, 45 Clarence Street, SYDNEY, NSW, 2000
 Web: www.bdinfrastucture.com.au

Spatial Reference
 Name: GDA2020 MGA Zone 55
 PCS: GDA2020 MGA Zone 55
 GCS: GDA2020
 Datum: GDA2020

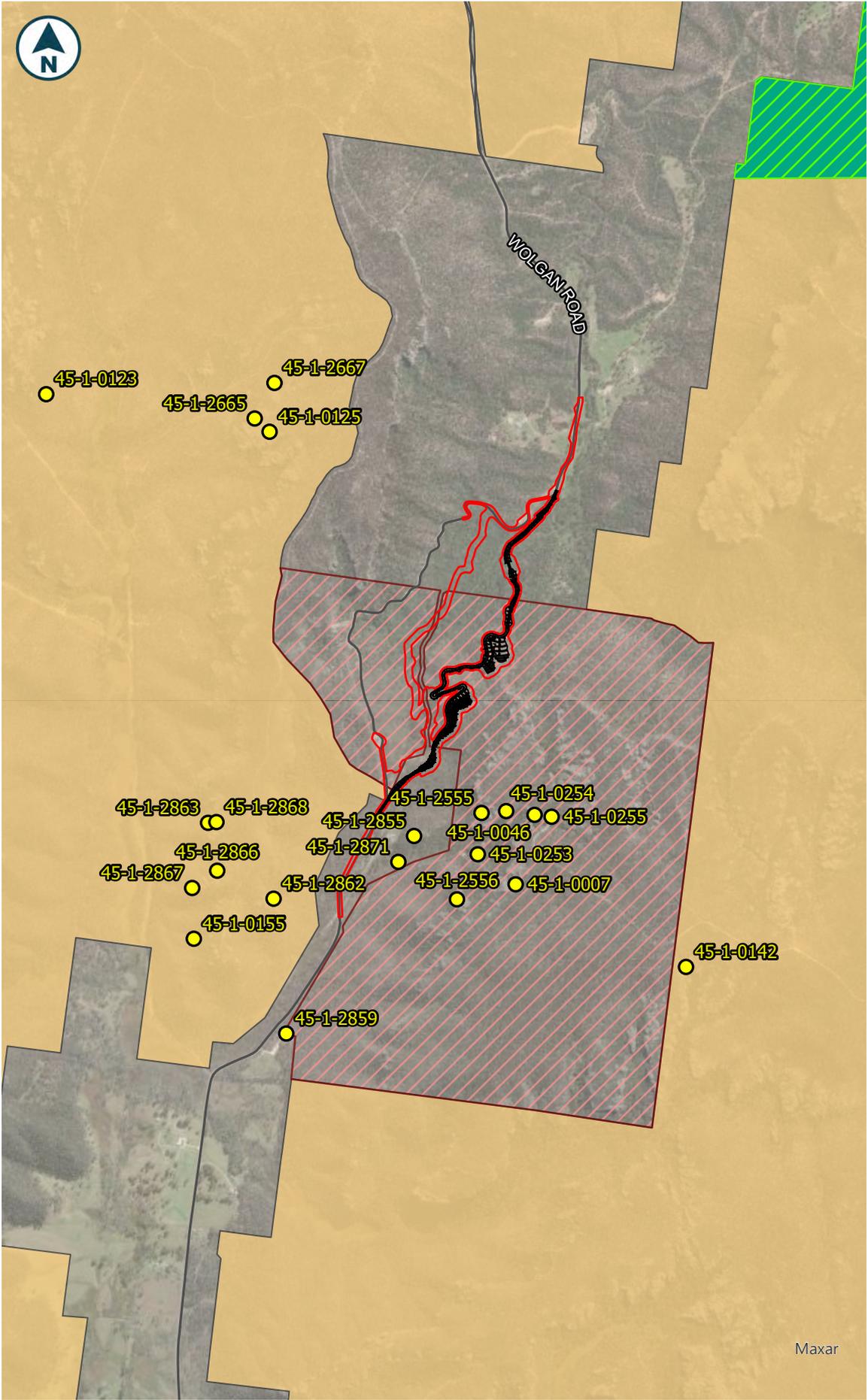


Maxar

Wolgan Road - Property



Wolgan Road - Planning Approvals Strategy

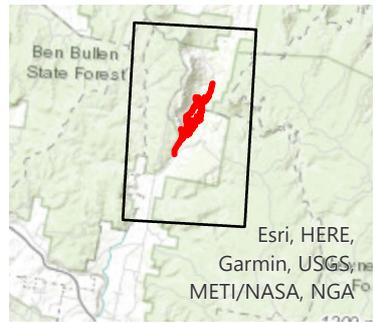


- Preliminary Project footprint
- Preliminary Project design alignment
- Aboriginal sites
- Aboriginal Place
- National Heritage - Listed
- National Heritage - Nominated (additional values)
- World Heritage



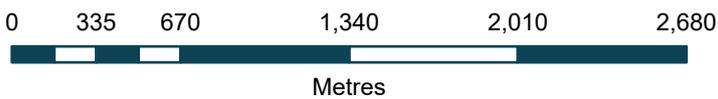
bd infrastructure
 Level 7, 45 Clarence Street, SYDNEY, NSW, 2000
 Web: www.bdinfrastucture.com.au

Spatial Reference
 Name: GDA2020 MGA Zone 55
 PCS: GDA2020 MGA Zone 55
 GCS: GDA2020
 Datum: GDA2020



Maxar

Wolgan Road - Heritage



Attachment C – EP&A Regulation Section 171(2) factors

Environmental factor	Consideration
Any environmental impact on a community?	<p>The Project would have some impacts on the community, including:</p> <ul style="list-style-type: none"> • the proposed alignment would likely have a substantial direct impact on an Aboriginal Place • potential economic benefits associated with re-instatement of access to Wolgan Valley (operation phase) and temporary benefits related to investment in the locality during construction (including construction workers purchases of goods and services) • potential amenity impacts (noise, dust etc) during construction for a small number of local residents close to the project footprint
Any transformation of a locality?	<p>The Project would result in the introduction of a new (third) road footprint in a highly visible relatively untouched bushland area with pockets of rural development that, prior to the landslip and closure of Wolgan Road, only had one road footprint.</p> <p>The project would likely have substantial visual impacts (from particular viewpoints, including from Wolgan Valley looking south/ southeast towards Wolgan Gap) with some cuttings (excavation into the mountain side) reaching around 65 metres high in order to achieve road gradients.</p>
