



# **Appendix S     Draft     Construction Management Plan**

**Fast-Track Approvals Act 2024 Substantive Application**

**Hinuera Solar Farm**

**Harmony Energy NZ #6 Limited**

SLR Project No.: 880.016894.00001

19 August 2026

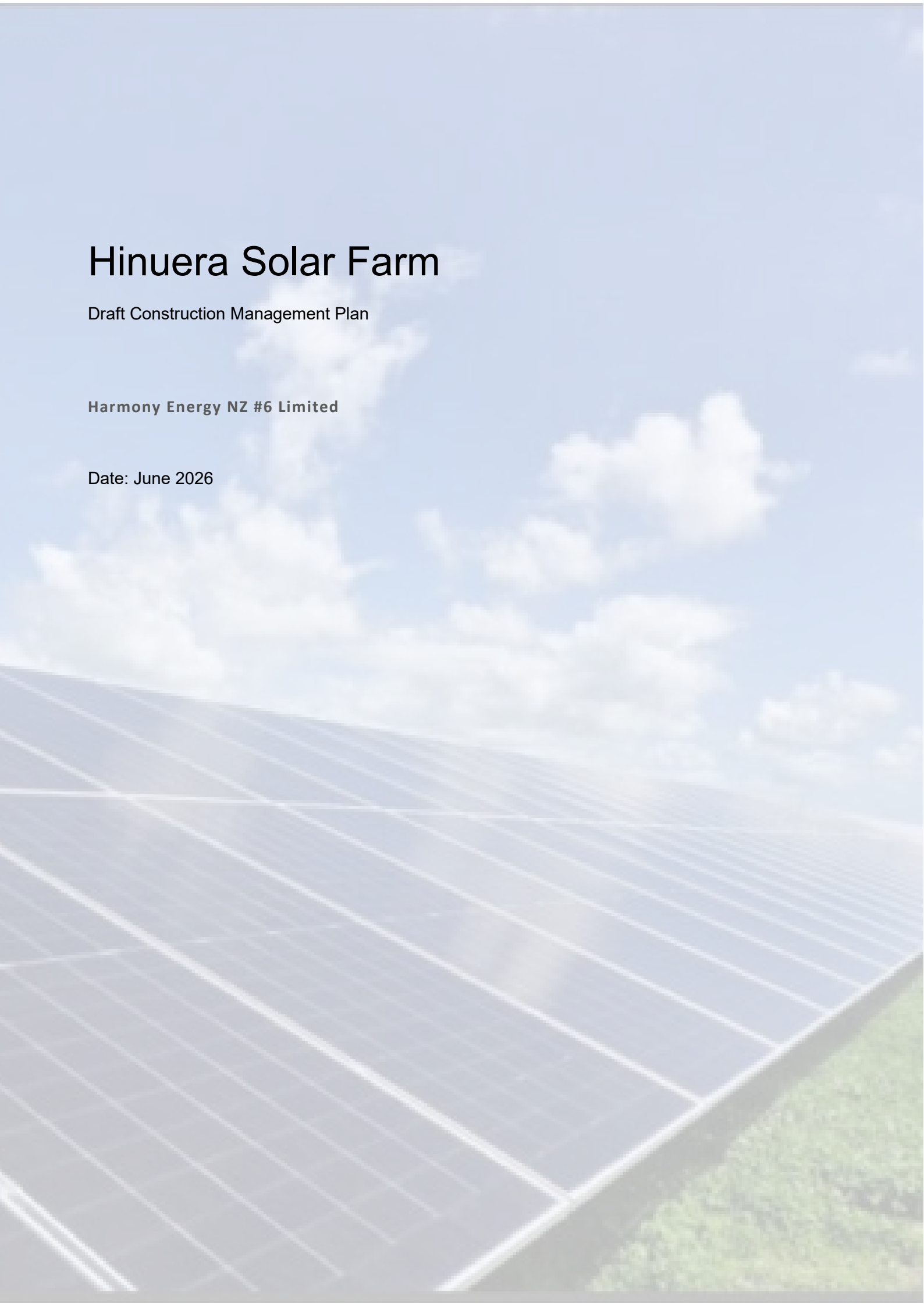


# Hinuera Solar Farm

Draft Construction Management Plan

**Harmony Energy NZ #6 Limited**

Date: June 2026



| Version | Date      | Comment           |
|---------|-----------|-------------------|
| 0.1     | June 2026 | Draft for Consent |
|         |           |                   |
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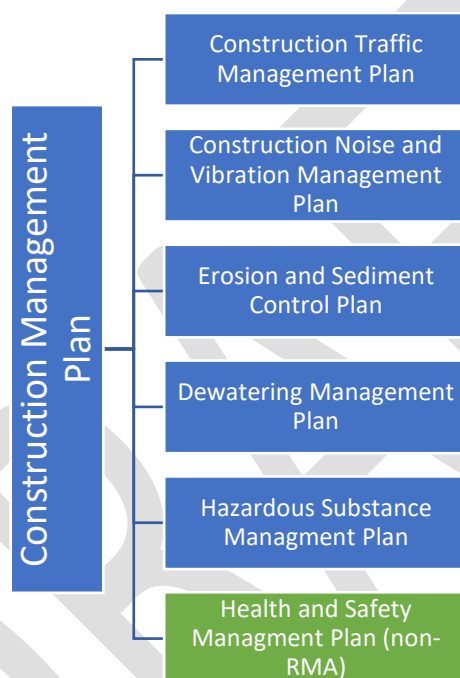
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## 2 Introduction

This Hinuera Solar Farm Construction Management Plan (CMP) provides a framework of operational and administrative controls for the management of adverse environmental effects associated with the construction phase of the Hinuera Solar Farm.

