

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name: Downtown Carpark Site Development

Fast-Track application number: FTAA-2512-1158
BUN60460864, LUC60460865, DIS60460866 and WAT60460867

2.0 Technical Specialist Memo – Erosion and Sediment Control

To: Sarah Wilson – Lead Planner & Adonica Giborees - PPL

From: Zac Woods – SouthernSkies Environmental

Qualifications & Relevant Experience: I hold the qualifications of: Bachelor of Science in Earth and Ocean Science and Environmental Science and a Post Graduate Diploma in Environmental Science. I have 10 years of experience in the field of erosion and sediment control.
I am a member of the International Erosion Control Association. I have prepared technical assessments for resource consent applications and fast-track applications.

Preparation in Accordance with the Code of Conduct: I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses ([Code](#)), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.

Signature:



Date: 22 April 2026

3.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Downtown Carpark Site Development, Fast-track Approvals Act Substantive Application, 2 Lower Hobson Street, Auckland CBD, Assessment of Environmental Effects and Statutory Analysis; dated 18 December 2025 prepared by Barker & Associates Ltd. (AEE)
- Erosion Sediment Control Management Plan; dated 6 November 2025 prepared by Tonkin & Taylor Ltd. (ESCMP)
- Downtown Carpark Site Development Draft Construction Management Plan; dated 09/10/2025 prepared by RCP. (Draft CMP)
- Erosion and Sediment Control Management Plan Addendum, dated 2 April 2026 prepared by Tonkin + Taylor
- Erosion & Sediment Control Plan, SK01, Rev 5 dated 02.04.26 prepared by Tonkin + Taylor

4.0 Specialist Assessment

4.1 Introduction to the project in relation to erosion and sediment control

A site description has been provided in the AEE, submitted with the application. It is adopted for this assessment.

The proposed development includes three podium buildings, two towers and four levels of shared basement. The basement excavation is the component of the application that is particularly applicable to the assessment of the erosion and sediment control (ESC). The basement excavation will involve land disturbance of approximately 100,000m³ in volume over an area of 6,442m². The project will also require upgrades to the three waters infrastructure.

The AEE states the key components of the excavation comprise the following:

- The primary excavation method will utilize rock-ripping machinery and excavators to load out spoil.
- Where site constraints require, excavator-mounted rock saws and hammers will be used to break up hard or inaccessible material, including buried obstructions.
- All excavated spoil will be placed directly into trucks and removed from site via ramps and/or long-arm load-out machinery.
- Dewatering measures will be implemented concurrently with excavation to manage groundwater and maintain safe working conditions.
- The extent and method of dewatering will be further refined in the final CMP, following appointment of the main contractor and completion of detailed design.
- A Geotechnical and Groundwater Assessment has been undertaken by Tonkin & Taylor (T+T) which determined that the modelled groundwater level is approximately RL 1.4m at design static groundwater level and RL 2.5m at elevated groundwater level.
- Confirmation of the wastewater system to be implemented and its construction methodology is yet to be confirmed.

In summary, the ESCMP states:

- The works will be carried out in accordance with Auckland Council's Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region GD2016/005 (GD05).
- Draft Construction Management Plan (CMP) and ESC Management Plan (ESCMP) have been provided. It is proposed that an updated or final CMP and ESCMP are prepared and submitted to Council for review and certification prior to commencement of works.
- ESC measures including silt fencing/hoardings, perimeter bunds, wheel wash areas, treatment devices for dewatering and dosing tanks are likely to be used.
- The earthworks are anticipated to be undertaken in approximately 10-12 months.
- All cut to waste material will be removed from the Site to a licensed landfill.
- All sediment control devices will remain in place until the contributing catchment is fully stabilised.
- The final basement excavation will be sealed to minimise groundwater inflows.

4.2 Soil Contamination

The applicant has provided a Contamination Site Management Plan (CSMP) that details how contaminated soils will be managed. The contaminated soils aspects of the application are reviewed by Sarah Pinkerton, contaminated land consultant. Table 6.1 of the CSMP relates to water discharge and notes that if discharge to stormwater is required, the water shall be initially treated to remove sediment. The stormwater quality monitoring proposes daily sampling for three consecutive days, tested for total suspended solids (TSS), metals and PAHs. If the results meet ANZECC guidelines then discharge to stormwater can commence. Ongoing weekly sampling, tested for TSS, metals and PAHs is also proposed. No further comment on the CMSP is provided and assessment of contamination aspects of the application are deferred to Sarah Pinkerton.

4.3 Erosion and Sediment Control

To manage potential sediment discharges resulting from the proposed earthworks, the applicant has prepared an ESCMP in general accordance with Auckland Council Guidance Document 2016/05 "*Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region*", June 2016, Incorporating Amendment 3 (GD05).

This plan includes:

- Stabilised construction entry/exit from Customs Street West.
- Perimeter controls, including the use of existing kerb and channels as well as additional perimeter bunds in the form of hotmix bunds or sandbags.
- Wheel wash facility, if required, at each exit point to minimise sediment tracking onto the public roads.
- Dewatering of excavation to a secondary treatment device. Possible treatment devices proposed are:
 1. 25,000 L rain tanks for use as settling tanks.
 2. Portable open top steel rectangular settlement chamber
 3. Portable sediment tank with screens/baffles. An example spec sheet has been provided for a Seditrol water treatment system.
- Groundwater infiltration rates will be confirmed following groundwater monitoring but are predicted to be up to 60m³ per day. The groundwater infiltration rates have been considered as part of the ESCMP.

