

APPENDIX 4

DRAFT CONDITIONS FOR STOCKTON PLATEAU HYDRO SCHEME

General Conditions for WCRC & BDC

1. Exercise of Consents

- 1.1 All activities authorised by these consents shall be undertaken in accordance with the information contained in the Application, Assessment of Environmental Effects ("Stockton Plateau Hydro Scheme") and all supporting documents and plans as provided to the Consent Authorities, except where inconsistent with these conditions.
- 1.2 The Consent Holder shall ensure all key staff and contractors are made aware of the conditions of these resource consents to ensure compliance with the conditions.

2. Fees

- 2.1 The Consent Holder shall pay the Consent Authorities such monitoring, supervision and administration fees, as are fixed from time to time by the Consent Authority in accordance with Section 36 of the Resource Management Act 1991. The Consent Holder shall meet the reasonable costs of compliance of all requirements and conditions of these consents.

3. Lapsing of Consents

- 3.1 All resource consents shall lapse on the expiry of ten years after the date of issue of the consents unless the consents are given effect before the end of that period. ~~or upon application in terms of Section 12(1)(b) of the Resource Management Act 1991, whereby the Consent Authority grants a longer period of time.~~

4. Review of Conditions

- 4.1 Pursuant to Section 128(1) of the RMA 1991, the Consent Authority may review any of the conditions of these consents by serving written notice within a period of three months commencing on the fifth anniversary of the date of commencement of these consents and thereafter every five years for the following purposes:
 - a) To deal with any adverse effect on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage.
 - b) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
 - c) To assess the appropriateness of imposed compliance standards, monitoring parameters, monitoring regimes and monitoring frequencies and to alter these accordingly.
 - d) To ensure that any Management Plans required by these consents gives effect to conditions of those consents.
 - e) To vary the amount of the bond required under condition 5 of these consents in order to provide the Consent Authority with adequate security.

5. Bond

- 5.1 The Consent Holder shall provide and maintain a bond in favour of the Consent Authorities (jointly for their respective interests) with a financial institution of good repute. The purpose of the bond is to secure compliance with conditions of consent including completion of rehabilitation in accordance with the Landscape and Rehabilitation Management Plan.
- ~~5.2 The bond sum shall be NZ\$200,000 (adjusted annually to reflect changes in the Construction Code Index) and shall be maintained at this sum throughout the bond term as defined in condition 5.7 below.~~
- 5.2 The bond shall be in a form acceptable to the Consent Authorities.
- 5.3 Unless the bond is a cash bond, the performance of the conditions of the bond shall be guaranteed by a guarantor acceptable to the Consent Authorities. The guarantor shall bind itself to pay for the carrying out and completion of any condition in the event of any default of the Consent Holder. If the Consent Holder is unable at any time to arrange a guarantor for the quantum as set out in condition 5.7, the Consent Holder will provide a cash bond or bonds for the quantum within 60 days of the date of the renewal.
- 5.4 The bond shall provide that the Consent Holder remains liable under the Resource Management Act 1991 for any breach of these consents which occurs before expiry of these consents and which become apparent during or after the expiry of the relevant consent.
- 5.5 The Consent Holder shall not exercise these consents until the bond has been executed by the Consent Holder and deposited with the Consent Authorities.
- 5.6 The amount (quantum) of the bond may be varied from time to time but at any given time shall be sufficient to cover the estimated costs at that time (including any contingency) of compliance with all conditions, including but not limited to:
- a) Demolition and/or removal of temporary buildings and structures erected during the course of construction activities.
 - b) Rehabilitation by re-contouring, spreading sub-soils and topsoil, re-vegetation and weed control until disturbed areas have been re-established with suitable vegetation.
 - c) Stabilisation of earthworks and landforms.
 - d) Rehabilitation of watercourses disturbed by construction activities, including the installation of erosion protections works where necessary.
- 5.7 The initial amount of the bond shall be fifty thousand New Zealand Dollars (NZ \$50,000).
- 5.8 The Consent Holder shall provide the bond for the quantum stated in condition 5.7 above for a minimum term of two years, such term to be renewed for a minimum of a further three year term (or such other term as the parties may agree) on a yearly basis, after consideration of the annual work plan estimation of costs of complying with condition 5.6 for the coming year.
- 5.9 The term of the bond shall continue until:
- a) Rehabilitated sites have established a 90% planting cover in accordance with condition 21 of land use consents 149/10 -12; and
 - b) The Consent Holder has complied with all the terms and conditions of the resource consent; or

- c) In the reasonable opinion of the Consent Authorities, the likelihood of an adverse effect on the environment arising from the land in respect of which the resource consent has been exercised, is not greater than that from adjacent undisturbed land.

5.10 If the consent is transferred in part or whole to another party or person, the bond shall continue until any outstanding work at the date of transfer is completed to ensure compliance with the conditions of this consent, unless the Consent Authorities are satisfied adequate provisions have been made to transfer the liability to the new Consent Holder.

5.11 In the event of any such transfer of the consent, the Consent Holder shall ensure that the transfer forthwith provides a replacement bond to the Consent Authorities on the terms required by the Bond Conditions.

5.12 The provisions of Section 109 shall apply to any bond, or bonds, required pursuant to the above.

5.13 The Consent Holder shall meet the costs of providing any bond, or bonds, including the costs of the bond and any substitute bond.

6. Notification

6.1 The Consent Holder shall notify the Consent Authority in writing:

- a) Of the intention to commence construction activities of project works, specifying a specific date, as soon as practicable of the date that activities first commence under these consents.
- b) Of the intention to complete construction activities as soon as practicable after construction activities cease and prior to electricity generation commencing.

7. Complaints and Non-compliance

7.1 The Consent Holder shall maintain and keep a complaints register for any complaints received in relation to construction activities and operation of the scheme. The register shall be maintained and publicly accessible on the web site www.hydrodevelopments.co.nz and shall record:

- i) The date, time and duration of the incident that has resulted in a complaint.
- ii) The possible cause of the incident.
- iii) ~~The location of the complainant when the incident was detected.~~
- iii) Any corrective measures taken by the Consent Holder in response to the complaint, including the timing of that corrective action.

The complainants name and details should not appear on the web site.

7.2 The Consent Holder upon receipt of any complaint reported to it by the Consent Authority, shall promptly investigate the complaint, take action to remedy or mitigate the complaint, and inform the Consent Authority of the details of the cause of the complaint and the action taken within 48 hours

7.3 The Consent Holder shall inform the Consent Authority as soon as practicable, but no later than 48 hours of receiving a complaint, of the details of the complaint and the action taken.

7.4 The complaints register shall be made available to the Consent Authority within 48 hours of any formal request from the Consent Authority.

- 7.5 In the event of any breach of the conditions of these consents the Consent Holder shall notify the Consent Authority within 48 hours of the breach being detected. Within 5 days of any breach the Consent Holder shall provide written notification to the Consent Authority which explains the cause of the breach and if the cause was within the control of the Consent Holder, steps which were taken to remedy the breach and steps which will be taken to prevent any further occurrence of the breach.

General Conditions for the WCRC

1. Scheme Design

- 1.1 The Consent Holder shall undertake geotechnical site investigations as appropriate to complete final design in accordance with the Building Act 2004 and Building (Dam Safety) Regulations 2008.
- 1.2 Prior to the commencement of construction of any structures required to exercise these consent, the Consent Holder shall forward to the Consent Authority final design reports ~~for approval~~. The design reports shall include detailed plans of the following:
- a) Weka and Mt William dams, storage reservoirs and associated structures.
 - b) Stockton and Granity Tunnels and outlet portals.
 - c) Mine Creek, Mangatini Stream and Darcy Stream diversion tunnels.
 - d) Instream structures both temporary and permanent including all culverts, weirs and intake structures ~~and showing fish passage provisions where required~~.
 - e) Temporary and permanent transmission lines.
 - f) Granity access ramp, surge chamber and emergency outfall into Granity Stream.
 - g) Ocean outfall pipeline and diffuser.
- 1.3 The design report for the construction of the Granity outlet portal required in condition 1.2(b) above, shall include the following details:
- i) Potential risk of instability at the tunnel portal.
 - ii) Proposed stabilisation and contingency measures.
 - iii) Proposed monitoring measures during construction to ensure satisfactory performance of the portal stabilisation works and contingency actions.
- 1.4 The design report for construction of the ocean outfall pipeline required in condition 1.2 (g) above, shall include the following details:
- i) Interpretation of ground and groundwater conditions based on site investigations.
 - ii) Assessment of expected deformation and trigger levels for contingency actions.
 - iii) The proposed monitoring locations and procedures during construction.
 - iv) The development of actions and contingency plans should expected levels of deformation be exceeded.
 - v) A list of the buildings and structures that may be affected by groundwater and ground settlement changes and proposed methodology to reduce potential impacts.
- 1.3 ~~Prior to the commencement of construction of any structures authorised by these consents, the Consent Holder shall obtain the appropriate building consents required under the Building Act 2004 and Building (Dam Safety) Regulations 2008. Copies of all approved building consents shall be submitted to the Consent Authority.~~
- 1.5 The Consent Holder shall ensure that any variations to any building consent are approved

Comment [HRR1]: Not relevant due to lack of fish present

by the issuing authority and copied to the Consent Authority. The Consent Holder shall prepare and retain final "As Built" plans of all buildings and structures, copies of which should also be forwarded to the Consent Authority.

- 1.6 The dam structures shall as a minimum be designed, constructed and maintained for the life of the project in accordance with NZSOLD Dam Safety Guidelines, November 2000 and any subsequent amendments for high potential impact dams. The guidelines include, but are not limited to:
- a) Engaging suitable designers, peer reviewers and specialists.
 - b) Using appropriate quality measures to the design process.
 - c) Selecting suitable contractors and applying quality assurance procedures for construction of the works.
 - d) Assessing the flood hazard and providing adequate spillways and diversion facilities to manage this potential hazard.
 - e) Assessing the seismic hazard and providing adequate defense against earthquake effects.
 - f) Comprehensively investigating the foundations and construction materials.
 - g) Include appropriate foundation and abutment treatment and seepage controls.
 - h) Establishing an appropriate dam and reservoir surveillance programme in advance of reservoir filling and subsequent visual observations and monitoring against defined performance criteria throughout the operational life of the structures.
 - i) Provision of an emergency action plan appropriate for High PIC dams.
 - j) Regular safety reviews of the dam and associated gates and retaining structures.

2. Management Plans

- 2.1 Not less than three months prior to commencement of construction activities of the project works authorised by these consents, the Consent Holder shall provide to the Consent Authority the following plans, as prepared by suitably qualified persons in accordance with conditions 3 to 5 :
- a) Construction Management Plan.
 - b) Erosion and Sediment Control Plan
 - c) Landscaping and Rehabilitation Management Plan.
 - ~~d) Ocean Outfall Management Plan.~~
- 2.2 [A minimum of 3 months prior to commencing construction of the outfall pipeline \(pursuant to coastal permit 149/2\), an Ocean Outfall Management Plan shall be provided to the Consent Authority, as prepared by a suitably qualified person in accordance with condition 6.](#)
- 2.3 Construction of the project works shall not commence until the management plans [specified in conditions 3 -5](#) have been certified by the Consent Authority. Certification is defined as ensuring that the Management Plans contain the necessary information specified in conditions 3 -5 and meet the requirements set out in more specific conditions of consent.
- 2.4 The Consent Holder may commence construction of project works once the management plans [specified in conditions 3-5](#) have been certified by the Consent Authority or after two months from the date that the last management plans required under [conditions 3 -5](#) have been submitted to the Consent Authority, whichever is the sooner.
- 2.5 The Consent Holder shall not commence discharge via the marine outfall (coastal permit 149/5) until the Ocean Outfall Management Plan specified in condition 6 has been certified by the Consent Authority. Certification is defined as ensuring that the Management

Plan contains the necessary information specified in condition 6 and meets the requirements set out in more specific conditions of consent. The Ocean Outfall Management Plan will be deemed to have the certification of the Consent Authority unless the Consent Holder is otherwise advised in writing within two months of submission of the management plan.

- 2.6 Subject to any other conditions of these consents, all activities shall be undertaken in accordance with the latest certified version of the management plans.
- 2.7 The Consent Holder may review and revise any management plan at any time after they have been submitted to the Consent Authority on the following terms:
- (a) The review shall be undertaken in consultation with and certified by the Consent Authority.
- (b) Such review is necessary to give effect to the purpose of the management plan.
- (c) The Consent Holder shall pay all actual and reasonable costs of the Consent Authority in connection with the review of all management plans prior to their certification.
- 2.8 The revisions to management plans shall be submitted to the Consent Authority for certification two months prior to the intended implementation. The revised management plan will be deemed to have the certification of the Consent Authority unless the Consent Holder is otherwise advised in writing within two months of submission of the revisions.
- 2.9 The Management Plans may be submitted in sections which cover discrete components of the project to allow for the staged development of the hydro scheme. When viewed as a whole the respective sections must be consistent with the requirements of conditions 3 to 7 and must achieve comprehensive management plans for the entire project.