The CMP provides details of the key personnel, construction timeframes and methodology, controls, monitoring and reporting. It is intended to provide a practical summary for management and site personnel, with further details on specialist subjects contained in additional management plans, as set out below.



### 2.1 Purpose

The purpose of this CMP is to set out a framework on how construction activities for the Hinuera Solar Farm (HSF) will be managed to avoid, remedy and/or mitigate adverse impacts. The plan includes:

- Contact details of key personnel.
- A description of the site, including key features.
- Confirmation of the construction works program, including staging of works and construction methodology.
- Confirmation of work hours, with reference to any limits within the Construction Noise and Vibration Management Plan and Bat Management Plan.
- Methods and systems to inform and train all persons working on the site of potential environmental issues and how to avoid, remedy or mitigate potential adverse effects.
- Cultural induction process for all staff.
- Dust management measures.

- Inclusion of the Accidental Discovery Protocols and a list of contact names and numbers relevant to accidental discovery.
- How the requirements of machinery distances from overhead wires will be achieved in compliance with NZEP34:2001.
- Inclusion of Incidental Discovery Protocols in compliance with Condition [D25].
- Construction machinery management to ensure compliance with Conditions [F10-F14].
- Cleanfill acceptance criteria and record keeping with reference to conditions [F17-F19]
- Reference to the following management plans:
  - Construction Noise and Vibration Management Plan
  - Construction Traffic Management Plan
  - Erosion and Sediment Control Plan
  - Bat Management Plan
  - Incidental Discovery Protocol
  - Health and Safety Management Plan (non-RMA)
- Procedures for ensuring that surrounding property owners, including:
  - Providing prior notice of construction works and informed about expected duration of works.
  - Communicating with surrounding landowner and occupiers during construction works for the purposes of minimising disruption to farming activities and work-from-home activities.
- Procedures for managing, responding to and recording complaints in accordance with conditions [A9-A12].

## 2.2 Consent Conditions

Resource consent for the development of the Hinuera Solar Farm was granted on the [date] by an Expert Consenting Panel. The following conditions are particularly relevant to this CMP:

| Condition Reference | Wording |
|---------------------|---------|
| [xx]                | [xx]    |
|                     |         |
|                     |         |
|                     |         |

## 3 Key Personnel

The roles and responsibilities associated with the implementation of this CMP are set out below:

| Role                  | Responsibilities                                                                                                                                                                                                                                                                                               | Name | Contact Details |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------|
| EPC – Project Manager | <ul style="list-style-type: none"> <li>▪ Ensuring adequate resources are in place to implement CMP.</li> <li>▪ Ensuring all staff and contractors present onsite operate within the requirements of the CMP.</li> <li>▪ Overseeing the successful implementation, monitoring and review of the CMP.</li> </ul> |      |                 |

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                              | <ul style="list-style-type: none"> <li>▪ Ensuring that inspections and audits are carried out in accordance with the relevant CMP, and report incidents as and when required restrict or stop any activity that has the potential to or has caused environmental effects.</li> <li>▪ Ensure standard operating procedures are being followed for activities conducted within the Project.</li> <li>▪ Retain environmental records and registers in accordance with Section [x].</li> <li>▪ Coordinate and/or assist with stakeholder engagement matters as required.</li> </ul>                                                                                                                     |  |  |
| EPC – Construction Manager                   | <ul style="list-style-type: none"> <li>▪ Coordinating the implementation of the CMP.</li> <li>▪ Identifying resources required for the implementation of the CMP.</li> <li>▪ Ensuring that site employees and subcontractors are working in compliance with environmental requirements and work activities are not impacting the environment.</li> <li>▪ Coordinating actions in emergency situations/rapid stabilisation of site and allocating appropriate resources for these activities.</li> <li>▪ Restrict or stop any activity on the Project that has the potential to or has caused environmental effects.</li> <li>▪ Ensuring all workers have been inducted into the Project.</li> </ul> |  |  |
| EPC - Health, Safety and Environment Manager | <ul style="list-style-type: none"> <li>▪ Compliance with the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 and all Environmental legislative requirements.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                              | <ul style="list-style-type: none"> <li>▪ Ensure all staff are appropriately inducted.</li> <li>▪ Coordinate the Implementation of the CMP.</li> <li>▪ Ensure installation of environmental controls as per the CMP and ESCP.</li> <li>▪ Undertake environmental site inspections of the project including end-of-day inspections of controls.</li> <li>▪ Oversee the maintenance and improvement of defective environmental controls.</li> <li>▪ Undertake environmental incident reporting.</li> <li>▪ Keep project leadership informed of environmental performance of the project.</li> <li>▪ Inform staff of procedures and constraints applicable to managing specific environmental issues.</li> <li>▪ Communication to workers and visitors.</li> </ul> |  |  |
| Client Representative – Construction Manager | <ul style="list-style-type: none"> <li>▪ Manages grievances, oversees project updates, collaborating with the CLO, EPC contractor and other stakeholders during the construction process.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |
| Client Representative – Planning Director    | <ul style="list-style-type: none"> <li>▪ Audits compliance with consent conditions.</li> <li>▪ Assists with communication to local authorities, iwi and stakeholder.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
| Community Liaison Officer                    | <ul style="list-style-type: none"> <li>• Primary responsibility for stakeholder engagement, updates and communications.</li> <li>• Assist Construction Manager in handling of grievances.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |
| All Staff                                    | <ul style="list-style-type: none"> <li>▪ Undertake all activities in accordance with the requirements of the CMP.</li> <li>▪ Ensure they are aware of the relevant contact person.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  | <ul style="list-style-type: none"> <li>▪ Report incidents to the Site Supervisor or Representative.</li> <li>▪ Compliance with all requirements under relevant legislation.</li> <li>▪ They have undertaken appropriate site induction.</li> <li>▪ Compliance with all safety requirements including risk assessments, reporting procedures etc.</li> <li>▪ Report immediately any emergency, dangerous occurrence, injury, hazard, or defective equipment.</li> <li>▪ Actively participating in site safety meetings safety programs and emergency training.</li> <li>▪ They are trained in the use of emergency equipment as appropriate.</li> </ul> |  |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

## 4 Project Site

### 4.1 Project Site

The Hinuera Solar Farm is located over four Records of Title at the corner of State Highway 29 and State Highway 27, Hinuera.