Any environmental impact on the ecosystems of the locality?	<p>The Project would require removal of a relatively large area of vegetation that, although not threatened Plant Community Types (PCTs) under the TSC Act or EPBC Act, would likely form habitat for several threatened flora and fauna species likely to traverse the area. The Project would have some impact on fauna connectivity/ habitat fragmentation, however there are large areas of adjacent habitat and likely multiple additional fauna movement corridors within the area.</p> <p>The Project would also impact areas of highly erodible soils on steep topography that could result in erosion and sedimentation impacts and potential for related water quality impacts. The area traversed by the Project includes two 1st order waterways, two 2nd order waterways and one 3rd order waterway that is also mapped as Key Fish Habitat.</p> <p>Based on the results of a search of the EPBC Act protected matters search tool (PMST) in May 2024, outside potential biodiversity impacts, it is unlikely that there are other matters of national environmental significance (MNES) that would be affected by the Project.</p>
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	<p>The Project would re-establish access to/ from the Wolgan Valley. It would not likely impact (and would likely improve) access to Wolgan Valley. Based on the large area of relatively untouched bushland adjacent to the Project site, it would not likely impact the overall recreational, scientific or environmental values of the area.</p> <p>Given the Project would introduce an additional road footprint in a highly visible and relatively untouched bushland area, there would be a reduction in the aesthetic quality/ value of the locality (from particular viewpoints, including from Wolgan Valley looking south/ southeast towards Wolgan Gap).</p>

