



Site Environmental Management Plan

Snowmaking Pond Channel Works

Thredbo Alpine Resort
Kosciuszko National Park, NSW

June 2025

Document Control

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1 Introduction

This Site Environmental Management Plan (SEMP) has been prepared for implementation by Kosciuszko Thredbo Pty Ltd (KT) (and its contractors) for the Snowmaking Pond Channel Works Project (the Project).

2 Project Description

2.1 Project timing

Construction is proposed in March 2026 during low flow periods.

2.2 Work hours

Standard works hours include (unless otherwise approved):

- Monday to Friday 7 am to 6 pm
- Saturday 8 am to 1 pm
- No work on Sundays or public holidays

2.3 Vehicles, machinery and equipment

The Development will require (but not limited to) the following vehicles, machinery and equipment:

- 15T Long arm Excavator
- 22T Long arm Excavator
- 12T Tipper Truck
- Hand tools
- Traction Boards (on standby)

2.4 Pre-construction activities

Prior to undertaking any physical works, the construction staff must comply with the following measures and controls outlined in **Section 3**:

- Ensure all relevant approvals and permits have been obtained.
- Pre-works briefing to advise construction staff of environmentally sensitive areas, limit of disturbance and relevant safeguards for these areas (ELA 2025a; ELA 2025b).
- Ensure all construction staff have been provided a copy of this SEM and understand their obligations.
- Establishment of site boundary/fencing/signage. The construction corridor is to be clearly identified with flagging tape to mark no-go/no clearing zones prior to construction (ELA 2025a).
- Installation of erosion and sediment controls as per the plans and controls outlined in **Section 3.2**.
- All relevant weed species that occur within the construction corridor and associated staging and stockpile sites must be treated prior to works commencing to ensure these weeds are not spread further at the site or within KNP.

- Prior to the sluice gate shutting off the water and dewatering the channel, a suitability qualified ecologist must conduct fauna survey within works area to trap threatened species and relocated individuals if found. Any relocation of species is to be in accordance with the relocation plan (ELA 2025b).
- The sluice gate should be gradually closed over multiple days, dropping the water progressively to encourage aquatic fauna to vacate the area downstream to the ponds. The downstream sluice gate controlling flow from the ponds back to Thredbo River should be closed to prevent the ponds from refilling and needing dewatering.
- Once the works site is free of water the sluice gate will be completely closed, plastic wrapped and sandbagged to prevent water from entering the works site while works occur (ELA 2025b).

2.5 Construction activities

Works will include removal of vegetation and excavated material within the subject site as per the approved plans.

During the works, construction staff must comply with the following measures and controls outlined in **Section 3**:

- Ensure the downstream sluice gate remains closed so an adequate amount of water remains in the ponds for the aquatic fauna which may have retreated to the ponds (ELA 2025b)
- Instream habitat structure including large woody debris or boulders should not be permanently removed from the channel. Removal of large woody debris is considered a key threatening process under the FM Act. If structure is required to be removed, it should be replaced at the conclusion of works (ELA 2025b).
- Works must be stopped if any previously undiscovered aquatic fauna, evidence of aquatic fauna (e.g., platypus burrows), or threatened species, populations or communities are discovered during works (ELA 2025b).
- NPWS should be contacted if any animals are disturbed or injured during the proposed works (ELA 2025a).
- All excavated material is to be removed from site and disposed of at the Lower Overflow Carpark stockpile site. No excavated material is to be stored onsite.
- Restrict works to daylight hours (ELA 2025a).

2.6 Post-construction activities

Post-construction activities will comprise the following:

- Rehabilitation in accordance with the Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park (DECC 2007).
 - All disturbed areas shall be stabilised/rehabilitated as soon as possible following completion of the works.
 - Only weed-free or natural thatch/litter should be used in sediment control activities.
 - Restore disturbed areas by topsoiling or revegetation with the aim of ensuring the impacted area recovers as soon as possible and that there are no long-term impacts after the work is completed (ELA 2025b)
- Demobilisation of plant and machinery.
- Site clean-up.