Table 1: Site Details

| Title Reference | Address                                | Legal Description                                                                        | Size (ha)       |
|-----------------|----------------------------------------|------------------------------------------------------------------------------------------|-----------------|
| SA69A/179       | 4775 State Highway 29, Matamata        | Section 1 Block X Tapapa Survey District and Lot 1-2 Deposited Plan South Auckland 83767 | 38.3939         |
| SA50B/243       | State Highway 29                       | Section 9 Block X Tapapa SD and Block 11 Tapapa SD                                       | 0.0096          |
| SA292/111       | State Highway 27, Matamata             | Lot 1 Deposited Plan 11891                                                               | 25.7507         |
| SA308/1         | 8270 State Highway 27, Okoroire, Tirau | Lot 2 Deposited Plan 11891                                                               | 25.7507         |
| 647047          | 8302 State Highway 27, Okoroire, Tirau | Part Lot 3 Deposited Plan 11891 and Lot 2 Deposited Plan 473263                          | 63.4790         |
| SA13B/333       | State Highway 27                       | Section 3 Block X Tapapa SD                                                              | 1.1442          |
|                 |                                        | <b>Total</b>                                                                             | <b>154.5281</b> |

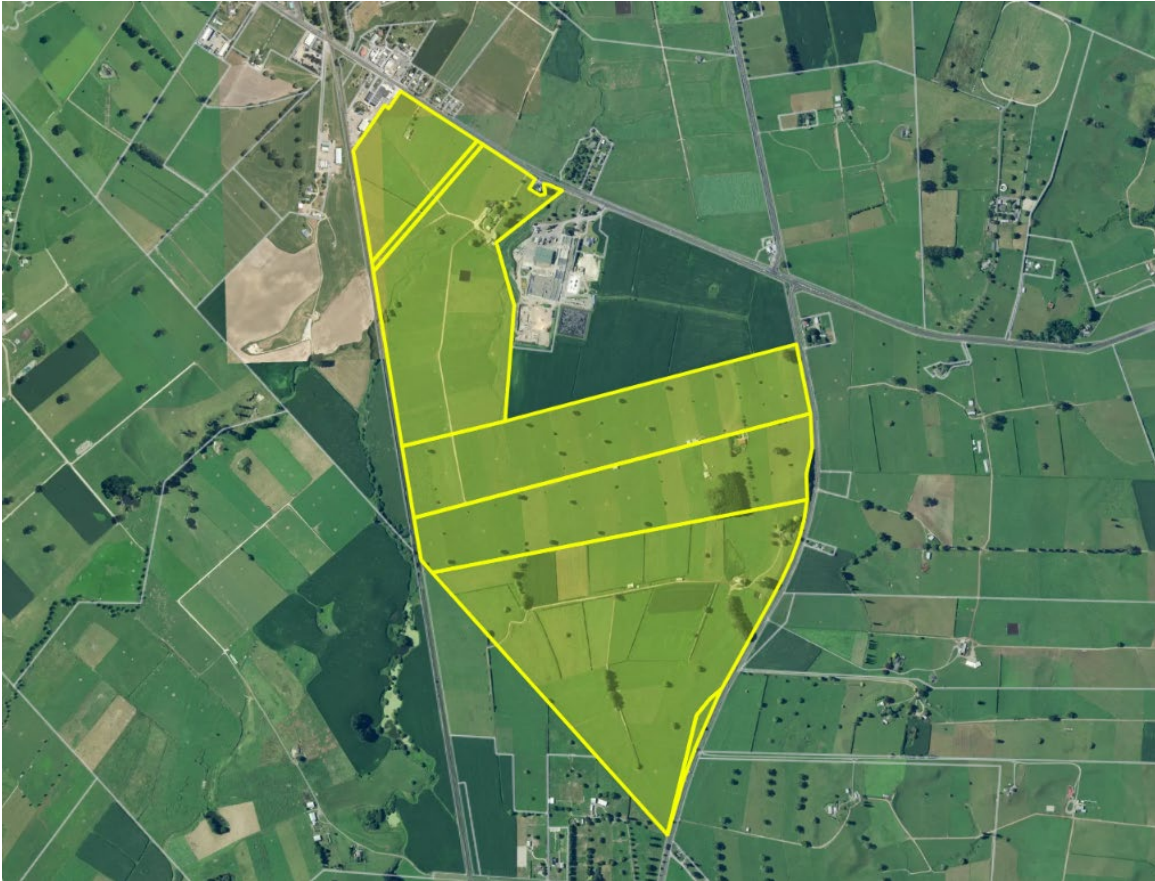


Figure 1: Site Location Plan

## 4.2 Key Features

The site comprises of two separately operating dairy farms and contains a total of four dwellings, which will continue to be occupied throughout the construction period.

### 4.2.1 Environmental Features

The site contains the following key environmental features:

- an unnamed tributary of the Mangawhero Stream located in the northern portion of the site.
- an unnamed tributary of the Mangawhero Stream traversing the site from north to south.
- a woodlot comprising of exotic trees over an area of approximately 1.2 ha adjacent to the boundary separating the northern and southern landholdings and outside the solar farm security fence.
- dispersed exotic trees and hedges throughout the site.

