

## Appendix 23

### **LUC16/0067 and LUC17/0122: a consent for the construction and operation of a substantial water storage facility and the new mechanical rotary fish screen**

#### **Glossary of Terms & Abbreviations Used In these resource consents**

- 0.0 The following definitions shall be used when interpreting and implementing the conditions of these resource consents:
- 0.1 **Appropriately qualified and experienced expert(s)** means a person or persons:
- With a relevant recognised tertiary qualification(s) to the topic being assessed;
  - Whom is (are) recognised as a full member (or equivalent) of a relevant professional institution(s) (such as the Institution of Professional Engineers New Zealand), where such institutions exist; and
  - Has more than 10-years relevant experience in the topic being assessed.
- 0.2 **Certifies and Certification** means a process whereby:
- The consent holder supplies a management plan, report, engineering design, action plan, planting plan or planting specification, and the Ashburton District Council appoints an appropriately qualified and experienced expert to assesses the documentation submitted to ensure that it achieves the requirements and objectives of the relevant condition(s) of consent;
  - Should the documents supplied in accordance with condition 0.2(a), in the opinion of the expert appointed by the Council, achieve the requirements and objectives of the relevant condition(s) of these resource consents, the Chief Executive (or delegate) of the Ashburton District Council shall issue a written certificate to the consent holder confirming that the requirements and objectives of the relevant condition(s) have been satisfied;
  - If the expert appointed by the Council is not satisfied that the documents supplied in accordance with condition 0.2(a) achieve the requirements and objectives of the relevant condition(s) have been achieved, the Chief Executive (or delegate) of the Ashburton District Council shall advise (in writing) the consent holder of the experts concerns and ask that the management plan, report, engineering design, action plan, planting plan or planting specification be modified so as to address the concerns, and then be resubmitted; and
  - This process shall be repeated until the expert appointed by the Chief Executive (or delegate) of the Ashburton District Council is able (on the advice of the expert) to certify that the requirements and objectives of the applicable condition(s) of consent have been satisfied.
- 0.3 **CLRAP** means Contaminated Land Remediation Action Plan.
- 0.4 **CMP** means Construction Management Plan.
- 0.5 **Construction site** includes all areas, excluding gazetted and vested road reserves that contain formed roads, where construction works/activities authorised by these resource consents are being undertaken by the consent holder.
- 0.6 **Contaminated Land** means land that contains any:
- Landfill;
  - Farm dump;
  - Offal pit;
  - Septic tank;
  - Silage pits; and
  - Land where hazardous substances have been accidentally spilled.
- 0.7 **CTMP** means Construction Traffic Management Plan.
- 0.8 **Council** means the Ashburton District Council.
- 0.9 **ERPMP** means Ecological Refuge Planting and Management Plan.
- 0.10 **Fish screen** means the rotary fish screen and its associated bypass channel.
- 0.11 **Flood flow take** means a flood flow abstraction from the Rangitata River.
- 0.12 **Klondyke Pond** means the Lake Klondyke Water Storage Facility.
- 0.13 **km/hr** means kilometres per hour.
- 0.14 **LMP** means Lizard Management Plan

- 0.15 **m** means metre
- 0.16 **m/s** means metres per second.
- 0.17 **NZTA** New Zealand Transport Agency
- 0.18 **Project Archaeologist** means the archaeologist appointed in accordance with condition 18.1 of these resource consents.
- 0.19 **RDR** means the Rangitata Diversion Race.
- 0.20 **RDR mods** means the modifications to the Rangitata Diversion Race.
- 0.21 **SBR relocation** means the relocation of a portion of Shepherd's Bush Road.
- 0.22 **The Proposal** means the Klondyke Dam, WWC, RDR mods, fish screen, SBR relocation, flood flow take and refuge, and all incidental work.
- 0.23 **The Refuge** means the proposed six-hectare ecological refuge.
- 0.24 **Unanticipated effect** means, for the purpose of condition 23.0, instances where:
  - a. An effect has arisen that was not contemplated in the resource consent application (and all supporting information – such as the Assessment of Environmental Effects report and all 'further information'); and/or
  - b. An effect was contemplated in the resource consent application (and all supporting information), but the magnitude of the effect was incorrectly predicted/assessed (for example, where the resource consent application assessed an effect as being minor, but monitoring showed the effect to be more than minor).
- 0.25 **VMP** means Vibration Management Plan.
- 0.26 **WMP** means Waste Management Plan.
- 0.27 **WWC** means the proposed White Water Course.
- 0.28 **WWCMP** means the White-Water Course Management Plan.

