
EARTHWORKS CONSTRUCTION MANAGEMENT PLAN FOR 68 WEKA STREET, MANGAWHAI

MAY 2022

CONTENTS

.....	1
INTRODUCTION.....	3
SCOPE OF WORKS.....	3
PURPOSE OF PLAN.....	3
EXCLUSIONS	3
CONSTRUCTION GUIDELINES.....	3
SUMMARY OF POTENTIAL EFFECTS DURING CONSTRUCTION	4
ENVIRONMENTAL GUIDELINES DURING CONSTRUCTION	5
TRAFFIC GUIDELINES.....	5
Traffic Flow Restriction during construction	5
SEDIMENT CONTROL.....	5
Programme of works	5
Construction Methodology.....	5
STORMWATER QUALITY	6
CONTAMINATION.....	6
NOISE.....	6
VIBRATION.....	7
EARTHWORKS AND CONSTRUCTION GUIDELINES.....	7
Dust Control.....	7
Erosion Control.....	7
NIGHT TIME CONSTRUCTION.....	7
GUIDLEINES FOR STORAGE AND MAINTENANCE ACTIVITIES	8
REFUELLING AND MAINTENANCE	8
COMMUNICATING WITH STAKEHOLDERS	10
KAIPARA DISTRICT COUNCIL.....	10
ON-SITE CONTACTS	10
COMMUNITY COMMUNICATION	10
HANDLING COMPLAINTS	10

SCOPE OF WORKS

The works that are the subject of the Construction Management Plan, are the works at 68 Weka Street, Mangawhai. The property has an area of 660m² and with a volume of 107m³ and it is proposed to undertake earthworks as part of the construction of a new dwelling.

The site is accessed from Weka Street and all of the works for this plan are within the confines of the property boundaries.

PURPOSE OF PLAN

The purpose of this Construction Management Plan (CMP) is to achieve the following:

1. Demonstrate how potential constriction related environmental effects will be avoided, remedied or mitigated during the construction phase of the proposal as per the guidelines outlined in this document.

The CMP should be referred to when:

1. Planning works to minimise, remedy or mitigate the effect on the environment;
2. Undertaking all works that may have an impact on the environment.
3. Communication with all affected parties, including Council and adjacent sites.

The CMP will be available to all parties so that it can be used as a practical construction and management tool and reference source. An up to date CMP will be kept with the Earthmoving Contractor during the earthworks undertaken on the application site.

EXCLUSIONS

The following items are excluded from the scope of the CMP:

- Construction Health and Safety. The contractor who is to undertake the construction and earthworks management, shall prepare a specific health and safety plan for the proposal.

CONSTRUCTION GUIDELINES

The Environmental Guidelines listed in this report have been specifically formulated for the construction processes within the application site. The guidelines are based on New Zealand Legislation and best environmental management techniques. The guidelines are to be used as a key part of measures to directly control activities to avoid, remedy or mitigate actual or potential effects on the environment during the construction phase of the proposal.

SUMMARY OF POTENTIAL EFFECTS DURING CONSTRUCTION

The following are potential environmental effects that may result from the construction phase of this project:

- Disruption to local traffic flow;
- Sediment discharge during earthworks;
- Reduced stormwater quality;
- Contamination from refuelling;
- Noise and Vibration nuisance;
- Reduced Air Quality and Dust;
- Night time activities.

The following sections set out the guidelines for the purpose of avoiding, remedying or mitigation the above potential effects as a result of the construction works on the environment.

ENVIRONMENTAL GUIDELINES DURING CONSTRUCTION

TRAFFIC GUIDELINES

Traffic Flow Restriction during construction

The construction phase of the project will not involve both partial or total closure of any of the surrounding roads or accessways. No Construction Traffic Management Plan is required for the earthworks phase of the development.

SEDIMENT CONTROL

There is minimal potential for sediment from the earthworks and construction activities to be washed into the stormwater system or adjacent waterways.