### 4.2.2 Existing Entranceways

There are currently 5 entrances to the site, these are located as follows:

1. 4775 State Highway 29 – dwelling access only.
2. 4739 State Highway 29 – farm access (dairy shed) and dwelling access.

3. 8270 State Highway 27 – farm and dwelling access.
4. 8302 State Highway 27 – dwelling access.
5. 8302 State Highway 27 – farm access and secondary dwelling access

The location of vehicle entrances is illustrated in Figure 2, below.

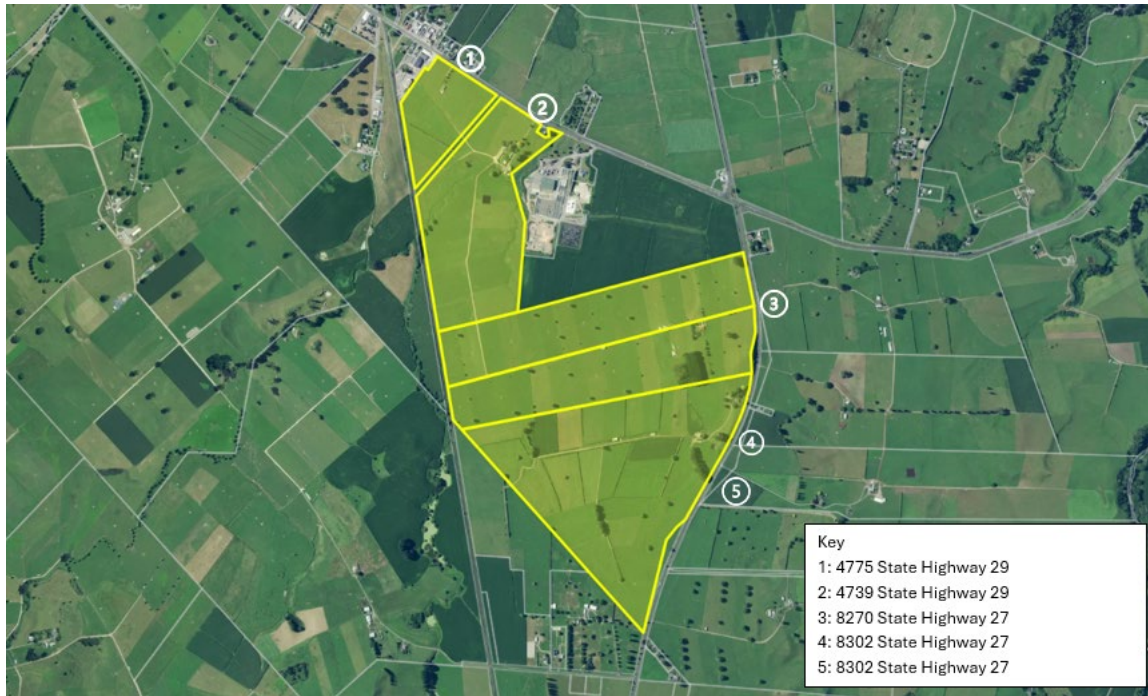


Figure 2: Existing Vehicle Entrances

Except in emergency situations (e.g. fire or medical event) the existing vehicle accessways noted as 1, [2] 3 and 4 are to be retained for the sole use of the owners/occupiers and are not to be used by construction vehicles. Emergency vehicles may make use of any site access at their discretion. Construction access is discussed in section 6.4.1 of this management plan.

#### 4.2.3 Existing Buildings

The northern farm (comprising of titles SA69A179, SA292/111 and SA308/1) contains three dwellings, two adjacent to State Highway 27 and one adjacent to State Highway 29. There is a dairy shed located adjacent to State Highway 27 and a number of implement/farm sheds, generally located in the southern portion of the farm.

The southern farm is comprised in 647047 and contains one dwelling and a dairy shed, both accessed via State Highway 27.

All existing dwellings/dwelling curtilage areas and existing farm buildings on site are excluded from the development area. Landowner access to these areas should be maintained through the construction process.

## 5 Project – Construction Overview

### 5.1 Timing and Sequencing

Construction will take [18-24] months to complete from start to finish.

Construction will follow the below sequence:



Figure 3: Indicative Construction Program for an 18 Month Build Schedule

## 5.2 Construction Hours

Construction activities will occur over a six-day week (i.e. Monday – Saturday), between 7am and 6pm. However, quiet work, staff arrivals and departures and deliveries may occur outside of these hours.

It is also noted that oversized deliveries may be required outside of these hours to avoid congestion on public roads during peak periods.

There will also be a security and CCTV monitoring presence on site 24 hours a day, seven days a week, during the construction phase of the project.

## 5.3 Staff Numbers

Staff numbers will fluctuate throughout the construction phase, with the structural construction phase requiring the greatest staff numbers. Estimated staff numbers for each stage of construction are included below:

Table 2: Estimated Staff Numbers

| Phase                     | Estimated Staff Numbers |
|---------------------------|-------------------------|
| Site establishment        | 15-30                   |
| Civil works               | 10-25                   |
| Mechanical construction   | 30-70                   |
| Electrical works          | 20-70                   |
| Electrical Commissioning  | 10-20                   |
| Grid Connection           | 10-30                   |
| Transition to Operational | 10                      |

## 5.4 Traffic Management

### 5.4.1 Access Locations

Primary construction access is to be via SH 27, with a secondary access located on SH29.

The access from SH 29 will be utilised for equipment necessary to construct the plant at the northern portion of the site, so as to minimise the number of heavy vehicles/loads tracking across the existing bridge/culvert on the Mangawhero Stream.

[If existing northern entrance (option 2) is selected for use additional controls to be included]

Except for emergency access, no construction vehicles are permitted to utilise the remaining site access points.

