

# STATEMENT OF ENVIRONMENTAL EFFECTS

UPGRADE OF SERVICES, INCLUDING SNOWMAKING  
KAREELA HUTTE TO BLACK SALLEES—SNOWGUMS TOP STATION  
THREDBO ALPINE RESORT  
KOSCIUSZKO NATIONAL PARK



Prepared for:  
Kosciuszko Thredbo Pty Ltd



MAY 2023  
Project: 08-23

Dabyne Planning Pty Ltd  
Reproduction of the document or any part  
thereof is not permitted without prior written permission

# STATEMENT OF ENVIRONMENTAL EFFECTS

## UPGRADE OF SERVICES, INCLUDING SNOWMAKING KAREELA HUTTE TO BLACK SALLEES—SNOWGUMS TOP STATION THREDBO ALPINE RESORT KOSCIUSZKO NATIONAL PARK

This report has been prepared by:

A handwritten signature in black ink, appearing to read 'I. Pasalich', is positioned above a horizontal line.

---

Ivan Pasalich  
Principal  
Dabyne Planning Pty Ltd

**MAY 2023**

**Project: 09-23**

**Dabyne Planning Pty Ltd**

Reproduction of the document or any part  
thereof is not permitted without prior written permission

# CONTENTS

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>The Site and Locality</b>	<b>4</b>
2.1	The Locality	4
2.2	The Site	4
<b>3</b>	<b>Description of the Development</b>	<b>7</b>
3.1	General Description	7
3.1.1	Snowmaking	7
3.1.2	Services	8
3.1.3	Trenching	9
3.2	Construction Timing	9
3.3	Access	9
<b>4</b>	<b>Key Matters for Consideration</b>	<b>10</b>
4.1	Fauna and Flora	10
4.2	Aboriginal Cultural Heritage	12
<b>5</b>	<b>Environmental and Planning Legislation</b>	<b>13</b>
5.1	Environmental Planning and Assessment Act, 1979	13
5.1.1	Section 4.15(1)(a)(i) – Environmental Planning Instruments	13
5.1.2	Section 4.15(1)(a)(ii) – Draft Environmental Planning Instruments	20
5.1.3	Section 4.15(1)(a)(iii) – Development Control Plans	20
5.1.4	Section 4.15(1)(a)(iiia) – Planning Agreements	20
5.1.5	Section 4.15(1)(a)(iv) – Regulations	20
5.1.6	Section 4.15(1)(b)– Likely Impacts	20
5.1.7	Section 4.15(1)(c)– Suitability of the Site	20
5.1.8	Section 4.15(1)(d)– Submissions	20
5.1.9	Section 4.15(1)(e)– Public Interest	21
5.2	Biodiversity Conservation Act, 2016	22
<b>6</b>	<b>Conclusion</b>	<b>23</b>

Appendix A Photographs

Appendix B Fauna and Flora Assessment

Appendix C AHIMS Search Results

# 1. INTRODUCTION

Dabyne Planning Pty Ltd has been engaged by Kosciuszko Thredbo (KT), the head lessee of the Thredbo Alpine Resort to prepare a Statement of Environmental Effects to accompany a Development Application (DA) to the NSW Department of Planning & Environment (DPE).

As part of the ongoing replacement and upgrades to the snowmaking system across the Thredbo Resort and in anticipation of the proposed replacement and upgrade of the Snowgums Chairlift, the existing snowmaking mains between the Snowgums Chairlift top station and Kareela Hutte restaurant along the Village Trail ski run are proposed to be replaced for a distance of approximately 225m.

The replacement and upgraded mains will include air and water pipelines and replacement and upgrades of hydrants. This will include the installation of short laterals to the hydrants to allow for connection into the new main. Whilst these works are being undertaken the proposal will replace existing manual hydrants, install new manual hydrants, install new pits and lance guns.

The proposed location of the replacement mains will generally follow the existing mains alignment along a disturbed ski slope.

To minimise impacts on the environment and to take the opportunity to improve the services connection between the Black Saltees restaurant and Kareela Hutte restaurant, the same trenching required for the snowmaking replacement and upgrade works are proposed to be used for the majority of a services upgrade between the two buildings to provide improved water supply, upgraded sewer pipeline, electrical supply and communications.

Therefore, only one primary disturbance corridor between the two buildings along the Village Trail ski run is required to accommodate both a snowmaking and services upgrade.

The disturbance corridor has been located to avoid the mapped biodiversity values areas to avoid triggering the Biodiversity Offsets Scheme (BOS) under the Biodiversity Conservation Act, 2016 (BC Act, 2016), except for one short section where the proposed disturbance corridor has been located within a highly disturbed ski slope, therefore avoiding removal of native vegetation within the mapped area. This allows for the BOS to be avoided and along with the alignment of the trenching located within disturbed ski slopes, will minimise impacts on native vegetation.

Accordingly, a fauna and flora assessment has been prepared. This assessment has concluded that the proposal will not result in any substantial adverse impacts on native vegetation communities or associated fauna habitats, nor will there be any impacts on flora species of conservation significance, important fauna habitats, habitat connectivity or any other biodiversity values of conservation significance.

A detailed description of the proposal is provided in Section 3 of the report.

The purpose of this SEE is to:

- describe the land to which the DA relates.
- describe the form of the proposed works.
- define the statutory planning framework within which the DA is to be assessed and determined; and
- assess the proposed development against the matters for consideration listed under Section 4.15(1) of the Environmental Planning and Assessment Act, 1979 (EP&A Act, 1979).

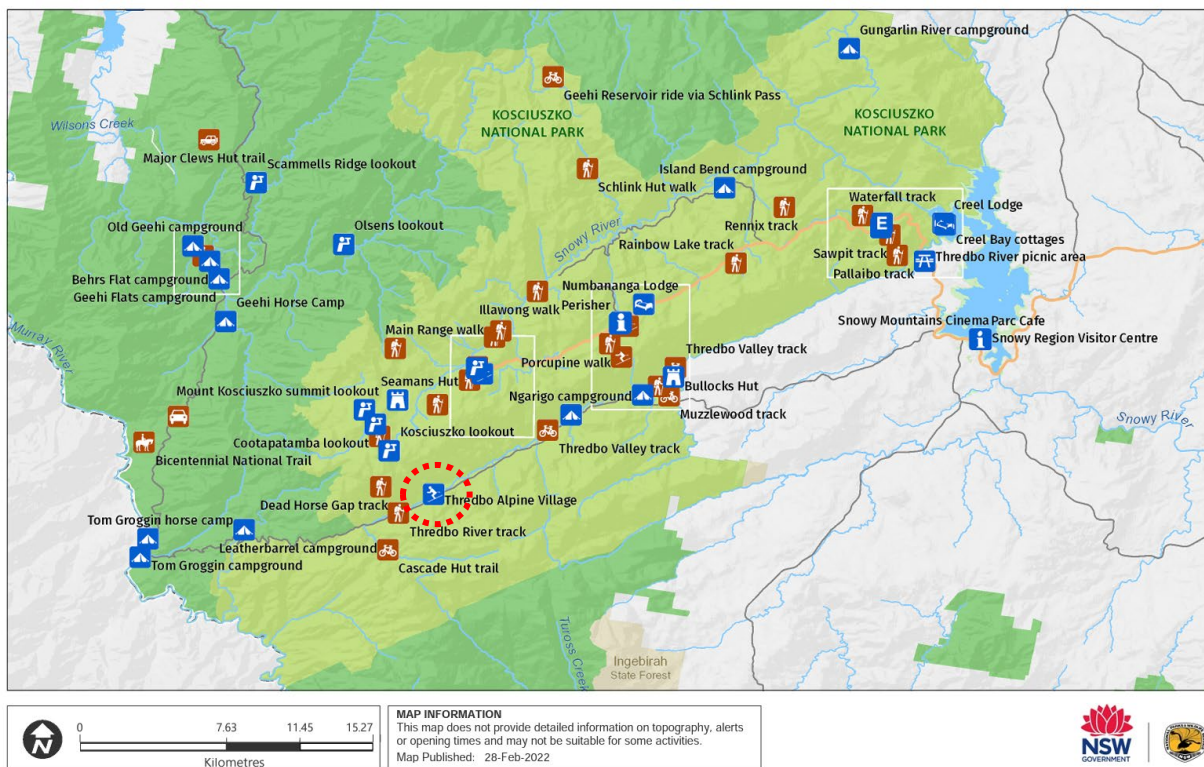
The report has been prepared in accordance with the requirements of the Environmental Planning and Assessment Regulations 2021.

## 2. THE SITE AND LOCALITY

### 2.1 The Locality

The subject site is located within the Thredbo Alpine Resort, approximately 35kms from Jindabyne. Access to the resort is achieved via the Alpine Way.

The location of Thredbo is illustrated in context with the regional locality below:



*Figure 1: Context of the site within the region*

### 2.2 The Site

The subject site is generally located between Black Sallees restaurant, adjacent to the Snowgums Chairlift top station and Kareela Hutte restaurant and comprises of the Village Trail ski run.