3 Environmental Controls

3.1 Machinery, equipment and storage

- All machinery and equipment to be confined to the construction area as per the plans.
- All equipment, machinery and vehicles used during construction of the Project must be cleaned prior to entry into the Park and prior to site mobilisation to ensure they are free of mud and vegetative propagules.
- All vehicles and machinery entering Thredbo must adhere to the Standard Operating Procedure: Use and Maintenance of Wash Down Bay. The wash down bay is located at the Thredbo Waste Transfer Station for use by KT staff and contractors. Wash down all equipment to prevent the spread of aquatic weeds (ELA 2025b).
- Refuel machinery and store all chemicals away from the channel and riparian zone (ELA 2025b).
- Machinery and engine maintenance to be scheduled to reduce the chance of accidental oil/fuel leakage. Refuelling areas to be outside the riparian zone (ELA 2025b).
- All machinery and equipment used during construction must be cleaned prior to entry into KNP and prior to site mobilisation to ensure the machinery is free of mud, vegetative propagules, and pathogens. This includes machinery that may have been working in an area of the resort that contains weeds and is preparing to be redeployed in the construction corridor and associated stockpile and staging areas.
- Equipment and vehicles coming from areas which are known to inhabit pest species such as *Cherax destructor* (common yabby) are to be thoroughly inspected and washed prior to arriving on site (ELA 2025b).

3.2 Erosion and Sediment Control

- Erosion and sediment controls to be installed in accordance with the Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition (Landcom 2004) and IECA Best Practice Erosion and Sediment Control.
- Implement sediment control measures prior to any construction work and retain in place until exposed areas of soil or vegetation are stabilised/rehabilitated.
- Disturbance along the channel should be staged to minimise impact on the channel.
- Shut the sluice gate and sandbag the channel upstream of the works (at the location where the channel meets Thredbo River) to prevent flow from mobilising sediment (ELA 2025b).
- Schedule the work outside of predicted heavy rain periods and stop work during and after heavy rainfall to reduce risk of mobilising sediment (ELA 2025b).
- Install dual layer of sediment controls consisting of haybales with geofabric and hydrocarbon filters downstream of the works to prevent sediment from traveling downstream. The sediment barrier must be positioned and secured firmly to remain in place until the channel banks have become reinstated and revegetated at the completion of works (ELA 2025b).
- Inspect erosion controls regularly (daily during workdays) and after rainfall. Fix damaged controls immediately. Remove accumulated sediment or waste material from within the sediment controls regularly (ELA 2025b).
- Monitor for sediment plumes downstream of the excavation works (ELA 2025b).
- Sediment which is excavated from the bank should be transported using a dump truck with a watertight tail gate (ELA 2025b).

- Ensure all excavated material placed on the bank of the channel at Location 1 is collected and transported away from areas in proximity to the channel and the riparian area of Thredbo River.
- Leave erosion and sediment controls in place until after the works are completed and only remove once the site has been stabilised.
- Ensure location where the excavated material is stored while dewatering has sediment controls in place to prevent material from being transported from the location by wind or water (rain and overland flow).
- Geofabric material and swamp/traction boards will be placed on areas outside of the established track on the northern bank of the channel to minimise damage to topsoil and vegetation.

3.3 Air quality and noise

- Plant and equipment to be maintained and operated in an efficient manner to reduce air pollution.
- Vehicles are to adhere to speed limits to minimise dust general and potential spill of hauled materials.
- All vehicles carrying spoil or rubble to/from site should be covered to prevent the escape of dust or other material. Covers are to be adequately secured.
- Construction works will be undertaken during standard work hours.
- Works are to be carried out in accordance with the Australian Standard AS 2436-2010 Guide to noise and vibration control on construction, demolition and maintenance sites.

3.4 Fuels and chemicals

- Appropriate spill kits and all chemical Safety Data Sheets easily accessible onsite (ELA 2025b).
- All workers should be trained and equipped to contain equipment spills and leaks.
- If a spill occurs, immediate steps should be taken to stop it polluting the water. The spill should be reported to the appropriate authorities as soon as possible.
- Refuelling, top-ups and oil checks should be done well away from the waterway.
- Environmental spill kits containing suitable spill response materials shall be kept on site at all times. Spill kit materials shall be used in the event of a spill. Any oil spilt during the oil transfer or at other times shall be immediately contained and cleaned up.
- In the event on an on-site spill, construction staff will follow KT's Construction Site Incident and Emergency Procedures Thredbo Village.
- Fuel and chemicals will be appropriately stored and handled in accordance with relevant Australian Standards and Codes of Practice.

3.5 Traffic and access

No adverse traffic impacts are proposed. The access track to the site is restricted to authorised access only.

3.6 Waste management

Excavated material will be transported to the Lower Overflow Carpark stockpile site for processing before being taken off-site to a waste facility for disposal.

There are also two licenced waste facilities within proximity to Thredbo, including:

- Jindabyne Landfill, 6013 Kosciuszko Road, Jindabyne NSW
- Cooma Landfill, 8448 Monaro Highway, Cooma NSW.