A plan indicating the location of construction access points is included in Figure 4.



Table 3: HCV Movements (Source: CKL)

| Months | Proposed Construction Deliveries<br>per Month | Calculated HCV Movements Per<br>Day |
|--------|-----------------------------------------------|-------------------------------------|
| 1      | 63                                            | 3                                   |
| 2      | 618                                           | 28                                  |
| 3      | 648                                           | 29                                  |
| 4      | 641                                           | 29                                  |
| 5      | 660                                           | 30                                  |
| 6      | 660                                           | 30                                  |
| 7      | 339                                           | 15                                  |
| 8      | 250                                           | 11                                  |
| 9      | 227                                           | 10                                  |
| 10     | 360                                           | 16                                  |
| 11     | 325                                           | 15                                  |
| 12     | 329                                           | 15                                  |
| 13     | 306                                           | 14                                  |
| 14     | 297                                           | 14                                  |
| 15     | 201                                           | 9                                   |
| 16     | 183                                           | 8                                   |
| 17     | 64                                            | 3                                   |
| 18     | 64                                            | 3                                   |
| 19     | 62                                            | 3                                   |
| 20     | 74                                            | 3                                   |
| 21     | 29                                            | 1                                   |
| 22     | 29                                            | 1                                   |
| 23     | 29                                            | 1                                   |
| 24     | 29                                            | 1                                   |

The following light vehicle numbers are estimated during the construction phase:

Table 4: Anticipated Light Vehicle Movements

| Months | Calculated HCV<br>Movements Per<br>Day | Calculated Staff<br>Movements Per Day | Total Site<br>Movements<br>Anticipated Per<br>Day |
|--------|----------------------------------------|---------------------------------------|---------------------------------------------------|
| 1      | 3                                      | 50                                    | 53                                                |
| 2      | 28                                     | 80                                    | 108                                               |
| 3      | 29                                     | 110                                   | 139                                               |
| 4      | 29                                     | 110                                   | 139                                               |
| 5      | 30                                     | 60                                    | 98                                                |
| 6      | 30                                     | 160                                   | 198                                               |
| 7      | 15                                     | 160                                   | 175                                               |
| 8      | 11                                     | 220                                   | 231                                               |
| 9      | 10                                     | 280                                   | 290                                               |
| 10     | 16                                     | 300                                   | 316                                               |
| 11     | 15                                     | 340                                   | 355                                               |
| 12     | 15                                     | 360                                   | 375                                               |
| 13     | 14                                     | 300                                   | 314                                               |
| 14     | 14                                     | 320                                   | 334                                               |
| 15     | 9                                      | 220                                   | 229                                               |
| 16     | 8                                      | 180                                   | 188                                               |
| 17     | 3                                      | 160                                   | 163                                               |
| 18     | 3                                      | 100                                   | 103                                               |
| 19     | 3                                      | 70                                    | 73                                                |
| 20     | 3                                      | 70                                    | 73                                                |
| 21     | 1                                      | 70                                    | 71                                                |
| 22     | 1                                      | 60                                    | 61                                                |
| 23     | 1                                      | 80                                    | 81                                                |
| 24     | 1                                      | 80                                    | 81                                                |

## 5.5 General Methodology

### 5.5.1 Equipment/Machinery

Civil and construction works will be carried out with a range of plant, including but not necessarily limited to the following:

Table 5: Plant List

| Plant                                            | Noise level at 10m from plant (dB L <sub>Aeq</sub> ) |
|--------------------------------------------------|------------------------------------------------------|
| Driven piling (ramming machine)                  | 97                                                   |
| Woodchipper                                      | 86                                                   |
| Hydraulic breaking (concrete)                    | 84                                                   |
| Drill rig                                        | 79                                                   |
| Directional drill                                | 77                                                   |
| Plate compactor                                  | 77                                                   |
| 14t bulldozer                                    | 77                                                   |
| 7t bulldozer                                     | 73                                                   |
| 6t padfoot roller                                | 73                                                   |
| Concrete pump and truck discharging              | 72                                                   |
| Front end loader                                 | 72                                                   |
| Excavator mounted 600kg drop hammer              | 72                                                   |
| Excavation and loading trucks with 30t excavator | 72                                                   |
| 100t mobile crane under load                     | 71                                                   |
| Excavation and loading trucks with 20t excavator | 69                                                   |
| Generator                                        | 66                                                   |
| 5t vibratory compaction roller                   | 66                                                   |
| 20t grader                                       | 65                                                   |
| Use of power tools                               | 65                                                   |
| 10t grader                                       | 62                                                   |
| Watercart (10,000l)                              | 62                                                   |
| Idling dump truck                                | 62                                                   |
| 5t static compaction roller                      | 62                                                   |

### 5.5.2 Dewatering

To allow for efficient construction, it may be necessary to dewater both trenches and foundations in the event of either rainwater or ground water intrusion. Full details of methodology and controls associated with dewatering are set out in the Erosion and Sediment Control Plan, which should be read in conjunction with this plan. The following provides a summary of activities:

Dewatering extraction techniques are likely to include:

- Direct extraction using a sump pump (trenching and shallow foundations).
- Well pointing (substation foundations).

Retention/Discharge methods are likely to comprise of a mix of the following:

- Temporary storage and reuse for non-potable purposes such as within a water cart for dust control.
- Controlled discharge to land, utilising the likes of: a decanting earth bund; turkeys nest; sediment retention ponds; sediment dewatering bags.