## **General**

### Purpose of these resource consents

- 1.0 The works authorised by these resource consents shall be limited to the construction and operation (including maintenance) of the Proposal, as set out in the documentation cited in condition 2.0 of these resource consents.

### Scope of these resource consents & Staging

- 2.0 The Proposal shall be constructed, operated and maintained in accordance with the detail contained within the document prepared by Ryder Consulting Limited in July 2016 and entitled "*Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016*" and the document prepared by Ryder in November of 2017 and entitled "*Proposed Rangitata Diversion Race Fishscreen and supplementary matters Resource Consent Application*", except where modified by specific conditions set out below or the plans authorised by the building consent for the Proposal where such changes have also been approved through any and all regulatory processes required under the Resource Management Act.
- 2.1 Should the consent holder wish to construct the Klondyke Dam in stages, the consent holder shall:
  - a. Notify the Council of the design and size of the first stage, and then each subsequent stage, not less than 12 months prior to construction of each stage commencing. Each notice, which is to be in writing, shall demonstrate that the stage complies with the parameters set out within the document prepared by Ryder Consulting Limited in July 2016 and entitled "*Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016*", except where modified by specific conditions set out in these resource consents or by the plans authorised by the building consent for the Proposal and where such changes have also been

- approved through any and all regulatory processes required under the Resource Management Act.;
  - b. Notify the Council of the construction period that is envisaged for the first stage and each subsequent stage;
  - c. Provide a copy the notification required by conditions 2.1(a) and 2.1(b) to the land owners that about the construction site and the parties listed in Annexure A to these resource consents (being the submitters to the resource consent application for the Proposal); and
  - d. Construct the Fish screen, WWC (and the associated parking facilities and amenities) and the Refuge, and provide formal access to the margins of the Rangitata River (and the associated parking facilities) as part of the first stage.
- 2.2 If the Klondyke Dam is to be constructed in stages, the consent holder shall prepare and implement the relevant management plans, action plan, monitoring plan, engineering designs, reports, planting plans and planting specifications specified in conditions 10.0 to 10.2, 11.2 and 11.3, 12.0 to 13.1, 14.2, 16.0 and 16.1, 19.0 to 19.2 and 21.1 to 21.2 for each stage. The certification process set out in condition 6.0 shall also apply to each stage.
- 2.3 Notwithstanding conditions 2.1 and 2.2, the consent holder shall construct and operate each stage of the Klondyke Dam so as to comply with the conditions of these resource consents.

#### Lapsing

- 3.0 The lapsing date for the purpose of section 125 of the Resource Management Act 1991 is 15-years from the commencement of these resource consents.

#### Other Approvals

- 4.0 All construction works/activities authorised by these resource consents shall be undertaken in accordance with the approved building consents for the Proposal. Where there is a conflict between the Building Consents for the Proposal, the resource consent(s) for the Proposal shall prevail unless such changes have also been approved through any and all regulatory processes required under the Resource Management Act.
- 4.1 At least 20 working days prior to the date upon which the Consent Holder intends to commence the activity, the Consent Holder shall provide the Ashburton District Council District Planning Manager all necessary permissions required and/or obtained under other legislation and from other consent authorities, including:
- a. Building Consent Plans as approved by the Canterbury Regional Council and Ashburton District Council;
  - b. Erosion and Sediment Control Plan as certified by the Canterbury Regional Council in accordance with CRC170660.
  - c. Dam Safety Management System as certified by the Canterbury Regional Council in accordance with CRC170652 and/or CRC170657.
  - d. Emergency Action Plan as certified by the Canterbury Regional Council in accordance with CRC170652 and/or CRC170657.
  - e. Dust Management Plan as certified or provided to the Canterbury Regional Council.
  - f. Any certificate for hazardous substance storage obtained or required under HASNO Act or other relevant legislation.

#### As Built Plans

- 5.0 The consent holder shall provide the following plans to the Chief Executive (or delegate) of the Ashburton District Council:
- a. A complete set of detailed 'as built' and Building Act/Building Consent approved engineering plans confirming the location of works and the dimensions of all

finished structures associated with the Proposal. These plans shall be supplied no later than 1 month after the Klondyke Dam is first filled with water.