The summer access road provides vehicle access to both restaurants and the Snowgums Chairlift top station.

The location of these works is illustrated in figure's 2 & 3 below, with photos provided in Appendix A.



*Figure 2: Location of the subject works*



Figure 3: Thredbo ski trail map with the identified location of the proposed works

## 3. DESCRIPTION OF THE DEVELOPMENT

### 3.1 General Description

The purpose of the development is to replace existing snowmaking infrastructure between the Snowgums Chairlift top station and Kareela Hutte restaurant and also take the opportunity to co-locate the installation of new services including water, sewer, power and communications, between the Black Sallees restaurant and Kareela Hutte restaurant, generally within the same trench and therefore disturbance corridor.

#### 3.1.1 Snowmaking

As part of the ongoing replacement and upgrades of the snowmaking system across the Thredbo Resort and in anticipation of the proposed replacement and upgrade of the Snowgums Chairlift, the existing snowmaking mains between the Snowgums Chairlift top station and Kareela Hutte restaurant along the Village Trail ski run are proposed to be replaced for a distance of approximately 225m.

The replacement mains will include air and water pipelines and replacement of hydrants. This will include the installation of short laterals to the hydrants to allow for connection into the new main.

Snowmaking improves seasonal length and viability of the snow season and is considered critical infrastructure for the operation of the ski resort, in particular in mitigating any potential impacts from climate change.

#### Replacement & Upgraded Snowmaking Mains:

The existing air and water pipes are 250mm and 200mm in diameter respectively.

To provide potential increase in future capacity and avoid having to replace and upgrade the mains in the short to medium term future, the proposed steel snowmaking mains are 300mm in diameter for air and 250mm in diameter for water.

#### Laterals:

The new snowmaking mains will need to tie into each hydrant on the ski slope adjacent (skiers right) on the Village Trail ski run. This will be achieved by installing a new lateral connection with each lateral servicing the hydrants to comprise of two pipes, one for water and one for air, each 50mm in diameter, a dial and electrical cable.

#### Replacement & Upgrade of Hydrants:

Whilst the mains are being replaced, the proposal will replace existing manual hydrants, install new manual hydrants, install new pits and lance guns, as outlined in the summary table below:

**Table 1: Hydrant Upgrades:**

Hydrant Reference	Proposed
Not numbered (next to gas tank)	Install new double hydrant and connect to existing main
831	Install new double hydrant next to existing hydrant
830	Existing manual hydrant to be left in-situ
829	Existing manual hydrant to be left in-situ
828	Existing manual hydrant to be left in-situ
827	Existing manual hydrant to be left in-situ
826	Move and replace existing manual hydrant with new auto pit and lance
825	Existing automatic lance to be left in-situ
824	Install new auto pit and lance
823	Install new auto pit and replace existing lance with new lance. Existing manual hydrant to be left in-situ

### 3.1.2 Services

#### Upgraded Water Supply:

To provide an improved and reliable water supply between the Black Sallees restaurant and Kareela Hutte restaurant, a new water pipeline is proposed between the buildings.

The water supply pipe will be 65mm in diameter.

#### Upgraded Sewer Pipeline:

To provide an upgraded sewer pipeline from Black Sallees restaurant to an existing manhole below the Kareela Hutte restaurant, a new sewer rising main with a 65mm diameter pipe will be installed to the road, above the building, with a new 150mm gravity main connecting to a man hole below the Kareella Hutte restaurant.

The sewer pipeline will be installed within the same trench as the water pipeline, where combined.

#### Upgraded Electricity Supply:

Co-located within the same trench, a new 415v underground electrical supply will be installed between the Black Sallees and Kareella Hutte restaurants.

#### Upgraded Communications:

A new data cable will be installed within the trench between Black Sallees and Kareella Hutte restaurants.

### **3.1.3 Trenching**

Where combined the services and snowmaking infrastructure will require a trench approximately 1.7m wide and 1m deep.

Where located separately, the services will require a trench approximately 0.5m wide and 0.6m deep.

The trench size required for the laterals is approximately 0.8m wide and 1m deep.

The disturbance width corridor required for the trenching is 8m with a short section between hydrants 826 and 828 to be narrowed to 6m to minimise impacts on native vegetation on the lower side. The disturbance corridor associated with the laterals is 6m.

## **3.2 Construction Timing**

The proposed construction timing of the project has been scheduled to start in October 2023 and be completed by the end of May 2024.

## **3.3 Access**

Access to the site is achieved via the existing summer access road.

## 4. KEY MATTERS FOR CONSIDERATION

### 4.1 Fauna and Flora

The proposed works have been co-located and sited within a highly disturbed corridor comprising of a ski slope and road. Impacts on native vegetation will be limited to affect an area less than 10m<sup>2</sup> of already highly disturbed native vegetation.

These impacts have been assessed by Ryan Smithers, Senior Ecologist, Eco Logical Australia with the correspondence provided in Appendix B.

*This assessment has identified that the 'proposal will not result in any substantial adverse impacts on native vegetation communities or associated fauna habitats, nor will there be any impacts on flora species of conservation significance, important fauna habitats, habitat connectivity or any other biodiversity values of conservation significance'.*

*The assessment concluded that the 'proposed works will not result in any adverse impacts on threatened species, populations or ecological communities and will not have a significant impact on these entities pursuant to the NSW Biodiversity Conservation Act 2016 or the Commonwealth Environment Protection and Biodiversity Conservation Act 1999'.*

### 4.2 Aboriginal Cultural Heritage

In regard to the Due Diligence Code of Practice, DECCW 2010, the generic due diligence process has been followed and documented below.

*Step 1. Will the activity disturb the ground surface?*

Comment:

The proposed snowmaking and services installation will result in disturbance of the ground surface, however this will be located within highly disturbed areas, such as ski slopes and access roads.

*Step 2. Step 2a. Search the AHIMS database and use any other sources of information of which you are already aware.*

Comment:

An extensive search has been undertaken and provided in Appendix C. The search has identified that there are no recorded Aboriginal sites or places within the subject site area.

*Step 2b. Activities in areas where landscape features indicate the presence of Aboriginal objects?*

Comment:

Extensive archaeological studies for the ski slope area of Thredbo have been previously undertaken by Past Traces Heritage Consultants, Navin Officer Heritage Consultants, NSW Archaeology, Ironbark Heritage and NGH Environmental and these have found that there are no previously recorded Aboriginal sites located on or within the vicinity of the subject ski slope area.

These studies were included in the following reports:

- 'Past Traces Heritage Consultants (2017). Aboriginal Heritage Due Diligence Assessment – Replacement of Merritts Chairlift, Thredbo Alpine Resort.
- 'NGH Environmental (2017). Aboriginal Heritage Due Diligence Assessment – Thredbo Mountain Bike Trails (Stage 1C).
- 'Ironbark Heritage. (2013). A Cultural Heritage Due Diligence Assessment for Thredbo Bike Trails Stage 1 Kosciusko National Park. Report to Dabyne Planning Pty Ltd'.
- 'SEE for the Separation of the Crackenback Supertrail and World Cup Runs, Thredbo, URS Australia Pty Ltd, 2004'
- 'SEE for the Proposed Vegetation Removal, Ski Slopes, Thredbo URS Australia Pty Ltd, 2004'
- 'SEE for Proposed Works on the Tower 10 Ski Run, Thredbo, URS Australia Pty Ltd, 2005'

These studies have identified that due to the slope, orientation and exposure of the ski slope area, being generally steep with an exposed aspect and lack of sheltering tors, they are unlikely to have been favourable campsite locations. The majority of Aboriginal occupation sites are predicted to be on the valley floor in the Thredbo area.

None of the above field surveys identified the presence of Aboriginal objects or assessed the ski slope area as having archaeological potential for aboriginal objects.

Given the extent of the previous disturbance, these developments would have removed the topsoils and disturbed soil profiles, thus removing potential for Aboriginal sites to remain within these locations.

*Step 3. Can you avoid harm to the object or disturbance of the landscape feature?*

The proposed works will be located along a highly disturbed corridor which has been subject to previous construction disturbance, including earthworks, removal and levelling of topsoils and vegetation removal.

As a result, it is considered that the project has low potential to impact on unrecorded Aboriginal heritage sites.

Therefore, there is no requirement to move onto Step 4, as per the Code.

This fulfils all reasonable steps in undertaking a due diligence assessment.

In the unlikely event that Aboriginal items are uncovered during excavation, all work shall cease at that location and the NPWS shall be notified.

## 5. ENVIRONMENTAL AND PLANNING LEGISLATION

### 5.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

#### 5.1.1 SECTION 4.15(1)(a)(i) – ENVIRONMENTAL PLANNING INSTRUMENTS

The only applicable Environmental Planning Instrument to the proposed development and site is State Environmental Planning Policy (Precincts – Regional) 2021 (SEPP Regional Precincts).

The original Chapter 4 Kosciuszko Alpine Region was based completely (a straight transfer) on the previous State Environmental Planning Policy (Kosciuszko Alpine Resorts) 2007, repealed on the 26 November 2021.