The following measures will be implemented to avoid any discharge of sediment laden water into the receiving environment:

1. Filter fabric fences shall be installed on the down-slope side of soil stockpiles and disturbed/exposed areas to filter sediment from surface runoff before it enters the receiving environment (Stormwater drains, rivers, streams and adjacent properties).
2. Cut off drains shall be constructed along batters, above soil stockpiles and disturbed/exposed areas to diver clean surface water away from where it could become contaminated by sediment.
3. Sediment collected by filter fabric and filter material is to be regularly collected and carted off-site and disposed of at an approved land fill site if any of the material is unsuitable, otherwise spread on the site for re-use.

Programme of works

Works are scheduled to commence as soon as resource consent/building consent is issued and completed prior to 30 April 2021 or within the earthworks season.

Construction Methodology

All earthworks on the application site are to be undertaken utilizing excavators cutting and place of the material.

All topsoil on the exposed area being cut and filled is to be removed and stockpiled at a suitable flat location within the application site. This stockpile will be isolated from overland flow paths or where it can easily enter the receiving environment.

Following the completion of the earthworks, the topsoil is to be re-spread over the earthworked area or otherwise covered/sealed. Areas that are not to be utilized for construction will be mulched and grass seed spread or planted gardens.

STORMWATER QUALITY

Through the implementation of this CMP, stormwater quality will be maintained to pre development quality.

CONTAMINATION

Through the implementation of this CMP, contamination of stormwater will be avoided.

NOISE

Potential sources for construction noise are:

- Machinery undertaking earthworks at the application site;
- Noise as a result of the transportation of machinery to and from the sites;
- General road construction machinery.

For works during the day, the Contractor shall comply with the noise specified standards in New Zealand Standard NZS6803:1999 Acoustics – Construction Noise, New Zealand Standard NZS6801:2008 Acoustics – Measurement of Environmental Sound and New Zealand Standard NZS6802:2008 Acoustics – Environmental Noise. In particular, the following table outlines the noise standards and levels that will be met:

Time of week	Time period	Duration of work					
		Typical duration (dBA)		Short-term duration (dBA)		Long-term duration (dBA)	
		Leq	Lmax	Leq	Lmax	Leq	Lmax
Weekdays	0630-0730	60	75	65	75	55	75
	0730-1800	75	90	80	95	70	85
	1800-2000	70	85	75	90	65	80
	2000-0630	45	75	45	75	45	75
Saturdays	0630-0730	45	75	45	75	45	75
	0730-1800	75	90	80	95	70	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75
Sundays and public holidays	0630-0730	45	75	45	75	45	75
	0730-1800	55	85	55	85	55	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75

Table 1: Construction Noise and Temporary Activities – Kaipara District Plan Rule 13.10.15

VIBRATION

No construction methods undertaken within the application site will general vibration levels outside Rule 13.10.17 of the Kaipara District Plan. Further no vibration requiring mitigation is proposed.

EARTHWORKS AND CONSTRUCTION GUIDELINES

Earthworks control methods will limit the creation of dust and limit discharge of sediment laden water to enter any streams, rivers, estuary or waterway.

Dust Control

Dust will arise from where excavation and fill operation occur as well as tracks utilized for hauling materials and stockpile locations. Dust control requirements are:

1. Areas earth worked will be watered and covered as required to minimise the creation of dust;
2. The use of stockpiles and handing of excavation materials are to be minimized/limited;
3. The area of cut and fill is to be minimized/limited, with areas only being excavated where required.
4. Problem sandy, dusty areas will be capped to minimise/limit the level of dust creation;
5. Hydrocarbons (such as hydraulic oils) shall not be used as a method of controlling dust.

Erosion Control

The earthworks with a volume of 107m³. There is not expected to be any silt runoff created given the minimal amount of earthworks required to prepare the site for the new dwelling, coupled with the relatively flat nature of the site, precluding any potential discharges during construction. Excavations are small and there will be little runoff from excavated surfaces that could result in erosion.

Mitigation measures:

1. There are to be no directed channels from earthworks to roadside drains or flood plain areas.
2. Limited areas are to be earth works at any one time, with areas that have been completed, to be capped or otherwise covered to prevent erosion. This including top soiling and re-grassing where appropriate.
3. Where areas are exposed to high winds (in excess of 30 kilometers per hour plus), areas are to be wetted with imported water and/or otherwise covered with mulch or topsoil to prevent wind erosion.

