



**Detailed
Site Environmental Management Plan**

**Replacement of Merritts Chairlift with
Gondola Lift
Thredbo Alpine Resort**

DA 9130

8.8.2019

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1 INTRODUCTION

1.1 Background

This Detailed Site Environmental Management Plan (DSEMP) has been revised in accordance with the proposed S.4.55 Modifications to the approved DA (DA 9130) for the replacement of the Merritts chairlift with a gondola lift at Thredbo Alpine Resort.

The purpose of this plan is to provide detail of the management of the construction process (as amended) in order to protect the existing environment in and adjacent to the proposed works.

1.1.1 Project Description

A detailed description of the development proposal was included within the original *Statement of Environment Effects*, with a S.4.55 Modification Report also prepared.

1.2 Objective

The objectives of this DSEMP are to provide a platform:

- (a) That identifies environmental objectives;
- (b) That details environmental management guidelines and procedures, and ensures that Kosciuszko Thredbo Pty Ltd ('KT'), and the construction contractor are aware of these procedures, who is responsible for implementing and maintaining the required safeguards; and
- (c) That provides guidelines for incidents and emergencies.

This revised DSEMP is consistent with the requirements of the "Guideline for Preparation of Environmental Management Plans", DIPNR 2004, noting those Guidelines are only applicable for a development requiring an Environmental Impact Statement (EIS), usually a 'Designated Development'.

1.3 Legislative/statutory requirements

The activity must comply with the following legislation/standards:

- Environmental Planning and Assessment Act 1979,
- National Parks and Wildlife Act 1974,
- Building Code of Australia,
- Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)
- Protection of the Environmental Operation Act 1997,
- Water Management Act 2000,
- Biodiversity Conservation Act, 2016

2 SITE ENVIRONMENTAL ACTIONS

The environmental actions required for the proposed works are provided in Attachment 4.

This table also provides the timeframe and frequency for the actions and subsequent monitoring, as well as the designation of responsibilities.

This provides a checklist for the efficient use by Contractors and relevant staff, in conjunction with the following environmental objectives:

2.1 Environmental Objectives

The Environmental Management Objectives of this DSEMP are as follows:

2.1.1 Soils, geology and geomorphology

- Minimise the potential for soil erosion of the proposed works so as not to impact on the surrounding landscape and hydrological features.

2.1.2 Hydrology and water quality

- Minimise the risk of potential pollution during and following excavation of Creeks.
- Minimise the potential for sediment transport from the site.

2.1.3 Flora

- Minimise potential impacts to native vegetation.
- Rehabilitate with appropriate indigenous and exotic species.

2.1.4 Fauna

- Minimise direct impacts to native fauna and habitat.
- Restore habitat values as quickly as possible following the works.

2.1.5 Social and economic impacts

- Ensure that works conform with the Environment Protection Authority's construction noise criteria.
- Obtain community and visitor understanding of the project to maximise tolerance associated with disruption.

2.1.6 Archaeology

- To minimise impacts on places and artefacts of archaeological and aboriginal cultural significance, consistent with obligations under section 90 of the NPW Act.

2.1.7 Resource impacts

- Minimise waste from the construction site and recycle waste where possible.
- Minimise risk of chemical spills.
- Ensure prompt and effective clean up of any accidental spills.

2.1.8 Visual and scenic

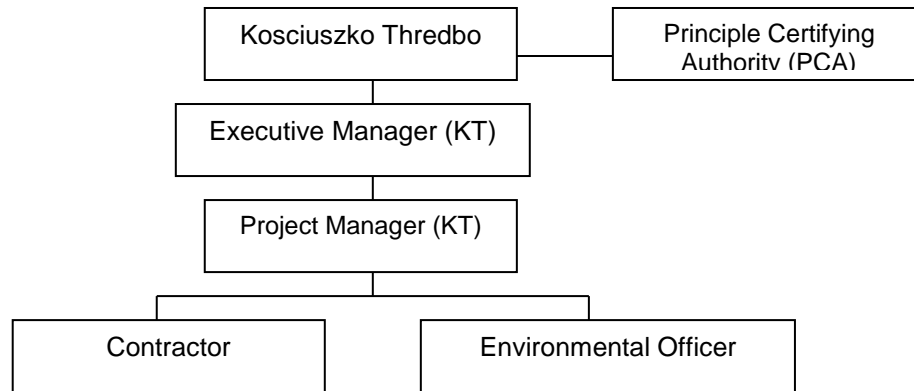
- Minimise visual impact of works during and following construction.

3 MANAGEMENT

3.1 Project Organisational Arrangement

The proposal is funded by Kosciuszko Thredbo Pty Ltd, who will manage its construction, and maintain its operation.

3.1.1 Project Team Structure



3.2 Roles and Responsibilities

The Roles and Responsibilities for each team member is outlined below in conjunction with the Inspection and Monitoring Plan, required under condition C.3.

3.2.1 Executive Manager

- Defines environmental responsibilities within the project,
- Develops, implements and maintains this DSEMP,
- Supervises implementation of training/induction,
- Ensures records are kept,
- Ensures environmental requirements are incorporated into the contract document,
- Ensures the requirements of the DSEMP are implemented, and
- Arranges audits/reviews of the DSEMP at appropriate stages.

