

Modification
Application for
West Nowra,
Recycling and
Waste Facility,
Stage 4
Expansion SSD
7187

April 2021

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Abbreviations

Term	Definition
ASP	Accredited Service Provider
EIS	Environmental Impact Statement
EPA	Environmental Protection Authority
EP&A	Environmental Planning and Assessment
LGA	Local Government Area
SCC	Shoalhaven City Council
SSD	State Significant Development

Appendixes

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1. Executive Summary

Shoalhaven City Council (SCC) owns and operates the West Nowra Recycling and Waste Facility (Facility) on Flatrock Rd, Mundamia, NSW. This facility operates under the EPA Licence EPL 5877 and is the main facility for the receipt of waste across the Shoalhaven Local Government Area (LGA).

The Facility currently operates seven days a week to receive both recycling and landfill from transfer stations, kerbside contractors, private operators and members of the public.

The SCC have implemented a range of waste management initiatives in an effort to reduce the amount of waste being diverted to landfill, but with predicted population growth, and increased waste generation per capita, it is highly likely that there will be an increase in waste diverted to landfill in the future.

To facilitate the forecast increase in waste production, the SCC has submitted a State Significant Development (SSD) application (SSD 7187) under part 4, Division 4.1 of the Environmental Planning and Assessment Act 1979 to extend the current landfilling facility at 120 Flatrock Road, Mundamia. This application involves the progressive construction, operation and rehabilitation of the Stage 4 Landfill Extension.

The Stage 4 Extension application incorporates approximately 18.6ha and includes conservation areas, biodiversity corridors, dams, leachate irrigation areas, fire trails, access tracks and internal infrastructure.

The proposed Stage 4 Expansion is designed to provide a facility to receive and dispose of landfill, general solid waste from within the SCC LGA, and provide security for future landfill capacity for the SCC LGA for up to 30 years. The construction and operation of the expanded facility will provide material to meet the operational cover requirements for the facility.

2. Background

The current proposal was granted consent to the development application on the 11th May 2020 and was subject to sixty three (63) specific Environmental Conditions.

The majority of these conditions relate to the construction and operation of the Stage 4 Extension, with Condition B33 relating to the pre-construction installation of Fauna Bridges; **B33: Prior to any clearing works for the development, the Applicant must install three wildlife rope-bridges with monitoring cameras to maintain habitat connectivity for the life of the development in accordance with the EIS.** This condition was indicatively located as shown in Figure 1.



Figure 1: Fauna Bridge Locations

This modification application provides information supporting the deletion of the condition from the Conditions of Consent for SSD 7187.

3. Legislative Framework

The proposed modification is to be made under Section 4.55 (1A) of the EP&A Act which states:

(1A) A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if:

- (a) It is satisfied that the proposed modification is of minimal environmental impact, and
- (b) It is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all)
- (c) It has notified the application in accordance with:
 - (i) The regulations, if the regulations so require, or
 - (ii) A development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and
- (d) It has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.

The proposed modification to remove the fauna bridges does not impact on the current environmental conditions and the additional alternative design and mitigation measures as detailed in Section 4 provide a level of increased connectivity suitable for a wider variety of local fauna species. A detailed Environmental Assessment is provided in Section 6.

4. Proposal

The SCC have reassessed the submitted EIS and Conditions of Consent in conjunction with a specialised fauna bridge designer and the current SCC Environmental Assessment team and determined that the installation of the fauna bridges as specified is going to have a significant impact on the time frame of the development and that comparable connectivity can be achieved with alternative design options.

4.1. Fauna Bridge Consultation

SCC engaged GPEHV to investigate and design the fauna bridges as required to achieve the Conditions of Consent. GPEHV are a powerline construction company, accredited Level 3 ASP designer and Level 1 ASP Constructor for Essential Energy. as part of the proposal, GPEHV assessed the fauna bridge locations and existing Essential Energy infrastructure, determining that in order to achieve the intended connectivity three (3) x three (3) pole bridges would need to be installed. The installation of these bridges would require the installation of new 14m – 15.5m power poles to

achieve statutory road clearance and Safe Approach Distance's. In order to achieve these installations, a Level 3 Essential Energy design is required. Once designed, this is required to go through the Essential Energy approval process to become a 'certified design', which takes 4-5 months to process.

