



CONSTRUCTION MANAGEMENT PLAN



DRURY TOWN CENTRE REV 0



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1. INTRODUCTION

Ross Reid Contractors has been engaged to undertake the Civil Works at Drury Town Centre on Behalf of Kiwi Properties. Ross Reid Contractors Ltd (RRCL) is required to undertake the following works;

- Access to site.
- Establishment a laydown area Previously completed under the earthworks contract
- Maintain and construction sediment and erosion control on the Drury Town Centre 40.5hec site.
- Stripping of topsoil and vegetation Previously completed under the earthworks contract.
- Stripping and stockpiling of topsoil Previously completed under the earthworks contract.
- Cut to fill & cut to stockpile Managing material generated from Civils such as road gullets, drainage installation and services.
- Gravity sewer and stormwater drainage.
- Construction of timber pole and segmental block walls.
- Respreading of topsoil and grassing.
- Landscaping and planting for roading, stream areas and general amenity.
- Construction of stormwater treatment devices.
- Road pavement construction, including lime and cement stabilising, pavement drainage, and Asphalt surfacing.
- Concrete works, including kerbs, islands, footpaths, vehicle crossings, speed tables, cycle lanes.
- Installation of water, power, and comms reticulation.
- Dewatering.
- Disestablishment from site.

Contract Management Plan (CMP) is based on the requirements of the tender documents provided currently as of 21/10/24 and the Resource Consent Decision "Drury Centre Precinct Final Decision" as they apply to Ross Reid Contractors Ltd as the Head Contractor.

RRCL recognises the importance of the project to the principle and will endeavour to manage this project in line with the with all key stake holder expectations.

RRCL considers the following to be the key stakeholders.

- Kiwi Properties (Principle)
- Ross Reid Contractors Ltd (Head Contractor)
- Woods (Engineer to the Contract & Civil Engineering consultants)
- CMW (Geotechnical Engineering Consultants engaged by the principle)
- Southern skyles Ltd (Environmental Consultants engaged by the RRCL)
- Te Akitai Waiohua and Ngati Te Ata (Cultural Advisors)
- Auckland Council (Vested infrastructure owners and Resource Consent compliance)
- Auckland Transport (Vested infrastructure owners)
- Veolia Services Ltd (Vested infrastructure owners)
- North Power (Electrical power suppliers and infrastructure owners)
- Ventia (Communications suppliers and infrastructure owners)
- Occupiers and users of adjoining properties and businesses.
- Work Safe NZ



2. PURPOSE

The purpose of the CMP is to provide the necessary guidance and background to enable the Ross Reid project delivery team to effectively manage health, safety and environmental issues associated with the proposed construction works.

3. OBJECTIVES

3.1. INTRODUCTION

The objective of the CMP is to help to deliver the project for our client Kiwi Property in line of the requirements of the contract drawings and specifications and the Key Stakeholders.

3.2. OBJECTIVES

In regards to this project the following goals have been set:

- To take all necessary steps to prevent or mitigate adverse health and safety and environmental (HSE) related effects caused by the construction works.
- To take all necessary steps to prevent or mitigate any nuisance to adjacent properties
- To ensure that at all times reasonable and useable access is maintained to private properties, particularly those directly affected by construction works or by construction related activities;
- To ensure that the contract requirements are complied with throughout the duration of the contract works by all parties involved with the construction works including subcontractors.

These goals will be achieved by:

- Promoting a strong HSE culture in the construction team.
- Actively consulting the construction team when planning HSE responses.
- Implementing systems and putting in place training to ensure HSE compliance as a minimum.
- Work in consideration of key stakeholders when determining responses to HSE and construction issues.
- Promote practical measures to lessen the amount of construction waste and implement energy saving initiatives (In the frame of managing the efficient use of all resources employed on this contract to achieve the required production rates).

RRCL's Environmental Policy is appended.



4. ROLES AND RESPONSIBILITIES

The following staff are responsible for the implementation of the CMP.

Project Manager:

Deon De Ridder

Responsible to:

Contracts Manager and General Manager

Responsibilities

Be the contractor's representative and ensure that the following happens.