Environmental factor	Consideration
<p>Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p>	<p>The Project would have a substantial direct impact on an Aboriginal Place and may also impact on (as yet unknown) Aboriginal archaeology that would likely have anthropological, scientific, archaeological, cultural and social significance. The <i>Blackfellows Hand Reserve (Maiyingu Marragu) Management and Biodiversity Plan</i> (EcoLogical Australia, 2013) includes the following information from a representative of the Migaan Aboriginal Corporation:</p> <p><i>Blackfellows Hand Aboriginal Place was an important meeting and educational place and holds special meaning for Wiradjuri people. The place is also highly valued by the wider Aboriginal community, including Gandangara, Dharug and Dharkinjung people. The area is regarded for its richness in wild resources and its natural beauty - the vegetation, rock formations, ochres and waterfalls create an aesthetic ambience. Blackfellows Hand Aboriginal Place was also important as an occupation site and includes a men's and a women's area. There is a women's birthing area in a secluded part of the complex.</i></p> <p>The project may also have minor direct impacts on the Gardens of Stone State Conservation Area (an area that forms part of the National Parks estate). This property/ area is immediately adjacent and to the west of the Project. The Gardens of Stone State Conservation Area forms part of the area being considered for National Heritage listing (nomination, not currently listed) under the EPBC Act. The area forms part of the nomination for expansion of, and listing of additional nationally significant heritage values, for the Greater Blue Mountains Area National Heritage place.</p>
<p>Any impact on the habitat of protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i>)?</p>	<p>Based on desktop analysis and some (limited) site investigations, the Project would, through the removal of native vegetation, impact on habitat for several threatened species listed under the BC Act and the EPBC Act.</p> <p>Most of the species identified as having habitat within the area are highly mobile (birds, bats, gliders) and as such there is likely to be large areas of suitable habitat for these species in the area adjacent to the Project site (including large areas of National Parks estate).</p>
<p>Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</p>	<p>Based on preliminary design information and constructability inputs, the Project would require around 24.43 of high-quality condition native vegetation clearing as well as potential direct and/ or indirect impacts to multiple watercourses, one of which is also mapped as Key Fish Habitat.</p> <p>Based on the extent of habitat (for both flora and fauna) in areas adjacent to the Project (including large areas of National Parks estate), it is less likely that the Project would result in the endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air, however this is subject to change given the early stage of project development, and the limited on-site investigations carried out to date.</p>
<p>Any long-term effects on the environment?</p>	<p>It is unlikely that the Project would have any long-term effects on the environment.</p>
<p>Any degradation of the quality of the environment?</p>	<p>The Project is located in an area of high environmental value with limited development, meaning it is relatively pristine. The Project, therefore, has the potential to degrade the quality of the environment, predominantly in the short term (construction phase) due to construction activities (potential impacts to biodiversity, water, air, noise etc.).</p> <p>There will be mitigation and management measures developed as part of the planning approval process, however even with mitigation, impacts to/ degradation of the quality of the environment is likely to occur to some extent based on the location of the Project and the nature of activities required to deliver it.</p>