4.2. Alternative Design Options

In an effort to minimise the impact on the construction schedule, and meet the remaining Conditions of Consent, SCC considered a number of alternative design options to increase the connectivity of both the biodiversity corridors and conservation area.

These alternate design options are detailed below;

- The permanent reduction of the Flatrock Road speed limit from 100km/h to 60km/h along the Eastern boundary of the development. (Independent advice has indicated that due to the current inferred speed limit and road conditions that this reduction is likely to be approved)
- The temporary reduction of the Flatrock Road speed limit to 40km/h during clearing activities related to the development.
- Installation and relocation of fencing in the South West corner of the development to provide increased connectivity between the conservation area, biodiversity corridor and neighbouring Crown Land and National Parks and Wildlife reserve (Figure 2).
- Regeneration and revegetation of disturbed areas in the South West corner of the development to improve the connectivity between the neighbouring Crown Land and National Parks and Wildlife reserve (Figure 2).

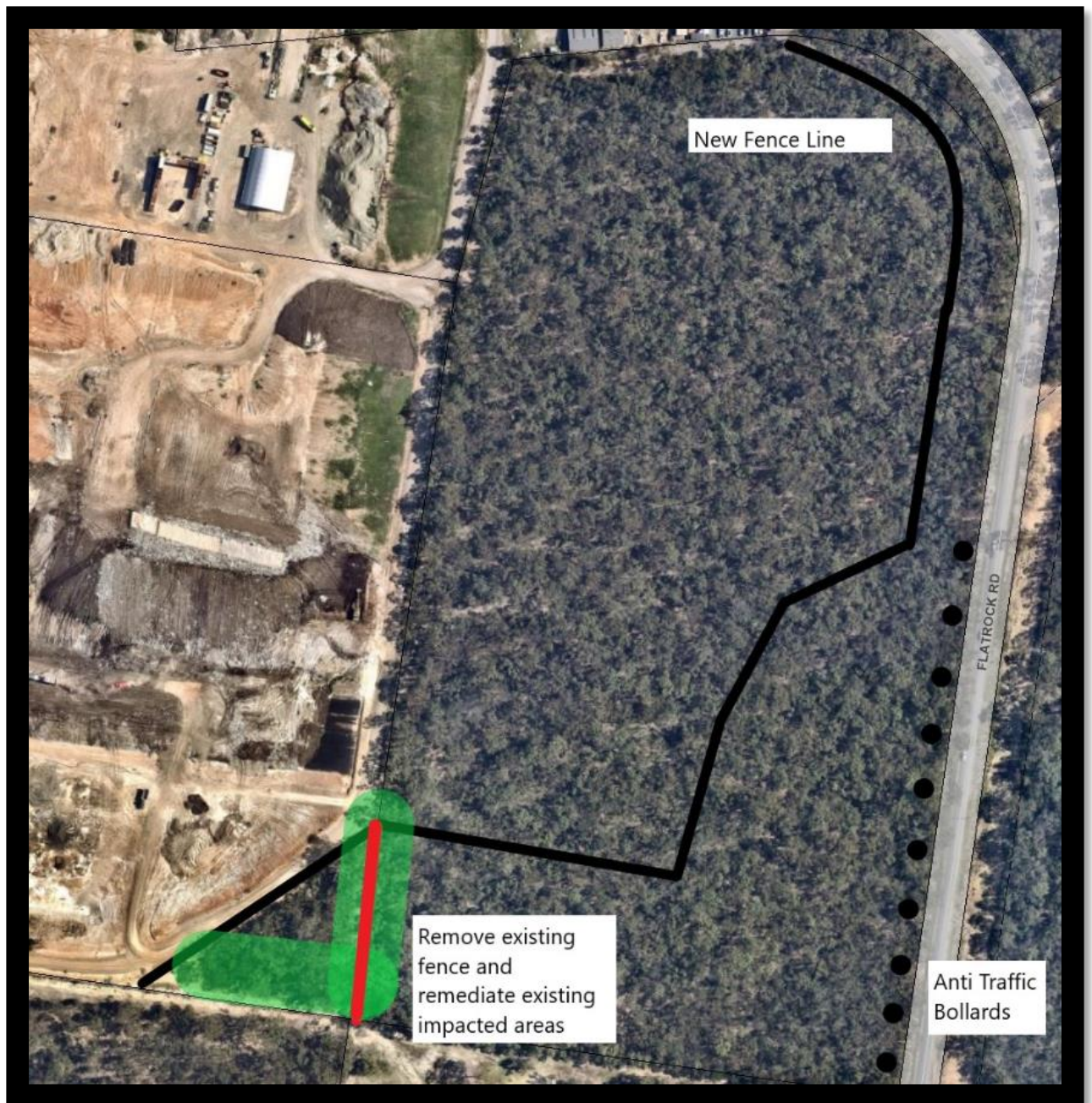


Figure 2: Proposed Alternative Design Options

4.3. Additional Mitigation Measures

In accordance with the intent of increasing the connectivity of the habitat, SCC considers the implementation of additional monitoring and mitigation measures to ensure that the removal of Condition B33 does not negatively impact on the biodiversity of the area. These additional measures include;

- Monitoring current property usage (West Nowra Waste and Recycling Facility, National Parks and Wildlife Office, Soil Conservation Service of NSW) at the Northern end of Flatrock Road operate standard business hours, ensuring night time traffic in the vicinity is minimal, and the development will not impact on or increase these operational hours or traffic flow.
- Implementation of an ongoing monitoring program of roadkill along Flatrock Road, including scheduled monitoring visits and installation of signage along Flatrock Road requesting that any Roadkill sighted is reported to the Shoalhaven City Council Environment Team landline.
- Adaptive mitigation measures evolving from monitoring such as increased signage, rope bridges/glider poles and speed reduction devices (as determined by a Roads and Traffic Engineer). The roadkill monitoring program will include triggers, such as death of a Threatened species, for the need for further assessment and mitigating. In the event that a trigger is met additional mitigation measures will be investigated and the most appropriate measure will be selected.