NIGHT TIME CONSTRUCTION

No work is to be undertaken outside the construction house specified above. Construction including earthworks are limited to between the weekdays hours of 7am and 7pm.

GUIDELINES FOR STORAGE AND MAINTENANCE ACTIVITIES

Storage and maintenance procedures take into account best practice environmental management. The following sections provide guidelines to assist this:

REFUELLING AND MAINTENANCE

Refuelling and maintenance activities have the potential to release oil, diesel, degreasers and other contaminants into the environment. The restrictions proposed recognise the potential adverse effects of these substances, together with the practical implications of removing vehicles from an area for refuelling.

Requirements for refuelling and maintenance are as follows:

1. Construction refuelling and maintenance facilities shall be appropriately constructed so that the potential for contamination is minimised as appropriate to the scale of the facility.
2. All bulk fuel/oil/chemical storage areas shall have secondary containment systems that shall be:
 - a. Impervious and non-reactive;
 - b. Able to contain the volume of the full vessel plus a freeboard of 0.5m to allow for the possible collection of rainwater at the same time as a spill.
 - c. Covered to prevent collection of rainwater.
3. All dispensing units shall have drip trays and drip containers in place at all times.
4. Waste bin shall be provided for the collection of waste drums, oily rags, oil filters etc and the contents of the waste bins shall be regularly and appropriately disposed of.
5. Any refuelling depot and storage of dangerous or hazardous materials shall comply with the relevant regulations or transitional regulations under the *Hazardous Substances and New Organisms Act 1996*.
6. The refuelling and maintenance depot shall be secure after hours.
7. No oils or any other substances other than stormwater are to be discharged to the ground.
8. Areas for degreasing and collection vessels from waste liquids are to be provided and shall be under cover. Degreasing fluids are to be removed off site for appropriate disposal.
9. The refuelling and maintenance area is to be appropriately reinstated once the need for the unit is no longer required.
10. A general spill containment kit shall be readily available at all times when machinery is present and to service each operating unit. The kit is to contain sawdust, gloves, an absorbent boom and a container for the disposal of contaminated equipment and soils (*spills over 60 litres will require appropriate arrangement to be made for removal and disposal*).

11. Refuelling may occur 'on location' (*i.e outside a designated maintenance/refuelling facility*) provided that:
 - a. Tanker carries a spill containment kit (*containing sawdust, gloves, an absorbent boom and a container for the disposal of contaminated equipment and soils*);
 - b. The tanker driver is responsible for filling
 - c. The tanker auto switch/off is fully operational.
12. All maintenance (*including oil changes*) is to occur within the designated maintenance and refuelling depot.
13. All spills are to be contained and appropriately cleaned up; Contaminated materials are to be appropriately disposed of off site.
14. No dispersants shall be used to control spills of hydrocarbons.
15. Any waste oils should be stored under covered and away from traffic management.
16. Grease cartridges shall be disposed of in rubbish receptacles.

COMMUNICATING WITH STAKEHOLDERS

KAIPARA DISTRICT COUNCIL

1. The Kaipara District Council (KDC) shall be informed in writing prior to the commencement of works on site and shall also be notified on completion of works.
2. KDC shall be notified of any contaminant discharges to the ground or any discharges off-site of any material.
3. KDC shall be permitted onto the site for periodic inspections of the works at its discretion.

Contacts for Kaipara District Council are as follows:

- (09) 4397059
- council@kaipara.govt.nz

ON-SITE CONTACTS

Details of on-site contacts are as follows:

On-Site Manager: _____ Phone: _____

Engineer: _____ Phone: _____

Housing Company Foreman: _____ Phone: _____

COMMUNITY COMMUNICATION

As the works will be limited to only the application site, it is not necessary to notify any outside parties of the proposed works.

HANDLING COMPLAINTS

A register of complaints will kept by the site foreman. This register will be a separate file containing the following information where it has been supplied by the complainant:

- Name and Address
- Contact phone number
- Nature and description of complaint. The location of the complaint will be recorded on a plan.