3. Construction Management Plan

- 3.1 Prior to the commencement of construction of the project works, a Construction Management Plan shall be submitted to the Consent Authority. The purpose of the management plan shall be to:
- To describe the methods proposed for the construction of the scheme and the programme for construction of each element.
 - Describe what actions will be taken to manage the actual or potential effects of construction activities associated with the scheme.
 - To describe the methodology and certification procedures for making changes to the Construction Management Plan.
 - To ensure that the practices and procedures for construction achieve compliance with the conditions of consent as they relate to construction work.
 - That the Consent Holder undertakes its best endeavors to ensure that the environmental nuisance effects of construction activities are minimised to the greatest extent possible.
 - To minimise the overall area of disturbance, so as to reduce the potential impact on vegetation, native fauna, and waterways.
 - To ensure the conservation of overburden, soil and vegetation for subsequent use in the rehabilitation.
 - To ensure that appropriate monitoring and reporting of all activities is undertaken in accordance with the resource consent conditions.
 - To minimise sediment generation and sediment laden runoff.
- 3.2 The Construction Management Plan shall as a minimum address the following matters:

- a) Construction programme and timetable detailing the works and proposed duration of each stage and the sequence of events.
- b) Description of all construction works including the dams, storage reservoirs, diversion/intake structures, tunnels, roads, power stations, substations and transmission lines.
- c) A site map which shows the buffer zones, sound bounds and fencing at-the Granity construction area.
- d) Detailed plans and methods of construction of the ocean outfall pipeline and diffuser and the emergency outfall into Granity Stream.
- e) Details and site plan of all construction plant and buildings to be used on-site.
- f) Detailed plans for both the temporary and permanent realignment of Repo Basin and Millerton walking tracks.
- g) Detailed plans for the Weka interpretative visitor display, including indicative information and display format.
- h) Details of methods of vegetation clearance and earthworks including disposal of stripped material, stockpiling activities and roading construction.
- i) An outline of the critical elements of the scheme where geotechnical investigation is required for the construction.
- j) Detailed plans, methods and timing of in-stream works including the temporary dam sluices and temporary stream diversions and the permanent structures such as the weirs, intakes and spillways.
- k) Measures for cleaning machinery and equipment prior to transport to the construction work areas on Stockton Plateau.
- l) Methods for management of solid waste generated during project construction including identification of solid waste, methods for minimising solid waste generation and description of disposal methods.
- m) Health and Safety measures to ensure public safety including hazard identification and management including erection of signs at appropriate locations warning public of dangers in construction areas.
- n) Methods for the management of nuisance dust generated as a consequence of construction activities.
- o) Details and locations of any proposed settling ponds, sediment traps or other treatment systems to be used for contaminated waters prior to discharge.
- p) Traffic management plan to ensure a safe and efficient transport system including showing the improvements required for existing accesses, details of design of new accesses and roads, details of rehabilitation of temporary roads/accesses and details concerning traffic movements.
- q) The name and contact details of key positions and points of contact, including an appropriately qualified staff member to manage environmental issues and any community complaints on site, have responsibility for managing and responding to environmental issues, any community complaints and ensure management plans and consent conditions are adhered to throughout construction.
- r) Detailed Plans, specifications, operation and maintenance of the various components of the Project including the dams, spillways, tunnels, power stations, intakes and diversion structures.
- s) Archaeological protocols.
- t) Contractor training.
- u) Security and lighting management during construction.
- v) Hours of operation

3.3 The Construction Management Plan shall include a sub-section entitled: "Hazardous Substances Management Plan" which shall detail the practices and procedures to be adopted to ensure that hazardous substances are managed so that their storage and use is carried out safely and will not adversely affect the environment. The Hazardous

Comment [HRR2]: All other matters noted by Council Planners are already contained within plan provisions or dealt with in other management plans

Substances Management Plan shall as a minimum address the following matters:

- a) Identify hazardous substances, including explosives, oils and fuels which are used in the construction phase and also the operation phase of the project.
- b) Describe the storage and handling procedures for hazardous substances.
- c) Provide details of the regular inspections and maintenance of the construction site, vehicles and equipment-
- d) Practices and procedures for dealing with accidental spills of hazardous substances during construction, transportation or commissioning of the scheme to ensure spill response contingency plans will be met.

4. Erosion and Sediment Control Plan

4.3 Prior to the commencement of construction of the project works, an Erosion and Sediment Control Plan shall be submitted to the Consent Authority. The purpose of the management plan shall be to:

- To ensure construction activities achieve compliance with the conditions of consent for these activities.
- To ensure that the effects of erosion on water quality are minimised.
- To ensure consistency with Auckland Regional Council Technical Publications TP10 and TP90.
- To undertake assessment of sediment movement within all the impacted watercourses and address ongoing procedures for sediment control once the scheme is commissioned.

Comment [HRR3]: The Sediment Management Plan has been incorporated into this plan.

4.4 The Erosion and Sediment Control Management Plan shall as a minimum address the following matters:

- a) Methods of conducting earthworks, disposal of excavated material and surface water, sediment and erosion management.
- b) Detailed design, location, operation and maintenance of stormwater runoff controls and sediment control facilities during construction activities of the site, including detailed engineering plans and design specifications.
- c) Methods to minimise sediment generation and sediment laden run off.
- d) Procedures for maintaining sediment control devices and the disposal of sludge/sediment.
- e) Training and supervision of operators and contractors associated with sediment control activities.
- f) Methods for ensuring that all stormwater runoff from construction activities is directed through sediment control facilities prior to discharge to natural watercourses.
- g) Describe the existing sediment movements for all the watercourses to be impacted by the scheme.
- h) Describe the measures to be implemented to control sediment within the reservoirs in order to minimise sediment discharges at the ocean outfall.
- i) Operational measures to control sediment entering the scheme, particularly while active mining is occurring in the catchment.

5. Landscape and Rehabilitation Management Plan

5.1 Prior to the commencement of construction of the project works, a Landscape and Rehabilitation Management Plan shall be submitted to the Consent Authority. The purpose of the management plan shall be to:

- Establish an indigenous vegetation cover on all disturbed areas appropriate to the respective construction site locations.
- To ensure short and long term stability of disturbed land and their surrounds.
- Visually integrate finished structures, landforms and vegetation into the surrounding landscape.
- To prevent weeds and pests invading the site so far as is reasonably possible, and otherwise to eradicate or control weeds and pests on the site.

5.2 The Landscape and Rehabilitation Plan shall as a minimum address the following matters:

- Construction sequence and timetable of rehabilitation activities.
- ~~Measures for minimising the area to be disturbed.~~
- Measures for rehabilitating all disturbed areas resulting from exploration drilling operations and areas outside of permanent occupation.
- Rehabilitation strategies for all disturbed areas on the Stockton Plateau including roads, transmission lines, reservoir margins, dams/embankments, stream intake/weir structures, Weka power house area and Granity construction site so that finished landforms and vegetation cover are integrated into the natural landscape.
- Landscaping strategies for the Granity construction area as determined in consultation with the respective landowners and the Granity Community Liaison Group.
- Rehabilitation procedures that will maximise the blending of the permanent access roads and reservoir margins into the surrounding landscape.
- Contouring and rehabilitation strategies for the progressive rehabilitation of the two sediment fill sites, once used as permanent fill sites.
- Landscaping strategies for the realigned portions of the Repo Basin and Millerton incline walking tracks to achieve integration with the surrounding natural landscape.
- The design and appearance of visitor interpretation displays and any associated structures.
- Measures to be implemented where direct vegetative transfer fails to successfully establish.
- Methods for monitoring the success of revegetation planting to ensure a 90% coverage of rehabilitated areas, as taken from initial coverage pre-disturbance.

Comment [HRR4]: All other matters listed by Council Planners are covered in specific conditions of consent.

5.3 The Landscape and Rehabilitation Management Plan shall include a sub-sections entitled "Weed and Pest Management" which shall provide details of weed and predator control measures and shall as a minimum address the following matters:

- A description of the areas within which control will be undertaken.
- A description of exotic plant and/or animal predator species that will be targeted.
- A description of the control techniques that will be used.
- The timeframe for and frequency of control operations, with control measures to be undertaken until such time as 90% planting coverage on rehabilitated areas has been achieved.
- A description of the monitoring that will be undertaken to assess the effectiveness of control operations.
- To undertake a programme of *Juncus squarrosus* control on all disturbed areas within the Project footprint, preventing the establishment of this invasive weed.
- Control of predators, particularly stoats and possums in the disturbed areas during construction and during the rehabilitation phase.

6. Ocean Outfall Management Plan

6.1 A minimum of 3 months prior to commencing construction of the outfall pipeline (coastal permit 149/2), an Ocean Outfall Management Plan shall be submitted to the Consent

Comment [HRR5]: Water quality modelling will be an on-going process with this rewording reflecting this

Authority. The purpose of the management plan shall be to:

- Describe additional water quality field trials, modeling and laboratory studies that will be undertaken to verify predictions of the actual water quality to be discharged from Weka outfall into the coastal marine environment. This information to aid in determination of the final configuration of the outfall diffuser design.
- Describe the monitoring regime that will be implemented for the Weka outfall to ensure the discharge meets ANZECC water quality guidelines at the edge of the mixing zone, as per conditions of consent.
- Describe the monitoring programme that will be undertaken to manage the actual or potential effects of the discharge on the coastal environment.
- Describe the mitigation measures that will be undertaken in the event that the discharge does not comply with conditions of consent.

6.2 The Ocean Outfall Management Plan shall as a minimum address the following matters:

- a) Establishment of water quality modeling studies to confirm the range of acidity, pH levels and required dilutions to meet ANZECC (2000) the water quality guidelines specified in condition 14 at the edge of the mixing zone.
- b) Modelling studies to include analysis of dilution at expected low, medium and high flows from Weka outfall. This information to be used to assess whether the effluent will meet water quality guidelines, particularly pH at the edged of the mixing zone under all flow conditions.
- c) An analysis of the range of acidity and pH levels for the Weka outfall discharge in order to assess the likely pH changes at the edge of the mixing zone and operational constraints .
- d) On determination of the range of operational discharges for Weka outfall as per item (a) - (c) above, development of a discharge monitoring programme for the Weka outfall discharge to ensure compliance with conditions of consent.
- e) Establishment of a one-off dispersion and dilution study to validate the predicted initial dilution results of the constituents of the Weka outfall under reasonable worst-case conditions.
- f) Establishment of a marine baseline survey in the vicinity of the final diffuser location, with focus on benthic infauna, sediment chemistry and local physical oceanography characteristic.
- g) Monitoring programme of benthic infauna, sediment chemistry and discharge water quality including the timing, location and frequency of the sampling programme.
- h) Management measures to be implemented when extreme climatic conditions adversely affect water quality conditions within Weka Reservoir and create a potential for non-compliance with conditions of consent.
- i) To describe the methodology and certification procedures for making changes to this management plan.

7. Annual Monitoring Report and Work Plan

7.1 The Consent Holder shall prepare and submit an Annual Monitoring and Work Plan to the Consent Authorities within 30 days of the anniversary of the commencement of construction of project works (being the date advised in Notification Condition 6.1(a)) and thereafter at yearly intervals until all rehabilitation requirements have been meet. The purpose of the plan shall be to:

- Provide an overview of the monitoring and reporting work undertaken and any issues that have arisen during construction of the scheme.
- A description of the operations and rehabilitation measures undertaken in the previous 12 months and the forthcoming 12 months.

Comment [HRR6]: This allows for plan to be readily reviewed in the event that actual water quality monitoring establishes a need to change weka outfall monitoring

- A calculation of the extent of rehabilitation remaining to be completed and the costs associated with such rehabilitation.

7.2 The monitoring period in each report shall be for the preceding 12 month period and shall as a minimum include the following matters:

- Detail all environmental monitoring undertaken.
- Summarise all the data collected as required under the conditions of these consents and management plans.
- Highlight and discuss any important environmental effects.
- Summarise any construction difficulties, changes or improvements undertaken.
- Summarise any difficulties in compliance with and breaches of, the conditions of the consent and the measures adopted to remedy or mitigate adverse effects and avoid reoccurrence.
- Summarise any complaints received and any action taken by the Consent Holder to address the complaint.
- Summarise any actions or initiatives proposed by the Granity Community Liaison Group in response to complaints received or issues which have arisen.

7.3 The work plan shall include the following matters:

- A schedule of the operations, mitigation measures and rehabilitation carried out over the previous 12 months term.
- Any explanation of any departure in the last 12 months from the previous annual work plan.
- A schedule of the operations, mitigation measures and rehabilitation intended to be undertaken within the next 12 months, including a general timetable of key construction and rehabilitation times.
- An evaluation of the of the extent of rehabilitation remaining to be completed and the cost associated with such rehabilitation in terms of the items listed in Bond Condition 5.6.

8. Scheme Operation

8.1 The Consent Holder shall produce an Operation, Maintenance and Surveillance Manual specifying those procedures to be adopted by the Consent Holder, or parties under its control with respect to the operation of the Stockton Plateau Hydro Scheme. This Manual shall be consistent with the recommendations of the NZSOLD Dam Safety Guidelines November 2000 (and any subsequent amendments) and shall detail how the safety of the scheme will be operated and maintained at all times. As a minimum the manual shall address the following matters:

- Operational procedures for the Weka and Mt William spillways and the Granity Stream emergency spillway.
- Procedures for operation of the weir gates on Mine and Mangatini Streams.
- Procedures for controlling sediment build-up in the reservoir silt traps.
- Procedures for the ocean outfall.
- Comprehensive safety procedures and inspections.
- Comprehensive safety review procedures.

8.2 This Manual shall be prepared by a suitably qualified person and provided to the Consents and Compliance Manager of the WCRC at least one month prior to the commissioning of the scheme. The scheme will be deemed to be commissioned on commencement of coastal permit 149/5 permitting discharge into the marine environment.

Comment [HRR7]: The matters raised by the Council Planners have already been covered or are dealt with under other consent conditions

- 8.3 Any emergency spill into Granity Creek shall be reported in writing to the Consents and Compliance Manager of the WCRC within 5 working days of such a spill occurring. Notification shall include an assessment of any impacts on the environment and any remedial measures required to be undertaken as a consequence of the exercise of this consent.
- 8.4 Where practicable, the Consent Holder shall notify downstream property owners, NZTA and Kiwi Rail not less than 24 hours prior to using the emergency spillway into Granity Creek. Where it is not practicable to do so the Consent Holder shall notify the aforementioned parties immediately upon the use of such emergency spillway.
- 8.5 ~~The Consent Holder shall ensure that inspections and safety reviews of structures shall be carried out at intervals in accordance with the recommendations of the NZSOLD Guidelines. This includes, but is not limited to:~~
- ~~Visual observations and monitoring;~~
~~Regular safety reviews.~~
- 8.6 The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of the consents and for any erosion control and energy dissipation works which become necessary as a consequence of these consents.

Comment [HRR8]: The term "where practicable" is defined in an advice note at the end of these conditions.