3.7 Aboriginal Cultural Heritage Unexpected Finds Procedure

Where unexpected items of potential archaeological, built or Aboriginal cultural heritage significance are discovered, Project personnel will follow the below procedure:

- **STOP:** Stop work and leave the site or item where it is.
- **NOTIFY:** Notify the Project Manager and NPWS to arrange for representatives to inspect the site. If human remains are found, the NSW Police must also be notified.
- **MANAGE:** Management may involve securing the find by erecting a no-go zone.
- **REPORT:** The Project Manager will complete any reporting requirements, as directed by NPWS.

3.8 Bushfire Protection

The construction contractor would be responsible for determining relevant requirements for the site and ensuring staff are aware of bushfire avoidance, evacuation, and management measures e.g. prior to undertaking works the construction contractor should confirm that there is no current total fire ban or Kosciuszko National Park fire ban as this may place restrictions of activities such as use of plant or machinery in grass/bush settings.

The **Construction Site Incident and Emergency Procedure** outlines procedures for responding to fire and bushfire incidents or emergencies. This procedure is made available to all construction staff. In the event of a bushfire, Kosciuszko Thredbo (the head lessee) would implement the resort-wide Bushfire Evacuation Plan. The plan has been designed to assist management and emergency services to protect life and property in the event of a bush fire or other emergency.

4 Construction Management Details

4.1 Key Contacts Details

Key contacts for the Project are provided in **Table 1**. Prior to commencement of works, contact details (name and contact number) will be provided for Project personnel.

Table 1: Key Contact Details

Company / Agency	Role / Reason	Contact
Government Agency Contacts		
Department of Planning, Housing and Infrastructure (DPIE) (Alpine Resorts Team)	Development approval and compliance	(02) 6456 1733
National Parks and Wildlife Service (NPWS)	Flora, fauna, archaeology	(02) 6450 5600
Environment Protection Agency (EPA)	Water, noise, air pollution and regulation	131 555
NSW Soil Conservation Service	Soil erosion and sediment control	02 9842 8300
Thredbo Village Services		
Thredbo Medical Centre	General medical attention	(02) 6457 6254
Fire and Rescue Thredbo, NSW	Incident / emergency	(02) 6457 6144
Emergency Contacts		
NSW Police		000

Company / Agency	Role / Reason	Contact
NSW Fire and Rescue	In case of fire, medical or police emergency	
NSW Ambulance		

4.2 Notification Protocols

A summary of the key notification protocols is provided in **Table 2**. Notification requirements will be updated as required.

Table 2: Regulatory Agency Notification Protocols

Party to Notify	What to Notify	When to Notify	Responsibility
DPHI	Commencement of construction	DPHI will be notified in writing at least 48 hours prior to the commencement of construction.	Site Project Manager
NPWS	Details of any material suspected of being a European or Aboriginal culturally significant site, relic or artefact.	Immediately upon discovery of any archaeological/culturally significant site or relic that are encountered. NSW Police to also be notified immediately upon discovery of human remains.	Site Project Manager
NSW Environmental Protection Agency	Details of pollution incident – who, what, when, where, how, any other supporting information and evidence (e.g. photos)	Immediately upon identification of pollution incident causing or threatening material harm to the environment, in accordance with <i>KT's Construction site Incident and Emergency Procedures Thredbo</i> .	KT Environmental Manager

4.3 Environmental Incident and Emergency Response

All Project personnel are required to follow KT's **Construction site Incident and Emergency Procedures Thredbo Village**. The procedure will be available on-site and all Project staff will be trained on their implementation through the site induction. The procedure classifies examples of emergencies and incidents and provides specific procedures for response to such events. The procedure also outlines general site management principles, incident reporting and notification requirements and provides an emergency contacts list. Environmental incident and near-miss reporting requirements are detailed in **Section 5.1**. Contact details for key Project personnel and emergency services are provided in **Table 1**.

External contractors are required to prepare and implement an emergency and incident response procedure. The contractor will be responsible for responding to any environmental emergency caused by any action (or inaction) of the contractor's staff, including notification requirements to external parties such as EPA and Fire, Fire and Rescue NSW.

4.4 Adverse Weather Contingencies

If adverse weather events are anticipated and/or occur during construction, contingencies will be implemented, and arrangements will be made to postpone construction activities. The Construction Manager / Site Project Manager will be responsible for notifying construction staff of any impending adverse weather, and to implement appropriate controls onsite, such as: evaluate temporary sediment and erosion controls to ensure they are adequately installed to withstand adverse weather events, and discontinue use of plant and machinery.

5 Monitoring and Reporting

5.1 Environmental Incident Reporting

All incidents and near misses will be managed in accordance with KT's **Construction site Incident and Emergency Procedures Thredbo Village**. The document provides procedures for responding to incidents and emergencies, reporting and notification requirements and emergency contacts.