4.4. Proposed Modification

To facilitate the above proposal, SCC request the following modifications;

Condition B33:

- Deletion of “Rope Fauna Crossing” heading
- Replace existing Condition B33, with new Condition B33 under “Conservation Area” *Remove existing fences in South West corner of proposed development site and provide revegetation to link conservation area to neighbouring Crown Land corridor.*

Condition B34

- Condition B34: Edit to include ... *in Appendix 1, inclusive of roadkill monitoring surveys.*

Condition B48

- Addition of sub-point (f) *That the Proponent request Transport for NSW undertake a speed zone review for Flatrock Road, with a view to reducing the speed limit from the current default 100km/h limit to 60km/h as a way to enhance the safety of general traffic and vulnerable road users.*

Appendix 2

- Deletion of points B-01, H-04, TA-02 and TA-03.

5. Consultation

SCC has already been involved in consultation with fauna bridge design and construction contractors and electrical contractors GPEHV (Appendix 1), and Environment, Energy and Science representatives (Daniel Robson) to assess the design and environmental implications of the proposed modifications (Appendix 2).

The SCC Environmental Assessment Team have been consulted and have been instrumental in the development of this modification application and its associated alternative design options, mitigation measures and Environmental Assessment.

6. Environmental Assessment

With regard to biodiversity it is understood Clause 30 of the Biodiversity Conservation (Saving and Transitional) Regulation 2017 states The BC Act applies to the modification of a planning approval even if the planning approval was granted before the commencement of the new Act. However Clause 30A(2)(c) states (summarised) that a biodiversity development assessment report (BDAR) is not required if the authority or person determining the application for modification is satisfied that the modification will not increase the impact on biodiversity values.

Biodiversity values are defined in Clause 1.5 of the Biodiversity Conservation Act as; (summarised) (a) vegetation integrity (b) habitat suitability, and (c) biodiversity values, prescribed by the regulations. Of these additional biodiversity values detailed in Clause 1.4 of the BC Regulation 'habitat connectivity' and 'threatened species movement' are relevant to this assessment. Applying this definition, the impact of the proposed modification to biodiversity values is assessed in Table 1 below.