9. Hazardous Substances

- 9.1 Hazardous substances and dangerous goods shall be stored and handled in accordance with the methods set out in the Hazardous Substances Management Plan, required by Construction Management Plan Condition 3.3.
- 9.2 Refueling, lubrication, mechanical repairs and storage of hazardous substances or dangerous goods shall be undertaken in such a manner so as to ensure that spillages of hazardous substances or dangerous goods on to the land surface or into a waterbody do not occur. Any accidental discharge of greater than 20 litres shall be reported immediately to the Consent Authority along with details of the steps taken to remedy and/or mitigate the adverse effects of the discharge.
- 9.3 Bunds shall be positioned around the perimeter of mobile fuel tankers to capture any potential spills. Bunding to be designed to capture at least 110% of the stored volume. Tankers shall be located in areas with an impervious surface and clean-up equipment shall be maintained so that it is in proper working condition at each fuel store throughout the duration of the project.
- 9.4 The powerstation switch yards shall be designed to ensure that transformers are located in sealed and bunded areas to contain any potential leakage of hazardous substances. Bunding to be designed to capture at least 110% of the stored volume. Clean-up equipment shall be maintained so that it is in proper working condition at each powerstation.
- 9.5 The Consent Holder and all contractors and/or operators shall adhere to the spill response contingency strategies outlined in the Hazardous Substances Management Plan.
- 9.6 All contractors and/or operators transporting or storing more than 20 litres of fuel shall carry spill kits to enable immediate action to remedy and/or mitigate the effects of hazardous substances discharges on-site.

9.7 A list of all hazardous substances and dangerous goods shall be maintained at all times, showing location of storage and use, in case of emergencies.

10. Aquatic Monitoring

10.1 Within one year of commissioning of the project (as defined in Scheme Operation Condition 8.2), the Consent Holder shall engage a recognised aquatic expert to undertake surveys of aquatic bryophytes in the following locations:

- a) One Darcy stream tributary downstream of the intake structure,
- b) Weka Stream downstream of the Weka dam.

Bryophyte % cover shall be estimated at a minimum of 3 transects placed across sections of each stream. Each stream transect should include stream bank habitat.

10.2 The aquatic expert shall prepare a report detailing the findings of the surveys undertaken in condition 10.1, with this report to include an assessment of the health of bryophytes surveyed comparative to other survey work that has been undertaken on Stockton Plateau streams.

11. Granity Community Liaison Group

11.1 Prior to commencement of construction activity at Granity, the Consent Holder shall consult with the Granity Museum curator, Northern Buller Community Society, local residents and representatives from the Consent Authorities and shall provide them with the opportunity to be involved in a Community Liaison Group. In the event that it is possible to establish such a group it shall be chaired by a person ~~agreed an independent facilitator appointed by the Consent Holder in consultation with the Consent Authority~~ as agreed between the Consent Holder and the Consent Authority

Comment [HRR9]: In relation to council Planners comments to involve HPT, DoC and SENZ - intent is for a community group and is likely to be most concerned with Granity effects

11.2 In the event that it is not possible to establish such a group through no fault of the Consent Holder, then such failure to do so shall not be deemed a breach of these conditions.

11.3 The objectives of the Granity Community Liaison Group shall be to:

- a) Maintain an effective working relationship between the local community, the Consent Authorities and the Consent Holder (including its contractors) during construction.
- b) Promote the free flow of information between the local community, the Consent Holder and the Consent Authority in order to anticipate and resolve any potential issues before they arise.
- c) Evaluate the results of monitoring activities on a periodic basis.
- d) Recommend any changes to proposed mitigation measures that might be appropriate in light of the monitoring.
- e) Evaluate the benefits of continuing liaison once the scheme is operational and if deemed necessary, establishing an on-going working relationship.

11.4 The Granity Community Liaison Group shall be consulted in regard to the following:

- a) Surface blasting procedures.
- b) Evaluation of noise and vibration monitoring results and any potential issues in relation to noise and vibration.
- c) Landscape and Rehabilitation measures for disturbed areas at Granity.
- d) Construction traffic related matters including measures for ensuring public safety and management of construction traffic.

- e) Potential improvements to the Charming Creek walkway, in the vicinity of the Mangatini Falls to enhance visitor experience.
- f) Maintenance of potable water supplies within or immediately adjoining the project footprint at Granity.
- g) Effects on Millerton walking track both during construction and following commissioning of the scheme.

Specific Conditions for Coastal Permits RC08149/1 – RC08149/8

COASTAL PERMIT RC08149/1:

To occupy land within the coastal marine area with an ocean outfall pipeline and diffuser, the occupation will extend approximately 600m offshore.

Located approx: N5952750 E2414175

1. Occupation shall be limited to a pipeline and diffuser to convey tailwater from the Granity power station along the general route shown on Plan C-006.
2. In the event of the break up of the pipeline or diffuser structure, all debris shall be removed from the coastal marine area.
3. The pipeline and diffuser shall be maintained in good structural condition.

COASTAL PERMIT RC08149/2:

To erect and place an ocean outfall pipeline approximately 600m long and outfall diffuser within the foreshore and seabed.

Located approx: N5952750 E2414175

COASTAL PERMIT RC08149/3:

The disturbance of the foreshore and seabed to facilitate burial of an ocean outfall pipeline approximately 600m long and outfall diffuser.

Located approx: N5952750 E2414175

COASTAL PERMIT RC08149/4:

To maintain an ocean outfall pipeline approximately 600m long and an outfall diffuser within the foreshore and seabed.

Located approx: N5952750 E2414175

4. The Consent Holder shall undertake the activities authorised by these consents in accordance with the latest certified version of the Construction Management Plan and Ocean Outfall Management Plan.
5. The disturbance shall be limited to that reasonably necessary to facilitate the installation of a pipeline to convey tailwater using micro-tunneling method.
6. The pipeline shall be placed at a depth of ~~at least four metres~~ below the surveyed bed level so that the risk of exposure of the pipeline is insignificant. Survey plans shall be provided to the WCRC Consents and Compliance Manager to confirm compliance with this condition within two months of the completion of works.
7. No drilling fluid shall be released into the coastal marine area.
8. There shall be no storage of fuel or refueling of vehicles and machinery anywhere within the coastal marine area.

9. In the event of the detection of any system failure of the pipeline, the WCRC Consents and Compliance Manager shall be notified within 24 hours of becoming aware of the system failure, and provided with details of:
- (a) The nature of any failure; and
 - (b) Any remedial works to be carried out.
10. ~~In the event that the Consent Holder is aware that the pipeline is identified as having become exposed, the WCRC Consents and Compliance Manager shall be notified immediately and provided with a report providing an assessment of effects and any proposed remediation or risk management to be undertaken within 20 working days.~~
11. In exercising these consents the Consent Holder shall adopt the best practicable option to ensure that emission of noise from within the coastal marine area does not exceed a reasonable level.

Comment [HRR10]: Covered by condition above

COASTAL PERMIT RC08149/5:

To discharge tailwater into the coastal marine area from the Granity power station, discharge to be via an ocean outfall pipeline and diffuser.

Located approx: N5952920 E2413930

12. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Ocean Outfall Management Plan.
13. The Consent Holder shall maintain a continuous record (being 15 minute interval recordings) of the flow and pH discharged from Weka Reservoir outfall into the coastal waters. Such records shall be retained by the Consent Holder and made available to the WCRC upon request.
14. The mixing zone comprises a zone extending to a maximum of 300 metres from every point on the outfall diffuser. The Consent Holder shall accurately mark the location of the diffuser, based on the GPS co-ordinates of the diffuser and the mixing zone, on a recent aerial photograph and provide it to the WCRC prior to any discharge occurring. The receiving water shall conform with the following limits at the edge of the mixing zone:

Parameter	Quality Limits for Discharge
Clarity	No reduction by more than 50% in the clarity of the receiving water beyond the mixing zone, measured by a Secchi disk or transmissometer, when compared against a control sample located 1000m perpendicular to the outfall diffuser midpoint in the direction of the movement of the plume.
pH ANZECC (1992)	No greater than a 0.2 unit pH change in the receiving water at the edge of the mixing zone in comparison with a seawater sample collected 1000m perpendicular to the outfall diffuser midpoint in the direction of the movement of the plume.
Toxicants ANZECC (2000)	At the edge of the mixing zone the following levels shall not be exceeded: ANZECC (2000) 95% Trigger Value For those toxicants identified in the studies undertaken as part of the Ocean Outfall management Plan, as having potential to cause adverse ecological effects in the receiving environment.

Comment [HRR11]: Changed from "black" disc to "Secchi" as Cawthron stated black disk is possible from a boat but is very limited since it is a horizontal measure, secchi is measure vertically and is the standard for marine measurements.

15. The Consent Holder shall continuously monitor ~~(being 15 minute interval recordings)~~ the Weka Reservoir outfall in accordance with the Ocean Outfall Management Plan monitoring programme. The water quality parameter limits for Weka Reservoir discharge, as identified in the Ocean Outfall Management Plan for the stated flow and modelled dilution, may not be exceeded on a 30 day rolling median or 90% of the time.
16. In addition to condition 15 above, for the first two years of operation of the scheme, the Consent Holder shall undertake monitoring of the receiving environment at the edge of the mixing zone, at a frequency not less than every three months, to confirm that the required water quality parameter limits for Weka outfall, as identified in the Ocean Outfall Management Plan, achieve compliance with condition 14 above. The Consent Holder shall ensure that no less than 8 sampling events of the receiving environment are undertaken.
17. In the event that monitoring undertaken in condition 16 above fails to comply with the required water quality parameters as listed in condition 14, the Consent Holder shall continue to undertake monitoring until such time that the water quality parameters have been met for a continuous 6 month period. Thereafter, monitoring shall be undertaken at the Weka outfall to achieve the stated flow and modelled dilution factors as stipulated in the Ocean Outfall Management Plan and condition 15 above.
18. The water quality parameters set out in condition 14 above may be reviewed after the first year of monitoring and constituents removed from the monitoring list, provided there have been no exceedences of the stipulated levels as specified in condition 14.
19. In that event that conditions 15 or 16 above are exceeded, the Consent Holder shall implement mitigation measures as outlined in the Ocean Outfall Management Plan in order to address the potential adverse effects of the discharge.
20. Prior to commissioning the outfall, samples of shellfish shall be taken at a location/s stipulated in the Ocean Outfall Management Plan and measured to establish baseline metal and metalloid concentration. Following commission of the outfall on-going sampling shall be undertaken at these same location/s to determine whether bioaccumulation is

Comment [HRR12]: Continuous monitoring of flow and pH covered above, too onerous for all the heavy metals.

occurring in the environment.

21. Notwithstanding any other conditions, the discharge authorised by this consent shall not give rise to any of the following effects beyond the mixing zone:
- a) The production of conspicuous oil or grease films, scums or foams or floatable suspended materials.
 - b) Any conspicuous change in the colour or visual clarity.
 - c) Any emission of objectionable odour.
 - d) Any significant adverse effects on aquatic life.

COASTAL PERMIT RC08149/6:

To erect and place temporary structures on the foreshore and seabed including sheet piling, rock breast work, sea anchors and other navigational and securing structures for the purpose of constructing and maintaining an ocean outfall pipeline and diffuser.

Located approx: N5952750 E2414175

COASTAL PERMIT RC08149/7:

To occupy land within the coastal marine area with temporary structures on the foreshore and seabed including sheet piling, rock breast work, sea anchors and other navigational and securing structures for the purpose of constructing and maintaining an ocean outfall pipeline and diffuser.

Located approx: N5952750 E2414175

COASTAL PERMIT RC08149/8: The disturbance of the foreshore and seabed with temporary structures including sheet piling, rock breast work, sea anchors and other navigational and securing structures for the purpose of constructing and maintaining an ocean outfall pipeline and diffuser.

Located approx: N5952750 E2414175

19. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
20. The occupation and disturbance shall be limited to temporary structures required to facilitate the installation of the pipeline.
21. On completion of works, all disturbed areas shall be returned to a state generally consistent with the surrounding foreshore area.
22. In exercising these consents the Consent Holder shall adopt the best practicable option to ensure that emission of noise from within the coastal marine area does not exceed a reasonable level.

Specific Conditions for Land Use Consents RC08149/9 – RC08149/20

LAND USE CONSENT RC08149/9:

Vegetation disturbance and earthworks associated with exploration drilling within the Project footprint. The activity will occur within the full extent of the scheme.

Located approx: N5948300 E2417600 and N5952390 E2414660

1. A least one month prior to commencing any drilling activity the Consent Holder shall prepare and submit a work plan detailing the following:
- a) Approximate site of all drill holes;

- b) Access to be used; and
 - c) Anticipated time frames to complete the drilling programme.
2. All drill holes shall be located within the footprint of the project dams, tunnels and reservoirs, with access to be gained via existing tracks where practicable or along the alignment of proposed new access roads.
 3. The Consent Holder shall ensure that the maximum area of disturbance resulting from operation of the drill rig is limited to 75m² per site.
 4. The Consent Holder shall ensure that all vegetation disturbed by the drill rig operation is reinstated immediately following the removal of the drill rig. Rehabilitation shall be undertaken accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

LAND USE CONSENT RC08149/10:

Earthworks and vegetation clearance to construct, operate and maintain the Project including RCC dams, embankments, saddle dams, spillways, diversion weirs, diversion intake sumps, tunnels, canals, inlet towers, drop shafts, portals, intake excavations, intake channels, penstocks, power stations, tracks, roads, silt traps, silt storage areas, stockpiling/fill areas, temporary buildings, construction plant, settling ponds, transmission spur lines and ocean outfall pipeline.

The activity will occur within the full extent of the scheme. Located approx: N5948300 E2417600 and N5952390 E2414660

LAND USE CONSENT RC08149/11:

Earthworks and vegetation clearance, including excavations for intakes and placement of fill to establish, repair and maintain a storage reservoir of approximately 28 hectares, upstream of Weka Creek gorge.

Located approx: N5952245 E2418885

LAND USE CONSENT RC08149/12:

Earthworks and vegetation clearance, including excavations for intakes and placement of fill to establish, repair and maintain a storage reservoir of approximately 50 hectares on St Patrick Stream at Mt William.