- Formation of an effective site operations team with clearly delegated responsibilities and a communication structure based on the chain of command as defined by the Ross Reid Operating System. (ROS)
- Effectively communicate the contract requirements to the operations team (Being the Site Supervisor and Key Subcontractor Supervisors)
- Implementation of health and safety controls and procedures.
- Implementation of environmental controls and procedures.
- Implement of quality assurance controls and procedures.
- Write, update and implement the construction program.
- Prepare and provide the monthly progress claims to the Engineer to the Contract with adequate substantiation.
- The provision of all required documentation from the contractor.
- Procurement and management of all resources required for the contract works including suppliers and subcontractors.
- Report to the Engineer to the Contract and the principle as required.
- Notification to the Engineer to the Contract of any foreseeable problems or variations.
- Manage the contract communications (correspondence) in a systematic and effective way so that the correct information is conveyed to appropriate people in a timely manner, and it is traceable.
- Maintain daily diary and photographic records of the project works.
- To ensure that everyone is aware of the Accidental Discovery Procedure, and it is adhered to. This in relation to Maori artifacts, unforeseen hazardous materials or anything else unexpected.
- To maintain an up to date knowledge of the contract plans and specifications and to register updates and changes.
- To ensure technical information derived from the plans and specifications is conveyed effectively to the site supervisor and the site team and ensure the contract works are executed correctly.
- To assist the project manager with the ordering of supplies and subcontractors to meet the program requirements and detailed work planning in conjunction with Site Supervisor.
- To ensure that the Inspection and Testing Plan (ITP) is executed and the resulting documentation is compiled in a systematic way and forwarded to the Engineer to the Contract.
- To book and manage survey requirements.



Lead Site Supervisor:

Nigel Cuthbert

Responsible to:

Project Manager

Responsibilities

- To communicate with the Project Manager and Site Engineer and ensure he is up to speed with the construction requirements. Technical, Program, Production targets, Quality, Safety and Environmental.
- To attend planning meetings as required with the site operations team to ensure that works are carried out correctly, on time with all the required tasks delegated to ensure that the resources required to do the job are available on time and that lead times are accounted for.
- Implementing the Health and Safety plan at an operational level.
- Implementing the ESCP at an operational level.
- To manage the site operations with the site personnel and resources to execute the contract works in line with contract requirements and in agreement with the Project Manager.
- To carry out all internal ROS supervisor requirements.
- Continuously Monitor the weather forecast, ground conditions (Suitability and moisture content) and the dust situation and respond accordingly.
- To know what the Accidental Discovery Procedures are and ensure they are adhered to. This in relation to Maori artifacts, unforeseen hazardous materials and anything else unexpected.

5. CONSTRUCTION MANAGEMENT

To ensure that the construction activities required by this project are undertaken in accordance with the contract drawings and specifications, consent conditions (As they apply to the contractor) and industry best practice, the following activity specific items provide the framework by which the construction activities will be undertaken in order to minimise the potential adverse environmental effects.

This CMP addresses the following issues:

- General site management
- Contaminated land management
- Earthworks and erosion and sediment control management
- Construction noise management
- Construction dust management
- Traffic management
- Public Health and Safety
- Hazardous substances management.

Where required site-specific plans will be developed to provide detailed measures to be implemented to minimise effects associated with construction. As plans are developed, they will be submitted to the Principal and/ or Council where required (for example Updated Sediment and Erosion Control Plans).



5.1. GENERAL SITE MANAGEMENT

5.1.1. Site Establishment

Site establishment will consist of:

- Maintaining existing haul roads and site lay down area.
- Update and Erect where needed site signage including brand, warning signs, H&S hazard board and procedural signs.
- Transport earthmoving equipment to site

Maintenance of site access

Site access will be from 133 Fitzgerald Road using the established entrance and shifted to the new road alignment as required. See submitted CTMP.

5.1.2. Plant Storage

All construction plant and materials for the project will be stored within the project area. The designated location for storage of construction plant will be as indicated on CTMP

5.1.3. Litter and Waste Control

Construction sites have a variety of waste streams including:

- Office paper
- Lunch wastes
- Cans and bottles from smoko sheds
- Concrete
- Wood (treated and untreated)
- Steel
- Plastics
- Gib board
- Packaging, and
- General waste.