On the 16 December 2022, an entire new Chapter 4 of the SEPP Regional Precincts was gazetted without any formal public exhibition and no explanation of intended effect was publicised.

The key relevant provisions of the new Chapter 4 of the SEPP Regional Precincts have been addressed below.

#### Section 4.1 Aim and objectives of Chapter:

Matter for Consideration	Response
The aim of this Chapter is to protect and enhance the Alpine Region by ensuring development managed with regard to the principles of ecologically sustainable development, including the conservation and restoration of ecological processes, natural systems and biodiversity.	
(2) The objectives of this Chapter are as follows—	
(a) to encourage the carrying out of a range of development to support sustainable tourism in the Alpine Region all year round, if the development does not result in adverse environmental, social or economic impacts on the natural or cultural environment of the Alpine Region, including cumulative impacts on the environment from development and resource use,	<p><i>The proposal is to replace and upgrade infrastructure services, that facilitate tourism, albeit in relation to snowmaking this is for winter only and has been designed to minimise environmental impacts whilst providing positive social and economic impacts.</i></p> <p><i>The SEPP does not provide any framework for consideration of cumulative impacts.</i></p>
(b) to establish planning controls that— (i) contribute to and facilitate the carrying out of ecologically sustainable development in the Alpine Region, and (ii) recognise the Alpine Region's significant contribution to recreation and the tourism economy in the State,	<i>The objective relates to establishing planning controls and therefore is not relevant to the assessment of the proposed development.</i>

- (c) to minimise the risk to the community exposure to environmental hazards, particularly geotechnical hazards, bush fires and flooding, by—
- (i) generally requiring development consent on land in the Alpine Region, and
  - (ii) establishing planning controls for buildings ensure the safety of persons using the buildings if there is a fire.

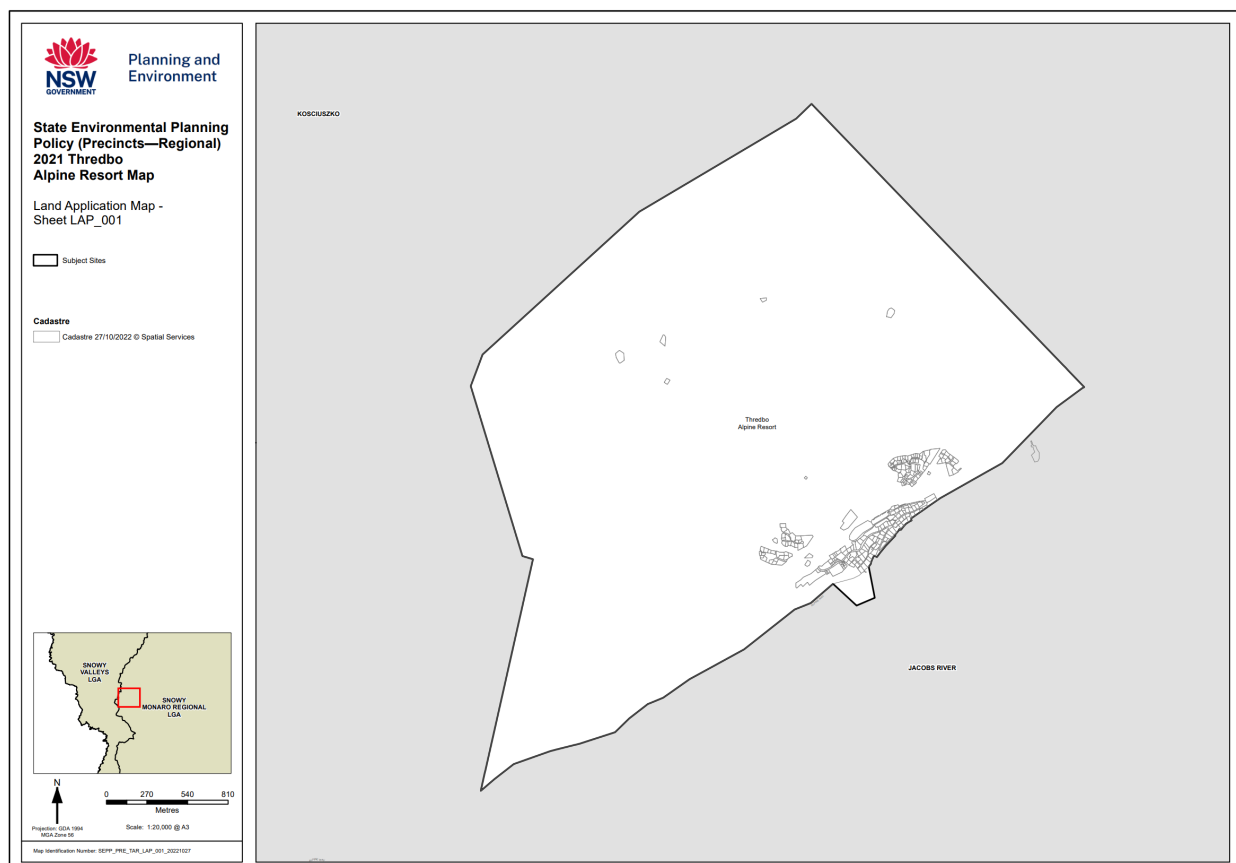
*The objective sets out to minimise risk to the community in relation to environmental hazards, such as geotechnical hazards, bush fires and flooding by requiring development consent.*

*A DA has been lodged and the development requires consent.*

*The second part of the objective relates to establishing planning controls for buildings to ensure the safety of persons using the buildings if there is a fire. This is not an environmental hazard, and the proposal does not relate to buildings.*

## Section 4.2 Land to which Chapter applies:

The subject site is located within the Thredbo Alpine Resort and this subregion is mapped as shown in the extract below.



**Figure 4: Precincts-Regional SEPP - Thredbo Alpine Resort Sub-Region Map**

### Section 4.3 – Definitions:

The proposal includes the installation and use of pipelines, pumps and related infrastructure used to supply water and convey sewage. Accordingly, under Chapter 4, this is not development for the purposes of water storage facilities or sewage treatment plants.

### Section 4.7 - Land Use Table:

The land use table for Thredbo Alpine Resort specifies that '*Snow-making infrastructure*' is permitted with consent as well as '*Infrastructure facility*'. Accordingly, the proposal is permitted with consent.

### Section 4.19 Public utility infrastructure

As the proposal in part relates to the provision, augmentation, maintenance and/or repairing of public utility infrastructure, including the supply of water, the supply of electricity and the disposal and management of sewage, this section does not apply under S.4.19(2) of the SEPP.

### Section 4.24 Flood Planning

Under Section 4.24(2), Development consent must not be granted to development on land in the Alpine Region the consent authority considers to be in the flood planning area unless the consent authority is satisfied with the provisions listed under (a) to (e) with further matters for consideration listed under S.4.23(3).

Under S.4.24(4) the words used in this section have the same meaning as in the *Considering Flooding in Land Use Planning Guideline*, published on the Department's website on 14 July 2021, unless otherwise defined.

In accordance with these guidelines, '*flood planning area has the same meaning as in the Floodplain Development Manual, ISBN 0 7347 5476 0, published by the NSW Government in April 2005*'.

The Floodplain Development Manual defines flood planning area as '*the area of land below the FPL, and thus subject to floor related development controls. The concept of flood planning area generally supersedes the "flood liable land" concept in the 1986 Manual*'.

Under the SEPP, there is no defined flood planning area or FPL and no reference to any adopted mapping.

Further consideration of Section 4.24 therefore cannot be undertaken.

### Section 4.25 Earthworks

Matter for Consideration	Response
(3) In deciding whether to grant development consent for earthworks, or for development involving ancillary earthworks, the consent authority must consider the following matters—	

(a) the likely disruption of, or adverse impact on, drainage patterns and soil stability in the locality of the development,	<i>The proposal includes ancillary earthworks involved with the trenching for the snowmaking infrastructure and services.</i>  <i>Trenching within disturbed ski slopes is a common development practice that has demonstrated to have little to no impact on drainage patterns or soil stability.</i>
(b) the effect of the development on the likely future use or redevelopment of the land,	<i>The effect of the development will have a negligible impact on the future use or redevelopment. The proposal is to replace and upgrade both snowmaking and services.</i>
(c) the quality of the fill or the soil to be excavated, or both,	<i>The quality of the soil within a highly disturbed ski slope to be excavated as part of the trenching works is not likely to change, as it will be reused on site.</i>
(d) the effect of the development on the existing and likely amenity of adjoining properties,	<i>The development will have a negligible effect on the existing and likely amenity of adjoining properties, which predominantly comprise of ski slopes and mountain bike trails.</i>
(e) the source of any fill material and the destination of any excavated material,	<i>The proposed trenching will use minimum fill material which will be sourced from an approved facility, if required. Any excess excavated material will be transported off-site to an approved facility, if required.</i>
(f) the likelihood of disturbing relics,	<i>The disturbance corridor has been previously disturbed, as discussed in Section 4.2 above.</i>
(g) the proximity to, and potential for adverse impacts on, a waterway, drinking water catchment or environmentally sensitive area,	<i>The subject site is setback well over 100m from the closest defined watercourse. There are no defined water catchments or environmentally sensitive areas under the SEPP.</i>
(h) appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.	<i>The proposal has been co-located within a highly disturbed corridor to avoid impacts on the natural environment. Furthermore, these impacts can be minimised by way of implementation of the measures outlined in the Site Environmental Management Plan [SEMP].</i>

## Section 4.26 Master plans

The Minister must prepare and approve a master that applies to the Alpine Region under Section 4.26 of the Chapter 4 of the SEPP Regional Precincts. On the 1 July 2022, the Snowy Mountains Special Activation Precinct Master Plan [SM SAP MP] was adopted. The SM SAP MP was adopted well in advance of the new Chapter 4 of the SEPP Regional Precincts and therefore prior to Section 4.46 being implemented.