Located approx: N5947510 E2419410

5. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan and Erosion and Sediment Control Plan.
6. All activities authorised by these consents shall be implemented under the supervision of persons with appropriate experience in the supervision of civil engineering construction works.
7. The Consent Holder shall ensure that all disturbed vegetation, soil or other material is deposited, stockpiled or contained to prevent the movement of such material into any watercourse.
8. Vegetation, litter and topsoil shall be retained and kept separate for use in adjoining rehabilitation areas.
9. The Consent Holder shall ensure that unnecessary riparian vegetation clearance does not occur.

10. The Consent Holder shall ensure that silt control measures, as outlined in the latest certified versions of the Erosion and Sediment Control Plan, are in place prior to the exercise of these consents, including diversion channels for watercourses and clean stormwater runoff, with the exception of the long term dam silt traps.
11. In carrying out all earthworks the recommendations of Auckland Regional Council's TP90 "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region" shall be adopted including the following measures:
 - a) Divert clean runoff around the construction area.
 - b) Direct runoff from disturbed sites into silt traps prior to discharge to receiving streams or clean water drainage channels.
 - c) Temporary silt or settling ponds constructed shall be designed to withstand a two year return period storm event.
 - d) Provide protection against erosion and entrainment of further sediment at the discharge point.
 - e) Keep disturbed areas to a practicable minimum and reinstate as soon as practical following completion of earthworks.
12. The Consent Holder shall ensure that all operational spillways are designed to have a stabilised path to a receiving stream and that no erosion results from the operation of such spillways.
13. The silt traps to be constructed at the head of each of the streams feeding into the reservoirs are to be built once the dams are completed, to ensure any sediment released during construction is contained within the reservoirs.

Rehabilitation Requirements

14. The vegetation rehabilitation of all areas affected by construction, shall include appropriate native planting using locally sourced seeds and plants genetically similar to those within the Stockton/Denniston Plateau area. Seed and plant resources shall be genetically sourced from the locality or Ngakawau Ecological District from at least 500m above sea level.
15. The Consent Holder shall, as far as practicable make available salvaged topsoil and forest duff from areas to be disturbed. ~~All~~ Salvaged material shall be used for rehabilitation purposes in accordance with the principle of achieving a minimum of 100mm of topsoil on forest and shrubland rehabilitation and 300mm of topsoil on tussock rehabilitation over subsoils and/or 1.5-3m of non-acid generating overburden.
16. The Consent Holder shall utilise, wherever practical given the characteristics of the land, direct transfer methods of rehabilitation.
17. On completion of work at any location, all plant, equipment, fuels, hazardous substances, buildings, fencing, signage, debris, rubbish and any other materials brought onto site shall be removed, and the site left clean.
18. Within one year of commissioning of the scheme (as defined in Scheme Operation Condition 8.2), the Consent Holder shall ensure the residue of sediment and scale shall be removed from the rock surfaces at the Mangatini Falls.
19. Within one year of commissioning of the scheme (as defined in Scheme Operation Condition 8.2), the Consent Holder shall ensure appropriate native species shall be sourced

Comment [HRR13]: Not stripping the entire reservoir footprints

Comment [HRR14]: Both these conditions moved from "Recreation"

and planted around the margins of the Mangatini Falls to revegetate the areas that have been affected by historic AMD contamination.

20. Immediately following the commencement of activities under these consents, the Consent Holder shall initiate and maintain a programme of progressive rehabilitation and revegetation of the land in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan. All planting obligations shall be completed within 12 months following the completion of work on the stage for which planting is intended.
21. Rehabilitation obligations will be deemed to have been met on establishment of a 90% planting cover, as taken from initial coverage pre-disturbance.

LAND USE CONSENT RC08149/13:

Earthworks and vegetation clearance to construct, operate and maintain temporary and permanent access roads and tracks within the Project footprint, including realignment of the Stockton Mine haul road over approximately 800m.

Located approx: N5948300 E2417600

22. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan and Erosion and Sediment Control Plan.
23. All access roads and the realigned mine haul road shall be adequately serviced with watertables, cut-offs and culverts to control surface water runoff and minimise the scouring of road surfaces, watertables, cut-offs and culvert outfalls.
24. In carrying out all earthworks the recommendations of Auckland Regional Council's TP90 "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region" shall be adopted including the following measures:
 - a) Divert clean runoff around the construction area.
 - b) Direct runoff from disturbed sites into silt traps prior to discharge to receiving streams or clean water drainage channels.
 - c) Temporary silt or settling ponds constructed shall be designed to withstand a two year return period storm event.
 - d) Provide protection against erosion and entrainment of further sediment at the discharge point.
 - e) Keep disturbed areas to a practicable minimum and reinstate as soon as practical following completion of earthworks.
25. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.
26. Immediately following the commencement of activities under this consent, the Consent Holder shall initiate and maintain a programme of progressive rehabilitation and revegetation of the land in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.
27. Vegetation, litter and topsoil shall be retained and kept separate for use in adjoining rehabilitation areas.
28. The Consent Holder shall ensure that unnecessary riparian vegetation clearance does not occur.

LAND USE CONSENT RC08149/14:

To disturb the bed of Weka Creek to erect, place, repair and maintain a RCC dam, spillway and associated structures, including temporary diversion works in the creek channel for construction purposes and deepening of the creek channel in the vicinity of the proposed Weka power station.

Located approx: N5952640 E2418910

29. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
30. Bed disturbance shall be limited to the extent necessary to undertake the works and shall not unnecessarily damage the stream bank or cause any flooding or erosion.
31. The Consent Holder shall ensure that all all reasonable steps are taken to minimise the release of sediment during the exercise of this consent.
32. The temporary sluice culvert in Weka Stream to enable dam construction shall be designed to cater for a 10 year flood event.
33. The temporary diversion associated with the installation of the sluice culvert shall be undertaken during dry conditions when stream flows are low and there is a clear weather window. Installation of the culvert shall be undertaken in the dry streambed, prior to stream flows being returned to the original stream channel.
34. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.
35. The Consent Holders shall ensure that disturbed areas along the margins of Weka Creek are rehabilitated and revegetated in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

LAND USE CONSENT RC08149/15:

To disturb the beds of Upper Mine Creek and Mangatini Stream to erect, place, repair and maintain weir/intake structures to divert flows into the Weka reservoir, including temporary diversion of the stream channel for construction purposes.

Located approx: N5951520 E2417850 and N5951520 E2419600

36. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
37. Bed disturbance shall be limited to the extent necessary to undertake the works and shall not unnecessarily damage any streambank or cause any flooding or erosion.
38. The temporary diversions associated with the installation of the weirs shall be undertaken during dry conditions when stream flows are low and there is a clear weather window. Installation of the weir structures shall be undertaken in the dry streambed, prior to stream flows being returned to the original stream channel.
39. The Consent Holders shall ensure that disturbed areas along the margins of Mine Creek and Mangatini Stream are rehabilitated and re vegetated in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

LAND USE CONSENT RC08149/16:

To disturb the bed of Sandy Creek to create the Weka reservoir and erect, place, repair and maintain the Upper Mine Creek diversion tunnel outlet, a silt trap and placement of a culvert during realignment of the Stockton haul road and temporary diversion of the stream channel for construction purposes.

Located approx: N5951765 E2418250

40. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
41. Bed disturbance shall be limited to the extent necessary to undertake the works and shall not unnecessarily damage the stream bank or cause any flooding or erosion.
42. The Consent Holder shall ensure that all all reasonable steps are taken to minimise the release of sediment during the exercise of this consent.
43. The culvert within Sandy Creek to enable realignment of the mine haul road shall be designed to cater for a 100 year flood event.
44. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.
45. The Consent Holders shall ensure that disturbed areas along the margins of Sandy Creek are rehabilitated and revegetated in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

LAND USE CONSENT RC08149/17:

To disturb the bed of St Patrick Stream to erect, place, repair and maintain a RCC dam and associated structures, including construction of a silt trap and temporary diversion works in the stream channel for construction purposes.

Located approx: N5947615 E2419580

46. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
47. Bed disturbance shall be limited to the extent necessary to undertake the works and shall not unnecessarily damage the stream bank or cause any flooding or erosion.
48. The Consent Holder shall ensure that all all reasonable steps are taken to minimise the release of sediment during the exercise of this consent.
49. The temporary sluice culvert in Weka Stream to enable dam construction shall be designed to cater for a 10 year flood event.
50. The temporary diversion associated with the installation of the sluice culvert shall be undertaken during dry conditions when stream flows are low and there is a clear weather window. Installation of the culvert shall be undertaken in the dry streambed, prior to stream flows being returned to the original stream channel.
51. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.
52. The Consent Holders shall ensure that disturbed areas along the margins of St Patrick

Stream are rehabilitated and revegetated in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

LAND USE CONSENT RC08149/18:

To disturb the bed of tributaries of Darcy Stream and a tributary of St Patrick Stream to erect, place, repair and maintain intake sumps to divert flows into Mt William storage reservoir, including temporary diversion of the stream channel for construction purposes.

Located approx: N5946490 E2420460

53. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
54. Bed disturbance shall be limited to the extent necessary to undertake the works and shall not unnecessarily damage any streambank or cause any flooding or erosion.
55. The temporary diversions associated with the installation of the intake sumps shall be undertaken during dry conditions when stream flows are low and there is a clear weather window. Installation of the intake sumps shall be undertaken in the dry streambed, prior to stream flows being returned to the original stream channel.
56. The Consent Holders shall ensure that disturbed areas along the margins of Darcy Stream are rehabilitated and revegetated in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

LAND USE CONSENT RC08149/19:

To disturb the beds of Fly, Plover and T31 Streams to create the Mt William storage reservoir, including construction of silt traps and temporary diversion of stream channels for construction purposes.

Located approx: N5947430 E2419120

57. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
58. Bed disturbance shall be limited to the extent necessary to undertake the works and shall not unnecessarily damage the stream bank or cause any flooding or erosion.
59. The Consent Holder shall ensure that all all reasonable steps are taken to minimise the release of sediment during the exercise of this consent.
60. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.
61. The Consent Holders shall ensure that disturbed areas along the margins of all waterways are rehabilitated and revegetated in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

LAND USE CONSENT RC08149/20:

To disturb the bed of Granity Stream in constructing and maintaining an overflow diffuser for discharge of Granity power station tailwater in emergency situations and to disturb the bed in placing and maintaining rock work around the diffuser structure.

Located approx: N5952545 E2414673

62. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.

63. Bed disturbance shall be limited to the extent necessary to undertake the works and shall not unnecessarily damage the stream bank or cause any flooding or erosion.
64. The Consent Holder shall ensure that all all reasonable steps are taken to minimise the release of sediment during the exercise of this consent.
65. The Consent Holder shall ensure that peak flow from an emergency spill will not disturb the natural armouring of Granity stream channel and will be contained within the streambed.
66. The Consent Holder shall ensure that any reinstatement works required after flood damage are, as far as practicable, undertaken on the recession of the flood while stream flows are naturally turbid.
67. The Consent Holders shall ensure that disturbed areas along the margins of Granity Stream are rehabilitated and revegetated in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

Specific Conditions for Water Permits RC08149/21 – RC08149/32

WATER PERMIT RC08149/21:

To take and use water from St Patrick, Darcy, Weka, Mangatini, Mine, Sandy and Granity Streams and tributaries to supply water for operation of a drilling rig.

Located approx: N5952640 E2418910 and N5947615 E2419580 and N5952545 E2414673

1. The Consent Holder shall undertake the activities authorised by this consents in accordance with the latest certified version of the Construction Management Plan.
2. The maximum rate of take from any waterway shall not exceed 1 litre per second.
3. The Consent Holder shall monitor and record the volume of water abstracted under this consent based on the volume pumped per day ($\text{m}^3\text{day}^{-1}$) if requested by the Consents and Compliance Manager of the West Coast Regional Council.

WATER PERMIT RC08149/22:

To take, use, dam and divert St Patrick Stream by means of a RCC dam to create the Mt William storage reservoir, including temporary diversion for construction purposes.

Located approx: N5947600 E2419575

WATER PERMIT RC08149/23:

To take, use and divert tributaries of Darcy Stream and a tributary of St Patrick Stream by means of intake sumps to create the Mt William storage reservoir, including temporary diversions for construction purposes.

Located approx: N5946490 E2420460

WATER PERMIT RC08149/24:

To take, use and divert water from Plover, Fly and T31 Streams to create the Mt William storage reservoir, including temporary diversions for construction purposes.

Located approx: N5947430 E2419120

4. The Consent Holder shall undertake the activities authorised by these consents in accordance with the latest certified version of the Construction Management Plan.

5. The Consent Holder shall ensure that machinery activity in the bed of any waterway is kept to a minimum and that bed disturbance is limited to the extent necessary to undertake the works.
6. The Consent Holder shall ensure that all reasonable steps are taken to minimise the release of sediment during the exercise of these consents.
7. The temporary sluice culvert in St Patrick Stream to enable dam construction shall be designed to cater for a 10 year flood event.

Comment [HRR15]: The Wildlife condition is unnecessary - see Rhys Buckingham's comments that reservoirs will not pose a threat for birds etc.

WATER PERMIT RC08149/25:

To take and use water collected in the Mt William reservoir via the Stockton tunnel and penstock to supply the Weka power station.

Located approx: N5949380 E2418090

8. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.

WATER PERMIT RC08149/26:

To take, use, dam and divert Weka Creek by means of a RCC dam to create the Weka storage reservoir, including temporary diversion for construction purposes.

Located approx: N5952640 E2418910

WATER PERMIT RC08149/27:

To take, use, dam and divert Upper Mine Creek, Mangatini and A.J. Streams by means of weirs and diversion tunnels to create the Weka storage reservoir, including temporary diversions for construction purposes.

Located approx: N5951520 E2417850 and N5951520 E2419600

WATER PERMIT RC08149/28:

To take, use and divert Sandy Creek to create the Weka storage reservoir, including temporary diversions for construction purposes.

Located approx: N5951765 E2418250

9. The Consent Holder shall undertake the activities authorised by these consents in accordance with the latest certified version of the Construction Management Plan.
10. The Consent Holder shall ensure that machinery activity in the bed of any waterway is kept to a minimum and that bed disturbance is limited to the extent necessary to undertake the works.
11. The Consent Holder shall ensure that all reasonable steps are taken to minimise the release of sediment during the exercise of these consents.
12. The temporary sluice culvert in St Patrick Stream to enable dam construction shall be designed to cater for a 10 year flood event.