3.2.2 Project Manager

- Is familiar with contents of this DSEMP,
- Ensuring that all personnel including contractors/sub-contractors comply with the DSEMP requirements relevant to their scope of work.

3.2.3 Contractors

- Implement and maintain DSEMP relevant to work being undertaken, and
- Report on compliance as required (Environmental safeguards Action Chart).

3.2.4 Environmental Officer

- Is familiar with the contents of this DSEMP
- Is familiar with contractors Environmental Management Plan
- Observes and monitors contractors compliance on a daily basis,
- Reports on compliance with this DSEMP and Contractors DSEMP, and

- May participate in construction audits.
- Will undertake a weekly inspection.

3.3 Training

All KT staff involved with works, and the contractor would be made aware of the relevant requirements of this DSEMP. Training would be initiated by site induction. KT is responsible for the site training of all of their employees, and nominated representatives of the contractor. The contractor is responsible for site induction and training of their staff.

Site induction of KT supervisory staff would include:

- i) Environmental awareness, including relevant KT policy, the concept of due diligence, and other relevant codes of practice;
- ii) Environmental issues including:
 - The DSEMP,
 - Relevant legislation/licence/approvals,
 - Emergency preparedness/procedures,
 - Incident reporting,
 - Community consultation, and
 - Site environmental procedures

3.4 Communication

The communication strategy would mirror the contractual responsibilities illustrated in section 3.2

3.4.1 Stakeholder Consultation

Key stakeholder consultation would occur with DPE.

3.5 Environmental Control Plans

A Soil and Water Management plan has been prepared and provided in Attachment 2.

3.6 Construction Program

3.6.1 Construction Staging Areas

The primary construction staging area has been identified at the south-western side of the current bus parking area, adjacent to the Friday Flat day car park, as this surface is the most suitable for storage

This area will also be used as a helicopter staging area for lifting.

Three secondary construction staging areas have been identified at the top, mid and bottom stations of the proposed lift.

Additional small staging areas have also been identified, where required.

3.6.2 Site Compound

The diagrammatic plans provided in Attachment 1, identifies the location for the site compound to be located adjacent to the mid-station on the highly disturbed High Nook ski run. This is to be used for temporary site offices and other equipment.

3.6.3 Stockpile Sites

Smaller temporary material stockpile sites will be required to enable management of spoil, materials, soil and vegetation.

These sites will be strategically located:

- Within areas that are highly disturbed
- Within areas away from watercourses
- On relatively flat land
- Provide sufficient area for the storage of materials to minimise, to the greatest extent practical, the number of deliveries required

3.6.4 Demolition Works

The existing chairlift lift will be removed from the site, with some components stored and recycled (ie the lift haul rope, the new types of towers, building cladding, lift components that can be re-used, etc).

Other components will be either scrapped and/or taken to Jindabyne landfill.

All demolition work shall comply with *AS 2601 The demolition of structures*.

3.6.5 Noise, Vibration and Dust

Construction will take place during off-peak visitation periods unless agreed otherwise with DPE and KT. The works will take place across the lower, mid and upper ski slopes associated with the Merritts chairlift alignment, generally away from any tourist accommodation.

All vehicles carrying spoil, rubble or vegetation debris to or from the site shall at all times be covered to prevent the escape of dust or other material, with covers to be adequately secured and roadways and footpaths to be kept clean.

3.6.6 Waste Management

All builders' waste and rubbish is to be contained within covered receptacles to prevent litter being blown about the site. All waste will be dealt with according to the Thredbo Village waste management strategy.

3.6.7 Construction Access

As KT is both the applicant and head lessee, KT will manage all traffic and access as they do on a daily basis with regard to any development within the village.

Construction access will be split into three categories, as described below:

Primary Access:

The primary access to the development will be from Friday Drive to Valley Terminal to service the bottom station and towers 1 & 2 and for the rest of the development, will be from the Mountain summer access road via Friday Flat and onto the Merrits summer access road.

These roads are suitable for all machinery and vehicles.

Secondary Access:

The secondary access is limited to certain machinery and vehicles due to slope and limited native vegetation coverage.

The secondary access corridors are to be roped off and defined to ensure single entry and exit of tracked vehicles, limited to excavators, dump trucks, cranes, concrete trucks, flatbed trucks and vehicles.

These tracks, when not utilised by the new development, will be rehabilitated following construction.

Restricted Access:

Restricted access to Towers 9-12 will be implemented whereby all access will be via foot or by air, except for the excavation of tower footings, which is to be undertaken by an excavator and walked down and back up the lift line to limit impacts on native vegetation.

All other access will be via helicopter including removal of spoil, installation of steel, concrete and lift towers (both removal of existing and proposed new towers).

A Construction Access Plan has been incorporated into the overall diagrammatic plans provided in Attachment 1.

3.6.8 Pedestrian and bike rider management

As KT is both the applicant, constructor, head lessee and now manager of all mountain bike operations, bike riders and pedestrian using trails that will be impacted by construction works will be managed by use of signage, partial closure of trails and exclusion from construction works.