## 6 Environmental Controls

### 6.1 Construction Traffic Controls

The Construction Traffic Management Plan contains details on the management of all construction traffic and should be read in conjunction with this document. The following provides a summary of traffic management controls:

- All construction access to be via the designated access points included in Figure 4.
- On-site parking and manoeuvring areas to be clearly sign posted and/or demarcated.
- Inductions to toolbox talks to include information about site access, safe driving and any activities that will impact the roading networks (e.g. temporary controls or delivery of oversized vehicles).
- All staff and contractors are required to report traffic near-misses or accidents to the Site manager.
- All site accesses to be available to emergency vehicles and emergency plans to include clear instructions regarding access.

### 6.2 Construction Noise and Vibration Controls

The Construction Noise Management Plan contains details on the management of all construction traffic and should be read in conjunction with this document. The following provides a high-level summary of construction noise management controls:

- Compliance with construction hours.
- Compliance with construction noise levels.
- Compliance with setback distances.
- Selection of most appropriate equipment for construction activity.
- Ensuring machinery is well maintained throughout the project.
- Switching off machinery when not in use.
- Good practice when using tipper trucks including:
  - Not slamming tail gates
  - Avoiding engine breaking
  - Loading softest material first (when possible).
- Best practice among staff, such as:
  - Communication via radios to avoid shouting
  - No playing of amplified music in workspaces.
- Use of mitigation measures where required.
- Monitoring of noise levels where required.

### 6.3 Erosion and Sediment Control

The Erosion and Sediment Control Plan (ESCP) contains details regarding the management of earthworks activities on site and should be read in conjunction with this document. Specifically, the ESCP details:

- Proposed earthworks.
- Staging of works.
- The location and types of control measures.
- Winter works controls.
- Dust control requirements.
- Monitoring requirements.
- Dewatering methods and requirements.

### 6.4 Hazardous Substances

The Hazardous Substances and Site Safety Management Plan contains:

- A list of hazardous substances that will be on site during construction.
- Requirements for storage and segregation.
- Risk management and controls.
- Requirements of Site storage.
- Requirements for labelling and signage.
- Safety data sheets.
- Requirements for training and supervision.
- Emergency response and incident management procedures.
- Waste and disposal requirements.
- Monitoring and review requirements.

### 6.5 Bat Management

The Bat Management Plan contains details on the management of activities on site so as to avoid adverse effects on bat. The Bat Management Plan should be read in conjunction with this document.

In summary it includes:

- Requirements for the assessment of trees by a SQEP to establish potential for bat roost prior to any removal.
- Where potential bat roost is identified additional measures (including acoustic monitoring and manual inspection) to ensure no bats are present.
- Where bat roost is confirmed a delay in removal of trees until no bats are present along with SQEP supervision.
- Requirements for additional mitigation where bat roost is confirmed.

## 6.6 Imported Fill

Any fill required to be imported to the site will comprise only of cleanfill, with the primary fill being engineered fill for the purpose of road/foundation construction.

The following requirements will apply:

- Imported fill must meet cleanfill requirements and only include virgin materials such as clay, soil and rock and/or inert materials such as concrete and brick.
- Fill must be placed in the pre-approved areas identified in the cut and fill plans attached at [Appendix x], including in any stockpile areas.
- No fill is to be placed until the appropriate erosion and sediment control measures are in place and approved in accordance with the Erosion and Sediment Control Plan.
- Fill must be appropriately placed and compacted (where required) in accordance with the requirements of the Geotech report [attached at appendix x] to avoid any land instability.
- The Contractor must maintain a site logbook to identify all loads entering the Site, recording the date of each truck, and estimated volume, and the source and type of material deposited.

## 6.7 Dust Control

Dust management for the HSF will comply with the *Good Practice Guide for Assessing and Managing Dust (Ministry for the Environment, 2016)*<sup>1</sup> to ensure that any dust caused by construction operations on the Site does not cause an effect that is noxious, dangerous, offensive or objectionable at or beyond the boundary of the Site.

[The contractor] will be responsible for implementing appropriate dust management practices throughout the construction phase, including:

- Staging of works (to reduce the extent of soil exposed). Conducting earthworks in phases and align high dust activities with low wind to reduce dust lift.
- Use of water tanker to dampen exposed surfaces during dry periods to ensure sufficient moisture during earthworks. Adjusting the wetting frequency based on relative dryness and wind conditions.
- Where necessary, covering of exposed soils and stockpiles, including strategic positioning of stockpiles and taking all reasonable steps to reduce their size, height and duration on site.
- Avoidance of high dust generating activities during adverse weather conditions.
- Progressive stabilisation and reinstatement of exposed soil as soon as practicable, including revegetation of exposed areas promptly once work allows.
- Implementation of speed limits across unsealed roads and ensuring covering of soil loads on transport vehicles to prevent dust escape.

The following monitoring will be implemented for the site for the duration of construction phase activities:

- Regular visual assessments to detect dust generation across the site, in particular at the site boundaries.

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<sup>1</sup> <https://environment.govt.nz/assets/Publications/Files/good-practice-guide-dust-2016.pdf>.

- Regular visual inspections of the entranceways and site access roads to ascertain level of dust generation at the entranceway related to vehicle movements and tracking of material.

## 6.8 Cleanfill

Cleanfill, primarily aggregate and sand will be utilised on site for the construction of roads and foundations and within trenches.

All cleanfill must be limited to natural materials such as clay, soil and rock and other inert materials such as concrete and brick, or mixtures of any of the above. Cleanfill must be of an appropriate size and placed to ensure it does not result in land instability.

## 6.9 Accidental Discovery – Cultural or Archaeological Site

In the event that an unidentified archaeological site or human remains (kōiwi) is located during works, the following Accidental Discovery Protocol will be followed for all construction phase works. The Accidental Discovery Protocol to be used is outlined in condition [A7] and below:

- Works must cease immediately at that place, shut down all machinery and demarcate an exclusion area 20m around the site.
- The contractor must secure the site, and advise the Construction Manager.
- The Construction Manager must ensure the site is secured and notify the Project Archaeologist.