WATER PERMIT RC08149/29:

To take and use water collected in the Weka reservoir via the Granity tunnel and penstock to supply the Granity power station.

Located approx: N5951070 E2416830

WATER PERMIT RC08149/30:

To take groundwater seepage as a result of de-watering during tunnel construction.

Located approx: N5948300 E2417600 and N5952390 E2414660

WATER PERMIT RC08149/31:

To take groundwater seepage from the Project's tunnels and reservoirs for use in the Weka and Mt William storage reservoirs.

Located approx: N5951790 E2418590 and N5946890 E2419620

13. The Consent Holder shall undertake the activities authorised by these consents in accordance with the latest certified version of the Construction Management Plan.

WATER PERMIT RC08149/32:

To take and use water from St Patrick, Weka, Mangatini, Mine, Sandy and Granity Streams and tributaries to supply water for construction activities, including operation of the concrete and dam fill batching plants.

Located approx: N5952640 E2418910 and N5947615 E2419580 and N5952545 E2414673

14. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
15. The maximum rate of take from any waterway shall not exceed 5 litres per second.
16. The Consent Holder shall monitor and record the volume of water abstracted under this consent based on the volume pumped per day ($\text{m}^3\text{day}^{-1}$) if requested by the Consents and Compliance Manager of the West Coast Regional Council.

Specific Conditions for Discharge Permits RC08149/33 – RC08149/42

DISCHARGE PERMIT RC08149/33:

To discharge tailwater from the Weka power station into Weka reservoir.

Located approx: N5952060 E2418900

DISHCARGE PERMIT RC08149/34:

To discharge spill from Mt William reservoir into T35 Stream.

Located approx: N5947830 E2419375

1. The Consent Holder shall undertake the activities authorised by these consents in accordance with the latest certified version of the Operation, Maintenance and Surveillance Manual.
2. The maximum rate of discharge into T35 Stream shall not exceed 300 cubic metres per second.
3. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.

DISCHARGE PERMIT RC08149/35:

To discharge spill from Weka reservoir into Weka Creek.

Located approx: N5952640 E2418910

4. The Consent Holder shall undertake the activities authorised by this consent in accordance with the provisions of the Operation, Maintenance and Surveillance Manual.

5. The maximum rate of discharge into Weka Creek shall not exceed 65 cubic metres per second.
6. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.

DISCHARGE PERMIT RC08149/36:

To discharge tailwater from the Granity power station into Granity Stream during emergency overflow situations.

Located approx: N5952545 E2414673

7. The Consent Holder shall undertake the activities authorised by this consent in accordance with the provisions of the Operation, Maintenance and Surveillance Manual.
8. The maximum rate of discharge into Granity Stream shall not exceed 9 cubic metres per second.
9. Any emergency spill shall be reported in writing to the Consents and Compliance Manager of the WCRC within 5 working days of such a spill occurring. Notification shall include an assessment of any impacts on the environment and any remedial measures required to be undertaken as a consequence of the exercise of this consent.
10. Where practicable, the Consent Holder shall notify downstream property owners, NZTA and Kiwi Rail not less than 24 hours prior to using the emergency spillway into Granity Creek. Where it is not practicable to do so the Consent Holder shall notify the aforementioned parties immediately upon the use of such emergency spillway.
11. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works which become necessary as a consequence of the exercise of this consent.

DISHCARGE PERMIT RC08149/37:

To discharge groundwater seepage during tunneling activities into Granity Stream, via the emergency outflow diffuser.

Located approx: N5952545 E2414673

12. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
13. The discharge of groundwater seepage shall be directed through sediment control measures prior to discharge into Granity Stream. The sediment control measures shall be of sufficient capacity to ensure compliance with condition 14 of this consent.
14. Beyond a mixing zone of 12 times the width of Granity Stream measured at the point of discharge, or 200 metres downstream, whichever is the lesser, the discharge shall not give rise to any of the following effects:
 - i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material.
 - ii) Any conspicuous change in colour or visual clarity.
 - iii) Any emission of objectionable odour.

- iv) The rendering of fresh water unsuitable for consumption by farm animals.
- v) Any significant adverse effects on aquatic life.

DISHCHARGE PERMIT RC08/38:

To discharge stormwater from construction activities, plant process water and groundwater seepage from tunneling construction into St Patrick, Mangatini, Upper Mine and Weka, Sandy Streams or tributaries.

Located approx: N5946820 E2419530 and N5951560 E2419585 and N5951535 E2417850 and N5951640 E2418145

- 15. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
- 16. All discharge of stormwater, plant process water and groundwater seepage shall be directed through sediment control measures prior to discharge to waterways. The sediment control measures shall be of sufficient capacity to ensure compliance with condition 17 of this consent.
- 17. Beyond a mixing zone of 12 times the width of the receiving water body measured at the point of discharge, or 200 metres downstream, whichever is the lesser, the discharge shall not give rise to any of the following effects:
 - i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material.
 - ii) Any conspicuous change in colour or visual clarity.
 - iii) Any emission of objectionable odour.
 - iv) The rendering of fresh water unsuitable for consumption by farm animals.
 - v) Any significant adverse effects on aquatic life.
- 18. The use of flocculating agents is not permitted under this consent.

DISCHARGE PERMIT RC08149/39:

To discharge solid contaminants, being sediment to land at fill locations adjacent to the Mt William and Weka reservoirs.

Located approx: N5946655 E2418540 and N5952055 E2418740

- 19. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
- 20. The Consent Holder shall ensure that all runoff from the silt storage areas is directed into the reservoirs.
- 21. The Consent Holder shall maintain a programme of progressive rehabilitation and revegetation of this fill locations in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

DISCHARGE PERMIT RC08149/40:

To discharge stormwater and sediment associated with construction activities to land (in circumstances which may result in the stormwater entering water)

- 22. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
- 23. All discharge of stormwater to land shall be directed through sediment control measures

prior to discharge to waterways. The sediment control measures shall be of sufficient capacity to ensure compliance with condition 24 of this consent.

24. Beyond a mixing zone of 12 times the width of the receiving water body measured at the point of discharge, or 200 metres downstream, whichever is the lesser, the discharge shall not give rise to any of the following effects:
- i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material.
 - ii) Any conspicuous change in colour or visual clarity.
 - iii) Any emission of objectionable odour.
 - iv) The rendering of fresh water unsuitable for consumption by farm animals.
 - v) Any significant adverse effects on aquatic life.
25. The use of flocculating agents is not permitted under this consent.

DISCHARGE PERMIT RC08149/41:

To discharge water containing sediment to land from operation of a drill rig. The activity will occur within the full extent of the scheme.

Located approx: N5948300 E2417600 and N5952390 E2414660

26. All discharges from operation of the drill rig to land shall be directed through sediment control measures prior to discharge to waterways. The sediment control measures shall be of sufficient capacity to ensure compliance with condition 27 of this consent.
27. Beyond a mixing zone of 12 times the width of the receiving water body measured at the point of discharge, or 200 metres downstream, whichever is the lesser, the discharge shall not give rise to any of the following effects:
- i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material.
 - ii) Any conspicuous change in colour or visual clarity.
 - iii) Any emission of objectionable odour.
 - iv) The rendering of fresh water unsuitable for consumption by farm animals.
 - v) Any significant adverse effects on aquatic life.

DISCHARGE PERMIT RC08149/42:

To discharge contaminants to air associated with the construction, operation and maintenance of the Stockton Plateau Hydro Scheme including but not limited to dust associated with the excavation, handling, conveying and processing of gravel, sand, soil, rock, and other natural materials; the operation of aggregate crushing and screening, and concrete batching plants and stockpiling activities; and dust /fumes emitted via tunnel ventilation systems.

The discharge will occur within the full extent of the scheme.

28. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
29. The Consent holder shall undertake appropriate dust mitigation measures for worked areas to ensure that dust nuisance is minimised including but not limited to the use of water sprinklers and water carts.
30. The Consent Holder shall use all practicable means to ensure that the concentrations of nuisance dust attributable to construction activities does not exceed the Ministry for the Environments dust nuisance criteria of 120 µg/m³ as a 24 hour average for total suspended

particulate, and 4 g/m²/30 days above ambient for deposited particulate, at the notional boundary of any residential dwelling occupied by non project personnel on another site.

31. The Consent Holder shall seal the Granity construction yard site entrance, adjacent to the Granity band rotunda, in accordance with NZTA specifications.

Advice Notes:

1. The Consent Holder is advised that building consents are required under the Building Act 2004 and Building (Dam Safety) Regulations 2008. Copies of all approved building consents should be submitted to the Consent Authority.
2. For the purposes of Scheme Operation Condition 8.4, the term “where practicable” shall encompass the following scenarios:
 - a) Where the Consent Holder is made aware of an issue with the performance of the marine outfall either by way of a third party or through their own investigations and intends to operate the emergency spillway; or
 - b) Where the Consent Holder intends to shut down the marine outfall for maintenance purposes and operate the emergency spillway.

Where the Consent Holder has no prior knowledge of any issue with operation of the marine outfall, this is deemed to fall outside the definition of “where practicable.”

3. For the purposes of these resource consents “commencement of construction of the project works” shall be deemed to have occurred on the exercise of any land use consent, with the exception of exploration activities authorised by Land Use Consent 149/9.

General Conditions for BDC

1. Scheme Design

- 1.1 The Consent Holder shall undertake geotechnical site investigations as appropriate to complete final design in accordance with the Building Act 2004 and Building (Dam Safety) Regulations 2008.
- 1.2 Prior to the commencement of construction of the ocean outfall, the Consent Holder shall forward to the Consent Authority final design reports ~~for approval~~. The design reports shall include detailed plans for the construction of the Ocean outfall pipeline and shall include the following details:
- i) Interpretation of ground and groundwater conditions based on site investigations.
 - ii) Assessment of expected deformation and trigger levels for contingency actions.
 - iii) The proposed monitoring locations and procedures during construction.
 - iv) The development of actions and contingency plans should expected levels of deformation be exceeded.
 - v) A list of the buildings and structures that may be affected by groundwater and ground settlement changes and proposed methodology to reduce potential impacts.
- 1.3 The Consent Holder shall ensure that any variations to any building consent are approved by the issuing authority and copied to the Consent Authority. The Consent Holder shall prepare and retain final "As Built" plans of all buildings and structures, copies of which should also be forwarded to the Consent Authority.

Comment [HRR16]: Un-necessary to also require landscape assessments for any variations to the building consents - given the substantially modified environment

2. Management Plans

- 2.1 Not less than three months prior to commencement of construction activities authorised by these consents, the Consent Holder shall provide to the Consent Authority the following plans, as prepared by suitably qualified persons in accordance with conditions 3 to 6:
- a) Construction Management Plan.
 - b) Landscaping and Rehabilitation Management Plan
 - c) Noise and Vibration Management Plan..
 - d) Terrestrial Ecology Management Plan.
- 2.2 Construction of the project works shall not commence until the management plans have been certified by the Consent Authority. Certification is defined as ensuring that the Management Plans contain the necessary information specified in conditions 3 to 6 and meet the requirements set out in more specific conditions of consent.
- 2.3 The Consent Holder may commence construction of project works once all the management plans have been certified by the Consent Authority or after two months from the date that the last management plan required by these consents is submitted to the Consent Authority, whichever is the sooner.
- 2.4 Subject to any other conditions of these consents, all activities shall be undertaken in accordance with the latest certified version of the management plans.
- 2.5 The Consent Holder may review and revise any management plan at any time after they have been submitted to the Consent Authority on the following terms:

- (a) The review shall be undertaken in consultation with and certified by the Consent Authority.
- (b) Such review is necessary to give effect to the purpose of the management plan.
- (c) The Consent Holder shall pay all actual and reasonable costs of the Consent Authority in connection with the review of all management plans prior to their certification.

2.6 The revisions to management plans shall be submitted to the Consent Authority for certification two months prior to the intended implementation. [The revised management plan will be deemed to have the certification of the Consent Authority unless the Consent Holder is otherwise advised in writing within two months of submission of the revisions.](#)

2.7 The Management Plans may be submitted in sections which cover discrete components of the project to allow for the staged development of the hydro scheme. When viewed as a whole the respective sections must be consistent with the requirements of conditions 3 to 6 and must achieve comprehensive management plans for the entire project.

3. Construction Management Plan

3.1 Prior to the commencement of construction of the project works, a Construction Management Plan shall be submitted to the Consent Authority. The purpose of the management plan shall be to:

- To describe the methods proposed for the construction of the scheme and the programme for construction of each element.
- Describe what actions will be taken to manage the actual or potential effects of construction activities associated with the scheme.
- To describe the methodology and certification procedures for making changes to the Construction Management Plan.
- To ensure that the practices and procedures for construction achieve compliance with the conditions of consent as they relate to construction work.
- That the Consent Holder undertakes its best endeavors to ensure that the environmental nuisance effects of construction activities are minimised to the greatest extent possible.
- To minimise the overall area of disturbance, so as to reduce the potential impact on vegetation, native fauna, and waterways.
- To ensure the conservation of overburden, soil and vegetation for subsequent use in the rehabilitation.
- To ensure that appropriate monitoring and reporting of all activities is undertaken in accordance with the resource consent conditions.
- To minimise sediment generation and sediment laden runoff.