#### Certification Process

6.0 The consent holder shall:

- a. Engage an appropriately qualified and experienced independent expert (or experts) to prepare the management plans, action plan, monitoring plan, engineering designs, reports, planting plans and planting specifications specified in conditions 10.0 to 10.2, 11.2 and 11.3, 12.0 to 13.1, 14.2, 16.0 and 16.1, 19.0 to 19.2 and 21.1 to 21.2, using the draft versions of these plans as submitted, and dated March 2017, and as included in the AEE at annexure two to six, and in evidence submitted by Steven Woods in Appendix B, as base documents;
- b. Provide drafts of each of the documents required by condition 6.0(a) to the Chief Executive (or delegate) of the Ashburton District Council, not less than three months prior to the intended commencement of construction works/activities in accordance with these resource consents;
- c. Not commence the construction works/activities authorised by these resource consents until certification has been received from the Ashburton District Council that the management plan, action plan, engineering design, report, planting plan or planting specification is consistent with and meets the requirements and objectives of the applicable conditions of this consent;
- d. Adhere to and implement the requirements of the certified version of the management plans, action plan, engineering design, report, planting plan or planting specification;
- e. Submit any proposed variations to the management plans, action plan, engineering design, report, planting plan or planting specification to the Chief Executive (or delegate) of the Ashburton District Council, at least seven days prior to when the changes are proposed to be implemented by the consent holder. Any variations made shall not take effect until the Chief Executive (or delegate) of the Ashburton District Council certifies that the variations accord with the applicable conditions of these resource consents or have been approved through any and all regulatory processes required under the Resource Management Act;
- f. Appoint an appropriately qualified and experienced independent expert (or experts) to review the management plans and action plan annually to ensure that they continue to achieve the applicable conditions of these resource consents. The review of the CLRAP shall be undertaken by the expert in consultation with the principal contractor for the construction of the Proposal. Any changes made to the management plans, monitoring plan or action plan as a result of these reviews shall be submitted to the Ashburton District Council and shall not take effect until the Chief Executive (or delegate) of the Ashburton District Council certifies that the variations accord with the applicable conditions of these resource consents;
- g. Pay for the costs of the expert appointed by the Ashburton District Council to certify the management plan, action plan, engineering design, report, planting plan or planting specification (and any variations and/or revisions thereto);
- h. Ensure that copies of the certified management plans, action plan, engineering design, planting plan or planting specification set out in conditions 10.0 to 10.2, 16.0 and 16.1 and 20.0 to 20.2 are available on site at all times during the construction works/activities authorised by this consent, and that the management plans set out in conditions 12.0 and 12.1, 13.0 and 13.1, and 21.1 to 21.5 are available on site at all times; and
- i. Ensure that all key personnel are to be made aware of the content and requirements/obligations of the management plans, action plan, engineering design, reports, planting plan or planting specification.

- 6.1 Notwithstanding conditions 6.0(c), 6.0(e) and 6.0(f), if the consent holder has not received a written response from the Ashburton District Council on the 30<sup>th</sup> working day of it providing a management plan, action plan, engineering design, report, planting plan or planting specification (or variations/changes to these documents) for certification, the works/actions authorised by these resource consents may commence in accordance with the document that was submitted to the Council. However, this shall not apply where the authorisation of Ashburton District Council outside of its Regulatory responsibilities (for example to assume management or custodianship of any part of the facility) is required to action any part of a proposed management plan.