3.6.9 Emergency/Incident Procedures/Fuel and Chemical Spills

Any emergency/incident procedure will follow the document, Construction Site Incident and Emergency Procedures Thredbo Village, September 2006, that includes reference to spill procedures and emergency and incident responses, including "call the mountain/general manager and 000 for Fire Brigade response". The Thredbo brigade has HAZMAT response capabilities, and the village department has spill kits at every village facility (ie pump stations, golf course sheds etc) and a 240-litre bin spill kit available for response.

It would also be a requirement that the contractor has an emergency/incident procedure plan that includes an oil spill response plan. The contractors are responsible for responding to any environmental emergency, including contacting

appropriate authorities (KT, NPWS etc). These procedures are detailed in the “Kosciuszko Thredbo Pty Ltd Safety Procedure” document.

3.6.10 Amenities

Toilet facilities are provided at the bottom station (Valley Terminal), Friday Flat and at the top station (Merritts Mountain house).

3.6.11 Wet/Adverse Weather Contingencies

Wet and Adverse Weather will be monitored daily as is currently the situation with the resort operating at least one chairlift 365 days per year. This will rely on standard weather forecasting (ie. BOM) plus weather readings from the Thredbo Top Station weather station.

In the event of wet weather, defined when the ground is sufficiently soaked that safe or efficient construction is not possible, construction will be stopped until the weather clears and the ground is sufficiently dry to commence construction. Standard construction management practices for extreme weather events will be evoked prior to and during adverse weather (inc tie downs, covers, etc).

The Project Manager in consultation with the Environmental Officer and the Contractor will determine what constitutes wet weather, when construction will cease and under what conditions construction will commence.

3.6.12 Risk Assessment

A risk assessment matrix has been prepared and provided in Attachment 5.

3.6.13 Tree Cutting Protocol

Where the identified trees are to be pruned or removed, the following measures are to be undertaken to reduce the potential impacts to tree dwelling fauna species:

- Pre-clearing check for tree-dwelling fauna, nests and hollows;
- Trees should be felled by contractor using chainsaw;
- Trees should be felled in such a way as to avoid impacts on intact native vegetation;
- Trees with hollows should be felled so that the hollow is uppermost when the tree is lying on the ground;
- Cleared vegetation may be dispersed within surrounding vegetation.

3.6.14 Use of Helicopter for Construction

It is anticipated that a helicopter will be required for some of the lift installation, specifically towers 9-12. Further specific details on the use of a helicopter will need approval from OEH and these details will be provided by the lift manufacturer at that time.

Attachment 1

Diagrammatic Plans:
Construction Access/Construction Staging Areas/Site Compound




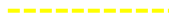
- Legend:**
- New Lift: —
 - Primary Access: - - -
 - Secondary Access: - - -
 - Restricted Access: - - -
 - Primary Staging Area:
 - Secondary Staging Area:
 - Small Staging Area:
 - Site Compound:
 - Overflow Construction/Staff Vehicle Parking:


**DIAGRAMMATIC PLAN - SEMP - LOWER MOUNTAIN
MERRITTS GONDOLA LIFT, THREDBO ALPINE RESORT**





Legend:


New Lift:


Primary Access:


Secondary Access:


Restricted Access:


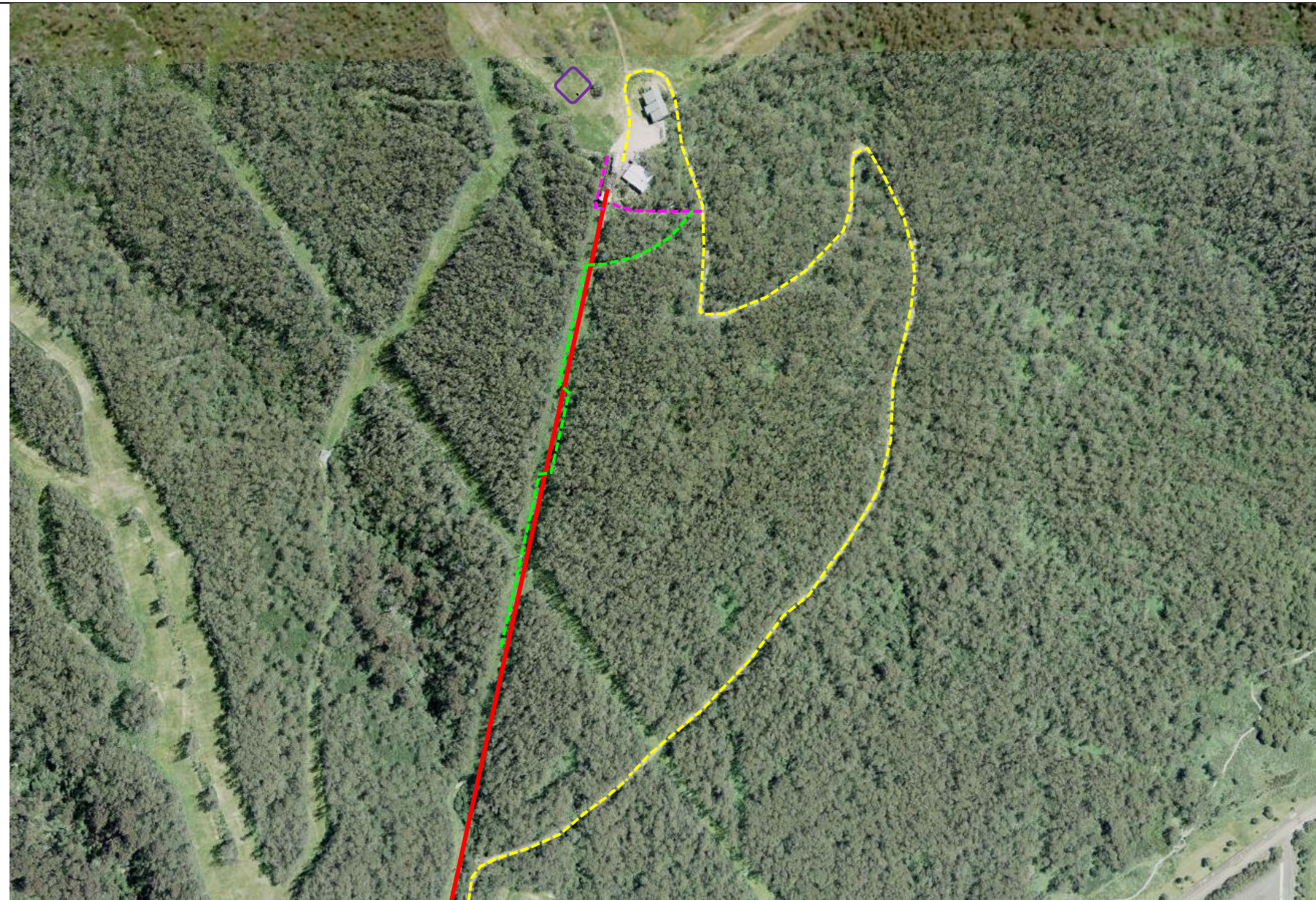
Primary Staging Area:


Secondary Staging Area:



Small Staging

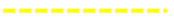

Site Compound:



**DIAGRAMMATIC PLAN - SEMP - MID MOUNTAIN
 MERRITTS GONDOLA LIFT, THREDBO ALPINE RESORT**





Legend:


New Lift:


Primary Access:


Secondary Access:


Restricted Access:


Primary Staging Area:


Secondary Staging Area:


Small Staging


Site Compound:


**DIAGRAMMATIC PLAN - SEMP - UPPER MOUNTAIN
 MERRITTS GONDOLA LIFT, THREDBO ALPINE RESORT**



Legend:

New Lift:



Primary Access:



Secondary Access:



Restricted Access:



Primary Staging Area:



Secondary Staging Area:



Small Staging



Site Compound:



**DIAGRAMMATIC PLAN - SEMP - FRIDAY FLAT CARPARK
MERRITTS GONDOLA LIFT, THREDBO ALPINE RESORT**

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Attachment 2

Soil and Water Management Plan

Soil and Water Management Plan

Erosion and Sedimentation Control

Appropriate environmental management controls will be required to manage soil and surface water during the construction of the development. Temporary controls will include either a straw bale filter, installed as illustrated Diagram A or a sediment fence in accordance with Diagram B below.

