

OMAHU NORTH INDUSTRIAL AREA SITE SPECIFIC STORMWATER MANAGEMENT PLAN

CONSENT AUTH-120054-03 & AUTH-120056-03

Background information: The Site Specific Stormwater Management Plan (SSSMP) is a formally written plan that forms part of the Controlled Stormwater Discharge Approval and the occupant is required to adhere to it at all times. A copy of the SSSMP is to be kept on site and referred to as required once approval is granted. This format guide document has been created to accompany those developing an SSSMP.

You can find the application form for approval to discharge controlled stormwater on the Hastings District Council website by searching stormwater and clicking on the related documents button at the top of the page or use the following link <https://www.hastingsdc.govt.nz/assets/Document-Library/Forms/Other/Stormwater-Application-Form-for-Approval-To-Discharge-Controlled-Stormwater.pdf>

Site Specific Stormwater Management Plan

A Site Specific Stormwater Management Plan must be provided with all applications; it must include and clearly describe the following:



- Assessment of risk areas
- The process for on-site detention, screening and/or pre-treatment to remove contaminants
- How the rate of discharge is controlled to ensure compliance with the maximum allowed (if applicable)
- A copy of the site audit carried out to identify potential sources of Stormwater contamination
- The process for monitoring the quality of the Stormwater discharge
- Any results available from Stormwater sampling or sensitivity meter readings (from the discharge this application is for)
- The contingency plans/procedures that are in place to deal with potential contamination
- How spill containment and clean-up will be managed in an emergency
- The emergency spill devices available on site and how staff are trained in their use
- A management and maintenance plan for the on-site Stormwater system, devices and equipment
- Containment valve(s) prior to discharge to the stormwater network

Figure 1 : SSSMP requirements as set out in the application form for Approval to Discharge Controlled Stormwater.

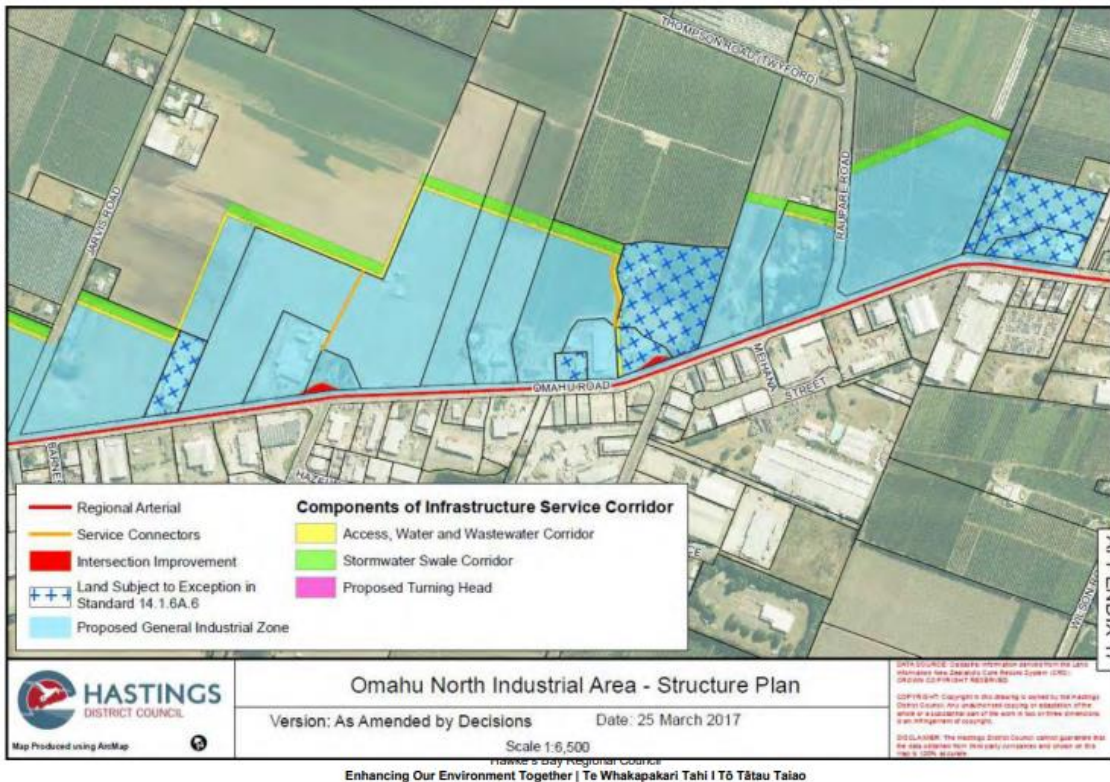
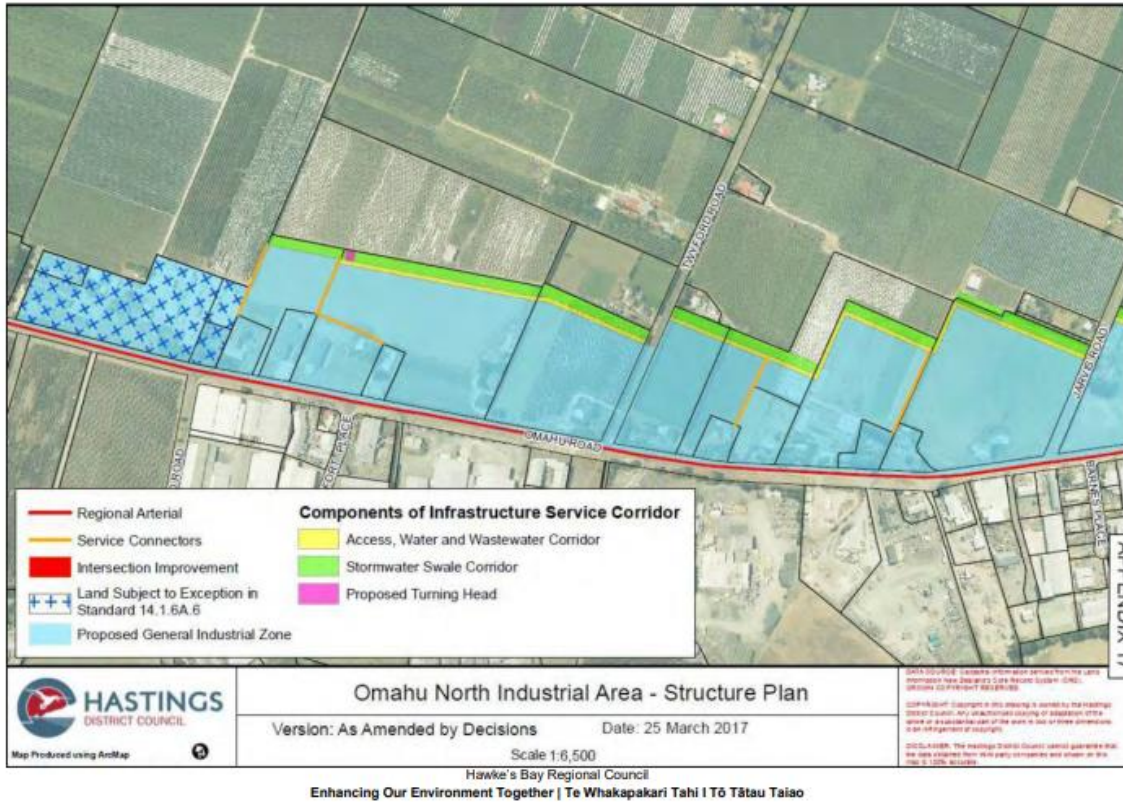