6.1. Proposed Alternative Mitigation Measures

Proposed alternative mitigation measures to replace the requirement for rope fauna crossings are detailed in Table 1 below.

Table 1

Biodiversity	
Enhancing habitat connectivity to neighbouring Crown Land to the southwest adjoining National Parks Estate to the west.	Realigning fencing around the landfill in the south west corner of the subject site to increase connectivity is already included under B-09 of Appendix 2 of the Development Consent. Further measures to enhance this habitat connectivity proposed include: • Realignment of the fire trail crossing this link and restoration of native vegetation structure and composition along the current fire trail. • Wildlife friendly fencing along the southern boundary of the site. These measures will be included with the Vegetation Management Plan required by Condition B35.
Figure 2 includes a figure demonstrating works to enhance connectivity.	
Monitoring any roadkill along Flatrock Road and adaptive management actions to ensure threatened fauna populations are not impacted by vehicle strike.	Implementation of an ongoing monitoring program of roadkill along Flatrock Road adjacent to the landfill site would include: • Traversing the roadside along Flatrock Road on a bimonthly basis to inspect for any road kill (this can be conducted in conjunction with regular maintenance weeding and rubbish collection)

	• Installation of signage alerting the public to the presence of threatened species populations and requesting that any roadkill sighted is reported to the Shoalhaven City Council Environment Team. • Reporting by Council waste team on any roadkill collected. Adaptive mitigation measures in response to triggers, including any vehicle strike to threatened species would be advised by Councils Traffic Engineers and could include measures such as: • Further signage. • Traffic calming devices. • Further investigation of modification to the current powerline arrangement to accommodate glider poles or rope crossings being installed in future.
Traffic	
Speed limits	Council have already applied for the permanent reduction of the Flatrock Road speed limit from 100km/h to 60km/h along the Eastern boundary of the landfill. A further measure proposed is; • The temporary reduction of the Flatrock Road speed limit, adjacent to the landfill, to 40km/h during clearing activities related to the development.

6.2. Assessment of Impact to Biodiversity Values

Key Considerations in assessing whether the proposed modification will increase the impact in biodiversity values are detailed in Table 2

Table 2

Biodiversity	Assessment
Biodiversity Assessment Report (BAR) and credits / offsets	The BAR assessed the credit obligation to offset impacts to biodiversity values from the project. The offset required includes; • 719 ecosystem credits; • 217 Squirrel Glider species credits; and, • 197 Eastern Pygmy Possum Credits.

	The Biodiversity Offset Strategy (BOS) details how Council will meet the credit obligation. This will occur prior to any vegetation clearing commences. The impacts of the project will be offset in accordance with the BOS. The proposed modification does not require any further native vegetation or habitat removal and will not affect vegetation integrity or habitat suitability (as referred to in the BC Act). As such the credit obligation required to offset impacts will not be affected.
Low traffic levels on Flatrock Road	The traffic on Flatrock Road is currently low. The proposed works are at the end of Flatrock Road which is a no through road. Current property usage that requires access along this stretch of Flatrock Road includes West Nowra Waste and Recycling Facility, and offices for National Parks and Wildlife Services and Soil Conservation Service. These all operate within standard business hours, ensuring night time traffic in the vicinity is minimal. The development will not impact on or increase these operational hours or traffic levels. As such the risk of vehicle strike is currently low and is greatly reduced for nocturnal species including all threatened species recorded within or near the subject site. Council are unaware of any further proposed land use that will utilise Flatrock Road for works, access or operations.
Habitat connectivity/threatened species movement	Rope Fauna Crossings were recommended as a mitigation measure to enhance fauna movement between retained native vegetation within the subject site and bushland to the east as well as to reduce the risk of fauna strike to wildlife crossing the road. The removal of the condition requiring fauna crossings will not increase these potential impacts due to the following factors; • The fauna crossings were targeted towards Squirrel Gliders recorded onsite however traffic movements along Flatrock Road during the evening when Squirrel Gliders are active is expected to be very low (detailed above) and pose minimal threat of vehicle strike; • The proposed works will not increase fragmentation to bushland to the east of the subject site; • The proposed works are not expected to increase vehicle movement along Flatrock Road; Alternative mitigation measures detailed in Table 1 will be adequate to ensure the risk of vehicle strike is minimised and habitat connectivity is not reduced.