The Master Plan must contain certain information.

The SM SAP MAP does not:

- Include a map showing existing and proposed types of development for the Thredbo Alpine Resort: No map of the entire resort, including the subject site is provided, therefore the Master Plan does not apply to the subject site. Furthermore, the map provided does not show 'existing and proposed types of development'. The map only shows 'development areas'.
- Include performance criteria for the proposed development.
- Include information about heritage items or places of heritage significance: The Master Plan does not provide information or a map of any heritage items.
- Outline limitations on development on certain land: The Master Plan does not show any limitation on development with regard to the subject site, being located on the upper ski slopes of the resort.

The Master Plan was drafted and finalised well before the new Chapter 4 of the SEPP Regional Precincts was gazetted.

#### Section 4.28 – Consideration of master plans and other documents

Matter for Consideration	Response
[1] In deciding whether to grant development consent to development in the Alpine Region, the consent authority must consider the following—	
(a) the aim and objectives of this Chapter set out in section 4.1,	<i>The proposed development is not inconsistent with the aim and relevant objectives.</i>
(b) a draft development control plan that is intended to apply to the land and has been published on the NSW planning portal,	<i>Not applicable.</i>
(c) a conservation agreement under the <a href="#"><i>Environment Protection and Biodiversity Conservation Act 1999</i></a> of the Commonwealth that applies to the land,	<i>Not applicable.</i>
(d) the <i>Geotechnical Policy –Kosciuszko Alpine Resorts</i> published by the Department in November 2003,	<p><i>The 'Geotechnical Policy –Kosciuszko Alpine Resorts' only applies to the land which State Environmental Planning Policy No.73 – Kosciuszko Ski Resorts (SEPP No. 73) applies, under clause 1.2(b).</i></p> <p><i>This SEPP has been repealed and no longer applies to the land.</i></p> <p><i>Notwithstanding this, a Form 4 Certificate has been prepared and provided with the DA.</i></p>

(e) for development in the Perisher Range Alpine Resort— (i) the Perisher Range Resorts Master Plan published by the National Parks and Wildlife Service in November 2001, and (ii) the Perisher Blue Ski Resort Ski Slope Master Plan adopted by the National Parks and Wildlife Service in May 2002.	<i>Not applicable.</i>
(2) In deciding whether to grant development consent to development in the Alpine Region, the consent authority must consider—	
(a) a master plan approved by the Minister under section 4.26 that applies to the land, or	<i>The SM SAP MP was adopted prior to the new Chapter 4 of the SEPP being adopted, therefore prior to section 4.26.</i>  <i>The SM SAP MP does not specifically relate to the site or the proposed development and does not include the mandatory information required under section 4.26 of the SEPP.</i>
(b) if a master plan has not been approved—a draft master plan prepared under section 4.26 that is intended to apply to the land and has been published on the NSW planning portal.	<i>Not applicable.</i>

#### Section 4.29 - Consideration of environmental, geotechnical and other matters

Matter for Consideration	Response
S.4.29 (1) In deciding whether to grant development consent to development in the Alpine Region, the consent authority must consider the following—	
(a) measures proposed to address geotechnical issues relating to the development,	<i>The measures proposed to address geotechnical matters have been outlined in the Form 4 Certificate and report prepared by Asset Geotechnical.</i>
(b) the extent to which the development will achieve an appropriate balance between— (i) the conservation of the natural environment, and (ii) taking measures to mitigate environmental hazards, including geotechnical hazards, bush fires and flooding,	<i>The proposal does not require any measures to mitigate environmental hazards that would impact on the conservation of the natural environment.</i>
(c) the visual impact of the proposed development, particularly when viewed from the land identified as the Main Range Management Unit in the Kosciuszko National Park Plan of Management	<i>The proposed works are predominantly underground, with only limited changes to snowmaking hydrants above ground proposed. These above ground elements are not visible from the Main Range Management Unit.</i>

(d) the cumulative impacts of development and resource use on the environment of the Alpine Subregion in which the development is carried out,	<i>There is no framework provided to assess cumulative impacts. That being said, an assessment of likely impacts of the proposal is provided in Section 5.1.6 of this SEE.</i>
(e) the capacity of existing infrastructure and services for transport to and within the Alpine Region to deal with additional usage generated by the development, including in peak periods,	<i>The proposed works will have no impact on the existing transport to and within the resort, as the proposal does not generate additional usage.</i>
(f) the capacity of existing waste or resource management facilities to deal with additional waste generated by the development, including in peak periods.	<i>The proposed works will generate minimal waste.</i>
(2) For development involving earthworks or stormwater draining works, the consent authority must also consider measures to mitigate adverse impacts associated with the works.	<i>Ancillary excavation works are required for the trenching as outlined above under Section 4.25.</i>  <i>Sedimentation and erosion control measures as outlined in the SEMP provided separately, will mitigate any adverse impacts associated with such works.</i>
(3) For development the consent authority considers will significantly alter the character of an Alpine Subregion, the consent authority must also consider— (a) the existing character of the site and immediate surroundings, and (b) how the development will relate to the Alpine Subregion.	<i>The proposed services and snowmaking replacement and upgrades will not significantly alter the character of the Thredbo Alpine Subregion.</i>

### Section 4.30 - Kosciuszko National Park Plan of Management

The proposed development is not inconsistent with the Kosciuszko National Park Plan of Management.

#### 5.1.2 SECTION 4.15(1)(a)(ii) – DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS

There are no draft Environmental Planning Instruments that are applicable to the site or proposed development.

#### 5.1.3 SECTION 4.15(1)(a)(iii) – DEVELOPMENT CONTROL PLANS

There are no Development Control Plans applicable to the Kosciuszko Alpine Resorts under the SEPP Regional Precincts.

#### **5.1.4 SECTION 4.15(1)(a)(iii) – PLANNING AGREEMENTS**

There are no Planning Agreements applicable to the Kosciuszko Alpine Resorts under the SEPP Regional Precincts.

#### **5.1.5 SECTION 4.15(1)(a)(iv) – REGULATIONS**

The development application has been made in accordance with the requirements contained in the Environmental Planning and Assessment Regulation 2021.

#### **5.1.6 SECTION 4.15(1)(b) – LIKELY IMPACTS**

##### **Natural Environment:**

The likely impacts from the proposed development on the natural environment are expected to be minimal given the highly disturbed nature of the combined snowmaking and services corridor.

##### **Built Environment:**

The impacts on the built environment are expected to be minimal, as the infrastructure is predominantly underground and replaces the existing infrastructure already in place.

##### **Social and Economic impacts in the locality:**

The social and economic impacts from the upgraded services and replacement snowmaking are positive, by providing improved snowmaking infrastructure and improved water and sewer connections, with upgraded electricity supply and communications.

#### **5.1.7 SECTION 4.15(1)(c) – SUITABILITY OF THE SITE**

The subject site is considered suitable for the proposed works, being a ski slope and disturbed corridor.

#### **5.1.8 SECTION 4.15(1)(d) – SUBMISSIONS**

The proposed works are located more than 50m from the closest tourist accommodation building and therefore cannot be publicly notified or advertised under the Departments Community Participation Plan, 2019.

In accordance with Table 1, 'no public exhibition will be undertaken for proposals where a site is located more than 50m away from a tourist accommodation building'.

Accordingly, there is no lawful requirement allowing for public exhibition or notification for the proposed development.

### 5.1.9 SECTION 4.15(1)(e) – THE PUBLIC INTEREST

The proposal allows for existing snowmaking infrastructure and services to be replaced and upgraded and therefore is considered to be within the public interest.

## 5.2 BIODIVERSITY CONSERVATION ACT, 2016

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

A review of the subject site in relation to the Biodiversity Values Map shows that the location of the proposed works is predominantly not mapped as comprising high biodiversity value as set out in Appendix B.

A small section of disturbed ski slope is incorrectly mapped where the proposed works are located, however these works will not require the removal of native vegetation, therefore not triggering the Biodiversity Offsets System (BOS) under the BC Act 2016. This is further explained in the fauna and flora assessment provided in Appendix B and illustrated in the map provided below in figure 5.