Figure 2: Omaha North Industrial Area Structure Plan.

All premises located within the Proposed General Industrial Zone (blue highlighting) are required to gain an Approval to discharge stormwater to the infiltration basins located within the Omaha North Industrial Area.

SSSMP FORMAT

TITLE PAGE

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GENERAL DETAILS/DOCUMENT CONTROL

Provide the date the SSSMP was created.

Provide site contacts.

State who prepared and reviewed the SSSMP, their qualification(s), job title, organisation. Please note an SSSMP must be prepared by a suitably qualified person as per section 1.3 of the HDC current Engineering Code of Practice.

1.3 Suitably Qualified Persons

Where investigations and reports are required by a suitably qualified person, this person or persons will have nationally recognised qualifications and accreditation, such as Chartered Professional Engineer (CPEng), Registered Professional Surveyor or Licensed Cadastral Surveyor. The person or persons will normally be expected to be professionally recognised in the area of competence claimed and to carry professional indemnity insurance to a level suitable for the purpose but in any case not less than \$1,000,000 per project.

Council reserves the right to have any work peer reviewed regardless of any prior approval as to the acceptability of the suitably qualified person. The cost of all peer review work will be borne by the developer.

Without limiting the Council's rights to require the use of suitably qualified persons the following are examples of areas of expertise, together with the expected minimum qualifications where such people may be required:

- Geotechnical engineering (CPEng with recognised discipline competence);
- Traffic and transportation engineering (CPEng with recognised discipline competence);
- Stormwater engineering and flood mitigation (CPEng with recognised discipline competence);
- Wastewater engineering (CPEng with recognised discipline competence);
- Potable water supply engineering (CPEng with recognised discipline competence);
- Non-potable or rural water supply engineering (CPEng with recognised discipline competence);
- Landscape design and practice (Registered Landscape Architect);
- Land surveyor (subdivision plans) (Registered Professional Surveyor, Registered Engineering Surveyor or Licensed Cadastral Surveyor);
- Land legalisation, subdivision lots, roads, reserves etc. (Registered Professional Surveyor and Licensed Cadastral Surveyor).

State the SSSMP shall be reviewed annually to ensure updates and changes in procedures are recorded correctly and explain how updates will be documented if there is any change from what is described in the Site Specific Stormwater Management Plan submitted.