Environmental factor	Consideration
Any risk to the safety of the environment?	<p>The Project would introduce additional road infrastructure to the area. Its construction has the potential to result in erosion and sedimentation and water quality impacts, including as a result of accidental spills. These risks are expected to be short term (construction phase) and manageable with mitigation.</p> <p>The Project would be located at the top of the Wolgan River catchment area (upper reaches of the Hawkesbury Nepean Catchment) and stormwater runoff (rather than flood risk) would need to be considered during design development and construction phases. Given the location of the Project, there would not be risk related to storm surge, sea level rise, urban heat, noting that design development would consider bushfire and other climate change risks/ adaptation.</p> <p>In the longer term (operation) there is limited risk to the safety of the environment based on the relatively low vehicle volumes likely to utilise the road and that it would not be used to transfer large volumes of freight or high risk (hazardous) cargo.</p> <p>The risk to the safety of the environment would likely increase based on the construction activities required, however longer term (operation phase) risks would be managed as part of design development and the implementation of appropriate mitigation and management measures.</p>
Any reduction in the range of beneficial uses of the environment?	<p>There would be no reduction in the range of beneficial uses of the environment as a result of the Project. It has the potential to improve the range of beneficial uses for the community by improving (re-establishing) access to the Wolgan Valley for education, research and recreational purposes.</p>
Any pollution of the environment?	<p>The Project would likely have some temporary (construction phase) impacts on the environment including to air, water, soils (erosion and instability risk), and noise and vibration that would be minimised/ managed through the implementation of mitigation measures. There are relatively few receivers in the Project area and amenity-related impacts on the community would likely be limited.</p> <p>It is less likely that operation of the Project would result in the pollution of the environment, however incidents (vehicle accidents) and/ or spills have the potential to result in pollution of soils and water. There are likely to be relatively low vehicle volumes utilising the road and land uses within Wolgan Valley are unlikely to require transfer large volumes of freight or high risk (hazardous) cargo. The design would consider aspects such as spill containment.</p>
Any environmental problems associated with the disposal of waste?	<p>The Project is located in relatively steep and difficult terrain. Construction would generate (and require transfer of) a large volume of spoil that may be classified as either virgin excavated natural material (VENM) or excavated natural material (ENM) based on the NSW Environment Protection Authority (EPA) waste classification guidelines (2014).</p> <p>Given the relatively untouched nature of a majority of the Project site, it is unlikely that large volumes of contaminated material would be encountered, however the Project area is mapped as having 'severe limitations' for Acidification hazard.</p> <p>Spoil reuse would be investigated as part of the project development process with a number of potential locations in the area, including Springvale Coal mine, Wallarawang power station and Mount Piper power station sites.</p> <p>Other wastes typical of a road construction project would be generated by the Project and managed in accordance with NSW waste avoidance and resource recovery strategies, guidelines and legislation.</p>
Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?	<p>The Project would not result in increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply.</p>
Any cumulative environmental effect with other existing or likely future activities?	<p>The Project would result in the introduction of a new (third) road footprint in a highly visible relatively untouched bushland area with pockets of rural development that, prior to the landslip and closure of Wolgan Road, only had one road footprint. The Project would therefore further increase the area/ footprint of road infrastructure in the locality.</p> <p>Notwithstanding this, the location of the Project is such that there are few if any other developments of a size or nature that could be demonstrably linked to cumulative impacts with the Project. Cumulative impacts would be considered as part of the planning approval process with reference to relevant cumulative impact assessment guidelines.</p>

Environmental factor	Consideration
Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	Give the Project's location there would be no impact on coastal processes and coastal hazards, including those under projected climate change conditions.
Any applicable local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act?	<p>Key strategic planning documents for Lithgow LGA include the Community Strategic Plan (November 2022) and the <i>Our Place Our Future Delivery Program 2022/23 - 2025/26</i> (Lithgow City Council, 2022).</p> <p>The Project site falls within an area of Crown Land identified in the <i>Lithgow Generic Community Lands Plan of Management</i> (Lithgow City Council, 2013) as of cultural significance. Under that plan of management any areas of cultural significance require their own plan of management. On that basis the <i>Blackfellows Hand Reserve (Maiyingu Marragu) Management and Biodiversity Plan</i> (EcoLogical Australia, 2013) has been prepared for the Mingaan Aboriginal Corporation and Lithgow City Council.</p>
Any other relevant environmental factors?	Nothing not covered above.