*Figure 5: Proposed services corridor (red) traverses through a short section of mapped biodiversity values, however this is highly disturbed; Alternate alignment that is shorter (yellow) would avoid mapped biodiversity values area, however this is mostly undisturbed*

The above map shows that the most direct alignment for the services corridor would avoid the mapped biodiversity values area. However, this area comprises mostly undisturbed native vegetation, including wet vegetation with higher biodiversity values, as shown in figure 6 below.



*Figure 6: Alternate alignment is not mapped; however it comprises of mostly undisturbed native vegetation*

Therefore, the highly disturbed longer alignment was selected, even though this includes a small area mapped incorrectly as biodiversity values. This will result in less impacts on biodiversity.

Regarding the clearing threshold, the site is located within a National Park and is zoned C1 – National Park under the Snowy River Local Environmental Plan, 2013 (SR LEP, 2013).

Consequently, the site does not have a minimum lot size, under the SR LEP 2013.

Therefore, the clearing threshold is predicated on the lot size of the subject site. The lot size allows for clearing up to 1 ha (10,000m<sup>2</sup>).

As the proposed clearing is well below the lowest clearing threshold, the BOS will not be triggered.

As identified above and in Appendix B, the project will not impact on any threatened flora, important fauna habitats, habitat connectivity or any other biodiversity values of conservation significance. Therefore, no further assessment is required under the BC Act, 2016.

## 6. CONCLUSION

The proposed snowmaking infrastructure works are part of the ongoing replacement and upgrade to the snowmaking system across the Thredbo Resort and are in anticipation of the proposed replacement and upgrade of the Snowgums Chairlift.

The proposed location of the replacement and upgraded mains will generally follow the existing mains alignment along a disturbed ski slope.

To minimise impacts on the environment and to take the opportunity to improve the services connections between the Black Sallees restaurant and Kareela Hutte restaurant, the same trenching required for the snowmaking replacement works is proposed to be used for the majority of a services upgrade between the two buildings to provide improved water supply, upgraded sewer pipeline, electrical supply and communications.

To ensure that all the environmental and associated legislation is complied with and fulfilled, the proposed development has been considered in regard to Section 4.15 of the Environmental Planning and Assessment Act, 1979, Biodiversity Conservation Act, 2016, and Chapter 4 of the State Environmental Planning Policy (Precincts – Regional) 2021.

The proposal has been found to be consistent with the above legislation and relevant Environmental Planning Instrument, as detailed in this SEE.

Both the snowmaking infrastructure and services are critical infrastructure for the operation of the ski resort. The replacement snowmaking allows the resort and ski runs to open earlier and remain open longer, providing seasonal viability for the resort.

The upgraded services provide improved water, sewer, electricity and communications connections between two mountain restaurants.

The proposal has been designed and located to provide the necessary operational outcomes, whilst minimising impacts on the environment.

## APPENDIX A

### PHOTOS



*Figure 1: Photo of upper ski slope and corridor*



*Figure 2: : Photo of the middle ski slope and corridor*



*Figure 3: Photo of the lower ski slope and corridor*



*Figure 4: Photo of the lower ski slope and corridor*



*Figure 5: Photo of the services corridor down to Kareela Hutte restaurant*



*Figure 6: Photo of the access road, to accommodate the upgraded services*



*Figure 7: Photo of Black Sallee's restaurant*



*Figure 8: Photo of new double manual hydrant location*



*Figure 9: Photo of existing manual hydrant to be upgraded to a double hydrant*



*Figure 10: Photo of a typical manual hydrant to be replaced*



*Figure 11: Photo of the new location for a new lance gun and pit*



*Figure 12: Photo of the location of a new lance gun and pit to be installed at snow fence*



*Figure 13: Photo of existing lance gun to be replaced with new lance gun and pit*



*Figure 14: Kareela Hutte restaurant*

## APPENDIX B

### FAUNA AND FLORA ASSESSMENT

Date: 19 May 2023

Our ref: 5157

Kosciuszko Thredbo Pty Ltd  
PO Box 92  
Thredbo Village NSW 2625

Attention: Chloe Chalk

Dear Chloe,

**Snowmaking and Services Corridor, Snowgums Top Station to Kareela Hutte, Thredbo**

As requested, I have reviewed the proposed impacts on vegetation and fauna habitats associated with the proposed snowmaking and services corridor between Snowgums Top Station and Kareela Hutte, as shown in Figure 1 below and photos 1-6.

The proposed works involve:

- Trenching for the replacement of snowmaking mains and laterals.
- installation of services in the same trench, including water, sewer, electricity and comms.
- The installation of hydrants, auto pits and lances in various locations.
- A disturbance corridor for trenching between 6 and 8 m wide.

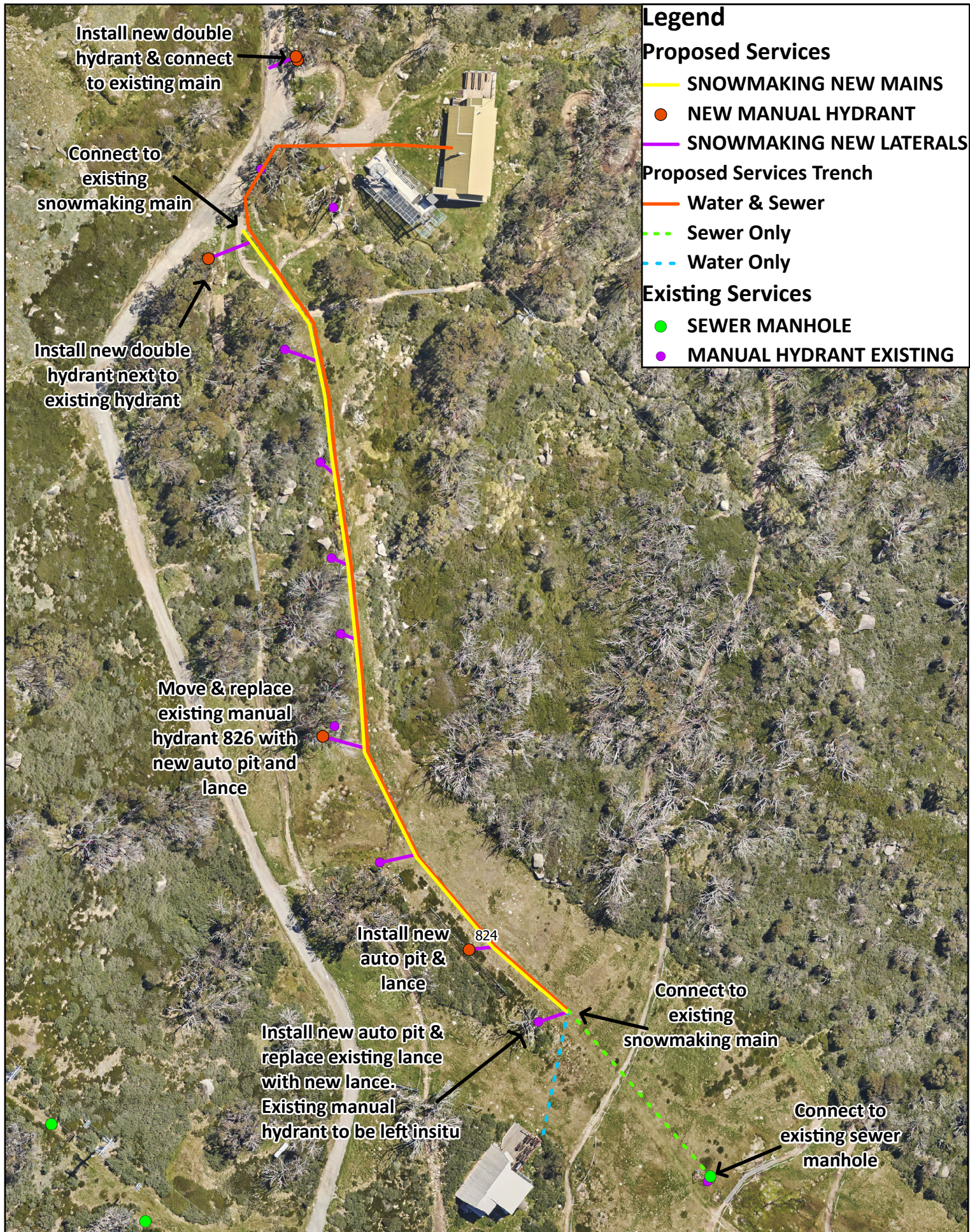
To avoid, minimise and mitigate impacts, the proposed works will be located entirely within existing roads, ski slopes and other highly disturbed areas, as shown in Figure 1 and Photos 1-6. In addition, the proposal co-locates both the snowmaking mains and services within the one single trench and therefore single disturbance corridor. The proposed works also take advantage of existing disturbed areas and existing infrastructure, particularly existing hydrant locations, as shown in Figure 2.

Impacts on vegetation will be limited to a few shrubs and groundcovers that are scattered amongst the exotic grassland that characterises the disturbance footprint. Direct impacts arising from the proposal are expected to affect less than 10 m<sup>2</sup> of already highly disturbed native vegetation.