Diagram A: Standard Straw Bale Filter Installation

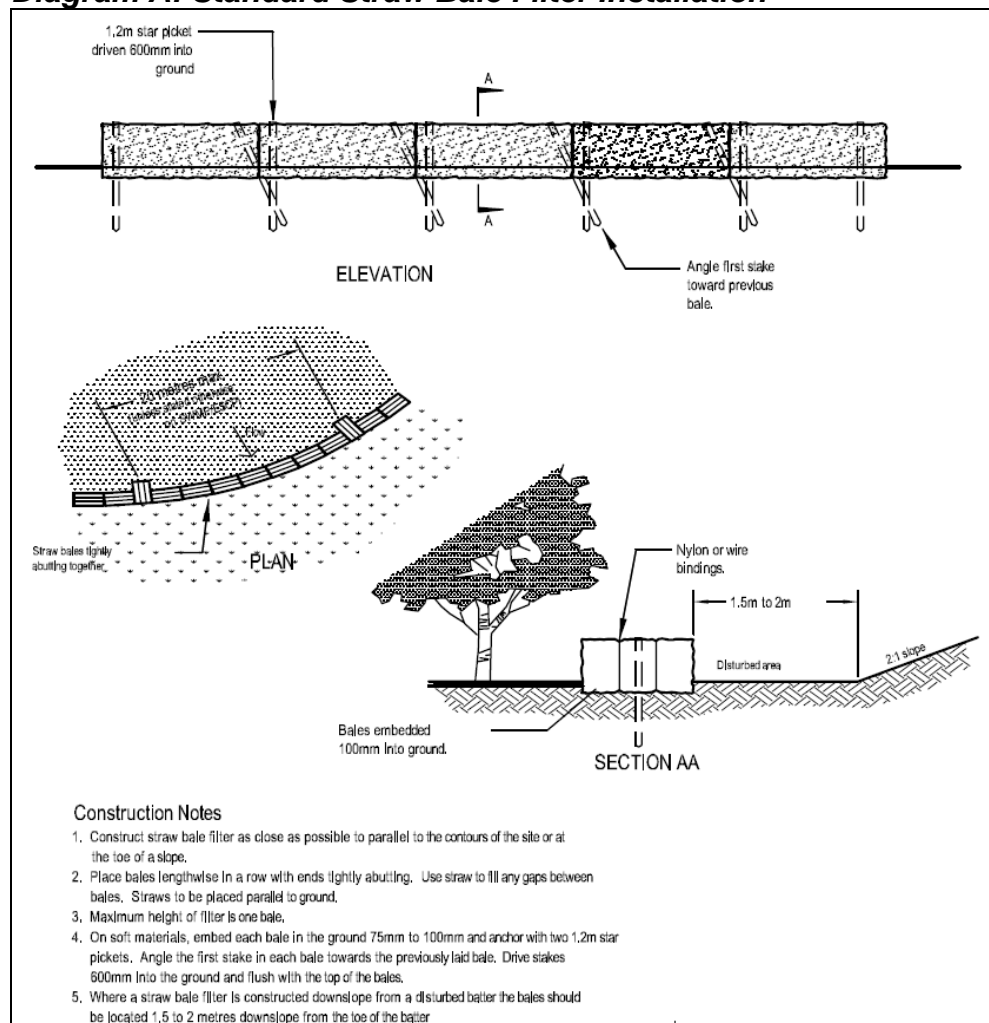
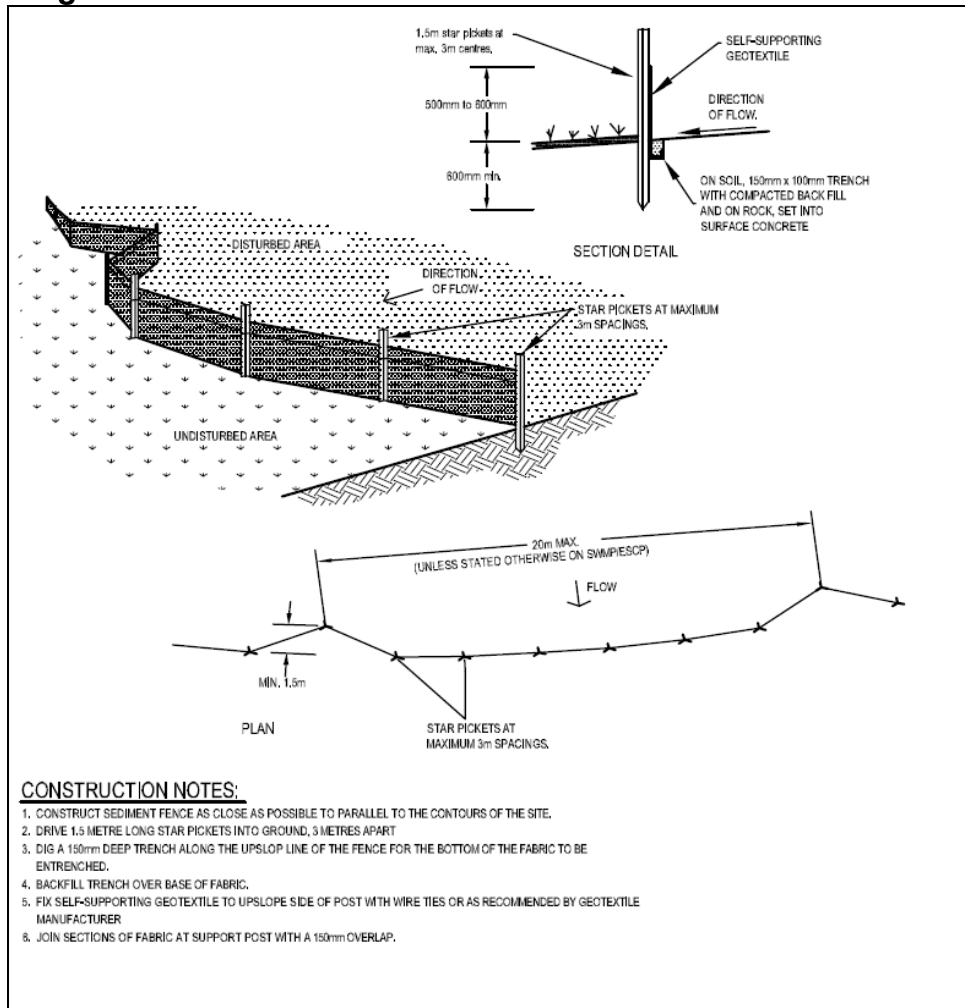


Diagram B: Standard Sediment Fence Installation



Due to the size and scale of the project, it is not feasible or necessary to specifically locate these controls in plan form. The controls are however to be installed in accordance with the following suite of criteria:

- Both straw bale and sediment control fencing should be installed on the low side of the work site;
- Both straw bale and sediment control fencing should be installed as close as possible to follow the existing contours of the site;
- A provision for the diversion of water, and stabilisation of channels, around the excavation site should be installed; and
- Areas where soil is to be stockpiled is to be surrounded by sediment control fencing and protected from runoff water.
- Works will not take place during rainfall periods (other than work necessary to ensure that long sections of the trench are not left open and are protected as per diagram A).

