

# Memorandum

**To:** Craig Batchelar  
**From:** Judd Speedy  
**Copy:** Jandre van Zyl, Brian Palmer, Helen Caley  
**Subject:** Allied Asphalt - Beca Resource Consent Responses

**Date:** 26 April 2023  
**Our Ref:** 3936244-159207228-2244

## Response to TCC request for further information (27/02/2023):

1. *The Infrastructure and Services Assessment Report does not mention whether there will be an increase in demand on Council's wastewater and water services. Please advise if there is an increase and if there is please quantify the increase.*

### Water:

There will be no change to the current Council water supply demand (confirmed by Allied Asphalt via email 08/02/2023). The site will supplement the Council water supply with an existing rainwater harvest tank onsite for operational water demand requirements. If so required, the site operations might add additional rain harvesting tanks.

### Wastewater:

Refer to the proposed trade waste system from IWS (Industrial Waters Solutions) attached as an appendix.

2. *A new wastewater connection would entail installation of a crossing of Aerodrome Road. Has the feasibility of installing a crossing been considered?*

The relative levels of the proposed wastewater pipe and the existing services along Aerodrome Road at the proposed connection point have been investigated, and no clashes from a desktop review are prevalent. An invasive investigation will be undertaken in subsequent design stages to confirm design assumptions. A pumping option will be considered if it is found to be unfeasible due to service clashes. However, as noted, the proposed connection is feasible at this stage as it avoids existing services and achieves the minimum self-cleaning velocities of 0.6m/s.

3. *The Infrastructure and Services Assessment Report advises that a freeboard of 300mm will be provided for the relocated office but does not specify a finished floor level. Please nominate a finished floor level and provide an assessment of the site redevelopment against rules 8D.4.2.2 and 8D.4.2.4 of the Tauranga City Plan.*

A FFL can be provided, and this will be 550mm above ground level, as noted in the report. Proposed Floor level RL4.75m (NZ Vertical Datum).

Plan change 27 proposed framework requirements have been acknowledged in the report:

- Overland flow path – the changes to the overland path will be limited to the site with no additional impact on the people or buildings.

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- Flooding – flooding in the area is below 300mm, and the building floor (office) levels have been set accordingly. Noting that following Plan Change 27, where the water level is less than 300mm and providing the floor level is above the flood level, it's a permitted activity.
  
- 4. *A Contaminated Soil Management Plan is required for the discretionary application (under the NES-CS) to address the risk from the soil disturbance and ensure that the land is safe for the intended use. This should include:*
  - a. *The nature and extent of the potential contamination, that it has been sufficiently characterised, and the risk posed by contaminants to health and safety have been adequately assessed.*
  
  - b. *The method proposed to address the risk from the immediate activity (soil disturbance).*
  
  - c. *The method proposed to ensure the land is safe for its intended use (industrial land use).*

A Contaminated Soil Management Plan is planned to be provided as outlined in response to contaminated land queries below.

## **Response to BOPRC request for further information (08/02/2023):**

### Contaminated Land

1. *Please provide an update PSI that includes a "SQEP certification of report" in accordance with Appendix C of the current MfE CLMG No.1 (revised 2021).*

The PSI has been updated to include SQEP certification which satisfies the requirement of CLMG.

2. *Please confirm via the PSI whether a DSI is recommended.*

The PSI recommends sampling of any soil encountered to inform disposal. Noting that the majority of material to be disturbed is actually hardfill which will be reused onsite or manufactured into Recycled Aggregate Product (RAP). As detailed in the PSI, sampling of soil is not feasible due to the nature of material proposed to be disturbed, hence the discretionary activity pathway.

3. *Please provide a DSI, as any Contaminated Soil Management Plan should be completed based on the results of a DSI.*

A CSMP is planned to be provided without a DSI. This CSMP will detail handling, sampling and management of soils encountered. No DSI is required for a discretionary consent.