3.2 The Construction Management Plan shall as a minimum address the following matters:

- a) Construction programme and timetable detailing the works and proposed duration of each stage and the sequence of events.
- b) Description of all construction works including the dams, storage reservoirs, diversion/intake structures, tunnels, roads, power stations, substations and transmission lines.
- c) A site map which shows the buffer zones, sound bounds and fencing at-the Granity construction area.
- d) Detailed plans and methods of construction of the ocean outfall pipeline and diffuser and the emergency outfall into Granity Stream.
- e) Details and site plan of all construction plant and buildings to be used on-site.
- f) Detailed plans for both the temporary and permanent realignment of Repo Basin

- and Millerton walking tracks.
- g) Detailed plans for the Weka interpretative visitor display, including indicative information and display format.
- h) Details of methods of vegetation clearance and earthworks including disposal of stripped material, stockpiling activities and roading construction.
- i) An outline of the critical elements of the scheme where geotechnical investigation is required for the construction.
- j) Detailed plans, methods and timing of in-stream works including the temporary dam sluices and temporary stream diversions and the permanent structures such as the weirs, intakes and spillways.
- k) Measures for cleaning machinery and equipment prior to transport to the construction work areas on Stockton Plateau.
- l) Methods for management of solid waste generated during project construction including identification of solid waste, methods for minimising solid waste generation and description of disposal methods.
- m) Health and Safety measures to ensure public safety including hazard identification and management including erection of signs at appropriate locations warning public of dangers in construction areas.
- n) Methods for the management of nuisance dust generated as a consequence of construction activities.
- o) Details and locations of any proposed settling ponds, sediment traps or other treatment systems to be used for contaminated waters prior to discharge.
- p) Traffic management plan to ensure a safe and efficient transport system including showing the improvements required for existing accesses, details of design of new accesses and roads, details of rehabilitation of temporary roads/accesses and details concerning traffic movements.
- q) The name and contact details of key positions and points of contact, including an appropriately qualified staff member to manage environmental issues and any community complaints on site, have responsibility for managing and responding to environmental issues, any community complaints and ensure management plans and consent conditions are adhered to throughout construction.
- r) Detailed Plans, specifications, operation and maintenance of the various components of the Project including the dams, spillways, tunnels, power stations, intakes and diversion structures.
- s) Archaeological protocols.
- t) Contractor training.
- u) Security and lighting management during construction.
- v) Hours of operation

3.3 The Construction Management Plan shall include a sub-section entitled: "Hazardous Substances Management Plan" which shall detail the practices and procedures to be adopted to ensure that hazardous substances are managed so that their storage and use is carried out safely and will not adversely affect the environment. The Hazardous Substances Management Plan shall as a minimum address the following matters:

- a) Identify hazardous substances, including explosives, oils and fuels which are used in the construction phase and also the operation phase of the project.
- b) Describe the storage and handling procedures for hazardous substances.
- c) Provide details of the regular inspections and maintenance of the construction site, vehicles and equipment-
- d) Practices and procedures for dealing with accidental spills of hazardous substances during construction, transportation or commissioning of the scheme to ensure spill response contingency plans will be met.

Comment [HRR17]: All other matters noted by Council Planners are already contained within plan provisions or dealt with in other management plans

4. Landscape and Rehabilitation Management Plan

4.1 Prior to the commencement of construction of the project works, a Landscape and Rehabilitation Management Plan shall be submitted to the Consent Authority. The purpose of the management plan shall be to:

- Establish an indigenous vegetation cover on all disturbed areas appropriate to the respective construction site locations.
- To ensure short and long term stability of disturbed land and their surrounds.
- Visually integrate finished structures, landforms and vegetation into the surrounding landscape.
- To prevent weeds and pests invading the site so far as is reasonably possible, and otherwise to eradicate or control weeds and pests on the site.

4.2 The Landscape and Rehabilitation Plan shall as a minimum address the following matters:

- a) Construction sequence and timetable of rehabilitation activities.
- b) ~~Measures for minimising the area to be disturbed.~~
- b) Measures for rehabilitating all disturbed areas resulting from exploration drilling operations and areas outside of permanent occupation.
- c) Rehabilitation strategies for all disturbed areas on the Stockton Plateau including roads, transmission lines, reservoir margins, dams/embankments, stream intake/weir structures, Weka power house area and Granity construction site so that finished landforms and vegetation cover are integrated into the natural landscape.
- d) Landscaping strategies for the Granity construction area as determined in consultation with the respective landowners and the Granity Community Liaison Group.
- e) Rehabilitation procedures that will maximise the blending of the permanent access roads and reservoir margins into the surrounding landscape.
- f) Contouring and rehabilitation strategies for the progressive rehabilitation of the two sediment fill sites, once used as permanent fill sites.
- g) Landscaping strategies for the realigned portions of the Repo Basin and Millerton incline walking tracks to achieve integration with the surrounding natural landscape.
- h) The design and appearance of visitor interpretation displays and any associated structures.
- i) Measures to be implemented where direct vegetative transfer fails to successfully establish.
- j) Methods for monitoring the success of revegetation planting to ensure a 90% coverage of rehabilitated areas, as taken from initial coverage pre-disturbance.

4.3 The Landscape and Rehabilitation Management Plan shall include a sub-sections entitled "Weed and Pest Management" which shall provide details of weed and predator control measures and shall as a minimum address the following matters:

- a) A description of the areas within which control will be undertaken.
- b) A description of exotic plant and/or animal predator species that will be targeted.
- c) A description of the control techniques that will be used.
- d) The timeframe for and frequency of control operations, with control measures to be undertaken until such time as 90% planting coverage on rehabilitated areas has been achieved.
- e) A description of the monitoring that will be undertaken to assess the effectiveness of control operations.
- f) To undertake a programme of *Juncus squarrosus* control on all disturbed areas within the Project footprint, preventing the establishment of this invasive weed.
- g) Control of predators, particularly stoats and possums in the disturbed areas during

Comment [HRR18]: All other matters listed by Council Planners are covered in specific conditions of consent.

construction and during the rehabilitation phase.

5. Terrestrial Ecology Management Plan

5.1 Prior to the commencement of construction of the project works, a Terrestrial Ecology Management Plan shall be submitted to the Consent Authority. The purpose of the management plan shall be to:

- To describe the methods proposed for managing construction effects on terrestrial ecology; and
- Describe what actions will be taken to mitigate the actual or potential effects of construction activities on terrestrial ecology.

5.2 The Terrestrial Ecology Management Plan shall as a minimum address the following matters:

- a) A description of the terrestrial ecological values requiring management.
- b) Timing and management of vegetation clearance and construction activities.
- c) Survey methods for the recovery of lizards and Kiwi prior to the storage reservoir areas being inundated and identification of suitable areas for relocation.
- d) Identification of the areas which are to be used for direct vegetative transfer to rehabilitate areas disturbed by the project.
- e) Revegetation of all disturbed areas including timescale of rehabilitation activities.
- f) Control of predators in the disturbed areas during construction and during the rehabilitation phase.

5.3 The Consent Holder shall ensure that as part of the Terrestrial Ecology Management Plan required by condition 4.1 above, the following is achieved:

- a) Cleaning of all machinery prior to transport to the Stockton Plateau.
- b) Sequence the works to allow for direct transfer of vegetation from disturbed/inundated areas including cedar saplings, red tussocks and *Exocarpus bidwillii*.
- c) Sequence the works to allow for cuttings to be taken of *Metrosideros parkinsonii* for off-site propagation for rehabilitation on suitable sites.
- d) Inundation of the two reservoir areas to not occur during the peak kiwi breeding season (July-January), alternatively, the reservoir areas shall be searched with a certified and approved dog and handler to ensure no nesting kiwi are present.
- e) To undertake a programme of *Juncus squarrosus* control on all disturbed areas within the Project footprint, preventing the establishment of this invasive weed.
- f) To utilise the timber resource affected by inundation, for instance offering Ngai Tahu salvageable logs of Hall's Totara for cultural purposes.
- g) Locate as much of the Project as possible on land that has been recently disturbed for road construction.
- h) All surfaces disturbed by construction activities will be rehabilitated to establish native vegetation, appropriate to the locality with 90% coverage of rehabilitated areas.

6. Noise and Vibration Management Plan

6.1 Prior to the commencement of construction of the project works, a Noise and Vibration Management Plan shall be submitted to the Consent Authority. The purpose of the management plan shall be to:

- To ensure that the practices and procedures for the management of construction activities achieve compliance with the conditions of consent seeking to mitigate the

adverse noise effects of construction activities, with particular emphasis on construction noise at Granity and Millerton.

- That the Consent Holder adopts the Best Practicable Option in accordance with Section 16 of the RMA 1991 to avoid excessive noise from construction activities.
- To comply with the standards set out for noise and vibration recommended in AS 2187-2 (2006), DIN 4150-3 (1999), NZS 6803 (1999) and NZS/ISO 2831-2 (1989) or any superseding standards

6.2 The Noise and Vibration Management Plan shall include specific details relating to the management of all construction works associated with the Project and shall as a minimum address the following matters:

- a) Construction sequence.
- b) Machinery and equipment to be used.
- c) Hours of operation, including times and days when construction work would occur.
- d) The design of noise mitigation measures such as temporary bunds or fences.
- e) Detailed measures to ensure compliance with the vibration standards set out in AS 2187-2 (2006), DIN 4150-3 (1999) and NZS/ISO 2831-2 (1989) or any superseding standards.
- f) Detailed measures to ensure compliance with the construction noise standards set out in NZS 6803:1999 and AS2187-2 (2006) or any superseding standards.
- g) Detailed methods for monitoring and reporting on construction noise and vibration during construction, including the location of vibration and noise monitoring for construction activities that are adjacent to historic buildings or occupied dwellings.
- h) Noise and vibration complaint procedures and response procedures.
- i) Management methods for minimising noise generated by vehicle movements entering/exiting the Granity construction site and operating within the construction yard.
- j) Measures for notifying Granity residents of intended blasting and micro-tunnelling activities.
- k) Establishment of a programme of blasting, as discussed with the Granity museum curator.
- l) Record keeping measures including time and location of blast, weather conditions, total charge weight, volume of rock blasted and distance to nearest buildings.
- m) Pre-condition surveys of buildings and monuments prior to commencing blasting or micro tunnelling.
- n) Ground settlement surveys prior to commencing micro tunnelling and monitoring during tunnelling operations of ground levels around rail and road infrastructure.
- o) Identification of additional mitigation measures that may be utilised in the event that noise or vibration monitoring establishes non-compliance.
- p) Details of noise management once scheme is operational.

7. **Annual Monitoring Report and Work Plan**

7.1 The Consent Holder shall prepare and submit an Annual Monitoring and Work Plan to the Consent Authorities within 30 days of the anniversary of the commencement of construction of project works (being the date advised in Notification Condition 6.1(a)) and thereafter at yearly intervals until all rehabilitation requirements have been met. The purpose of the plan shall be to:

- Provide an overview of the monitoring and reporting work undertaken and any issues that have arisen during construction of the scheme.
- A description of the operations and rehabilitation measures undertaken in the previous 12 months and the forthcoming 12 months.

- A calculation of the extent of rehabilitation remaining to be completed and the costs associated with such rehabilitation.

7.2 The monitoring period in each report shall be for the preceding 12 month period and shall as a minimum include the following matters:

- Detail all environmental monitoring undertaken.
- Summarise all the data collected as required under the conditions of these consents and management plans.
- Highlight and discuss any important environmental effects.
- Summarise any construction difficulties, changes or improvements undertaken.
- Summarise any difficulties in compliance with and breaches of, the conditions of the consent and the measures adopted to remedy or mitigate adverse effects and avoid reoccurrence.
- Summarise any complaints received and any action taken by the Consent Holder to address the complaint.
- Summarise any actions or initiatives proposed by the Granity Community Liaison Group in response to complaints received or issues which have arisen.

7.3 The work plan shall include the following matters:

- A schedule of the operations, mitigation measures and rehabilitation carried out over the previous 12 months term.
- Any explanation of any departure in the last 12 months from the previous annual work plan.
- A schedule of the operations, mitigation measures and rehabilitation intended to be undertaken within the next 12 months, including a general timetable of key construction and rehabilitation times.
- An evaluation of the extent of rehabilitation remaining to be completed and the cost associated with such rehabilitation in terms of the items listed in Bond Condition 5.6.

8. Granity Community Liaison Group

8.1 Prior to commencement of construction activity at Granity, the Consent Holder shall consult with the Granity Museum curator, Northern Buller Community Society, local residents and representatives from the Consent Authorities and shall provide them with the opportunity to be involved in a Community Liaison Group. In the event that it is possible to establish such a group it shall be chaired by a person ~~agreed an independent facilitator appointed by the Consent Holder in consultation with the Consent Authority~~ as agreed between the Consent Holder and the Consent Authority

8.2 In the event that it is not possible to establish such a group through no fault of the Consent Holder, then such failure to do so shall not be deemed a breach of these conditions.

8.3 The objectives of the Granity Community Liaison Group shall be to:

- Maintain an effective working relationship between the local community, the Consent Authorities and the Consent Holder (including its contractors) during construction.
- Promote the free flow of information between the local community, the Consent Holder and the Consent Authority in order to anticipate and resolve any potential issues before they arise.
- Evaluate the results of monitoring activities on a periodic basis.
- Recommend any changes to proposed mitigation measures that might be

Comment [HRR19]: In relation to council Planners comments to involve HPT, DoC and SENZ - intent is for a community group and is likely to be most concerned with Granity effects

appropriate in light of the monitoring.

- e) Evaluate the benefits of continuing liaison once the scheme is operational and if deemed necessary, establishing an on-going working relationship.

8.4 The Granity Community Liaison Group shall be consulted in regard to the following:

- a) Surface blasting procedures.
- b) Evaluation of noise and vibration monitoring results and any potential issues in relation to noise and vibration.
- c) Landscape and Rehabilitation measures for disturbed areas at Granity.
- d) Construction traffic related matters including measures for ensuring public safety and management of construction traffic.
- e) Potential improvements to the Charming Creek walkway, in the vicinity of the Mangatini Falls to enhance visitor experience.
- f) Maintenance of potable water supplies within or immediately adjoining the project footprint at Granity.
- g) Effects on Millerton walking track both during construction and following commissioning of the scheme.