Top, Mid & Bottom Station:

Due to the top, mid and bottom stations site being relatively dry and level, a straw bale filter downslope of the works is to be installed in accordance with Diagram A above.

Tower Footings:

All the tower footings are located in relatively dry and level areas and a straw bale filter downslope of the works is to be installed in accordance with Diagram A above.

Water in excavations:

In the event that water needs to be pumped out of any excavations, the following measures are to be adhered to:

- a temporary dam filter shall be installed within the construction zone but outside of any riparian corridor, and shall be constructed of geofabric material or similar;
- the temporary filter dam shall function in a way that it captures sediment and pollutants and prevents them leaving the filter dam; and
- all pump out equipment shall be wholly contained within the construction zone.

Monitoring:

The nominated project Environmental Officer will be responsible for ensuring that all the erosion and sedimentation controls are installed in accordance with the above criteria and are regularly maintained and monitored.

Protection of Native Vegetation & Fauna

The recommendations as set out in the Fauna and Flora Assessment provided are to be followed with regard to vegetation and habitat management, sediment control and rehabilitation.

Vegetation and habitat management

- 1. All disturbance should be kept to the minimum required to achieve the proposal. In particular, excavation and any vegetation and rock removal should be undertaken so as to minimize damage to surrounding vegetation and associated habitats.*
- 2. All machinery to be used during the construction phase should be limited to the existing disturbed areas and access tracks and the footprint of the proposal as far as is possible.*
- 3. As far as is possible, excavation and other activities should be undertaken from existing disturbed areas so as to not extend the disturbance footprint beyond the proposal, unless where restricted access is proposed as set out in the SEMP.*
- 4. The proposal 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.*
- 5. 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 action proposed.*

6. A plan should be developed to minimize impacts on wombats during the construction phase of the proposal. This should include identifying the precise location and assess current usage of wombat burrows after the vegetation clearing has been undertaken and prior to the commencement of excavations. Works that affect any active burrows should be undertaken so as to limit the potential for injury or stress to wombats.

Sediment control

7. 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.

8. Drainage management and sediment control measures are to have particular regard to the prevention of any sedimentation of watercourses or vegetation communities adjoining the study area.

Rehabilitation

9. Rehabilitation activities should be consistent with the resort areas rehabilitation guidelines (NGH Environmental 2007).

10. Timber removed in association with the proposal should be stockpiled offsite for use as firewood or mulch.

11. Shrubs removed in association with the proposal should be mulched and used in the stabilization of cleared areas.

Attachment 3

Record of Complaint

Record of Complaint, Kosciuszko Thredbo Pty Ltd

For the recording of a complaint or incident (both verbal and written complaints).

Time and Date complaint received:

Reference number:

Name of representative who witnessed complaint:

Name and contact details of complainant:

Nature of complaint:.....
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Action taken in response to complaint:.....
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Attachment 4

Environmental Actions Table

Attachment 4 - Environmental Actions Checklist

Flora

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
PRIOR TO CONSTRUCTION			
All site personnel shall observe the limits of the works area and be made aware of the importance of vegetation of significant value during the site induction.	Environmental Officer/ Contractor	Site Induction / Prior to Commencement / During Construction	
Secondary Access routes are to be roped off to concentrate traffic to single vehicle paths and avoid adjoining native vegetation.	Environmental Officer/ Contractor	Site Induction / Prior to Commencement	
Restricted Access routes (Towers 9-12) are to be restricted to foot or air only, except as outlined in this SEMP.	Environmental Officer/ Contractor	Prior to Commencement	
DURING CONSTRUCTION			

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
Machinery used during construction must be cleaned prior to site mobilisation, to ensure the machinery is free of mud and vegetative propagules.	Project Manager / Contractor	Prior to Park Entry/ Prior to Construction	
POST CONSTRUCTION			
The site is to be progressively stabilised as works are completed.	Project Manager/ Contractor	Upon Completion	
The condition of rehabilitated areas shall be monitored seasonally until permanent vegetation cover is achieved.	Environmental Officer	Ongoing / As required by development approval	
Follow up weed control (spot spraying) is to be carried out if deemed necessary.	Environmental Officer	Ongoing / As required by development approval	

Fauna

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
Movement of habitat features, (such as large logs) is to be avoided during construction.	Environmental Officer	During Construction	

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
Accidental leakages and spillage of concrete, fuel or lubricant from machinery shall be dealt with by taking immediate measures to contain the spill.	Environmental Officer/ Contractor	During Construction	
Any excavations left open overnight are to be left with an egress ladder for fauna, and checked in morning. If significant fauna are found, sheets of hessian or similar are to be left in sections of the disturbed areas to assist escape.	Environmental Officer / Contractor	At the Start of Each Day	
Trees to be removed will first be inspected to establish whether nesting of native fauna is evident.	Environmental Officer	Site Induction	
POST CONSTRUCTION			
Areas which have been disturbed are to be rehabilitated immediately following the completion of works.	Environmental Officer / Project Manager/ Contractor	Upon Completion	