Attachment D – Preliminary consideration of biodiversity offset costs

30 May 2024

RE: – Wolgan Road reconstruction project – Strategic biodiversity offset estimates

As instructed, we have prepared strategic biodiversity offset estimates for the Wolgan Road reconstruction project based on the agreed preliminary project footprint.

Background

Wolgan Road was closed to traffic in November 2022 by Council due to geotechnical risks and land slips and rock falls.

Lithgow City Council are currently in the process of investigating options for the construction of a new road alignment further south from the existing road (the Project) for which disaster recovery funding will be sought.

The Project would impact native vegetation and habitat for threatened species listed under the *Biodiversity Conservation Act 2016* (BC Act). These impacts may give rise to biodiversity offset requirements.

Approach to estimating biodiversity offsets

The approach to developing a strategic stage estimate of biodiversity offsets is based on the approach outlined in the Transport for NSW No net loss guidelines. Estimates assume that the area-based offsetting thresholds are triggered. The process has included the following steps:

- Development of an indicative construction (clearing) footprint for the Project.
- Identification of the area (in hectares) of each plant community type (PCT) to be impacted by the Project (refer to the attachment to this letter). PCTs were adopted from State Vegetation Type Map.
- Application of a ratio of 30 ecosystem credits per hectare of PCTs to be impacted (as recommended by the No net loss guidelines)
- Estimation of the cost of acquiring the ecosystem credits as follows:
 - Identification of an Offset Trading Group (OTG) for each PCT using the Plant Community Type to Offset Trading Group lookup tool.
 - Adoption of the weighted average per credit price for the each relevant OTG (within the same or surrounding IBRA subregion) where available on the Biodiversity Credits Market Sales Dashboard.
 - Adoption weighted average price for ecosystem credits in the same IBRA subregion region (or surrounding subregion) where suitable pricing for a subject OTG is not available.
 - Calculate a 30 per cent premium on the cost of acquiring the ecosystem credits to account for the costs of species credits (as recommended by the No net loss guidelines).
- While some areas of Key Fish Habitat occur within the Project footprint, specific aquatic habitat offsets are only used where marine vegetation is affected. As no areas of seagrass, mangrove, and saltmarsh would be affected, aquatic habitat offsets have not been calculated. Were relevant, riparian vegetation has been included in terrestrial biodiversity offset calculations.

Strategic offset estimates

Preliminary strategic stage terrestrial biodiversity offset estimates for the Wolgan Road reconstruction project are provided in Table 1 below. The total area of clearing assumed in generating the strategic offset estimates is 24.43 hectares. Market prices for nominated OTGs within the same or neighbouring IBRA subregions were not

available in the Biodiversity Credits Market Sales Dashboard and therefore the weighted average price for ecosystem credits for the Wollemi subregion has been adopted (\$6,328 per credit as of 20 May 2024).