4. *Please submit a Contaminated Soil Management Plan, as part of the application (rather than in accordance with consent conditions).*

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- a. *DW R25 restricts Councils discretion to the remediation processes to be employed and degree and extent of off-site discharges (among other matters). The intent of the rule is to allow BOPRC to assess the effects of any discharges of contaminants to the environment resulting from active remediation and other disturbances of contaminants on a case-by-case basis.*
- b. *BOPRC cannot adequately assess the remediation processes proposed or effects of any discharges of contaminants to the environment without a CSMP provided in support of the resource consent application.*
- c. *It is noted that any application to the City Council under the NES-CS will also require the preparation of a CSMP.*

A CSMP will be provided with the application to inform the discretionary consent.

## Stormwater

1. *Please provide an initial hydraulic assessment to ensure the stormwater treatment proprietary device has sufficient hydraulic head to drive the intended operations effectively.*

An initial assessment of the stormwater network has been undertaken, assuming a 350mm required head loss for the treatment device e.g., as indicated by Stormfilter 360, their devices can meet the hydraulic effect.

2. *Information on the propriety device and the treatment provisions is required to understand how the system will perform to the permitted activity standards for water quality.*

Refer to the proposed stormwater treatment system from IWS attached as an appendix.



**Judd Speedy**

Civil Engineer

on behalf of

**Beca Limited**

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Memorandum

Appendix A – IWS stormwater and trade waste treatment solutions summary

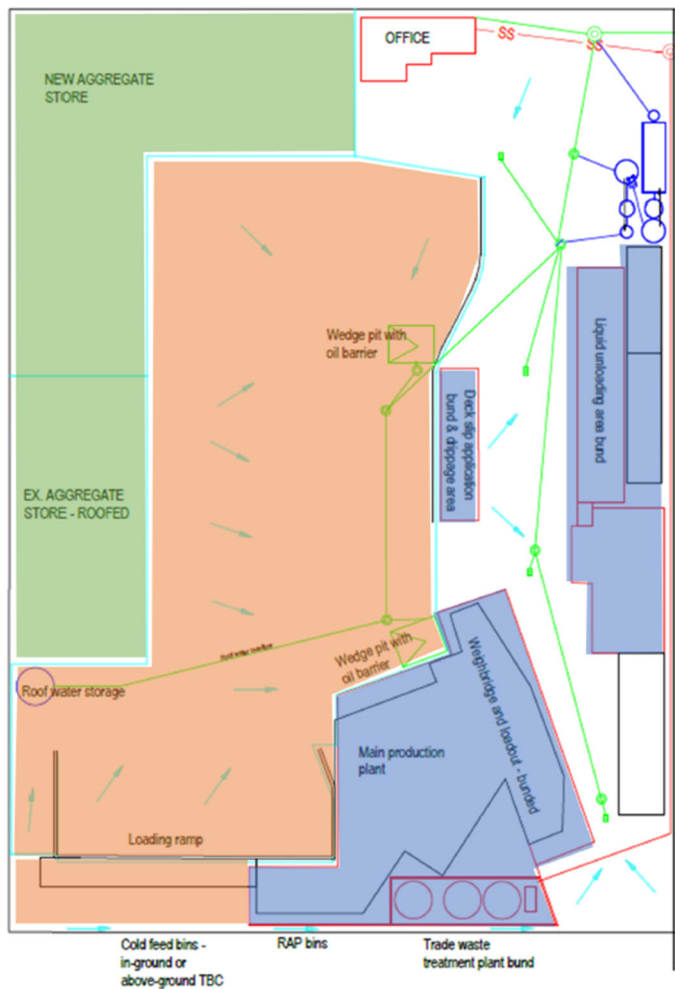


26 April 2023

**Allied Asphalt, 54 Aerodrome Rd, Mount Maunganui**  
**Stormwater and trade waste treatment solutions summary**

This additional detail on the stormwater and trade waste treatment concepts is based on the site layout envisaged by Beca, and as presented in the resource consent application. This concept is under development.

Area segregation is a key strategy within the design, as shown in the sketch below.



Legend

Sand and aggregate storage – partially roofed	Higher-load industrial stormwater
Lower-load industrial stormwater area	Trade waste (Wet Process) Area and banded areas

### Trade waste treatment concept

The trade waste area where wet or high-risk processes take place is divided into 2 categories. The first is the area under the production plant of approximately 950 m<sup>2</sup> where it is proposed that adequate storage be provided to retain a significant rainfall event (approximately 100mm). The bunding around this wet process area is a mix of trafficable humps and nib walls – i.e., ‘diversion bunding’. The area drains to a dual pump sump that lifts the trade waste to storage. This conservative approach is being taken as it is difficult to clean these particular areas consistently, to a degree that permits an uncontaminated discharge to stormwater.