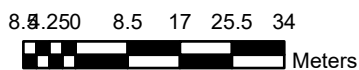
Indirect impacts associated with the proposal are expected to be minor as:

- The footprint of the proposed direct impacts is small.
- The areas affected are already highly disturbed.
- The proposal will be implemented with appropriate safeguards.

The proposed works will affect areas mapped within the Biodiversity Values Map as defined in the NSW *Biodiversity Conservation Regulation 2017* (BC Reg), as shown in Figure 3. However, those areas where the proposed works intersect with areas mapped on the Biodiversity Values Map have long been cleared of native vegetation, as shown in Photos 7-9, and comprise exotic grassland apart from scattered forbs and shrubs.



Scale: 1:1,232



Map Projection: Universal Transverse Mercator  
Horizontal Datum: GDA 2020  
Grid: GDA 2020 MGA Zone 55



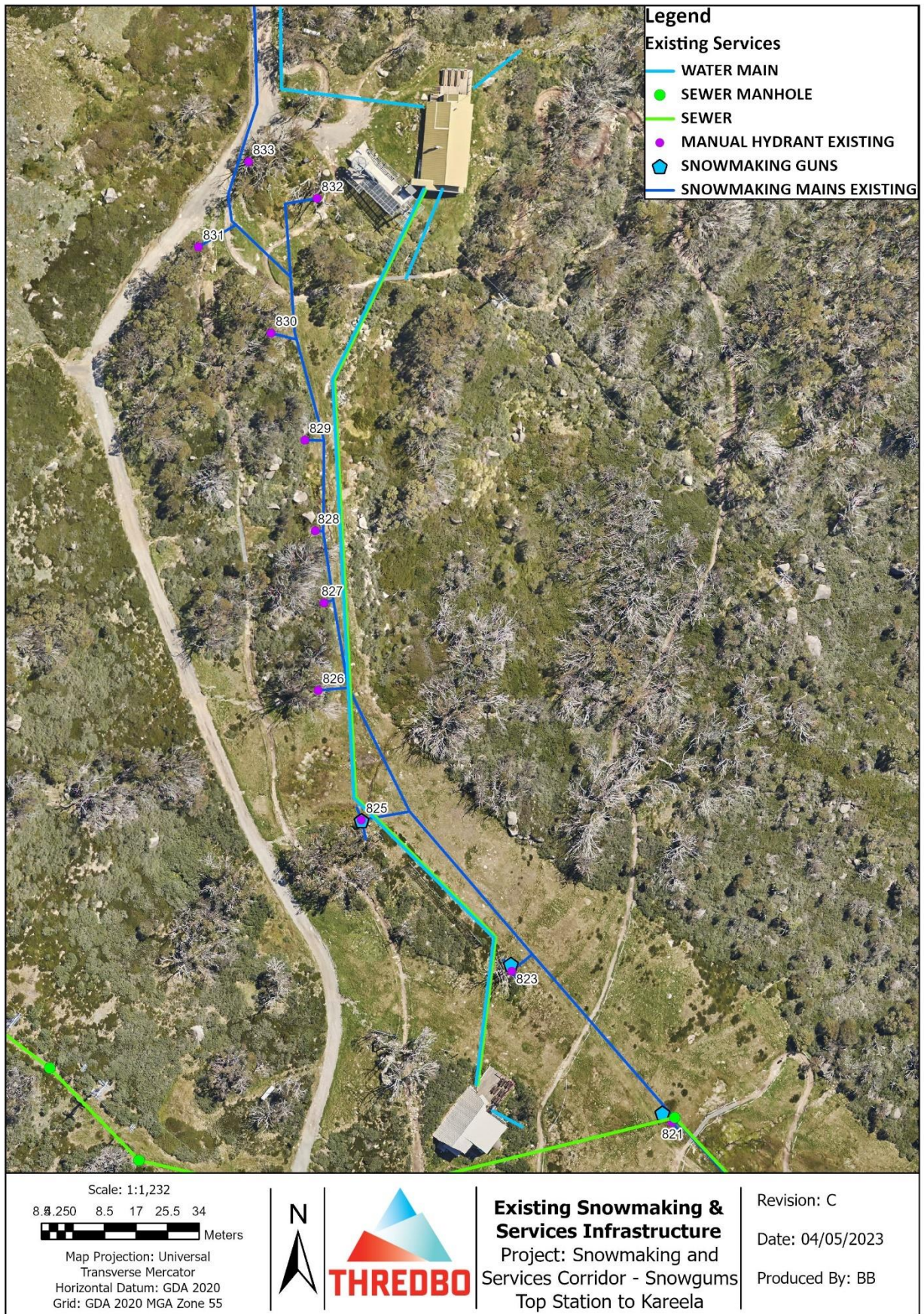
## Site Plan

Project: Snowmaking and Services Corridor - Snowgums Top Station to Kareela

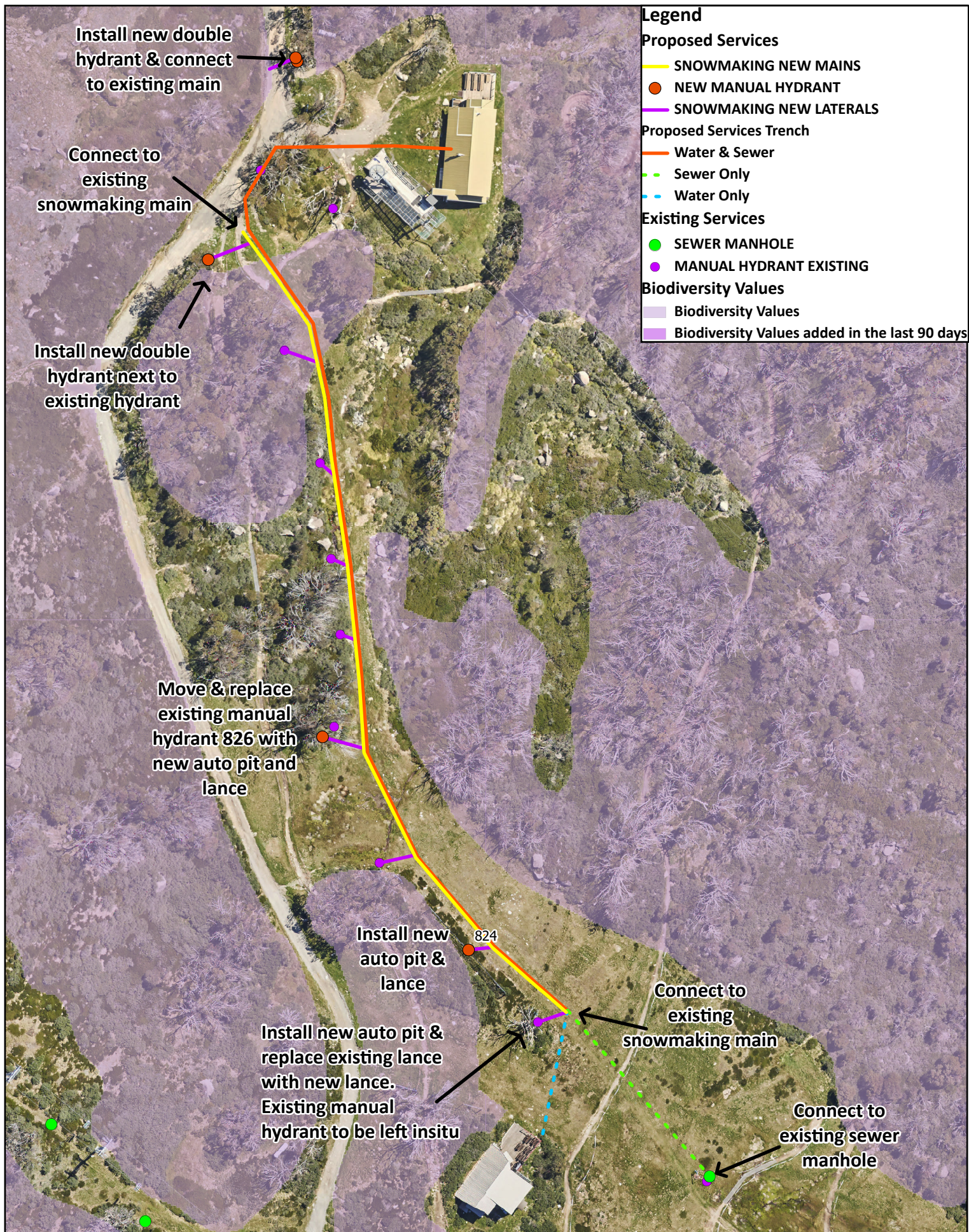
Revision: E

Date: 23/05/2023

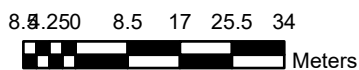
Produced By: KOS



**Figure 2: The existing snowmaking and services infrastructure in proximity to the proposed works.**



Scale: 1:1,232



Map Projection: Universal Transverse Mercator  
Horizontal Datum: GDA 2020  
Grid: GDA 2020 MGA Zone 55