9. Archaeological Protocols

Comment [HRR20]: Combined some conditions as had some repetition

- 9.1 Prior to the commencement of construction activities, the Consent Holder shall prepare, in consultation with the New Zealand Historic Places Trust, an Accidental Discovery Protocol to establish procedures for identifying, reporting and managing features of archaeological significance that may be uncovered in the course of construction activity. The Accidental Discovery Protocol shall be referred to and complied with during all construction activity at Granity and on the Stockton Plateau. A copy shall be forwarded to the Consent Authorities.
- 9.2 Prior to the commencement of any vegetation clearance, the Consent Holder shall implement a training programme for construction staff by a recognised archaeological expert on the recognition of archaeological material and the procedures for dealing with archaeological material, as established in the Accidental Discovery Protocol.
- 9.3 The Consent Holder shall ensure that any loose artefacts and excavated material of historic significance uncovered in the course of construction activity are identified, reported and managed in accordance with the Accidental Discovery Protocol.
- 9.4 ~~A person approved by the Historic Places Trust~~ A suitably qualified archaeologist shall be employed by the Consent Holder to undertake documentation of recovered artefacts. The Consent Holder shall provide records of the recovery, identification and distribution of these objects to the West Coast Filekeeper of the New Zealand Archaeological Association.
- 9.5 The Consent Holder is to provide the Consent Authority a copy of any necessary archaeological authorities obtained prior to starting construction.
- 9.6 The Consent Holder shall ensure that any pounamu accidentally discovered shall be:
 - a) Reported to Ngati Waewae's Land and Environmental Portfolio Team Leader as soon as is practicable.
 - b) Any artifact made of pounamu discovered or found within the project area on land administered by the Department of Conservation should be left untouched and notified immediately to both the local Department of Conservation Officer and Ngati Waewae's Land and Environmental Portfolio Team Leader. If the artifact happens to be collected it should be handed directly to the local Department of Conservation Officer along with all information about the find and Ngati Waewae's Land and

Environmental Portfolio Team Leader is to be notified.

- c) Any artifact made of pounamu discovered or found on all other land within the project area should be left untouched and notified immediately to the local regional museum, the New Zealand Historic Places Trust regional archaeologist and Ngati Waewae's Land and Environmental Portfolio Leader. If the artifact happened to be collected it should be handed directly to the local regional museum along with all information about the find and the New Zealand Historic Places Trust's regional archaeologist and Ngati Waewae's Land and Environmental Portfolio Team Leader are to be notified.
- d) All pounamu discovered, other than through authorised collection, cannot be removed without consultation with Te Runanga o Ngai Tahu and authorisation from Ngati Waewae.

10. Recreation

- 10.1 Prior to the commencement of construction of project works the Consent Holder shall, in order to minimise the risk to persons undertaking recreational activities in the vicinity of the scheme erect signs to warn users of dangers in the area during construction, in accordance with the details contained in the latest certified version of the Construction Management Plan.
- 10.2 The Consent Holder shall ensure that while construction activity is occurring at Granity, safe public walking access is maintained along the Millerton Incline track. On completion of construction activity a permanent walking track shall be provided along the same general alignment as the existing track. Temporary and permanent track alignment to be in accordance with the plans supplied in the latest certified version of the Construction Management Plan.
- 10.3 The Consent Holder shall ensure that while construction activity is occurring at Weka reservoir, safe public walking access is maintained around the construction site into Repo Basin. On completion of construction activity a permanent walking track shall be provided around the Weka Reservoir perimeter linking into the existing Repo Basin walking track. Temporary and permanent track alignment to be in accordance with the plans supplied in the latest certified version of the Construction Management Plan.
- 10.4 The Consent Holder shall develop an interpretive visitors display in the vicinity of Weka power station, in accordance with the information supplied in the Construction Management Plan. The visitors display shall include details on the construction and operation of the historic loco line and any other material deemed suitable for incorporation by the Consent Holder's archaeological expert. The interpretative display shall be established under the guidance of an archaeological expert and be completed and accessible to visitors on commissioning of the scheme.
- 10.5 ~~The Consent Holder shall, in consultation with DoC and the Granity Community Liaison Group, undertake improvements to the Charming Creek walkway, possible measures to include installation of additional viewing areas/structures and replanting and rehabilitation around the margins of the Mangatini Falls.~~
- 10.5 ~~Within one year of commissioning of the scheme (as defined in general condition 8.2), the Consent Holder shall ensure the residue of sediment and scale will be removed from the rock surfaces at the Mangatini Falls.~~
- 10.6 ~~Within one year of commissioning of the scheme the Consent Holder shall ensure appropriate native species shall be sourced and planted around the margins of the Mangatini Falls to revegetate the areas that have been affected by historic AMD~~

Comment [HRR21]: Such matters will be addressed through the land exchange process with DoC

Comment [HRR22]: Moved to RC149/12 - RC consent

11. Construction Noise

- 11.1 The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Noise and Vibration Management Plan.
- 11.2 All above ground construction activities including establishment of the Jacking Station, initial micro-tunneling, outlet portal, portal apron, access ramp, construction yard and overweight heavy vehicle movements are restricted to the hours of 7.30am to 6pm Monday to Sunday.
- 11.3 A temporary earth barrier, as detailed in the latest certified version of the Noise and Vibration Management Plan, shall be constructed around the western side of the Jacking Station to minimise noise effects for nearby residents.
- 11.4 A minimum of a 2m high solid fence shall be erected around the perimeter of the Granity construction site. If required as a mitigation methods proposed in the latest certified version of the Noise and Vibration Management Plan, this fence shall be designed to be acoustic.
- 11.5 All equipment and machinery shall be regularly maintained to ensure noise levels are as low as reasonably attainable but at no time shall they exceed the levels permitted by the consent.
- 11.6 The noise from construction works shall be measured and assessed in accordance with the requirements of NZS 6803:1999 “Acoustics – Construction Noise”. The Consent Holder shall ensure that construction noise from the scheme shall comply at all times with the requirements of NZS 6803:1999 “Acoustics – Construction Noise”, outlined in the table below:

Table 2 – Recommended upper limits for construction noise received in residential zones and dwellings in rural areas

Time of week	Time period	Duration of work					
		Typical duration (dBA)		Short-term duration (dBA)		Long-term duration (dBA)	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
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

Advice Note:

Short term duration means construction work at any location for up to 14 calendar days

Typical duration means construction at any one location for more than 14 days but less than 20 weeks

Long term duration means construction at any one location with a duration exceeding 20 weeks.

- 11.7 The Consent Holder shall undertake noise monitoring (by a suitably qualified and experienced acoustic engineer) of the noise emanating from construction activities carried out at both day and night time periods. Adequate monitoring shall be carried out to be representative of the varying noise levels emanating from the different construction activities to demonstrate that the activity complies with the relevant limits as set out in NZS 6803:1999. As a minimum, monitoring at two representative properties shall be carried out on at least two occasions annually.
- 11.8 The Consent Holder shall ensure that construction of the Jacking Pit required for micro tunnelling purposes complies with the short-term duration noise requirements of NZS 6803:1999 "Acoustics – Construction Noise", outlined in the above table.

12. Blasting/Construction Activity

- 12.1 During blasting the Consent Holder shall ensure that airblast overpressure conforms with the recommendations outlined in the Australian Standard AS2187.2-2006 "*Explosives – Storage and Use*"; whereby all noise created by the use of explosives measured at a notional boundary from any residence shall not exceed a peak overall sound pressure of 120dB L Linear Peak for 95% of the time with a maximum peak of 125dB L peak. For the purpose of this condition the notional boundary shall be a point 20m from the most exposed facade of the dwelling not connected with the project.
- 12.2 During blasting the Consent Holder shall ensure that ground vibration limits conforms with the recommendations outlined in the Australian Standard AS2187.2-2006 "*Explosives – Storage and Use*", whereby peak particle velocity does not exceed the following limit when measured on any foundation of a building not connected with the project:
- 10mm/s maximum, unless agreement is reached with the occupier that a higher limit may apply.
- 12.3 At the commencement of blasting activity at Granity, monitoring of representative blasting activity by reliable and appropriate methods shall be undertaken to ensure that the typical levels of vibration are known. This monitoring shall identify the distance at which the requirements of AS2187.2-2006 are complied with. In the event that any results are within 20% of the specified vibration limits, measurements will continue to be undertaken until such time as the levels are reduced.
- 12.3 For all other construction activity the Consent Holder shall ensure that ground vibration limits conform with the recommendations outlined in International Standard ISO 2831-2:1989 "*Evaluation of Human Exposure to Whole Body Vibration*"
- 12.4 All surface blasting activity shall be restricted to between the hours of 9.00am and 5.00pm Monday to Saturday.
- 12.5 Blasting required for rock-splitting and establishment of the Granity tunnel portal shall be undertaken so as to minimise effects on the Granity Museum and the historic coke ovens.
- 12.6 A programme of blasting times shall be notified publicly by way of notice erected at the road

Comment [HRR25]: All blasting around Granity portal outlet will be completed within 12 months following which activities will have migrated underground therefore this std is appropriate.

entrances to the Granity construction area and by circular or public advertisement to local residents, SENZ, West Coast Regional Council and the Buller District Council prior to any such blasting taking place and at regular intervals not exceeding twelve months thereafter. Changes to the blasting programme shall be notified at least three days prior to implementation.

- 12.7 A noise barrier shall be erected at the Granity portal outlet if required to mitigate noise nuisance for residents.
- 12.8 Details of all blasts shall be entered into a record book kept for that purpose and shall be available to the Buller District Council on request.

13. Light Spill

- 13.1 The Consent Holder shall undertake appropriate mitigation measures including but not limited to, utilisation of screens, shields, hoods and fences to ensure light spill is minimised so as not to create a nuisance to residents, traffic, or to act as a distraction to wildlife..
- 13.2 ~~The Consent Holder shall ensure that any light spill during construction does not exceed 10 lux (horizontal or vertical) of light at any adjoining property, measured 2 metres inside the boundary of the adjoining site.~~

Comment [HRR26]: Reference to "hoods" inserted at request of Frida Inta (submitter)

Comment [HRR27]: As noted by Council Officer may not be able to comply with this condition as close to property boundaries e.g at Weka dam. However, condition immediately above gives protection to wildlife and people.

14. Traffic Management

- 14.1 The Consent Holder shall ensure all traffic management measures associated with scheme construction shall be implemented in accordance with the Traffic Management Plan (required under condition 2.2(p)) and with the New Zealand Transport Agency Code of Practice for Temporary Traffic Management.
- 14.2 The Granity site entrance off SH67 (adjacent to the band rotunda) shall be constructed to an industrial, reinforced, standard and shall be sealed for a minimum distance of 20m beyond the State Highway to ensure dust generated by vehicle movements is minimised.
- 14.3 The Consent Holder shall ensure the Granity site entrance off Back Road (museum entrance) shall be resurfaced and maintained to ensure a smooth finish.
- 14.4 The Consent Holder shall ensure the unsealed access and haul roads shall be maintained to avoid nuisance dust emissions.
- 14.5 The Consent Holder shall ensure overweight heavy vehicles into and out of the Granity site shall be restricted to 7.30am till 6pm Monday-Sunday and shall only utilise the Granity site entrance off SH67 (adjacent to the band rotunda).
- 14.6 The removal of Granity tunnel excavations shall be undertaken in accordance with the restrictions specified in condition 14.5 above and shall be via trucks only with no truck and trailer units to be utilised.
- 14.7 The Consent Holder shall erect a stop sign at the Granity site entrance off SH67 (adjacent to the band rotunda) before the footpath, to ensure no conflict of use with the footpath.

15. Waste Management Plan

- 15.1 During the construction phase the Consent Holder shall minimise the waste and litter

generated from the project and dispose of all waste at suitable off-site facilities. Waste management practices are to be in accordance with the details outlined in the Construction Management Plan.

Comment [HRR28]: The Consent Holder is required to address waste management under the Construction management plan therefore a specific plan is not required.

- 15.2 The Consent Holder shall provide toilet facilities at each operational area during scheme construction and a minimum of one toilet at the Weka office building.

16. Ngakawau Ecological Area

- 16.1 The Consent Holder shall carry out construction activities in a manner which ensures that the Ngakawau Ecological Area is not adversely affected.

17. Water Supply

- 17.1 In the event that construction activity at Granity impacts on any of the private water supplies informally established on DoC estate, the Consent Holder shall arrange at their cost, a similar alternative water supply from the same catchment. The Consent Holder shall ensure that an alternative potable supply by means of water tanker delivery is provided until connection to the alternative water intake is established.

- 17.2 The alternative water supply shall be at least of equivalent quality, security and flow to the existing water supplies. Given the uncontrolled nature of the water supply catchments, failure to meet NZ drinking water standards will not be deemed non compliance with this condition of consent.

Comment [HRR29]: The springs currently captured cannot meet drinking water stds as they flow from unprotected areas.

- 17.3 The Consent Holder shall ensure a potable water supply is provided at each of the staging areas.

18. General Landscape Requirements

- 18.1. The Consent Holder shall ensure that any above ground structures blend into the surrounding environment and are designed and finished in colours that are visually muted and generally consistent with the dominant colours of the surrounding landscape.

- 18.2. In the event that the Weka power station/office building is located externally the design and appearance shall be subject to review by a landscape architect, with results provided to the Consent Authority prior to lodgment of the relevant building consents.

- 18.3 All cuts, fills and embankments shall be graded and formed to the extent reasonably practicable so that they appear as natural extensions of the adjacent landforms and landscape patterns.

19. Granity Landscape Requirements

- 19.1 Disturbance to surrounding vegetation during construction activities shall be minimised, in particular, formation of the access ramp shall be undertaken to ensure vegetation below the access ramp formation remains undisturbed and disturbance to vegetation surrounding the portal and portal apron is kept to the immediate construction footprint.

- 19.2 The Consent Holder shall ensure a mature vegetative screen shall be retained, or planted, around the exterior of the construction site fence, immediately following erection of the _ fence.

- 19.3 The Consent Holder shall ensure suitable mature plants recovered from the access ramp and portal construction area shall be replanted along the entrance of the construction yard using direct vegetative transfer techniques to minimise the visual effects.
- 19.4 The Consent Holder shall ensure on completion of construction activities that all plant and equipment is removed from the site, and the area landscaped with plantings appropriate to the locality.

20. Financial Contribution

A financial contribution of cash for the maximum sum of One Hundred Thousand New Zealand dollars (NZ \$100,000) shall be paid to Buller District Council for the provision of reserves and facilities within the Granity community.