Note: If the SSSMP is out of date the last version received by Council will be used to determine compliance. Therefore, it is important that Council is informed of any changes to the Stormwater Management Plan and the updated version is sent to stormwater@hdc.govt.nz

TYPE OF INDUSTRY, CONTAMINANTS, AND ASSESSMENT OF RISK AREAS

Describe the main activities undertaken at the site, and an explanation of the potential contaminants generated by these activities in relation to stormwater. Include an assessment of the areas at risk of contamination, and how they will be managed.

ONSITE DETENTION

Describe the system used for onsite stormwater detention to control the rate of discharge to ensure it meets the rate allowed under the Engineering Code of Practice.

TREATMENT

Describe any treatment devices or system(s) used to remove contaminants from stormwater discharged from the site.

Discuss roof water collection and discharge here also.

Confirm all roof surfaces shall be constructed from inert materials or painted with non-metal based paint and thereafter maintained in good working order as stated in the District Plan under the Omaha North Area.

ONGOING SITE AUDIT TO IDENTIFY POTENTIAL SOURCES OF STORMWATER CONTAMINATION

Describe the management system in place to carry out regular audits of the site to identify any new processes or practices that have the potential of becoming sources of stormwater contamination. Provide a copy of the audit sheet.

ONGOING MONITORING OF THE STORMWATER DISCHARGE

Describe how the stormwater discharge will be monitored for quality parameters.

Please insert the following text into the SSSMP and abide by the contents for sufficient stormwater operations on site.

1. Discharge quality

The stormwater discharge must not contain any substance in concentrations which may cause the Council to be in breach of any discharge consent for the Stormwater Network held by the Council under the Resource Management Act 1991 from time to time; and must not exceed the limit for the contaminants listed in Table 1 below.

Table 1

Contaminant	Limit (mg/l)
Benzene	0.01
Toluene	0.8
Ethylbenzene	0.3
Xylenes (total)	0.6
Cadmium (dissolved)	0.004
Lead (dissolved)	0.01
Zinc (dissolved)	1.5
Copper (dissolved)	2
Total Petroleum Hydrocarbons	15
Nitrate-N	11.3

2. First flush monitoring frequency (sampling)

- First flush monitoring frequency will be required to occur twice annually when discharge is occurring during rainfall with a minimum of two months between samples: – Samples must be taken as soon as is practicable after run-off from the paved surfaces on the site commences.

Take a grab sample and analyse the sample for the following:

- Conductivity
- pH
- Total Petroleum Hydrocarbons
- BTEX (Benzene, Toluene, Ethyl Benzene and Xylene)
- Zinc (dissolved)
- Lead (dissolved)
- Cadmium (dissolved)
- Copper (dissolved)
- Ammoniacal-N
- Nitrate-N
- Total Nitrogen
- E. coli
- Total Suspended Solids

Identify each sample taken with the sampling method, time and date of sampling. Record appropriately.

- The laboratory results shall be forwarded to stormwater@hdc.govt.nz within 7 days of being received. The date the samples were taken and the date the sample results were sent to HDC will need to be recorded in the stormwater monitoring and maintenance register.
- If the sampling undertaken exceeds a specified trigger level shown in table 1, the developer/tenant shall assess and report to stormwater@hdc.govt.nz on the following matters, within 3 months of the exceedance occurring:
 - a) Investigate the cause of the exceedance, and any measures taken to reduce the level of contaminant in the stormwater discharge
 - b) Undertake an assessment of the significance of the exceedance and assess the potential effects of the exceedance on the potability of groundwater.
 - c) Options for addressing the source of contaminants in order to reduce contaminant levels and the timeframe for completion of any proposed works.

ANY SAMPLING AND SENSITIVITY METER RESULTS AVAILABLE

Provide all available sampling results and sensitivity meter readings from the stormwater discharge this Stormwater Management Plan applies to (IF ANY ARE AVAILABLE).

CONTINGENCY PLAN AND PROCEDURES

Describe the contingency plan and procedures for dealing with any potential contamination of the stormwater discharge from the premises. How will the discharge be isolated to prevent the discharge of contaminated stormwater from the site?

SPILL CONTAINMENT AND CLEAN UP

Describe how a small contaminant spill will be contained and cleaned up and; in the case of a large spill, how will it be contained, and the clean-up managed?

EMERGENCY SPILL DEVICES AND TRAINING IN THEIR USE

Describe the emergency spill devices available on the premises and how staff are trained in their use. Include information on spill kit signage on site and the procedure to immediately call Hastings District Council 06 871 5000 in the case of a contaminant spill that has entered the on-site stormwater network.

ON-SITE STORMWATER SYSTEM, DEVICES AND EQUIPMENT

Describe how the on-site stormwater system, devices, and equipment is managed and maintained.

CONTAINMENT VALVE(S)

Describe the containment valve(s) that are in place prior to discharge, how it/they are managed and maintained, associated signage, and staff training associated with operating the valve (including a register).

APPENDIX