The **Environmental Incident Report Form** (or similar) should be completed for all environmental incidents. All parts of the form must be completed in accordance with KT's incident procedure and following the instructions within the form. The form must be signed by the person making the report and the Project Manager/person in charge of the site/activity.

5.2 Complaints Management

Should complaints be received from the public in relation to the Project they will be recorded using the **Complaints Form** (or similar contractor's form). The Project Manager will be responsible for investigating, recording and closing out any complaints received. All records will be stored within KT's files and distributed to relevant persons / regulatory authorities as required.

6 Appendices

Appendix A Plans



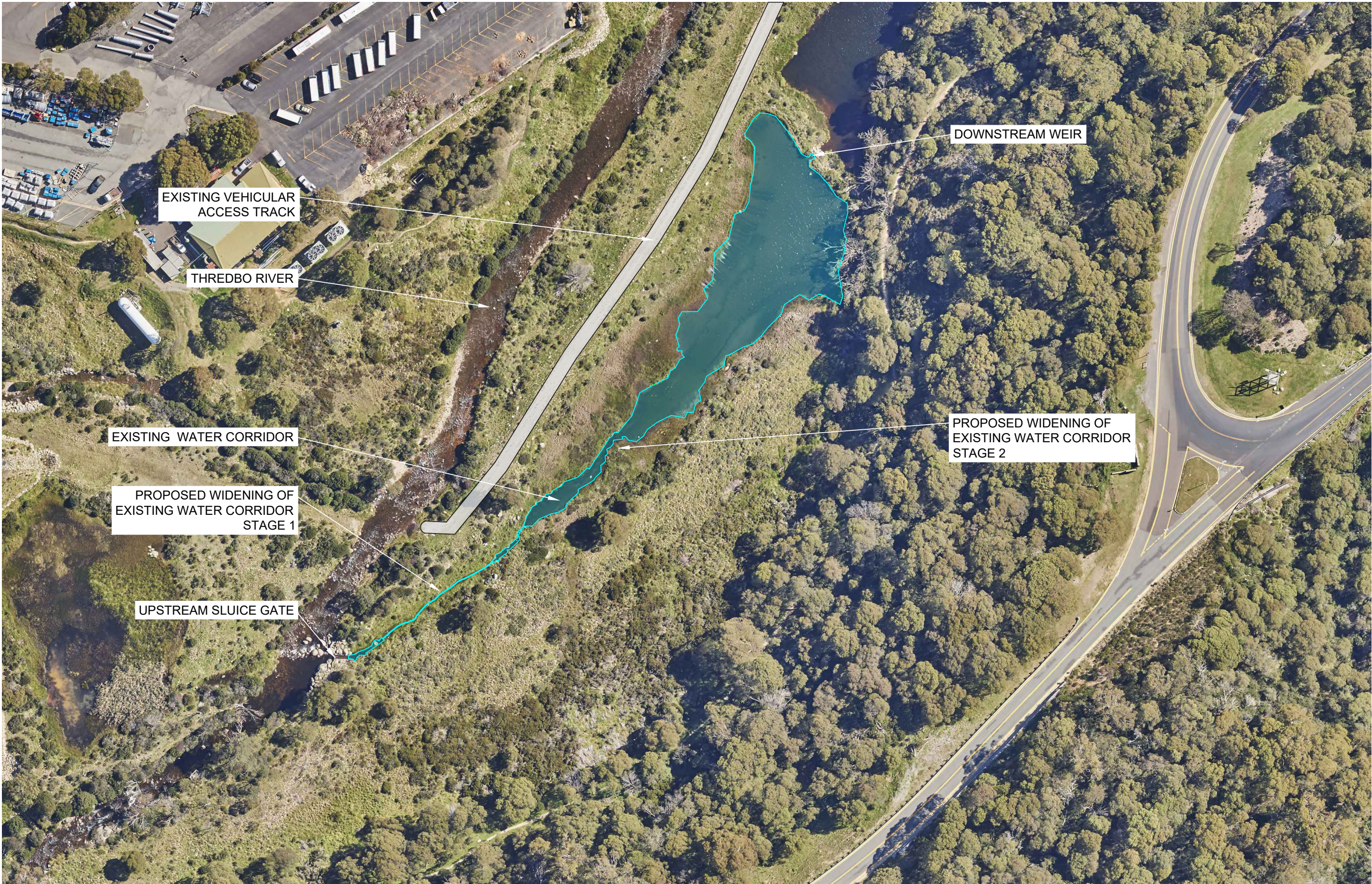
Rev.	Description	Date	Init.	Checked	Date
1.	ISSUE FOR DA	11/04/2025	JB		
2.					
3.					