Table 1: Wolgan Road reconstruction – strategic offset estimates

PCT ID	PCT Name	OTG	Impacted area (ha)	Credit estimate	Price per credit	Estimated offset
3367	Central Tableland Granites Grassy Box Woodland	Southern Tableland Grassy Woodlands greater than or equal to 70% and less than 90% cleared	0.01	0.3	\$6,328 Wollemi IBRA weighted average	\$1,898
3369	Central Tableland Ranges Peppermint-Gum Grassy Forest	Southern Tableland Grassy Woodlands greater than or equal to 50% and less than 70% cleared	0.51	15.3	\$6,328 Wollemi IBRA weighted average	\$96,818
3495	Western Blue Mountains Monkey Gum Gully Forest	Central Gorge Dry Sclerophyll Forests less than 50% cleared	5.94	178.2	\$6,328 Wollemi IBRA weighted average	\$1,127,649
3510	Capertee Slopes Stringybark-Box Forest	Upper Riverina Dry Sclerophyll Forests less than 50% cleared	10.60	318	\$6,328 Wollemi IBRA weighted average	\$2,012,304
3694	Upper Blue Mountains Ridgetop Woodland	Sydney Montane Dry Sclerophyll Forests less than 50% cleared	3.6	108	\$6,328 Wollemi IBRA weighted average	\$683,424
3695	Western Blue Mountains Peppermint Sheltered Forest	Sydney Montane Dry Sclerophyll Forests less than 50% cleared	0.01	0.3	\$6,328 Wollemi IBRA weighted average	\$1,898
3747	Southern Tableland Western Hills Scribbly Gum Forest	Southern Tableland Dry Sclerophyll Forests greater than or equal to 50% and less than 70% cleared	3.32	99.6	\$6,328 Wollemi IBRA weighted average	\$630,269
3749	Western Blue Mountains Scribbly Gum Forest	Southern Tableland Dry Sclerophyll Forests less than 50% cleared	0.02	0.6	\$6,328 Wollemi IBRA weighted average	\$3,797

PCT ID	PCT Name	OTG	Impacted area (ha)	Credit estimate	Price per credit	Estimated offset
4064	Central Eastern Ranges River Oak Forest	Coastal Heath Swamps greater than or equal to 50% and less than 70% cleared	0.42	12.6	\$6,328 Wollemi IBRA weighted average	\$79,733
Ecosystem Credit Total						\$4,637,790
Species Credit Total (30% premium on ecosystem credits)						\$1,391,337
Total offset estimate						\$6,029,127

Assumptions and limitations

The above estimates should be considered preliminary and will change due to revisions in vegetation impact and credit pricing. The area of vegetation clearing calculated is conservative. Some of the areas within the Project footprint includes mapped vegetation across the existing Wolgan Road and the recently completed Donkey Steps emergency access track. Given these are, or have recently been cleared of vegetation, the estimate results in a conservative assumption for vegetation clearance.

We recommend seeking a price estimate from the Biodiversity Conservation Trust during future stages of project development.

If you have any queries, please do not hesitate to contact me.