In the event the project Archaeologist identifies the accidental find to be an archaeological site or human remains (kōiwi), the Construction Manager must:

- Inform the relevant authorities or parties of the discovery, including
  - NZ Police if the discovery is of human remains or kōiwi;
  - The councils in all cases;
  - Heritage New Zealand if the discovery is an archaeological site, Māori cultural artefact, human remains or kōiwi;
  - Raukawa Settlement Trust, Ngāti Haua Iwi Trust and Te Puāwaitanga o Ngāti Hinerangi Trust, if the discovery is an archaeological site, Māori cultural artefact, human remains or kōiwi.
- Ensure site access to Raukawa Settlement Trust, Ngāti Haua Iwi Trust and Te Puāwaitanga o Ngāti Hinerangi Trust to enable appropriate cultural procedures and tikanga to be undertaken, provided all statutory requirements under legislation are met (Heritage New Zealand Pouhere Taonga Act 2014, Protected Objects Act 1975).
- Consultation will be undertaken with iwi representatives from Raukawa Settlement Trust, Ngāti Haua Iwi Trust and Te Puāwaitanga o Ngāti Hinerangi Trust and the Heritage New Zealand Pouhere Taonga Regional Archaeologist to determine and advise the most appropriate course of action.
- Where iwi so request, any information recorded as the result of the find such as a description of location and content, is to be provided for their records.
- If the iwi representatives request the kōiwi may be further analysed by a skilled bio-anthropological specialist prior to reburial, in line with the Heritage New Zealand Pouhere Taonga Guidelines Kōiwi Tangata Human Remains (2014).
- Heritage New Zealand will determine if an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014 is required for works to continue.

- Works affecting the archaeological site, Māori cultural artefact(s), and any human remains shall not resume until Heritage New Zealand Pouhere Taonga gives written approval for works to continue.

## 6.10 Accidental Discovery – Contaminated Soils

Where soil appears:

- Discoloured.
- Stained.
- Odorous.
- Contains fibrous material.
- Contains refuse.

It may indicate contamination is present.

Where such soils are discovered, the following protocol shall be implemented:

- Stop work in the area of discovery and demarcate an exclusion area around the site.
- Notify the Construction Manager of the potentially contaminated soil.
- Construction Manager to contact a Suitably Qualified and Experienced Person (SQEP) to assess the nature of the material.
- Work to re-commence if the SQEP advises no contamination is present and it is safe to proceed.
- Where the SQEP confirms soil is contaminated the SQEP will advise on next steps, this may include, but not be limited to the preparation of a Site Management Plan in accordance with the requirements of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health will be required. The Site Management Plan may include (but not necessarily be limited to):
  - Protocols for the removal of contaminated materials
  - Transport requirements (e.g. covering of loads)
  - Requirements for record keeping
  - Requirements for disposal at a suitable landfill
  - Additional Erosion and Sediment Control and/or Stormwater requirements
  - Additional dust control requirements.
  - Additional Health and Safety Requirements
  - Validation Sampling.
- Works may proceed only on advice of the SQEP and in accordance with the Site Management Plan.

## 6.11 Waste Management

If not appropriately handled, waste from construction activities can create adverse environmental effects. This can include nuisance effects to the public and neighbouring properties and adverse effects on the health and survival of flora and fauna. Accordingly, the following set out protocols and for the management of waste during the construction period.

- Work areas to be maintained in a clean and tidy state – with waste transported to appropriate containers at least twice a day.
- Waste should be separated by type and placed in separate containers for collection. All cardboard and paper to be recycled.
- All waste to be stored in covered containers away from external property boundaries.
- Waste to be transported to the appropriately licenced facilities off-site.

## 7 Emergency Contacts and Response

The emergency number for Fire, Police and Ambulance in New Zealand is 111.

An Emergency Response Plan is included in [Appendix x] of the Health and Safety Management Plan and reference should be had to that document. The Emergency Response Plan includes:

- Roles and responsibilities.
- Training requirements (e.g. first aid, fire wardens, evacuation and lock down protocols).
- Sign in and sign out protocols.
- Possible emergency types and responses.
- Appropriate landing coordinates for a helicopter.
- Preventative measures and site signage requirements.
- Emergency procedures.
- Emergency contact numbers.
- Emergency radio channels and radio protocol.
- Medical centre contact details and protocols for non-emergency injuries.

By way of summary, the Emergency Response Plan sets out the following emergency procedures:

- Using channel [x or x] on the UHF radio state “emergency, emergency, emergency”. A responder will then take the caller through the emergency response process while coordinating a response.
- On hearing the emergency call all other personnel on site to stop work, maintain radio silence and await instructions via radio.
- If necessary, an order to evacuate will be issued over UHF radio as follows: ‘Emergency, Emergency, Emergency, all personnel to nearest muster point immediately, all personnel to maintain radio silence.’ The radio call will be followed by the sounding of an air horn three times.

Emergency services may access the site through any access (including those not in use for construction purposes).

## 8 Contractor and Staff Training

### 8.1 Induction

All staff, contractors and subcontractors must complete an induction prior to carrying out work within the site. The induction will include, at a minimum:

- Overview of roles and responsibilities.

- Specific locations within the site of environmental significance and risk.
- Pertinent conditions of resource consent.
- Health and safety requirements.
- How to report incidents and hazards.
- Control measures (e.g. noise and vibration).
- Waste control requirements.
- Accidental discovery protocols.

## 8.2 Cultural Induction

[This section to be completed with the assistance of mana whenua, should they choose to assist, it is expected to include (but not be limited to) the following:

- The cultural significance and relationship of mana whenua to the whenua, wider landscape, waterways and places of significance.
- The role of mana whenua as kaitiaki and partners to the project
- The role of all parties in protecting and caring for the whenua and waterways.
- Discussion regarding accidental discovery protocols.]