Erosion and Sedimentation

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
PRIOR TO CONSTRUCTION			

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
Install Erosion and Sediment Controls (within the Construction Corridor) in accordance with the Soil and Water Management Plan (Attachment 2)	Environmental Officer / Project Manager/ Contractor	Prior to Commencement	
DURING CONSTRUCTION			
Construction activities are to be undertaken within the approved development footprint.	Project Manager/ Contractor	During Construction	
Wherever practicable, during the course of construction, exposed areas shall be provided with a cover to minimise erosion and sedimentation.	Project Manager/ Contractor	During Construction	
Erosion and sedimentation controls shall be monitored on a daily basis or immediately following a rainfall event.	Environmental Officer / Project Manager/ Contractor	Following Rainfall/ Daily	
Construction activities shall be programmed to minimise the area of disturbed ground that is exposed to erosion at any one time.	Project Manager/ Contractor	During Construction	
POST CONSTRUCTION			
All exposed soil areas shall be appropriately stabilised to prevent erosion.	Project Manager/ Contractor	During Construction / Prior to Rainfall	

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
All exposed soil areas shall be appropriately revegetated following stabilisation to prevent erosion.	Environmental Officer / Project Manager/ Contractor	Upon Completion	

Water Quality

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
Spill kits shall be readily accessible.	Contractor	Prior to Commencement	
Spills of any liquids shall not be hosed or flushed away but swept or collected.	Contractor	During Construction	
Equipment shall be properly maintained to prevent water pollution. All plant and equipment should be inspected daily to avoid leakage of fuel, oil or hydraulic fluid.	Contractor	During Construction	
No maintenance other than emergency repairs shall be undertaken on site.	Contractor	During Construction	
All plant/equipment shall be washed out in an appropriately protected area to prevent erosion and pollution to existing drains or natural areas.	Contractor	During Construction	

Site Working Area

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
Ensure that access to the site is restricted to authorised personnel only.	Project Manager/ Contractor	During Construction	
Ensure site and associated plant and equipment is secured when site activities conclude at the end of the day.	Project Manager/ Contractor	End of Each Day	
POST CONSTRUCTION			
Upon completion of construction, the site working areas shall be removed, and the area reinstated as found originally.	Project Manager/ Contractor	Upon Completion	

Air Quality

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
Materials transported in open trucks shall be covered to prevent generation of dust.	Contractor	During Construction	

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
The tailgates of all vehicles transporting material from the construction site shall be securely fixed prior to loading and immediately after unloading.	Contractor	During Construction	
POST CONSTRUCTION			
Areas no longer required for construction activity shall be progressively stabilised as soon as practicable to assist in controlling dust.	Contractor	Upon Completion	

Fuel, Chemicals & Hazardous Material (Explosives)

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
A container of spill absorbent is to be made available and used for emergency spills of fuel, oil or other chemicals.	Project Manager/ Contractor	Prior to Commencement	
All flammable and/or explosive materials shall be kept in an approved Workcover area.	Contractor	During Construction	
The use and storage of any herbicides or other chemicals classified as Dangerous Goods Class 6 poison shall be strictly in accordance with the manufacturers instructions and the relevant MSDSs.	Project Manager/ Contractor	During Construction	

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
POST CONSTRUCTION			
Any contaminated material (empty drums, rag, contaminated soil etc) shall be removed immediately from the site and disposed of in accordance with the appropriate regulations.	Contractor	End of Each Day	

Plant and Equipment

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
All plant and equipment used on the subject site is to be placed in existing disturbed corridors to ensure minimal disturbance to the native vegetation.	Project Manager/ Contractor	Prior to Commencement / During Construction	
Emergency procedures shall be displayed in a prominent position in the site working area.	Contractor	Prior to Commencement / During Construction	
POST CONSTRUCTION			
All work sites including the staging areas shall be restored in a satisfactory manner and where necessary in accordance with the appropriate regulations.	Project Manager / Contractor	Upon Completion	

Waste Management

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
All litter generated on site is to be placed in small garbage bags. At the end of each day, these bags are to be disposed of in appropriate bins.	Contractor	End of Each Day	
All building waste shall be contained in receptacles so as not to escape by wind or water and these receptacles must only be located in the construction access corridor and/or site compound area (not beneath the canopy or over roots of any trees) and must be cleaned regularly.	Contractor	During Construction	
Regular inspections shall be carried out to ensure the worksite is left in a rubbish free state.	Project Manager / Environmental Officer / Contractor	End of Each Day	
All employees shall be informed of the need to maintain a clean worksite.	Environmental Officer / Project Manager/ Contractor	Prior to Commencement / During Construction	
Any excess spoil is to be removed from the site, categorised and deposited at stockpile site.	Project Manager / Contractor	During Construction	