THREDBO ALPINE RESORT

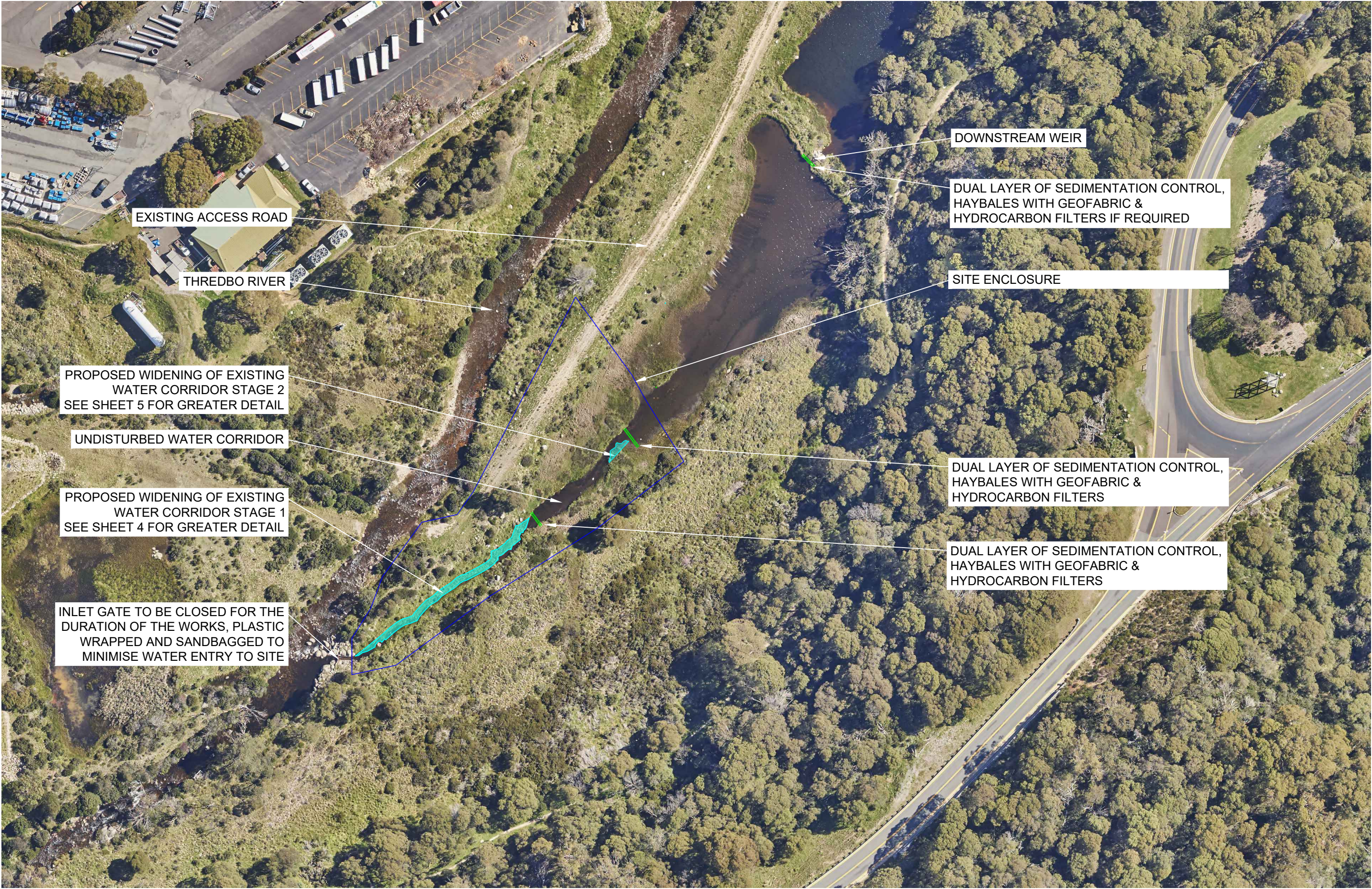



THREDBO UPPER
SNOWMAKING POND
CHANNEL WIDENING