In terms of the proposed controls, I consider the water treatment tanks (such as the Seditrol) will be the most appropriate device for the site for pumped water. The applicant has not proposed any discharge standards for discharges from the water treatment devices. As per the recommendations of GD05, discharges from dewatering and pumping operations should meet the following discharge standards:

- A water clarity of at least 100mm.
- A pH between 5.5 and 8.5 if using chemical treatment.

I consider that these discharge standards are appropriate and are included as recommended conditions of consent. Water treatment devices are often supplied with automated turbidity monitoring. In this case, turbidity could also be used as a surrogate for visual water clarity. A turbidity of less than 50 NTU is considered appropriate.

Sandbags are not typically used as clean water diversions, as they do not form a consistent diversion bund and could allow offsite clean water to enter the site. Hotmix (asphalt) bunds should be preferred to sandbags.

A wheel wash system may be required on site, although it is envisioned that trucks being loaded should be able to stay on sealed or clean aggregate. Water used as part of a wheel wash system must be contained within the site and must not be able to flow into the stormwater system until appropriately treated.

4.4 Timing / Seasonal Restriction

The applicant specifically requests that a seasonal restriction is not imposed to allow the excavation to be completed without the need to temporarily shut down over the winter period. Given that any site runoff will be contained within the excavation and will be pumped to a treatment device, I consider that the site works can be well controlled to meet the appropriate discharge standards without the need to stop works during the winter months. I have included under the proposed consent condition 34 a requirement to review the ESCMP prior to 1 May of each year to consider if any additional ESC measures are required prior to the onset of winter.

I have not undertaken a site visit but I am generally familiar with the location.

Overall and based on the information supplied, I support this application.

5.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps relating to erosion and sediment control.

6.0 Reason for consent

Auckland Unitary Plan (Operative in Part)

E11 Land disturbance - Regional

- The Proposal involves earthworks over an area of 6,442m² where part of the earthworks area is within Sediment Control Protection Area. Earthworks greater than 2,500m² within the Sediment Control Protection area is a restricted discretionary activity under rule E11.4.1 (A9).

7.0 Recommendation

The information provided provides sufficient information to assess the risks associated with the erosion and sediment control. Overall and based on the information supplied, I support this application. In addition, the information required through the consent conditions relying on the amendments and additional conditions I have recommended below will ensure that the effects of sediment and appropriately managed and minimised.

8.0 Proposed Conditions

Conditions of consent		Commentary
34.	The ESCMP must include at a minimum the following information: a. Specific erosion and sediment control works (location, dimensions, capacity, supporting calculations and design drawings), all controls must be in line accordance with Auckland Council's Guideline Document 2016/005 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05); b. Catchment boundaries; c. Timing and duration of construction and operation of control works (in relation to the staging and sequencing of earthworks); d. Details relating to the management of exposed areas (e.g., grassing, mulching or placement of hardfill); and e. Monitoring and maintenance requirements for the proposed erosion and sediment controls. f. Location of stabilised construction entry/exits. g. Wheel wash facilities, if required, at each exit point to minimise sediment tracking onto the public roads. h. Confirmation of how dewatering and treatment of water will be undertaken. i. Monitoring and maintenance requirements, including specific maintenance required for the water treatment device(s) and frequency of cleaning out / desilting. j. Confirmation of the wastewater system that will be built, the construction methodology and the required erosion and sediment control measures. k. Prior to 1 May of any year that earthworks is proposed to be undertake during the winter period (1 May to 30 September inclusive), the ESCMP should be reviewed and updated to include any additional ESC measures that may be required during the winter period.	Red text added as described and discussed above in Section 4 of this memo.
X.1	New condition:	It is recommended that a discharge standard is imposed. These

	<i>All discharges from the site to the receiving environment (including the stormwater system) must achieve a minimum water quality of:</i> - 100mm of visual clarity - pH between 5.5 and 8.5.	<i>requirements are in accordance with GD05 Section G1.0 Dewatering.</i>
X.2	<i>New condition:</i> <i>Prior to the commencement of earthworks activity on the site, a Chemical Treatment Management Plan (ChTMP) must be prepared in accordance with GD05 and submitted to Council for written certification. No earthwork activities must commence until written certification is provided by Council that the ChTMP meets the requirements of GD05, and the measures referred to in that plan have been implemented. The ChTMP must include as a minimum:</i> <i>a) Specific design details of chemical treatment system based on a <u>flow activated dosing methodology</u> for the site's dewatering system(s);</i> <i>b) Monitoring, maintenance and contingency programme (including a record sheet);</i> <i>c) Details of optimum dosage (including assumptions);</i> <i>d) Results of initial chemical treatment trial;</i> <i>e) A spill contingency plan; and</i> <i>f) Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.</i> <i><u>Advice note:</u></i> <i>In the event that minor amendments to the ChTMP are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the ChTMP may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to the Council prior to implementation to confirm that they are within the scope of this consent.</i>	<i>As part of the ESCMP the applicant states that if chemical treatment is to be used, the Contractor shall provide a Chemical Treatment Management Plan (ChTMP) to Auckland Council for approval prior to commencing these operation. I agree and suggest that this requirement is included as a consent condition.</i>
X.3	<i>New condition:</i> <i>The site's dewatering system(s) must be chemically treated in accordance with the certified Chemical Treatment Management Plan required by condition X.2.</i>	
X.4	<i>New condition:</i> <i>All water generated during the concrete cutting must be contained and appropriately disposed of to ensure it does not enter the stormwater system.</i>	