With construction and demolition wastes accounting for 30% of all landfill waste, opportunities for reusing and recycling construction materials will be investigated and implemented where practicable.

5.1.4. Litter and Waste Mitigation Measures

- Bins will be located throughout the site to ensure waste materials and recyclable materials are stored and disposed of appropriately.
- Office paper, cardboard and bottles, cans and plastic will be recycled through the kerbside recycling scheme.
- Opportunities for recycling concrete, plastics and wood into other value added products and possible reuse back on site will be investigated.

5.1.5. Weather Monitoring

Current and long term weather forecasts will be constantly monitored to ensure that construction activities are planned and resourced to address any changing weather conditions.

This monitoring will utilise various forecasting services including the NZ Met Service and Metvuw. A daily record of onsite weather conditions will be maintained.



In the event of a forecast significant weather event (high winds or heavy or persistent rainfall) additional inspections will be undertaken prior to these events. Additional controls will be established due to the nature of the topography of this site. Further inspections will be undertaken immediately after these events. If appropriate, inspections will also be undertaken during significant weather events. Remedial works as required as a result of a significant weather event will be carried out immediately.

5.4 EARTHWORKS MANAGEMENT

5.4.2. Erosion and Sediment Control

The principals of erosion and sediment control are well understood, and will be implemented in accordance with the drawings, specification and GDO5.

Construction Mitigation Measures

The stabilised entrance and haul roads will be maintained installed to ensure that the site entrance/exit does not become a source of sediment and a traffic safety issue. Additional protection measures will be added as necessary.

Sediment retention ponds and controls will be regularly checked for sediment content and operation and if necessary, Floc will be added as per the approved Chemical Treatment Plan. The CTMP will be prepared after testing of samples of the clay taken from site for reactivity with flocculation agents to determine the rate of dosing and frequency.

Sediment laden water within the site will be directed to the ponds using diversion bunds. Decanting earth bunds and silt fences will be employed during the Cut to Fill and Cut to Waste of material, additional "cut off drains "will be installed as required.

Existing or new stormwater reticulation will be used as appropriate to discharge treated/clean water from the site. Any dewatering required during construction will be managed to industry standards and sediment laden or concrete affected water will be directed to the sediment controls on site prior to treatment and discharge from the site.



Monitoring and Maintenance

The Project Manager in conjunction with the Site Supervisor will be responsible for actively monitoring all installed erosion and sediment controls. Informal audits undertaken by the site supervisor will be undertaken throughout the day as project staff go about their daily work programmes.

Once a week, a formal audit will be undertaken, written up, distributed with actions for close out identified.

5.5 CONSTRUCTION NOISE

Work Hours

Unless otherwise approved in writing by the Construction Manager the hours of work onsite are Monday to Saturday 7.00 to 7.00 pm. (excluding Public holidays and Sundays). The following exceptions may be required:

- Delivery of large equipment
- Emergencies
- Securing of the site or removing a traffic hazard.

Noise Mitigation Measures

Modern plant and equipment is fitted with exhaust mufflers and sound proofing that greatly reduces plant noise. RRC will ensure that all plant is appropriately maintained so that these mufflers are fully operational. This enforcement will extend to all plant operating on the site.

For work involving stationary equipment (e.g. pumps or generators), the equipment will either have silencers fitted, or external noise screens will be employed. Some other simple methods of mitigating noise are:

- Replace equipment with quieter technology, if not already employed
- Change the location of noisy pumps or machinery. This may involve lowering pumps into excavations or placing behind earth bunds
- Addition of secondary exhaust mufflers on noisy machines
- Monitor the effect of wind and temperature on noise level.

If noise exceeds the allowable limits, then further mitigation measures will be utilised or an alternative work methodology will need to be deployed. It is asserted that this will mitigate the potential nuisance suffered by neighbours ahead of any complaints being received.

Noise will managed to ensure compliance with NZS6803 (New Zealand Standard for Acoustics – Construction Noise), the requirements of the Resource Management Act and the Health and Safety in Employment Act, clause 11.

Please refer to the CNVMP for further information and details.

Monitoring and Maintenance

Construction noise monitoring will be coordinated by the Project Manager. If noise monitoring is required this will be undertaken in accordance with NZS6803.

