



# MEMORANDUM

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**To:** Josie Burrows  
**From:** Gregor McLean  
**Date:** 21 October 2019  
**Subject:** Pinehaven – ESCP review - WGN200083

**1. Has the applicant provided sufficient detail to understand the proposed construction, erosion and sediment control methodology and effects on water quality? If not, what further information and/or assessment is required?**

The application provides an Erosion and Sediment Control Plan (Appendix W) that was initially discussed during pre-application meetings with the Applicant's agents.

Appendix A and Appendix D of the ESCP contains Downers draft ESCP's. These were reviewed and comments provided during the pre-application meetings. These documents have not been modified since those meetings and still contain 'draft' comments from Downers when it was prepared. In addition they do not contain consistent information nor have taken on any pre-application advice.

The ESCP contains two methodologies for undertaking the works, sheet-piling and piped diversion. It was communicated at the pre-application meetings that the preferred methodology for the works was for the piped diversion and that sheet piling and subsequent tracking of construction machinery within the stream could not be supported.

The ESCP needs to contain consistent information that is in line with the pre-application advice from GWRC.

It is noted that the removal of the two bridges (56-48 Whitemans) requires the excavator to be within the stream. It is noted that the pre-application discussions regarding these works was to keep the excavator out of the stream. It was also noted that the design of the bridges had not been determined and therefore the methodology could not be confirmed.

The application states that the piped diversion has been designed for 0.5 cumecs flow, which corresponds approximately to the 95% rainfall gauge readings. The discussions regarding the piped diversion was to relate this back to a return period storm event which would then allow triggers to be set in terms of forecast and actual rainfall. These triggers would then result in certain onsite actions being taken, for example stabilising the instream works,

removal of construction equipment. It is suggested that further work on this aspect is undertaken.

**2. Is the proposed construction, erosion and sediment control methodology appropriate and the best practicable option for the proposed works at this location?**

Refer comments above regarding the instream works methodologies.

**3. Does the application provide sufficient detail on the monitoring and maintenance of erosion and sediment control devices that will be undertaken, how it will be undertaken and how effects on water quality will be managed?**

The water quality monitoring is proposed to be undertaken after 6mm/hr or 20mm/24hour rainfall event. It is noted that the monitoring proposed is only in relation to the earthworks components of the project rather than the streamworks, which is the major component of this project.

The monitoring needs to be modified to include appropriate parameters and triggers for the streamworks aspects and in rain events which exceed the design capacity of the piped diversion.

Table 6.1 does not contain any maintenance actions for the instream works and will need to include this information.

**4. Has the applicant proposed an appropriate monitoring plan, trigger and cease work triggers in relation to sedimentation of the stream?**

No – refer comments above.

Also note that the ESCP has set a provisional guidelines to trigger stormwater management investigation and response, with a water quality trigger of a total change in suspended sediment from upstream to downstream monitoring not exceeding a 30 percent increase of the baseline concentration. It is unclear what the baseline concentration refers to, this would need to be provided.

**5. Do you have any comments on the proposed consent conditions relating to erosion and sediment controls? What amendments or additions are required?**

Proposed condition 12 states:

*Submitted management plans will be deemed to be certified if no correspondence from the CMO has been received on the specific management plan within 15 Working Days.*

This should be deleted.

Condition 31 refers to the two construction methodologies. This should be modified to include only the preferred methodology.

Condition 32 includes flocculation monitoring however the application states that this will not be required. It is considered however that the use flocculation should not be discounted and therefore should remain within this condition. It is therefore also considered that a condition should be proposed requiring a Chemical Treatment Plan (if required due to monitoring).

There are no conditions relating to works during winter and I would suggest that the standard conditions are imposed. It is noted that works during these months have a higher risk of increased streamflows, groundwater levels and subsequent sediment discharges are more likely.

The conditions refer to a CMP and ESCP however the application and ESCP refers to SEMP/ SSEMP's. Consistency in terminology will be required throughout the conditions and documents.



**Gregor McLean**  
**SouthernSkies Environmental Limited**