In addition, there will be approximately 400 m<sup>2</sup> of bunded area around bitumen tanks, oil tanks etc. These full containment bunds will be drained to the trade waste if the contents are contaminated, or to the stormwater treatment process if the bund water is sufficiently clean, in a supervised release approach. If the bunds are directed to trade waste, this water also enters the central trade waste storage and treatment system.

The trade waste storage system and treatment system comprises a 3-stage settling and flow buffering tank system. This is followed by a final treatment stage - an oil/water interceptor – in this case we are proposing a SPEL Purceptor.

Should the 3-tank trade waste storage be in danger of filling up in an extended rainfall event, an alarm will alert operators to the situation and the area can be comprehensively cleaned down. When the tanks are full, the trade waste transfer pump will stop. The stormwater collecting on the flushed, cleaned surfaces will then overflow the area to stormwater treatment. This can be thought of as a very extended first flush diversion approach.

The treated trade waste is intended for reuse within the Wet Process Area, as the primary water source for area cleaning. The surplus trade waste is discharged from the system at a low flow rate to the sewer.

### Stormwater treatment concept

It is noted from the early work by Beca that detention of stormwater on the site, other than roof water, is not required. (One presumes that this is due to the proximity of the site to the harbour.)

Roof stormwater will enter above-ground storage for reuse around the site.

Stormwater with particularly high contaminant loads is expected in the areas where sand and aggregates are handled. A reduced contaminant load is expected in the drive-through area of the site.

It is proposed that the high-load areas pass through wedge pits to allow initial removal of the larger solids. These wedge pits can be cleaned on a frequent (daily) basis using the site's front-end loader.

The stormwater treatment solution becomes common to all run-off downstream of the wedge pits. A multi-stage stormwater treatment solution is proposed for the site focusing on the range of contaminants that are anticipated – these being elevated suspended solids, slightly elevated organic load, Petroleum Hydrocarbons traces and elevated heavy metals in particulate and dissolved form.

The proposed stormwater treatment train is described below.

1. A diversion weir directing flows above 20 mm/h rainfall equivalent to treatment whilst allowing higher flows to bypass around the system.
2. A sediment and gross pollutant trap (Stormwater 360 Cascade).
3. An oil removal stage for floating oil and some emulsified oil (SW 360 ESK).
4. A combined diversion weir directing flows above 10 mm/h rainfall equivalent to extended treatment whilst allowing higher flows to bypass around the system. The pump sump is required to lift the stormwater up to both allow access into the public network, which is not particularly deep, and to enable the treatment devices to be at a maintainable depth/height.
5. A stilling chamber to reduce the disturbance in the flows after the pumping stage, allowing the treatment following process to be less disturbed and more effective.
6. A microfiltration unit for the removal of further levels of fine sediment and associated heavy metals (SW 360 Jellyfish).
7. A media absorption unit set up for the removal of heavy metals in both fine particulate and dissolved form (SW 360 StormFilter).
8. A final treated stormwater sampling manhole.
9. Connection to the private network and flow off site to the public stormwater network.  
Bypassed and treated stormwater flows can also be tested at the recombining manhole.

This stormwater treatment approach also makes the maintenance of the system as manageable as possible.

The design also enables the site to keep the collected contaminants segregated from mixing with any floodwaters that may inundate the site.