In the event that the noise monitoring does not comply with NZS6803 additional mitigation measures will be considered. The implementation of additional options will be undertaken in consultation with the regulatory authorities and the Principal.



If the there is a Non-compliance with NZS6803 the incident will be reported immediately to the Principal, prior to advising Auckland Council. It will also be discussed at the weekly Management Team meetings and additional mitigation measures and subsequent compliance standards discussed. Any result of noise monitoring will be discussed at specific 'noise' themed tool box talks which will occur on a regular basis to keep interest and enthusiasm up with the workforce.

Noise Complaints

Any complaints received will be addressed by the Project Manager. Generally this would involve contacting the complainant to discuss the source of the noise activity and the mitigation measures which were in place at the time of the compliant. The supervisor of the activity which was the source of the complaint will be informed immediately to enable additional mitigation measures to be implemented as appropriate. Proactive follow up with the complainant shall be undertaken by the Project Manager.

The noise complaint shall be discussed at the Management Team meetings and highlighted at tool box talks to ensure that lessons learnt are reinforced and enacted upon.

5.6 CONSTRUCTION DUST AND DIRT ON ROADS

The potential for dust generation and dirt on roads is generally associated with the Cut to fill/ waste phase of the project. Water carts will be utilised on a regular basis to mitigate dust. When the earthworks are completed the exposed surfaces will be progressively stabilised with either aggregate or straw. This will limit the potential for dust and dirt generation. A water cart will be on site for the duration of the project, due to the effects of any dust on surrounding areas.

Dust Mitigation Measures

The most practical approach to mitigating the effects of dust and dirt on roads is to minimise the generation at source. The Construction Manager shall be responsible for ensuring the implementation of mitigation measures, which will include:

- Minimising areas of exposed earthworks and by stabilising completed areas as soon as practicable
- Maintaining stabilised entrance and exit points
- Reducing the speed of plant in localised areas if appropriate
- Stabilised egress points (incorporating wheel wash facilities as required)
- Retaining vehicles as much as practical on stabilised surfaces
- Restricting access to un-stabilised areas
- Using regular road sweeper runs
- Grassing of stockpiles
- Stopping of works during winds
- Retain existing vegetation as shelter belts
- Watering of haul roads during dry periods.

Water for dust control/ wheel wash purposes shall be obtained from a metered supply connection, non potable supply or from sediment ponds as appropriate.

The initial point of contact for matters relating to dust control will be the Project Manager.

Monitoring and Maintenance

Audits will be undertaken by the Foremen throughout the day as project staff go about their daily work programmes to ensure that the mitigation measures are working effectively.

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Dust and Dirt on Road Complaints

All complaints relating to dust shall be entered into the site's complaints register. The following information is to be recorded.

- The source and type of the complaint; Date and time and weather conditions; Cause of the complaint
- How the complaint was received
- Who the complaint is assigned and details of response;
- Action taken by RRCL in response to the complaint and
- Time taken to respond.

5.7 TRAFFIC MANAGEMENT

We do not intend to get a specific site entry TMP as the access of McLaughlins road is safe and ample.

Refer to Construction Traffic Management Plan (CTMP)

5.8 PUBLIC HEALTH AND SAFETY

All practicable steps will be taken to ensure public safety from construction related activities associated with the site. The approved TMP will provide the specific measures to be undertaken during works that occur within the public road boundary or during plant transport to and from the site. The site compound and storage area is to be located inside the site.

A site-specific Health and Safety Plan will be submitted to the Principal for approval and used to ensure safe practices are employed on site for the benefit of site personnel, visitors, and the general public who come into contact with site activities.

5.9 HAZARDOUS SUBSTANCES CONTROL

This project will involve the use of a variety of construction plant and machinery. Most of this plant will be motorised and as such will require a regular supply of fuels and oils. These can become a pollutant if discharged to ground or water.

Other materials used in the construction process including concrete, bonding agents, sealants, and degreasers can result in environmental impacts if they are not managed carefully and are discharged to the environment in an uncontrolled manner.