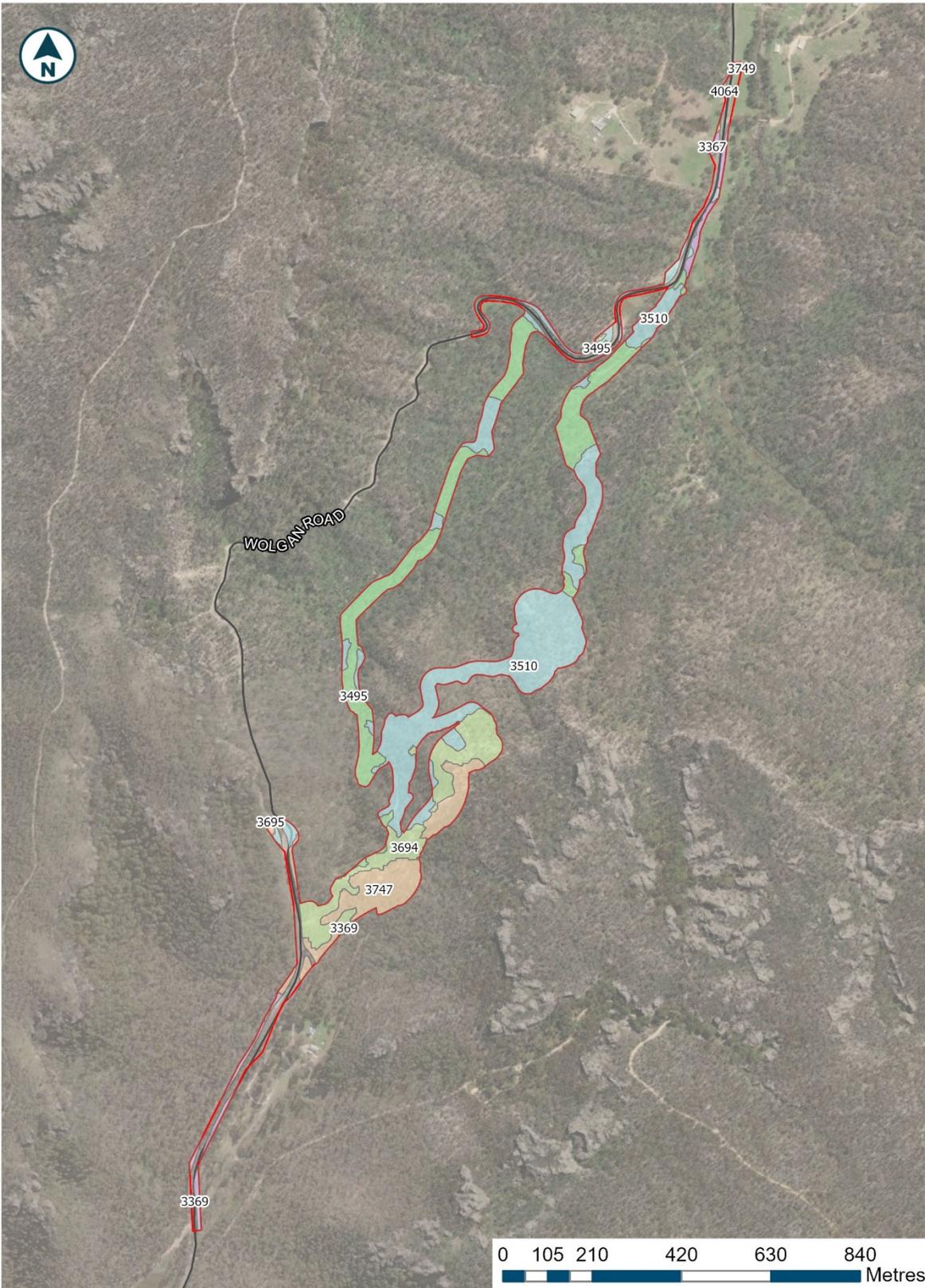
Kind regards,

Stuart Hill



Principal

bd infrastructure



- | | | | | |
|--|---|--|--|--|
| Preliminary Project footprint | 3369, Central Tableland Ranges Peppermint-Gum Grassy Forest | 3510, Capertee Slopes Stringybark-Box Forest | 3695, Western Blue Mountains Peppermint Sheltered Forest | 3749, Western Blue Mountains Scribbly Gum Forest |
| 3367, Central Tableland Granites Grassy Box Woodland | 3495, Western Blue Mountains Monkey Gum Gully Forest | 3694, Upper Blue Mountains Ridgetop Woodland | 3747, Southern Tableland Western Hills Scribbly Gum Forest | 4064, Central Eastern Ranges River Oak Forest |

Attachment E – EPBC Act protected matters search report



Australian Government

Department of Climate Change, Energy,
the Environment and Water

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: 15-May-2024

[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:	3
Listed Threatened Species:	57
Listed Migratory Species:	11

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:	19
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:	1
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
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 may occur within area
Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion	Endangered	Community may occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to 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 known to occur within area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	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
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat known to occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known 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 may occur within area

Scientific Name	Threatened Category	Presence Text
Polytelis swainsonii Superb Parrot [738]	Vulnerable	Species or species habitat may occur within area
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat likely to occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area
FISH		
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat known to occur within area
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
FROG		
Heleioporus australiacus Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat may occur within area
Litoria booroolongensis Booroolong Frog [1844]	Endangered	Species or species habitat may occur within area
Litoria littlejohni Northern Heath Frog, Littlejohn's Tree Frog [64733]	Endangered	Species or species habitat may occur within area
INSECT		
Paralucia spinifera Bathurst Copper Butterfly, Purple Copper Butterfly, Bathurst Copper, Bathurst Copper Wing, Bathurst-Lithgow Copper, Purple Copper [26335]	Vulnerable	Species or species habitat likely to occur within area
MAMMAL		