## 8.3 Pre-starts and Tool-Box Talks

All staff, contractors and subcontractors will be required to attend daily pre-start meetings, which will include (at a minimum):

- Details of activities for the day, including any associated hazards or environmental risks.
- Relevant environmental controls.
- Area work restrictions.
- Coordination between trades or contractors.
- Health and safety reminders.

Tool-box talks, held in conjunction with pre-starts will be held atleast weekly. Tool-box talks may cover a range of topics designed to improve staff wellbeing, ensure health and safety standards are maintained and bring awareness to environmental and cultural matters.

Pre-start meetings will be held atleast daily and will focus on the days activities, areas of work, interaction between subcontractors, weather conditions, special events occurring on that day.

Pre-starts and tool-box talks will be prepared and delivered by the Health, Safety and Environment Manager or their delegate. Specialist staff or advisors may also be invited to speak on topics as appropriate.

# 9 Monitoring and Reporting

## 9.1 Compliance Monitoring

| Environmental Inspection | Timing                                         | Purpose                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Responsible Person    |
|--------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| End of Day Inspection    | End of Each Working Day                        | <p>Site walkover to ensure:</p> <ul style="list-style-type: none"> <li>▪ Erosion and sediment controls are present and functional.</li> <li>▪ Identify any activities that may cause an environmental incident or adverse effect.</li> <li>▪ Ensure all temporary signage is in place and visible.</li> <li>▪ Ensure any exclusion zone flagging is in place.</li> <li>▪ Check for rubbish and dispose of any rubbish left on site.</li> </ul>                      | Environmental Manager |
| Weekly Inspection        | Weekly                                         | <ul style="list-style-type: none"> <li>▪ Comprehensive environmental inspection of the site to verify that the management measures prescribed in Management Plans are present and functional.</li> <li>▪ Identify any activities that may cause an environmental incident or adverse effect.</li> <li>▪ Identify any maintenance requirements for environmental controls.</li> </ul> <p>Weekly inspections are to be recorded on a Weekly Site Inspection Form.</p> | Environmental Manager |
| Pre-Event Inspection     | Prior to forecasted heavy rain event           | <p>To ensure that:</p> <ul style="list-style-type: none"> <li>▪ Erosion and sediment controls are present and functional and adequate for the forecasted event.</li> <li>▪ Identify any maintenance or additional controls required and ensure they are implemented.</li> </ul>                                                                                                                                                                                     | Environmental Manager |
| Post-Event Inspection    | Immediately following a significant rain event | <p>To ensure that:</p> <ul style="list-style-type: none"> <li>▪ Erosion and sediment controls are present and functional.</li> <li>▪ Ensure all temporary signage is in place and visible.</li> <li>▪ Ensure any exclusion zone flagging is in place.</li> <li>▪ Identify any maintenance required.</li> </ul>                                                                                                                                                      | Environmental Manager |

## 9.2 Non-Conformance Management

Any non-conformance with a Management Plan and/or associated environmental control identified as part of an inspection, as a result of an incident or identified by a grievance/complaint must be recorded in a Non-Conformance Register. The register will detail the required corrective action(s), due dates and record when actions are completed.

# 10 Stakeholder Engagement and Grievance Management

## 10.1 Stakeholder Engagement

### Local Residents

Pro-active stakeholder engagement will be undertaken to inform local residents of:

- The commencement of the construction period, including details such as:
  - Expected construction timeframe
  - Expected construction activities
  - Any environmental controls that may impact residents (e.g. temporary traffic management)
  - Contact details for the Stakeholder Engagement Officer
- Prior to any major deliveries or activities that will require temporary traffic management

In addition, quarterly newsletters should be provided to the local community and published on a project website.

### Council

Communications with Council(s) must, at a minimum, be in accordance with consent conditions. This includes:

- Pre-start meeting arrangements.
- Confirmation of dates of enabling and construction works.
- Sharing of complaints and resolutions

For ease of communications Council, the Contractor and the Consent Holder may agree to a set meeting cadence so that progress updates can be provided.

## 10.2 Complaints Management

Where complaints are received during the construction, the following steps must be taken:

- The complaint must be forwarded to the [delegated person].
- The complaint must be recorded in the complaints register with the following information:
  - The date, time and duration of the event/incident that has resulted in a complaint;
  - The location of the complainant when the event / incident (if possible, specify nature of incident e.g. dust nuisance) was detected;
  - The possible cause of the event / incident;
  - The weather conditions and wind direction at the Site when the event / incident allegedly occurred; and
  - Any other relevant information
- As soon as reasonably practicable, but within 2 working days, details of the complaint must be provided to:
  - The Waikato Regional Council where they relate to activities authorised under the Waikato Regional Plan or National Environmental Standard for Freshwater; or
  - The Matamata-Piako District Council where they relate to activities authorised under the Matamata-Piako District Plan.

- The complaint must be investigated and responded to as soon as reasonably practicable and within 5 workdays. The response must address:
  - The outcome of the investigation and/or details of any ongoing investigation; and
  - Any corrective action or measures taken, or proposed to be taken, to respond to the complaint.
- A copy of the response must be provided to the relevant Council within 5 working days.

A copy of the register must be made available to Waikato Regional Council and Matamata-Piako District Council on request.

## 11 Management Plan Review

This Management Plan will be reviewed and amended as necessary, including where:

- There is a major change to relevant legislation that may result in a change to the requirements of this management plan.
- Where there is a relevant incident or outcome from an incident investigation.

In the event amendments are required, such amendments must be certified by Matamata-Piako District Council in accordance with condition [x] of the resource consent.