Hazardous Substances Mitigation Measures

The following mitigation measures may be implemented to manage hazardous substance use, storage and transport during the project:

- Fuel will be stored on site in a double skinned tank for refuelling of construction plant. Spill kits will be available for use in the event of a spill.
- Hydraulic oils, greases and other construction materials including small quantities of fuel required for hand tools and pumps may be stored at the site compound, in a secure area.
- Any hazardous substances kept on site will be stored under cover in accordance with the relevant regulations.
- Containers of paint, adhesives etc are not to be left open unless being actively used.
- Specific concrete and grout wash-down areas shall be provided.



- Wastes will be disposed of in accordance with appropriate regulations.
- Spill kits will be maintained at appropriate locations around the site. These site locations will be detailed at all smoko sheds.
- Major plant maintenance will not be carried out onsite unless absolutely necessary. Minor repairs will be undertaken away from stormwater inlets.
- Hazardous substances are managed through the Health and Safety Management Plan. In addition to procedures in that plan, all MSDS information shall be available to site staff.
- Emergency response procedures and incident management are further discussed in Section 6.
- All containers will have exterior labels notifying people of what they contain.

Monitoring and Maintenance

As part of the regular site inspections, the storage and use of hazardous substances will be checked to ensure compliance with the CMP. This shall include checking:

- The storage areas are appropriately covered, bunded and secure;
- Containers are stored in the designated storage areas and positioned appropriately (e.g. not sitting on the bund).
- Containers that are not being used have their lids on firmly.
- Empty containers and other waste are being disposed of appropriately.

EMERGENCY RESPONSE

The procedures detailed below identify the response procedures which will be enacted in the event of resource consent non-compliance, a spill or other incident resulting in significant adverse environmental effects.

RESOURCE CONSENT COMPLIANCE

In the event that non-compliance with resource consent conditions is identified, resulting in adverse environmental effects, the Project Manager shall be informed. Irrespective of whether it causes harm to the environment or not, the incident will be reported immediately to the Engineer to the Contract prior to advising Auckland Council. The Project Manager shall identify a series of actions to be implemented to resolve the situation and return the site to full compliance. Contact will be made with the Engineer to the Contract to discuss the situation and detail the response to be undertaken. An investigation will then be undertaken and report prepared as detailed below. The incident report shall be forwarded to the regulatory authorities as appropriate.

Auckland Council Pollution Hotline (24 hr): 09 377 3107

7.1 ENVIRONMENTAL INCIDENT RESPONSE

In the event of a spill or other incident which results in an unauthorised discharge to the environment, immediate action will be taken to stabilise the situation.

Once the situation has been controlled and cleaned up, an incident investigation will be completed and a report prepared. The incident report will include the following details in the report:

- Description and location of incident including date and time
- Description of work being carried out at the time of the incident and how the incident occurred

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- Corrective actions taken to rectify the situation and mitigation measures to be taken to minimise the adverse effects on the environment
- Causes of the incident
- Environmental controls in place at the time of the incident, and
- Preventative actions to prevent a repeat of the situation
- Additional monitoring may be required to be enacted as a result of the incident.

8. TRAINING AND AWARENESS

An environmental induction will be provided to all staff and subcontractors prior to starting work on site. The induction will include information on the ecology of the area, heritage issues including procedures in the case of unexpected finds, and the requirements of the various consents. Information will be provided on environmental controls such as sediment control devices, noise and dust mitigation measures and waste management. Engineers responsible for writing Work Plans and Job Risk Analysis will also be given guidance on how to assess and plan for environmental issues using this CMP as the key reference document.

Environmental issues will form a regular part of toolbox meetings to ensure all workers are aware of the key issues. Site staff will be made aware of the restrictions in operations when working near designation boundaries, or potentially affected parties.

Subcontractors, as a condition of their contract with the project, will be required to actively manage environmental issues associated with the subcontract works and comply fully with their contract requirements. For significant aspects of work RRCL may require subcontractors undertaking high risk activities to provide their own Environmental Plan for review by the Project Manager. All subcontract staff will be required to attend a project induction that will include a section on environmental issues.



9. APPENDICES

- 9.1 ROSS REID ENVIRONMENTAL POLICY
- 9.2 CTMP
- 9.3 CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN
- 9.4