21. Scheme Operation

- 21.1 Any on-going operations or maintenance activities associated with the Stockton Plateau Hydro Scheme shall comply at all times with the following noise criteria, measured at the stated times at the boundary of any land used for a residential activity:

Monday to Friday – 8.00am to 11.00pm	55dBA L ₁₀
Saturday – 8.00am to 6.00pm	55dBA L ₁₀
At all other times including any public holiday	45dBA L ₁₀ L _{max} 75dBA

Specific Conditions for Land Use Consents RC08/131A – RC08/131G

LAND USE CONSENT RC08/131A:

Earthworks and vegetation clearance to construct, operate and maintain the Project including RCC dams, inundation areas, embankments, saddle dams, spillways, diversion weirs, diversion intake sumps, tunnels, canals, inlet towers, drop shafts, portals, intake excavations, intake channels, penstocks, power stations, tracks, roads, silt traps, silt storage areas, stockpiling/fill areas, temporary buildings, construction plant and settling ponds and undertake exploration drilling.

Located approx: N5948300 E2417600

LAND USE CONENT RC08/131B:

Earthworks and vegetation clearance to construct, operate and maintain the Granity power station including construction of the portal outlet, access ramp, portal apron, surge chamber, ocean outfall pipeline, emergency outflow structures, settling pond, site access, the Granity construction yard and the Jacking Station.

Located approx: N5952390 E2414660

1. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan and Terrestrial Ecology Management Plan.
2. The Consent Holder shall ensure that all disturbed vegetation, soil or other material is deposited, stockpiled or contained to prevent the movement of such material into any watercourse.
3. The area of disturbance shall be kept to a minimum for all stages of the proposal.

Geotechnical investigations / Drilling

4. A least one month prior to commencing any drilling activity the Consent Holder shall prepare and submit a work plan detailing the following:
 - a) Approximate site of all drill holes;
 - b) Access to be used; and
 - c) Anticipated time frames to complete the drilling programme.
5. All drill holes shall be located within the footprint of the project dams, tunnels and reservoirs, with access to be gained via existing tracks where practicable or along the alignment of proposed new access roads.
6. The Consent Holder shall ensure that the maximum area of disturbance resulting from operation of the drill rig is limited to 75m² per site
7. The Consent Holder shall ensure that all vegetation disturbed by the drill rig operation is reinstated immediately following the removal of the drill rig. Rehabilitation shall be undertaken accordance with the latest certified version of the Landscape and Rehabilitation Management Plan.

Fauna

8. Construction works on the Stockton Plateau and inundation of the reservoirs is to be undertaken outside of the kiwi breeding season (July to January) alternatively, the disturbed areas shall be searched with a certified and approved dog and handler to ensure no nesting kiwi are present; as set out in the Terrestrial Ecology Management Plan.
9. The translocation of lizards shall be undertaken from the reservoir footprints prior to inundation, as set out in the latest certified version Terrestrial Ecology Management Plan.

Rehabilitation

10. The vegetation rehabilitation of all areas affected by construction, shall include appropriate native planting using locally sourced seeds and plants genetically similar to those within the Stockton/Denniston Plateau area. Seed and plant resources shall be genetically sourced from the locality or Ngakawau Ecological District from at least 500m above sea level.
11. The Consent Holder shall, as far as practicable make available salvaged topsoil and forest duff from areas to be disturbed. ~~All~~ Salvaged material shall be used for rehabilitation purposes in accordance with the principle of achieving a minimum of 100mm of topsoil on forest and shrubland rehabilitation and 300mm of topsoil on tussock rehabilitation over subsoils and/or 1.5-3m of non-acid generating overburden.
12. The Consent Holder shall utilise, wherever practical given the characteristics of the land, direct transfer methods of rehabilitation.
13. On completion of work at any location, all plant, equipment, fuels, hazardous substances, buildings, fencing, signage, debris, rubbish and any other materials brought onto site shall be removed, and the site left clean.
14. Immediately following the commencement of activities under these consents, the Consent Holder shall initiate and maintain a programme of progressive rehabilitation and revegetation of the land in accordance with the latest certified version of the Landscape

Comment [HRR30]: Not stripping the entire reservoir footprints

and Rehabilitation Management Plan. All planting obligations shall be completed within 12 months following the completion of work on the stage for which planting is intended.

15. Rehabilitation obligations will be deemed to have been met on establishment of a 90% planting cover, as taken from initial coverage pre-disturbance.

Pests and Weeds

16. The Consent Holder shall undertake weed and predator control (in particular stoats and possums) around the reservoir areas until rehabilitation requirements, as stipulated in condition 15 above have been met. Predator control shall be carried out in accordance with the Weed and Pest Management strategies outlined in the latest certified version of the Landscape and Rehabilitation Plan.
17. The Consent Holder shall monitor on an annual basis predator numbers to assess the effectiveness of the predator control programme. The consent holder shall report its findings to the Consent Authority on an annual basis until such time as rehabilitation is complete.

LAND USE CONSENT RC08/131C:

Earthworks to construct, operate and maintain an ocean outfall pipeline beneath residential Granity.

Located approx: N5952485 E2414524

1. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan and Noise and Vibration Management Plan.
2. ~~Prior to commencement of micro-tunneling activity, the Consent Holder shall ensure a geotechnical survey, undertaken by a suitably qualified person, is undertaken along the proposed marine outfall route to assess ground conditions and any properties that may be at risk as a result of adverse conditions.~~
3. Prior to commencement of micro-tunnelling activity, the Consent Holder shall ensure pre-condition surveys of any building identified through Scheme Design Condition 1.2(v) as being at risk from construction of the ocean outfall pipeline is completed. The survey shall be undertaken by an appropriately qualified person and shall include:
 - Age and present condition, including defects.
 - Type of foundations.
 - Existing levels of aesthetic damage.
 - Existing level of structural damage.
 - Assessment of structural ductility.
 - Condition of garden paths, retaining walls and driveways.
 - Susceptibility of structure to further movement.
4. Within 2 months of completion of construction of the ocean outfall pipeline, a post-construction survey covering the matters identified in condition 3 above shall be completed. The survey report shall include a determination of the cause of damage identified (if any) since the pre-construction survey. Any damage attributed to the Consent Holders activities shall be repaired at the Consent Holders cost.
5. Notwithstanding condition 3 above, pre-condition surveys of the Granity Library, war memorial, Granity Museum and Granity kilns by a heritage building specialist are to be

Comment [HRR31]: Covered by general condition 1.2 requiring a design report that includes details on buildings at risk.

Comment [HRR32]: Not necessary to progressively monitor buildings as tunnelling will pass through quickly - std practice to only undertake pre and post surveys.

undertaken prior to construction of the ocean outfall pipeline. This survey shall include all the details listed in condition 3. Within 2 months of completion of construction of the ocean outfall pipeline, a post-construction survey covering the matters identified in condition 3 above shall be completed. The survey report shall include a determination of the cause of damage identified (if any) since the pre-construction survey. Any damage attributed to the Consent Holders activities shall be repaired at the Consent Holders cost.

6. Prior to micro-tunneling operations commencing, the Consent Holder shall undertake a ground survey utilising a network of bench marks and control marks around the perimeter of the construction site on stable ground beyond the micro tunnel alignment. Survey instruments shall be used to monitor survey pins above the micro tunnel to monitor movement both vertically, rotationally and x and y co-ordinates. Any detectable subsidence noted in the vicinity of the road or rail facilities attributable to the Consent Holders activities shall be repaired at the Consent Holder's cost.
7. During micro tunnelling the Consent Holder shall ensure that ground vibration limits conforms with the recommendations outlined in the German Standard DIN 4150-3 (1999), whereby peak particle velocity does not exceed the following limits when measured on any foundation of an a building not connected with the project:
 - 3mm/s for any historic building; and
 - 5mm/s for any residential building unless agreement is reached with the occupier that a higher limit may apply.
8. At the commencement of micro tunnelling activity at Granity, the Consent Holder shall undertake monitoring during operation of the micro tunneling machine by reliable and appropriate methods to ensure the set limits for vibration are not exceeded. ~~In the event that any results are within 20% of the specified vibration limits, measurements will continue to be undertaken until such time as the levels are reduced.~~ In the event that monitoring establishes that vibration standards are being exceeded the Consent Holder shall cease tunnelling activities immediately until appropriate mitigation measures have been implemented.
9. ~~Vibration measurements are to be undertaken by the Consent Holder at the request of any property owner who is concerned by vibrations caused to their building due to tunneling activities.~~

Comment [HRR33]: Adequately covered by above conditions specifying vibration stds to be met and monitoring of such.

LAND USE CONSENT RC08/131D:

The use and storage of hazardous substances during construction and operation of the Project.

Located approx: N5948300 E2417600 & N5952390 E2414660

1. Hazardous substances and dangerous goods shall be stored and handled in accordance with the methods set out in the latest certified version of the Hazardous Substances Management Plan, required by Construction Management Plan Condition 3.3.
2. The Consent Holder shall notify the Consent Authority of the location of any explosives magazine.
3. Refueling, lubrication, mechanical repairs and storage of hazardous substances or dangerous goods shall be undertaken in such a manner so as to ensure that spillages of hazardous substances or dangerous goods on to the land surface or into a waterbody do not occur. Any accidental discharge of greater than 20 litres shall be reported immediately

to the Consent Authority along with details of the steps taken to remedy and/or mitigate the adverse effects of the discharge.

4. Bunds shall be positioned around the perimeter of mobile fuel tankers to capture any potential spills. Bunding to be designed to capture at least 110% of the stored volume. Tankers shall be located in areas with an impervious surface and clean-up equipment shall be maintained so that it is in proper working condition at each fuel store throughout the duration of the project.
5. The powerstation switch yards shall be designed to ensure that transformers are located in sealed and bunded areas to contain any potential leakage of hazardous substances. Bunding to be designed to capture at least 110% of the stored volume. Clean-up equipment shall be maintained so that it is in proper working condition at each powerstation.
6. The Consent Holder and all contractors and/or operators shall adhere to the spill response contingency strategies outlined in the Hazardous Substances Management Plan.
7. All contractors and/or operators transporting or storing more than 20 litres of fuel shall carry spill kits to enable immediate action to remedy and/or mitigate the effects of hazardous substances discharges on-site.
8. A list of all hazardous substances and dangerous goods shall be maintained at all times, showing location of storage and use, in case of emergencies.

LAND USE CONSENT RC08/131E:

Earthworks and vegetation clearance to realign the Stockton Mine haul road over approximately 800m and undertake on-going maintenance.

Located approx: N5948300 E2417600

1. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan and the Landscape and Rehabilitation Management Plan.
2. The realigned mine haul road shall be adequately serviced with watertables, cut-offs and culverts to control surface water runoff and minimise the scouring of road surfaces, watertables, cut-offs and culvert outfalls.
3. The Consent Holder shall ensure that all disturbed vegetation, soil or other material is deposited, stockpiled or contained to prevent the movement of such material into any watercourse.
4. Immediately following the commencement of activities under this consent, the Consent Holder shall initiate and maintain a programme of progressive rehabilitation and revegetation of the land in accordance with the latest certified version of the Landscape and Rehabilitation Management Plan. All planting obligations shall be completed within 12 months following the completion of work on the stage for which planting is intended.
5. Rehabilitation obligations will be deemed to have been met on establishment of a 90% planting cover, as taken from initial coverage pre-disturbance.

LAND USE CONSENT RC08/131F:

To construct, operate and maintain a temporary overhead power line from the existing coastal BEL network to the Granity portal outlet, temporary spur line connections at Weka

and Mt William reservoirs, a new overhead electricity line from the Granity power station to the existing BEL distribution network at Granity and a new overhead electricity line from the Weka power station to SENZ's 33kV line on the Stockton Plateau.

To erect and maintain telecommunication cables along the above described overhead electricity poles.

To construct, operate and maintain a temporary transformer at Granity and switch yards within Granity and Weka power stations.

Located approx: N5952390 E2414660 and N5951760 E2418490

1. The Consent Holder shall ensure the Mt William and Weka temporary spur line connections are built within the reservoir footprints. All temporary spur lines shall be removed prior to inundation of the reservoirs.
2. The Consent Holder shall ensure re-instatement of the existing Mt William line is by means of similar poles and structures.

LAND USE CONSENT RC08/131G:

To disturb a 460m section of the historic coal tramway during realignment of the Stockton Haul Road and inundation of Weka Reservoir.

Located approx: N5952250 E2418500

1. The Consent Holder shall undertake the activities authorised by this consent in accordance with the latest certified version of the Construction Management Plan.
2. The Weka Reservoir and mine haul road realignment shall be laid out to minimise any further damage to the historic loco line formation.
3. Prior to the commencement of any vegetation clearance, the Consent Holder shall commission a recognised archaeological expert to undertake a detailed survey of the historic settlement of TinTown and the section of the historic loco line to be affected by construction activity and inundated by Weka and Mt William reservoirs. Any structures or artefacts that are salvageable shall be recovered and fully documented and recorded. The recovered material shall be offered for display at the Granity museum or displayed at the Consent Holder's onsite interpretive display.
4. The Consent Holder's on-site interpretative display shall be established under the guidance of an archaeologist and shall include information on the historic loco line operation and the historic settlement of Tin Town.
5. The Consent Holder shall, in consultation with DoC and SENZ, assess measures for protecting remaining sections of the historic loco formation, including construction of a walking track from the Weka to Mt William reservoirs traversing remanent sections of the historic formation. Track development to be undertaken under the guidance of an archaeological expert.

Advice Notes:

1. For the purposes of these resource consents "commencement of construction of the project works" shall be deemed to have occurred on the exercise of any land use consent, with the exception of exploration activities authorised by Land Use Consent 1311/A

2. The Consent Holder is advised that building consents are required under the Building Act 2004 and Building (Dam Safety) Regulations 2008. Copies of all approved building consents should be submitted to the Consent Authority.
3. The Consent Holder is advised that historic sites are subject to management under the Historic Places Trust 1993 and further authorisations may be required under this legislation for disturbance, collection and removal of artefacts of historic significance..
4. The Consent Holder is advised that the requirements of NZTA and KiwiRail will need to be met in relation to construction of the ocean outfall pipeline beneath infrastructural assets and construction works affecting legal road or railway land.