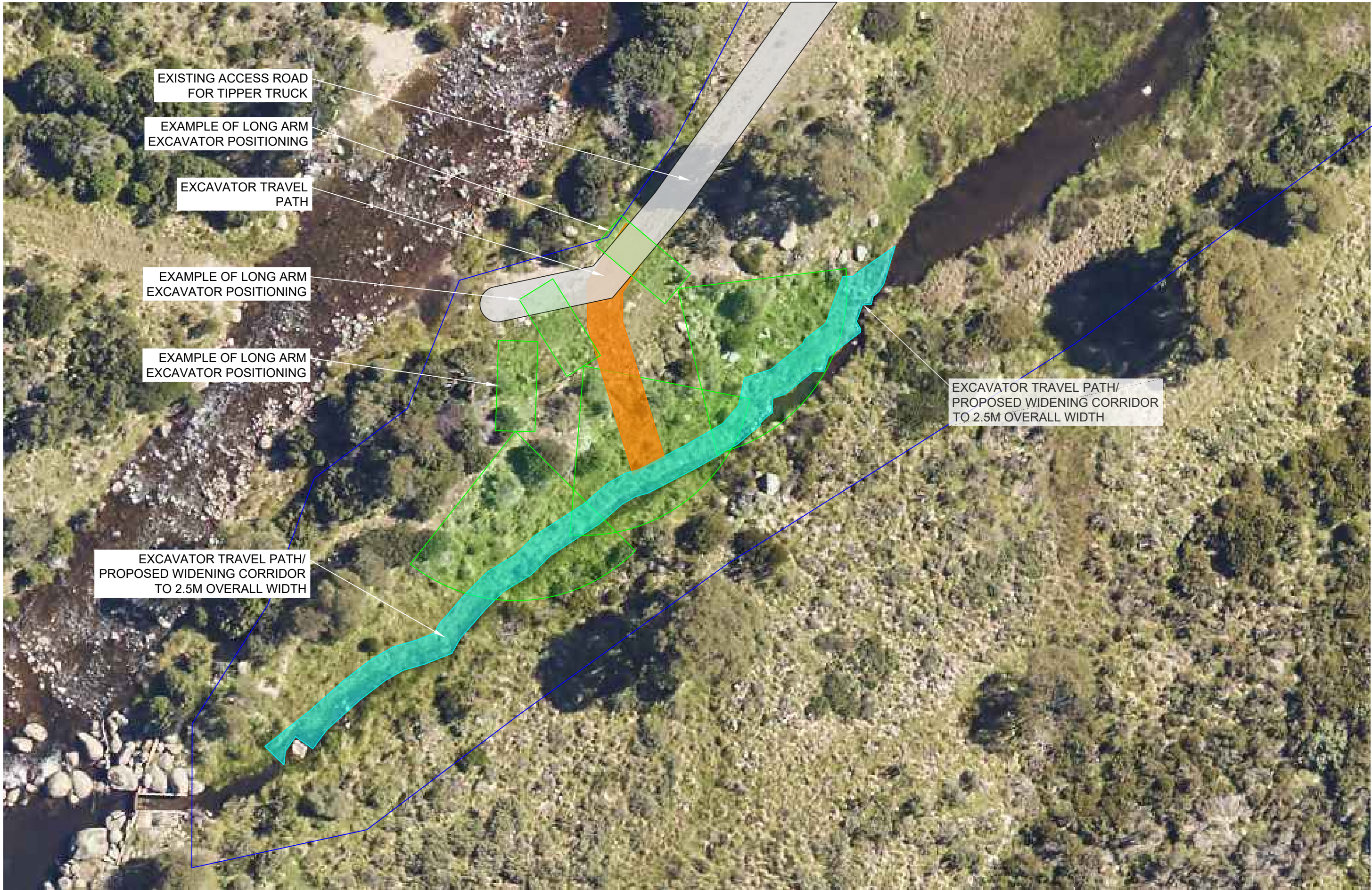
Drawing Number:	1. SITE PLAN
Project Number:	24024ENG
Scale:	1:2000 @A3
Drawn By:	Jack Barr