Threatened species records	Eastern Pygmy Possum and Squirrel Glider records are shown in Figure 18 and 19 of the BAR. Notes in Section 9 of the BAR state a Squirrel Glider was also recorded approximately 200m south east of the subject site. Section 9 of the BAR suggests the whole of the subject site provides suitable habitat for both of these species.
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In light of the key considerations detailed above, advice from Councils Environmental Planning and Assessment Team is that, providing the alternative mitigation measures detailed in Table 1 are implemented the proposed modification to remove rope fauna crossings across Flatrock Road would not increase the impact of the proposal on biodiversity values.

Appendix 1

Ross Templeton

From: Graeme Coonan <graemec@gpehv.com.au>
Sent: Friday, 5 March 2021 5:22 PM
To: Ross Templeton
Cc: Michael Ruhbaum
Subject: RE: Shoalhaven City Council Fauna Bridges

Hi Ross,
As per our phone conversation earlier today,

The biggest issue relating to Shoalhaven City Councils proposal of 3 X Fauna Crossings across Flat Rock Road, Nowra, is the existing Essential Energy 11kV Powerline running parallel to the road.

The existing conductor heights above ground are approximately between 7 and 9 meters depending on the 11kV conductors at mid span and the actual temperature on any particular day, and with a mandatory Safe Approach Distance (SAD's) to 11kV high Voltage lines is an absolute minimum of 3 meters, which and Essential Energy may most likely request a larger SAD due to the type of structure a Fauna crossing, which has Steel (conductive) cables supporting the Netting in each of the spans.

Due to the low height of the 11kV Conductors and the need to have a suitable SAD from these 11kV conductors, it will not be possible to get the required Road clearance height for the Fauna crossing's over Flat Rock Rd.

We (GPEHV Pty Ltd) are a powerline construction company and are an accredited Level 3 ASP Designer and a Level 1 ASP Constructor for the Essential Energy network and we believe the best option to achieve statutory road Clearance and Safe Approach Distance's will be by changing out 2 of the existing 11kV 11meter timber Power poles with new 14 or 15.5meter timber poles, which in turn will raise the 11kV conductors up to allow for enough clearance (SAD) from the live High voltage conductors from the Fauna Crossing's and in turn suitable Road clearances.

This will require an EE Level 3 Design which takes approximately 4 to 5 months to go thru the EE process's to get an approved 'Certified Design' and a further 4 to 6 weeks to carry out the construction.
The approximate cost for the EE Design and Construct will be in the vicinity of \$25k to \$35k excluding Gst.

We suggest for the 3 X Fauna Crossings that would be constructed using a 2 span of netting supported by 3 Poles, with the centre pole situated in a suitable location between the Powerline and the Gas main, with the 2 end poles be located just inside the Tree line on both sides.

Our budget estimate for the 3 X Crossings including Design, Supply of materials and construction would be in the vicinity of \$40k to \$45k per crossing Total \$120k to \$140k ex gst.

The total for both the EE powerline works and the 3 Fauna X-ings would be approx. \$145 to 175k exc Gst and should be able to be completed around Sept/Oct 2021.

I hope this helps you make an informed decision that best suits Shoalhaven CC.

If you need any further information, or clarification feel free to contact me at any time.

Have a good weekend!
Regards,

Graeme Coonan
Technical Services Officer

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Appendix 2

Ross Templeton

From: Daniel Robson <Daniel.Robson@environment.nsw.gov.au>
Sent: Thursday, 29 April 2021 1:56 PM
To: Ross Templeton
Cc: Chris Page
Subject: RE: Shoalhaven City Council SSD 7187

Hi Ross – I have discussed the proposal with my manager Chris Page (Senior Team Leader, Planning (Illawarra) South East Branch), and we are comfortable with the proposed changes and modification.

Cheers, Dan

Dan Robson
Senior Conservation Planning Officer, Planning (Illawarra)
South East Branch

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