## Biodiversity Values Mapping

Project: Snowmaking and Services Corridor - Snowgums Top Station to Kareela

Revision: E

Date: 23/05/2023

Produced By: KOS



**Photo 1: The services trench will traverse the highly disturbed are between Black Saltees and the Summer Road.**



**Photo 2: The hydrant locations will either be where existing hydrants are located or have been selected to take advantage of existing cleared areas.**



**Photo 3: The corridor has been located to be within the highly disturbed ski slopes to avoid adverse impacts on native vegetation and associated habitats.**



**Photo 4: The corridor is highly disturbed and dominated by exotic grasses with only scattered remnant native shrubs and groundcovers.**



**Photo 5: The corridor extends down the ski slope towards Kareela hut.**



**Photo 6: The corridor has been located to avoid the patch of disturbed heath between the two ski slopes on approach to Kareela hut.**



**Photo 7: The corridor traverses a highly disturbed area dominated by exotic grasses where it descends from the Summer Road. The upper parts of this area are mapped on the Biodiversity Values Map.**



**Photo 8: Native vegetation has long been cleared from where the corridor traverses the Biodiversity Values Mapped area. This area is completely dominated by exotic grasses.**



**Photo 9: The replacement of hydrant 830 and the lateral to it will not require the clearing of any native vegetation.**

### Impacts on vegetation communities

The vegetation within the development footprint comprises exotic grassland and is dominated by a range of weed grasses such as *Festuca rubra* (Red Fescue), *Agrostis capillaris* (Browntop Bent), *Acetosella vulgaris* (Sheep Sorrel), *Achillea millefolium* (Yarrow), and *Hypochaeris radicata* (Flatweed). Within the development footprint there are scattered patches of native groundcovers such as *Poa fawcettiae* (Smooth Blue Snowgrass) and *Hovea montana* (Alpine Hovea), and in one very small highly disturbed wet area hardy native species such as *Sphagnum* sp., *Carex gaudichaudiana*, *Baeckea gunniana*, *Richea continentis* (Candle Heath), *Empodisma minus*, *Oreobolus distichus*, *Carex echinata* and *Juncus effusus*.

### Impacts on threatened ecological communities

The small highly disturbed wet area within the development footprint are not considered to comprise:

- the Montane Peatland and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions EEC (hereafter referred to as the Montane Peatland and Swamps) which is listed under the NSW *Biodiversity Conservation Act 2016* (BC Act); or
- the Alpine Sphagnum Bogs and Associated Fens EEC (hereafter referred to as the Alpine Sphagnum Bogs and Associated Fens) which is listed on the Commonwealth *Environment Protection & Biodiversity Conservation Act 1999* (EPBC Act).

Whilst these EECs occur adjacent to the development footprint and are extensive in the locality, the vegetation within the development footprint has been so heavily disturbed, as shown in Photo 10, as to no longer be considered to comprise either of the abovementioned EECs.



**Photo 10: The small degraded wet area within the development footprint is of negligible conservation significance.**

### **Impacts on flora species of conservation significance**

The footprint of the proposed works were searched for threatened flora species, in particular *Rytidosperma vickeryae* (Perisher Wallaby Grass) and *Ranunculus anemoneus* (Anemone Buttercup). No threatened flora species, or flora species identified on the schedules of the Kosciuszko National Park Plan of Management (KNPPOM) (DEC 2006), were recorded within the development footprint during the survey period and none are expected to occur there.

### **Impacts on fauna habitats**

The small amount of vegetation and rock habitats to be affected by the proposal does not support any fauna habitats that aren't widely available in the extensive areas of contiguous vegetation.

The proposal will affect at least two wombat burrows which are in close proximity to the existing hydrants 826 and 827, as shown in Photo 11. Recommendations are provided below to minimise impacts on this wombat burrows during the construction phase of the proposal.

The proposal will not result in substantial modifications to the hydrological environment nor will it create barriers which prevent the movement and dispersal of fauna species. Similar developments have been undertaken over the years within and in areas immediately adjacent to the development footprint, and elsewhere within the NSW Alps, with negligible impacts on the hydrological environment and associated ecosystems.

Under these circumstances, the impacts of the proposal on fauna habitats are relatively minor and acceptable. The potential impact of the proposal on threatened fauna have been assessed further (Appendix A) pursuant to relevant statutory assessments.



**Photo 11: Active wombat burrows occur in close proximity to the existing hydrants 826 and 827. Impacts on the burrows will need to be managed during the construction phase of the proposal.**

### **Recommendations**

To further mitigate the potential impacts of the proposal, the following recommendations for impact mitigation and amelioration are suggested.

#### **Vegetation and habitat management**

- All disturbance should be kept to the minimum required to achieve the proposal.
- The proposed works should be constructed and implemented in accordance with best practice design standards to ensure that there are no adverse modifications to the hydrological environment that may impact on surrounding vegetation and associated habitats.
- Appropriate safeguards should be in place during the proposed works to limit the potential for invasive plants or pathogens, chemicals or any other pollutants to enter the environment in association with the proposed development.
- Prior to the commencement of the proposed works, a wombat management plan should be prepared to manage impacts on the active wombat burrows that were detected in close proximity to the existing hydrants 826 and 827.

## Sediment control

- Appropriate sediment control measures should be implemented prior to any construction work for the proposal and retained in place until exposed areas of soil or vegetation are stabilised and/or revegetated.
- Sediment control measures are to have particular regard to the prevention of any sedimentation of watercourses or vegetation communities adjoining the study area.

## Rehabilitation

- Rehabilitation activities should be consistent with the resort areas rehabilitation guidelines (NGH Environmental 2007).
- Only weed-free straw or natural thatch/litter should be used in sediment control activities.

## Conclusion

The proposed works will not result in any adverse impacts on threatened species, populations or ecological communities and will not have a significant impact on these entities pursuant to the NSW *Biodiversity Conservation Act 2016* or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

The proposal will not result in any substantial adverse impacts on native vegetation communities or associated fauna habitats, nor will there be any impacts on flora species of conservation significance, important fauna habitats, habitat connectivity or any other biodiversity values of conservation significance.

Should you require any further information please contact me on 0422 802 447.

Regards,



Ryan Smithers  
Senior Ecologist

## References

Department of Environment and Conservation. 2006. *Plan of Management Kosciuszko National Park*. Department of Environment and Conservation, South Sydney.

NGH Environmental 2007. *Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park*. A report for Parks and Wildlife Division. Department of Environment and Climate Change NSW.

## Appendix A : Test of significance

### Test of significance pursuant to section 7.3 of the BC Act: Five-part test

An assessment of the effects of the proposal on threatened species, populations and ecological communities which may be directly or indirectly affected by the proposal may be carried out by applying the five factors from Section 7.3 of the BC Act.

This test of significance is presented below for the threatened fauna species:

- *Mastacomys fuscus* (Broad-toothed Rat)
- *Cercartetus nanus* (Eastern Pygmy-possum)
- *Petroica phoenicea* (Flame Robin)

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

#### **Broad-toothed Rat *Mastacomys fuscus* (potential occurrence)**

The Broad-toothed Rat generally occurs in two widely separated areas in NSW, the Barrington Tops area and the wet alpine and subalpine heaths and woodlands of the Kosciuszko NP and adjacent areas. The species lives in a complex of runways through dense vegetation of wet grass, sedge or heath and under the snow in winter. Home range size is thought to range between approximately 0.1 ha and 0.27 ha. Individuals nest alone over summer but congregate in communal nests during winter. The species is thought to be locally common in the alpine and high subalpine tracts of the Snowy Mountains area (Green 2002), where suitable habitats are present.

The study area provides a very small amount of potential foraging and sheltering habitat for the Broad-toothed Rat.

The proposed development will affect some potential habitat for the species, however, it will affect only a very small amount of the potential habitat for the species in the Thredbo Resort area. The proposed development will not affect any key resources for the species, and the habitats immediately adjoining the study area will continue to be available to the species after the implementation of the proposed development. As such, the proposed development will not adversely affect a significant proportion of the home range of any Broad-toothed Rat individuals.

The proposed development will not result in habitat fragmentation which could isolate individuals or a population of the Broad-toothed Rat.

Under these circumstances, the proposed development is considered unlikely to disrupt the life cycle of the Broad-toothed Rat such that a viable local population is likely to be placed at risk of extinction.