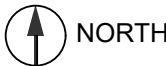
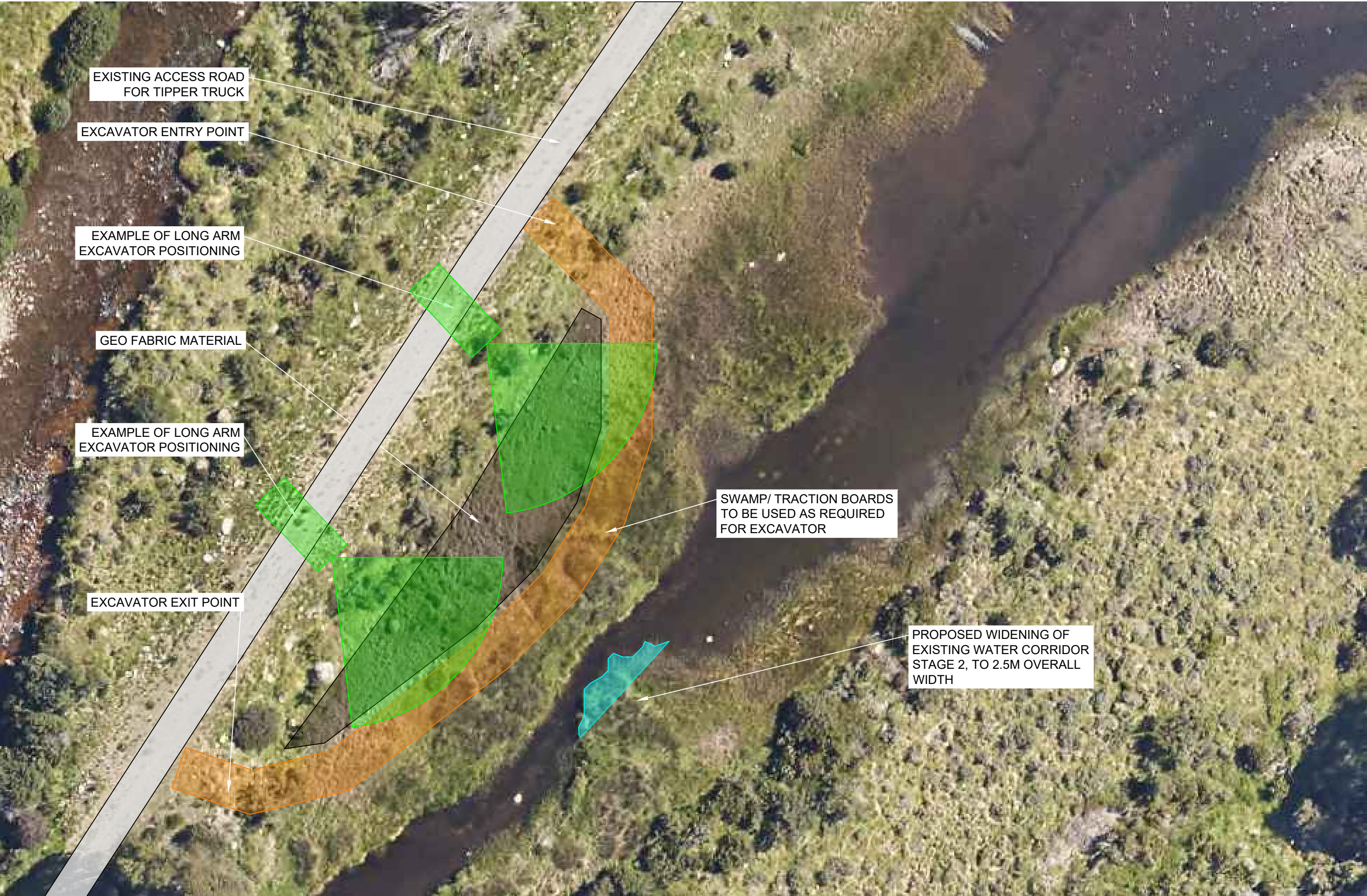
Rev.	Description	Date	Init.	Checked	Date	THREDBO ALPINE RESORT		THREDBO UPPER SNOWMAKING POND CHANNEL WIDENING	Drawing Number:	2. EXISTING PLAN
1.	ISSUE FOR DA	11/04/2025	JB						Project Number:	24024ENG
2.									Scale:	1:1000 @A3
3.									Drawn By:	Jack Barr




Rev.	Description	Date	Init.	Checked	Date	THREDBO ALPINE RESORT		THREDBO UPPER SNOWMAKING POND CHANNEL WIDENING	Drawing Number:	3. PROPOSED PLAN
1.	ISSUE FOR DA	11/04/2025	JB						Project Number:	24024ENG
2.									Scale:	1:1000 @A3
3.									Drawn By:	Jack Barr



Rev.	Description	Date	Init.	Checked	Date	THREDBO ALPINE RESORT		THREDBO UPPER SNOWMAKING POND CHANNEL WIDENING	Drawing Number:	4. STAGE 1 WIDENING
1.	ISSUE FOR DA	11/04/2025	JB						Project Number:	24024ENG
2.									Scale:	1:500 @A3
3.									Drawn By:	Jack Barr



Rev.	Description	Date	Init.	Checked	Date	THREDBO ALPINE RESORT		THREDBO UPPER SNOWMAKING POND CHANNEL WIDENING	Drawing Number:	5. STAGE 2 WIDENING
1.	ISSUE FOR DA	11/04/2025	JB						Project Number:	24024ENG
2.									Scale:	1:500 @A3
3.									Drawn By:	Jack Barr



Legend

 Stockpile Site

0 4.5 9 18 27 36
 Meters

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



**STOCKPILE AND
MATERIAL STORAGE
LOCATION
WASTE TRASFER FACILITY**

Revision: A

Date: 14/09/2023

Produced By: KOS

Appendix B Environmental Schedules

THREDBO ENVIRONMENTAL SERVICES

Record of complaint

Sheet _____ of _____

Project: _____

Date / Time: _____

Received by: _____

Reference Number: _____

[illegible]

Environmental Incident Reporting Form

Confidential document after first entry

The purpose of this form is to report any incident that may have resulted in Environmental harm on Kosciuszko Thredbo Pty Ltd premises. Remember to be succinct, stick to the facts and do not make assumptions. Only record information you know to be correct.