Jim Maddock

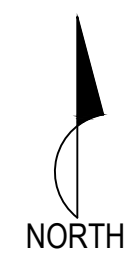
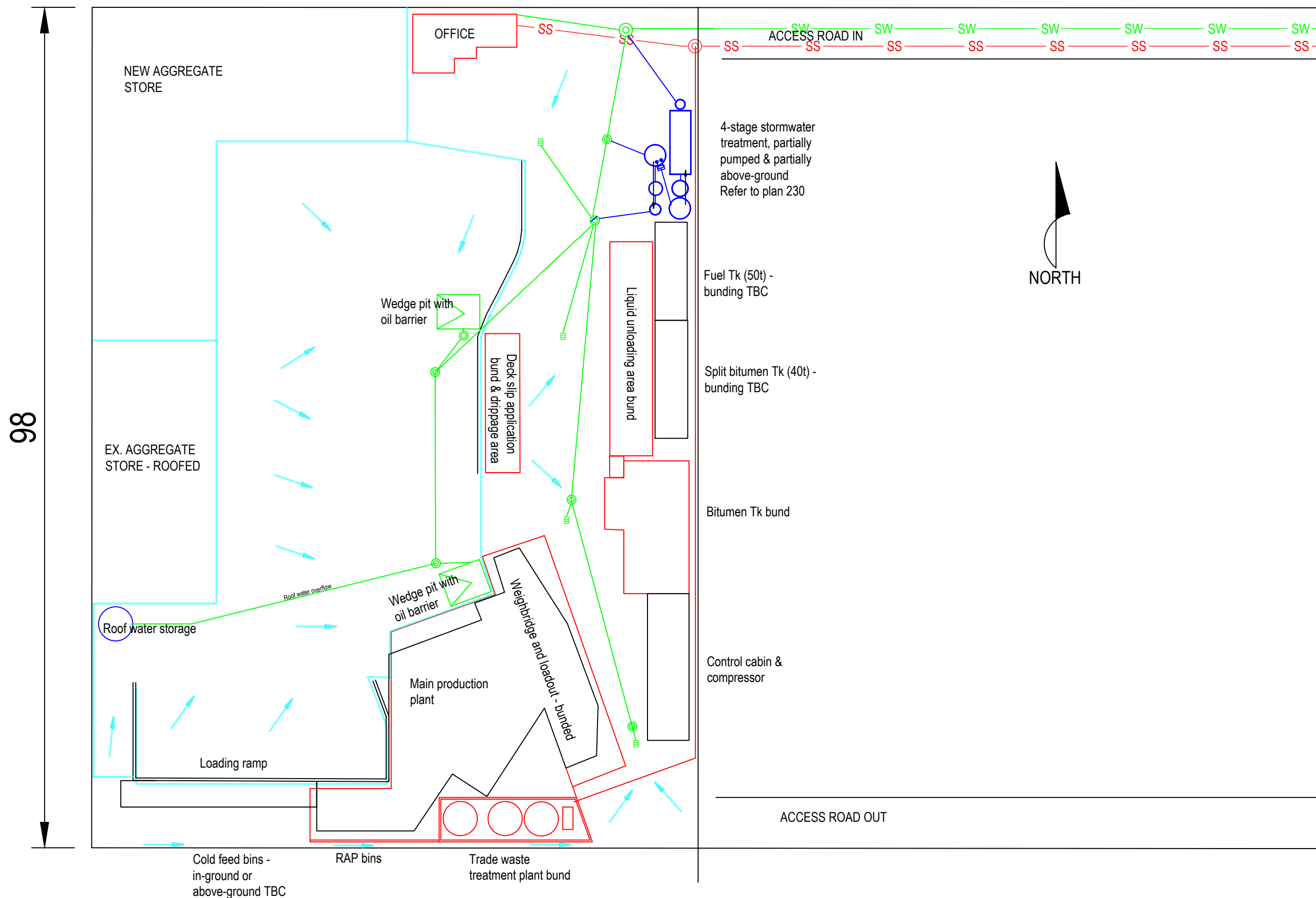
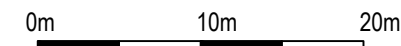
Director

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Allied & FH Tauranga site  
 Concept stormwater & tradewaste treatment solutions.  
 For discussion  
 IWS (JM)  
 14 Feb 2023  
 Updated 15 Feb 2023

71

Site area = 7000 m2



96



Drawn	
Checked	

**Industrial Waters Solutions Ltd**  
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 The go-to guys for Stormwater,  
 Wastewater and Environmental  
 Management for Industry

**Project Name**  
 ALLIED & FH TAURANGA  
 SITE DEVELOPMENT

**Title**  
 Site layout with  
 environmental controls

**File**  
 Plan No AFHTGA 220 A