## **Construction Works & Activities**

### Construction Management Plan

- 7.0 The purpose of the Construction Management Plan is to describe the measures that will be implemented to ensure that all construction related environmental effects are avoided, minimised, or managed in accordance with the conditions of these resource consents and engineering/environmental best practice.
- 7.1 The objectives of the CMP are to:
- a. Avoid and/or minimise the magnitude of the adverse effects generated during the construction activities and/or works authorised by these resource consents; and
  - b. Provide clarity as to how the Proposal is to be constructed by setting out the:
    - i. Construction methodology that is to be employed to construct the Proposal; and
    - ii. Staging, timing, duration and monitoring of construction works and/or activities; and
    - iii. Measures that are to be applied, and when they are to be applied, to minimise the effects of the construction activities and/or works authorised by these resource consents. These measures shall include:
      - A. A requirement that all construction works/activities be in accordance with the Canterbury Regional Council's ESCG (2007);
      - B. Measures necessary to provide for stormwater disposal and sediment removal;
      - C. The inclusion and/or maintenance of a vegetated strip (or other treatment system supported by the ESCG) between all areas of earthworks and water courses/water bodies/water races;
      - D. Controls on the siting of stockpiles to avoid sediment-entrained runoff entering water races/water courses/water bodies and to reduce the risk of fugitive dust emissions;
      - E. Measures to avoid the entrainment of oil, fuels or any other hazardous substances in stormwater, with particular emphasis on re-fuelling areas and repair areas; and
      - F. Requirements regarding the stabilisation and maintenance of all construction site entrances associated with the Proposal from public roads; and
      - G. Measures to ensure the appropriate level of mitigation of the adverse amenity effects of construction on those living adjacent to the storage facility, particularly in terms of separation and/or screening of construction staging areas/depots and dust effects.
    - iv. The means by which stakeholders are to be kept informed of the construction works/activities being undertaken by the consent holder and/or its contractor(s).

7.2 The CMP shall contain the following sections:

- a. Purpose and Scope
- b. Personnel, Team Structure, Contact Details and Responsibilities. This will include the 24-hour contact details for the following personnel:
  - i. The administrator of the complaints register required in condition 7.0; and
  - ii. The Liaison Officer appointed in accordance with condition 7.3;
- c. Environmental Policy and Environmental Management System;
- d. Resource Consent and Building Consent Requirements;
- e. Accidental Discovery Protocol (that accords with the requirements and objectives of conditions 18.0 and 18.1 of Resource Consent LUC16/0067 and LUC17/0122);
- f. Environmental Management Sub-Plans including, as a minimum, the following plans:
  - i. Erosion and Sediment Control Plan;
  - ii. Hazardous Substances Spill Management Plan;
  - iii. Noise & Vibration Management Plan;
  - iv. Waste Management Plan;
  - v. Works in the River Management Plan;
  - vi. Smoke Management Plan;
  - vii. Dust Management Plan; and
  - viii. Contaminated Land Remediation Action Plan;
- g. Construction Methodology;
- h. Training and Induction of Contractors and their Staff;
- i. Subcontractor Management;
- j. Monitoring and Site Inspections;
- k. Conformance and Corrective/Preventative Actions;
- l. Meetings Frequency and Purpose; and
- m. Environmental Systems Reviews.

Construction Management Sub-Plans:

*Hazardous Substances Spill Management Plan*

7.2.1 The purpose of the Hazardous Substances Spill Management Plan is to:

- a. Identify the hazardous substances that will be retained on the site during the construction of the Proposal,
- b. Set out how and where the hazardous substances will be stored, dispensed and used;
- c. Identify the potential situations and locations where hazardous substances may be accidentally spilled, and to ensure that the appropriate measures are implemented by the consent holder to ensure that all actual or potential hazardous substances effects arising from the construction activities are minimised. This includes, but is not limited to, measures to provide secondary containment around storage locations and refuelling sites, to minimise the extent of soil contamination and to prevent run-off of spilled liquids from reaching surface water bodies.

7.2.2 The HSSMP shall include:

- a. A list of the staff and/or experts responsible for reviewing the HSSMP;
- b. A description of staff/expert training and induction requirements that will be undertaken to ensure that the HSSMP is followed by all acting in accordance with these resource consents;
- c. A description of the site and local receiving environment;
- d. A description of hazardous substances allowed onto the construction site and the restrictions that apply to, and are to be followed, in relation to their storage;

- e. The procedures that are to be followed for the use of the hazardous substances within the construction site, including the construction personnel that are authorised to use them;
- f. The minimum requirements for spill management kits that are to be distributed throughout the construction site and the procedures that are to apply to the disposal of used spill management materials; and
- g. The procedures for corrective action in the event of a spill.

#### *Waste Management Plan*

7.2.3 The purpose of the Waste Management Plan is to identify the potential sources of waste that could arise during the construction of the Proposal, to set out how and where they will be managed so as to ensure that all actual or potential waste management effects arising from the construction activities are minimised. This includes, but is not limited to, identification of expected waste types, provision for segregation in collection and storage, and procedures for recycling and reuse of materials.