The only persons authorised to contact external agencies eg EPA in relation to environmental incidents are the Kosciuszko Thredbo General Manager and Environmental Services Manager or their approved delegates.

Return completed form to the Environmental Services Manager as soon as practicle, on completion of the Environmental incident.

Date of Incident:	Time of incident:
Reported by:	Department:

Location of Incident

EXACT location of the incident (include landmarks and features, nearest cross street etc to make it easier to identify later)		
Site:	Building:	Room:

Description of incident

Provide description and extent of incident:
.....
.....
.....
.....
.....
Have relevant photos been taken and attached? Yes <input type="checkbox"/> No <input type="checkbox"/>
If 'No', provide sketch and attach to the rear of this document.
What was the estimated duration of the incident?

Type of incident

<input type="checkbox"/> Spill (including fuel,oil,waste material or other polluting substance)	<input type="checkbox"/> Erosion and sedimentation incident	<input type="checkbox"/> Contaminated water discharge
<input type="checkbox"/> Noise emission/complaint	<input type="checkbox"/> Unauthorised/accidental damage to heritage item	<input type="checkbox"/> Unauthorised/accidental vegetation removal or harm
<input type="checkbox"/> Air Emission	<input type="checkbox"/> Wildlife habitat/nesting area disturbed	<input type="checkbox"/> Other (specify)

Environmental Incident Reporting Form

Level of incident

Level	Example
<input type="checkbox"/> Minor	eg. No material has escaped the site or caused material harm to the environment – it is easy to clean up without additional assistance.
<input type="checkbox"/> Major	eg. Material has escaped the site causing pollution downhill/downstream areas, which will require clean up involving other agencies and/or additional resources not available to local site management. Damage has occurred or is likely to occur to the environment.

Hazardous Material Spilt

<input type="checkbox"/> Petroleum based products/ Hydrocarbons	<input type="checkbox"/> Chemicals domestic or industrial grade
<input type="checkbox"/> Biological waste / Clinical and related waste	<input type="checkbox"/> PCB insulating liquids
<input type="checkbox"/> CFC containing equipment	<input type="checkbox"/> Paints or paint products
<input type="checkbox"/> Radioactive waste	<input type="checkbox"/> Other (specify)
Detail type/ingredient spilt: (UN, MSDS details)	
Detail concentration of material spilt:	
Detail quantity of material spilt:	

Type of Spill

<input type="checkbox"/> Spilt onto ground	<input type="checkbox"/> Spilt into stormwater drain
<input type="checkbox"/> Spilt into waterway	<input type="checkbox"/> Poured down sink
<input type="checkbox"/> Poured down sewer	<input type="checkbox"/> Released into atmosphere
<input type="checkbox"/> Caused odour	<input type="checkbox"/> Caused fire/explosion
<input type="checkbox"/> Caused infectious contamination	<input type="checkbox"/> Other (specify)

Immediate Actions

Was spill contained? Yes <input type="checkbox"/> No <input type="checkbox"/>
Detail immediate actions/controls measures taken to rectify or contain the incident
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Environmental Incident Reporting Form

Corrective Actions

Detail corrective clean up action taken

.....

.....

.....

.....

Disposal

Detail disposal method/plans and location

.....

.....

.....

Recommended follow up and preventative actions

Detail recommendations

.....

.....

.....

Persons present at Incident

Were there any witnesses to the accident? Yes ☐ No ☐ If 'Yes', please provide names

.....

.....

Declaration

The information and answers given above are true in every detail and no information has been withheld.

Departmental Supervisors Name

Departmental Supervisors signature

Date

Departmental Managers Name

Departmental Managers signature

Date



Diagram: (do not scale)

A blank sheet of graph paper with a grid pattern. In the top-left corner, there is a north arrow pointing upwards, labeled with the letter 'N'. The grid consists of small squares covering the entire page.

Created By: Paul Corcoran
Created Date: 24 Mar 2009
Review Date: 24 Mar 2017
Reviewed Date: 7th January 2020, by E Diver