Scientific Name	Threatened Category	Presence Text
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat known to occur within area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat known to occur within area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may 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
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area
PLANT		
Acacia bynoeana Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat may occur within area
Boronia deanei Deane's Boronia [8397]	Vulnerable	Species or species habitat may occur within area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Eucalyptus aggregata Black Gum [20890]	Vulnerable	Species or species habitat known to occur within area
Eucalyptus pulverulenta Silver-leaved Mountain Gum, Silver-leaved Gum [21537]	Vulnerable	Species or species habitat likely to occur within area
Euphrasia arguta [4325]	Critically Endangered	Species or species habitat may occur within area
Haloragodendron lucasii Hal [6480]	Endangered	Species or species habitat may occur within area
Hibbertia acaulothrix [87409]	Endangered	Species or species habitat may occur within area
Kunzea cabbagei [11420]	Vulnerable	Species or species habitat likely to occur within area
Leucochrysum albicans subsp. tricolor Hoary Sunray, Grassland Paper-daisy [89104]	Endangered	Species or species habitat may occur within area
Persoonia hirsuta Hairy Geebung, Hairy Persoonia [19006]	Endangered	Species or species habitat may occur within area
Persoonia marginata Clandulla Geebung [10852]	Vulnerable	Species or species habitat likely to occur within area
Pomaderris brunnea Rufous Pomaderris, Brown Pomaderris [16845]	Vulnerable	Species or species habitat likely to occur within area
Pomaderris cotoneaster Cotoneaster Pomaderris [2043]	Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Prasophyllum petilum Tarengo Leek Orchid [55144]	Endangered	Species or species habitat may occur within area
Prasophyllum sp. Wybong (C.Phelps ORG 5269) a leek-orchid [81964]	Critically Endangered	Species or species habitat may occur within area
Pultenaea glabra Smooth Bush-pea, Swamp Bush-pea [11887]	Vulnerable	Species or species habitat known to occur within area
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat may occur within area
REPTILE		
Aprasia parapulchella Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat likely to occur within area
Delma impar Striped Legless Lizard, Striped Snake-lizard [1649]	Vulnerable	Species or species habitat may occur within area
Eulamprus leuraensis Blue Mountains Water Skink [59199]	Endangered	Species or species habitat likely to occur within area
Hoplocephalus bungaroides Broad-headed Snake [1182]	Endangered	Species or species habitat may occur within area

Listed Migratory Species	[Resource Information]	
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		

Scientific Name	Threatened Category	Presence Text
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 known to occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat likely to occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known 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]	Vulnerable	Species or species habitat may occur within area
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]	Vulnerable	Species or species habitat may 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]	Vulnerable	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
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area overfly marine area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known 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 likely to occur within area overfly marine area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may 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 likely to occur within area overfly marine area

Extra Information

State and Territory Reserves [\[Resource Information \]](#)

Protected Area Name	Reserve Type	State
Gardens of Stone	State Conservation Area	NSW

EPBC Act Referrals [\[Resource Information \]](#)

Title of referral	Reference	Referral Outcome	Assessment Status
Angus Place West	2022/09270		Assessment

Not controlled action

Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed
--	-----------	-----------------------	-----------

Not controlled action (particular manner)

Aerial baiting for wild dog control	2006/2713	Not Controlled Action (Particular Manner)	Post-Approval
---	-----------	---	---------------

Bioregional Assessments [\[Resource Information \]](#)

SubRegion	BioRegion	Website
Sydney	Sydney Basin	BA website

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

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-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.

[© Commonwealth of Australia](#)

Department of Climate Change, Energy, the Environment and Water

GPO Box 3090

Canberra ACT 2601 Australia

+61 2 6274 1111