7.2.4 The WMP shall include:

- a. Identification of the staff and/or experts responsible for reviewing the WMP;
- b. A description of staff training and induction requirements that will be undertaken to ensure that the WMP is followed by all acting in accordance with these resource consents;
- c. A description of the site and local receiving environment;
- d. A description of the waste products that will be generated by the construction works/activities authorised by these resource consents;
- e. A detailed description of how all waste products will be stored within the construction site and the procedures that will be followed in disposing of all waste off site; and
- f. The procedures that will be followed to clean up and dispose of waste products should they not be correctly stored on site or disposed of.

#### Complaints Register

7.3 The consent holder shall keep a register of complaints lodged with it in respect of the exercise of these resource consents.

7.4 The register prepared and maintained in accordance with condition 7.3 shall record the following details for each complaint that is made:

- a. The date and time of the complaint; and
- b. The name and contact details of the complainant (if they are provided to the consent holder) and a description of the complaint; and
- c. The investigations (if any) that the consent holder undertook in response to each complaint; and
- d. Any action that was undertaken to address the concerns raised in the complaint; and
- e. The feedback provided to each complainant.

7.5 The consent holder shall:

- a. Forward a copy of each complaint that it receives to the Chief Executive (or delegate) of the Ashburton District Council) within five (5) working days of receiving the complaint; and
- b. Forward a copy of the register prepared and maintained in accordance with conditions 7.3 and 7.4 to the Chief Executive (or delegate) of the Ashburton District Council within five (5) working days of receiving a request to do so from the Council.

## Community and Cultural Liaison

- 7.6 The Consent Holder shall appoint a Liaison Officer for the Proposal 4 months prior to any construction authorised by these resource consents commencing. The Liaison Officer shall be the contact point for the public and shall actively engage with the local community, including those identified in condition 7.9 before, during and after significant project construction activities, and shall be the known point of contact to raise any matters that may arise during construction of the Klondyke Pond.
- 7.7 The name and contact details for the Liaison Officer shall be advertised, 3 months prior to any construction authorised by these resource consents commencing, at the main construction entrance for the Klondyke Storage Dam and on a notice at the Peel Forest Café and Department of Conservation Peel Forest Campsite booking office.
- 7.8 The consent holder shall, 3 months prior to any construction authorised by these resource consents, establish and resource a Community Liaison Group (CLG) for the duration of this consent and shall as a minimum invite, in writing, to be members, those identified in condition 53 and any other parties that express an interest in being involved in the CLG to meetings.
- 7.9 The Consent Holder shall, 2 months prior to construction commencing and as required in condition 7.10, thereafter, during the construction period, advertise a public meeting in the News Papers in the vicinity of the locality of the proposal, for the purpose of facilitating the establishment of a Construction Liaison Group (CLG) in order to consult with representatives of the community during the construction period. As a minimum, the Consent Holder shall invite the following interested parties to participate in the CLG:
- a. Te Rūnanga o Ngāi Tahu and Te Rūnanga o Arowhenua
  - b. Canterbury Regional Council and the Ashburton District Council
  - c. Landowners in the vicinity of the Klondyke Pond
  - d. NZTA
  - e. Kiwi Rail
  - f. CRC Harbour Master
  - g. CRC River Engineering
- 7.10 The Consent Holder shall use its best endeavours to ensure its meetings with the CLG are held as follows;
- a. At least once every 3 calendar months during the constructions period unless requested by the CLG that the meeting be less frequent and one meeting 6 calendar months prior to construction commencing and one meeting 6 calendar months following completion of construction.
- 7.11 The meetings conducted in accordance with condition 7.8 are for:
- a. The consent holder to update the interested parties on the construction of the Proposal, its on-going operation, and on the outcomes of the monitoring conducted in accordance with consents LUC16/0067 to LUC17/0122;
  - b. The interested parties to provide feedback and comment on environmental issues related to the exercise of consents LUC16/0067 to LUC17/0122;
  - c. The consent holder to provide details of any known additional existing irrigated land subject to intensification, and any known extensions to the existing irrigation network (to enable water to be supplied to unirrigated land) that are to be supplied water from the Dam. For the purposes of this consent condition,



the term 'existing' shall mean 'as at the date when the resource consent commences'.