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
All loads of rubbish removed shall be securely covered to ensure no spillage.	Project Manager / Contractor	During Construction	
To the furthest extent possible, efforts shall be made to reduce, reuse and recycle materials used onsite.	Project Manager / Contractor	During Construction	
POST CONSTRUCTION			
The worksite shall be left in a tidy and rubbish free state upon completion of the Project.	Project Manager / Contractor	Upon Completion	

European and Aboriginal Heritage

ACTION CHECKLIST	Who's Responsible	When to be undertaken	DONE (Initial/date)
DURING CONSTRUCTION			
All staff and contractors working on the site shall be advised of the need to notify their supervisor and cease work, if either indigenous or non-indigenous heritage items are encountered.	Project Manager / Contractor	Prior to Commencement	
Any evidence of Aboriginal relics discovered during construction shall be reported to Office of Environment & Heritage (OEH). Work in subject area to cease until advice is sought by OEH.	Executive Manager	During Construction	

Noise and Vibration

ACTION CHECKLIST	WHO'S Responsible	When to be undertaken	DONE (Initial / date)
PRIOR TO CONSTRUCTION			
All equipment to be used shall be correctly maintained and in good working order.	Project Manager / Contractor	Prior to Commencement	
DURING CONSTRUCTION			
Drilling noise should be short-term and water (if available) is to be used to reduce dust generation if dust is created.	Project Manager / Contractor	During Construction	
All construction activities shall be restricted to the hours as stipulated in the development consent issued by the Department of Planning and Environment (DPE).	Project Manager / Contractor	During Construction	
All site works shall be ceased by 30 May unless otherwise agreed to in writing by the DPE.	Executive Manager / Project Manager	30 May of the relevant year	

Attachment 5

Risk Assessment Tool (Table)

RISK ASSESSMENT TOOL

CONSEQUENCE OR IMPACT <i>What type of impact do you expect could result from exposure to this hazard?</i>		LIKELIHOOD <i>How often are people exposed to the hazard under assessment and how likely is it that these circumstances can and will lead to an accident?</i>			
		Very Likely <i>The event could happen at any time.</i>	Likely <i>The event could happen sometime.</i>	Unlikely <i>The event could occur but very rarely.</i>	Very Unlikely <i>The event could happen but probably never will.</i>
Category	Criteria				
CATASTROPHIC		Very High 1	Very High 1	High 2	Medium 3
Time	Time stop/prevents project				
Head Lessee	Stop/prevents construction/operations				
Environmental	Unacceptable damage to environment stop/prevents project				
Approvals	Results in prohibitive delay and/or cost				
Accessibility/Public & Community Safety	Risk results in death and severe restrictions				
Safety	Risk results in death				
Construction Methodology/ Risk	Risks resulting from weather, site conditions, material supply and other impacts result in prohibitive delays and/or cost increases				
Cost	Cost stops/prevents project				
MAJOR		Very High 1	High 2	Medium 3	Medium 4
Time	> 2 months time delay				
Head Lessee	Significant impacts on construction/ operations				
Environmental	Long term damage to environment requiring significant additional approvals/cost/ environmental offsets/ delays				
Approvals	Result in significant delay and/or cost				
Accessibility/Public & Community Safety	Risk results in significant injuries and/or significant restrictions				
Safety	Risk results in significant injury				
Construction Methodology/ Risk	Risks resulting from weather, site conditions, material supply and other impacts result in significant delays and/or cost increases				
Cost	Requires significant additional funding				
MODERATE		High 2	Medium 3	Medium 4	Low 5
Time	2-4 week time delay				
Head Lessee	Manageable impact on construction/ operations				
Environmental	Manageable damage to environment				
Approvals	Result in manageable delay and/or cost				
Accessibility/Public & Community Safety	Risk results in medical treatment and/or manageable restrictions				
Safety	Risk results in manageable medical treatment				
Construction Methodology/ Risk	Risks resulting from weather, site conditions, material supply and other impacts result in manageable delays and/or cost increases				
Cost	Requires manageable additional funding				
MINOR		Medium 3	Medium 4	Low 5	Very Low 6
Time	1 week time delay				
Head Lessee	Small impacts on construction/operations				
Environmental	Small impacts to the environment				
Approvals	Result in small delay and/or cost				
Accessibility/Public & Community Safety	Risk results in first aid treatment and/or small restrictions				
Safety	Risk results in first aid treatment				
Construction Methodology/ Risk	Risks resulting from weather, site conditions, material supply and other impacts result in small delays and/or cost increases				
Cost	Requires small increase in cost				
INSIGNIFICANT		Medium 4	Low 5	Very Low 6	Very Low 6
Time	1-7 days time delay				
Head Lessee	negligible disruptions on construction/ operations				
Environmental	Risk to the environment can almost be totally mitigated				
Approvals	Results in negligible delays and/or cost increases				
Accessibility/Public & Community Safety	Risk results in negligible restrictions				
Safety	Risk results in negligible disruption				
Construction Methodology/ Risk	Risks resulting from weather, site conditions, material supply and other impacts result in negligible delays and/or cost increases				
Cost	Requires negligible increase in cost				