**Eastern Pygmy-possum *Cercartetus nanus* (potential occurrence)**

The Eastern Pygmy-possum is found in wet and dry eucalypt forest, subalpine woodland, coastal banksia woodland and wet heath. Pygmy-Possums feed mostly on the pollen and nectar from Banksias, Eucalypts and understorey plants and will also eat insects, seeds and fruit. The presence of Banksia sp. and Leptospermum sp. are an important habitat feature. Small tree hollows are favoured as day nesting sites, but nests have also been found under bark, in old bird nests and in the branch forks of tea-trees. The Eastern Pygmy-possum appears to be mainly solitary, each individual using several nests, with males having non-exclusive home-ranges of about 0.68 hectares and females about 0.35 hectares. They are mainly nocturnal. The Eastern Pygmy-possum is found in south-eastern Australia, from southern Queensland to eastern South Australia and in Tasmania. In NSW it extends from the coast inland as far as the Pilliga, Dubbo, Parkes and Wagga Wagga on the western slopes. There are a few records of the species from Kosciuszko National Park, mainly from lower altitudes, however the species has been recorded at 1800 m. It is possible that the Eastern Pygmy-possum occurs in the subalpine and montane habitats of the Thredbo Resort area although it has not been recorded there.

The proposed works are unlikely to adversely affect the home range of any individual Eastern Pygmy-possum given the very small area of potential habitat to be affected. Disturbances during construction are likely to encourage any individuals that may be near the disturbance corridor, to move away.

The proposal is highly unlikely to disrupt the life cycle of the Eastern Pygmy-possum such that a viable local population of the species is likely to be placed at risk of extinction.

**Flame Robin *Petroica phoenicea* (known occurrence)**

The Flame Robin is found in south-eastern Australia (Queensland border to Tasmania, western Victoria and south-east South Australia). In NSW it breeds in upland moist eucalypt forests and woodlands, often on ridges and slopes, in areas of open understorey. It migrates in winter to more open lowland habitats such as grassland with scattered trees and open woodland on the inland slopes and plains. There are numerous records of the species throughout the NSW Alps, and the species was observed in the study area during the survey period. It is well known from the Thredbo Resort area and is one of the most common birds of open habitats outside of the winter period.

The proposal will affect a very small amount of potential foraging habitat for the species. This is negligible in the context of the extensive areas of similar habitat within the Thredbo Resort area that will not be affected by the proposed development and which will continue to be available to the species. The species is not sedentary and undertakes substantial seasonal migrations, reducing the species dependence on any specific area of known or potential habitat.

Under these circumstances, the proposed development is unlikely to disrupt the life cycle of the Flame Robin such that a viable local population of the species is likely to be placed at risk of extinction.

*(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:*

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

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

There are no endangered or critically endangered ecological communities within the study area.

*(c) in relation to the habitat of a threatened species or ecological community:*

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

The proposed development will impact on only a very small area of potential habitat for the Broad-toothed Rat and Eastern Pygmy-possum will not affect any known Broad-toothed Rat communal nesting or likely breeding sites. The proposed development will result in the modification of a very small amount of potential foraging for the Flame Robin.

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

The proposed development primarily involves a narrow band of clearing of exotic groundcovers. The proposed works will not sever connectivity between the fauna habitats within the study area and contiguous habitats, or isolate any fauna populations which may occur within the study area. The disruptions to connectivity between fauna habitats will be minor and temporary only.

The effects of the action proposed on habitat connectivity will be minor and the native fauna which may occur within the study area from time to time, will continue to be able to traverse the study area.

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

The potential Broad-toothed Rat habitats to be affected comprise a small area of marginal habitat relative to the extensive areas of similar and superior habitats provided by contiguous vegetation. The alpine, subalpine and montane heaths in the locality provide superior habitat for the species than the habitats within the study area. No evidence of any important communal nesting sites was observed within the study area. Under these circumstances, the habitats to be affected are not considered to be particularly important for Broad-toothed Rat.

The habitat to be removed by the proposal is highly unlikely to be important to the long-term survival of the Eastern Pygmy-possum in the locality given that it comprises only a small amount of marginal potential habitat for the species relative to the extensive areas of remnant forest, woodland and heath within the locality and that there are no records of the species within the Thredbo Resort area.

In the context of the extent of similar habitat available for the Flame Robin in the Thredbo Resort area and elsewhere in the locality, the habitats within the study area are not considered to be important.

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

The proposed development will not affect any area of outstanding biodiversity value.

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

The proposed development will remove only a few small patches of native groundcovers in already highly disturbed ski slopes. Whilst this constitutes the Key Threatening Process 'Clearing of native vegetation', the contribution to this key threatening process is negligible considering the extent of remnant native vegetation in the locality.

## EPBC Act Significant Impact Criteria

The EPBC Act Administrative Guidelines on Significance set out ‘Significant Impact Criteria’ that are to be used to assist in determining whether a proposed action is likely to have a significant impact on matters of national environmental significance. Matters listed under the EPBC Act as being of national environmental significance include:

- Listed threatened species and ecological communities;
- Listed migratory species;
- Wetlands of International Importance;
- The Commonwealth marine environment;
- World Heritage properties;
- National Heritage places;
- Nuclear actions; and
- Great Barrier Reef.

Specific ‘Significant Impact Criteria’ are provided for each matter of national environmental significance except for threatened species and ecological communities in which case separate criteria are provided for species listed as endangered and vulnerable under the EPBC Act.

Threatened and migratory species listed under the EPBC Act that are considered likely or potentially to occur within the study area are given in Appendix A of the Report. The only Commonwealth listed species which is considered to have the potential to occur within the study area is the Broad-toothed Rat.

The relevant Significant Impact Criteria have been applied to determine the significance of impacts associated with the proposal.

Matters to be considered	Impact
any environmental impact on a World Heritage Property or National Heritage Places;	No. The proposal does not impact on a World Heritage Property or a National Heritage Place as addressed in the SEE.  (listed natural: Australian Alpine National Parks and Reserves; nominated historic: Snowy Mountains Scheme NSW).
any environmental impact on Wetlands of International Importance	No. The proposal will not affect any part of Ramsar wetland.
any impact on Commonwealth Listed Critically Endangered or Endangered Species;	No. The proposal will not impact any Commonwealth listed endangered species.
Any impact on Commonwealth Listed vulnerable Species;	Yes. The study area provides potential habitat for one Commonwealth listed vulnerable species: the Broad-toothed Rat.  The significant impact criteria in terms of the vulnerable species are discussed below: a. lead to a long-term decrease in the size of an important population of a species.  Whilst the proposed action will affect some marginal potential habitat for the Broad-toothed Rat, it will affect only a very small amount of the potential habitat for the species. As such, the proposal is considered highly unlikely to adversely affect a significant proportion of the home range of one or more Broad-toothed Rat individuals and will not result in habitat fragmentation which could isolate individuals or a population of the Broad-toothed Rat.  Under these circumstances the proposed action will not lead to a long-term decrease in the size of an important population of the Broad-toothed Rat.  b. reduce the area of occupancy of an important population

Matters to be considered	Impact
	<p>It is highly likely that the Broad-toothed Rat will continue to occur within the study area after the implementation of the proposed action. The species continues to be locally common in the Thredbo Resort Area where there have been many similar and larger developments over many decades. As such, the proposed action is highly unlikely to reduce the species area of occupancy.</p> <p>c. fragment an existing important population into two or more populations</p> <p>The proposed action will not fragment an existing important population of the Broad-toothed Rat into two or more populations.</p> <p>d. adversely affect habitat critical to the survival of a species</p> <p>No habitat within the study area is critical to the survival of the Broad-toothed Rat.</p> <p>e. disrupt the breeding cycle of an important population</p> <p>The proposed action and affected area are too small to disrupt the breeding cycle of a population of the Broad-toothed Rat.</p> <p>f. modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline</p> <p>The proposed action will not modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the Broad-toothed Rat is likely to decline.</p> <p>g. result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat</p> <p>The proposed action will not result in invasive species that are harmful becoming established in habitat for the Broad-toothed Rat.</p> <p>h. interferes substantially with the recovery of the species.</p> <p>Whilst there have been documented declines in some Broad-toothed Rat populations within the Snowy Mountains, these declines have been attributed to environmental factors such as major bushfire events and early snow thaws, and not impacts of the nature of those proposed. In any case, the local population of the Broad-toothed Rat appears to continue to be relatively large on the basis of the abundance of the species' scats throughout the Thredbo Resort Area. The species continues to occur in suitable habitats within the Thredbo Resort Area, including within the village. As such, it is considered highly unlikely that proposed action will substantially interfere with the recovery of the Broad-toothed Rat.</p>
Any impact on a Commonwealth Endangered Ecological Community	No. The proposal will not impact any Commonwealth listed endangered ecological communities.
Any environmental impact on Commonwealth Listed Migratory Species;	No. The proposal will not have any adverse impacts on any listed migratory species.
Does any part of the Proposal involve a Nuclear Action;	No. The project does not include a Nuclear Action.
Any environmental impact on a Commonwealth Marine Area;	No. There are no Commonwealth Marine Areas within the study area.
In addition, any direct or indirect impact on Commonwealth lands	No. The project does not directly or indirectly affect Commonwealth land.

## APPENDIX C

### AHIMS SEARCH RESULTS

dabyne planning

Date: 29 March 2023

Attention: Ivan Pasalich

Email: ivan@dabyneplanning.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lat, Long From : -36.4959, 148.2891 - Lat, Long To : -36.4916, 148.2969, conducted by Ivan Pasalich on 29 March 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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

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

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

**Important information about your AHIMS search**

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