7.12 The CLG shall be conducted in a manner of good faith and have the following objectives:

- a. Facilitating information flow between the Consent Holder and the community regarding the implementation and environmental effects of the activities authorised by these consents (including new information, results of monitoring, and studies relevant to such effects);
- b. Identify any issues of concern that arise during the construction period;
- c. Identify or discuss appropriate measures to address issues raised;
- d. Making recommendations for the Consent Holder to consider in relation to any issues identified in terms of (b) above.

7.13 The interested parties invited to the meetings, if they request, shall be provided with a copy of the documents, reports and reviews produced in accordance with this consent, excluding any parts of the reports that the consent holder and Canterbury Regional Council, Attention: Regional Leader - Monitoring & Compliance agree are confidential and/or commercially sensitive. Copies of the reports shall be issued with the written invitations, and shall also be available at the annual meeting.

7.14 The meetings required by condition 7.10 need not occur if:

- a. The parties listed in the condition 7.9 advise (in writing) the consent holder and the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance that the meeting is not required; or
- b. The consent holder advises (in writing) the Canterbury Regional Council, Attention: Regional leader - Monitoring and Compliance that there has been no response, after a period of at least four weeks, from any of the parties listed in condition 7.9 to an invitation to meet.

7.15 The consent holder shall keep a record of the meetings held in accordance with condition 7.10. The record shall list the names of those who attended the meetings, the main topics of discussion and any agreed outcomes/areas of disagreement. The consent holder shall forward a copy of the meeting record to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance (on request) and to the meeting participants no later than four weeks after the meeting being held.

7.16 The Consent Holder shall assist the CLG to fulfil its objectives by, amongst other things:

- a. Arranging an appropriate venue in the area for meetings of the CLG and meeting any other reasonable costs of the meetings;
- b. Appointing a community Liaison Officer with authority to represent it on the CLG and ensuring the community Liaison Officer attends all of the formal meetings of the CLG;
- c. Ensuring that a representative of the company responsible for any construction under contract with the Consent Holder attends all meetings;
- d. Providing information to the CLG about progress in relation to the Klondyke Pond, including the environmental effects of the Klondyke Pond and compliance with consent conditions and development of any and all management plans;
- e. Being prepared to discuss the environmental effects of the proposal, any concerns in relation to human health and safety, and any complaints from the

local community, including provision of further information and identification of appropriate measures to address issues raised.

**Advice note:**

This CLG condition is replicated in CRC170657. Only one CLG is required for both the Canterbury Regional Council and the Ashburton District Council.

Hours of Construction Works & Activities

8.0 The construction of the Proposal shall be undertaken in accordance with the following restrictions:

- a. Construction work/activity shall only occur between 0630 (6.30am) to 2000 (8pm) hours daily;
- b. There shall be no construction work/activity on Sundays or any public holidays; and
- c. For the purpose of this condition, the term 'construction work/activity does not include maintenance works/activity needed to comply with the conditions of this consent.

Construction Noise & Vibration Limits

9.0 All construction activities/works shall be conducted so that noise emissions do not exceed the noise limits set out in NZS 6803:1999 'Acoustics – Construction Noise', and as repeated in the following table. Sound levels shall also be measured and assessed in accordance with NZS 6803:1999.

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

- 9.1 The construction activities/works authorised by these resource consents shall not exceed the German Industrial Standard DIN 4150-3 (1999): Structural vibration – Part 3.

*Vibration Standards & Management Plan*

- 9.1.1 The purpose of the Vibration Management Plan is to ensure that the appropriate measures are implemented by the consent holder to ensure that all actual or potential vibration do not exceed the standards set out in condition 9.1.

- 9.1.2 The VMP shall include:

- a. A list of the staff and/or experts responsible for reviewing the VMP;
- b. A description of staff training and induction requirements that will be undertaken to ensure that the VMP is followed by all acting in accordance with these resource consents;
- c. A description of the site and local receiving environment;
- d. A description of the construction works/activities authorised by these resource consents that will generate vibration;
- e. A description of the construction works/activities that require specific controls and monitoring and those that can be controlled by normal construction practice;
- f. A detailed description of the specific controls that will apply to the applicable construction works/activities identified in condition 9.1.2(e);
- g. The vibration limits that apply (expressed as PPV in units of mm/s) to the structures within or adjacent to the construction site and/or forming part of the RDR as it passes through or adjacent to the construction site, and the definition of an 'excessive vibration limit' for the structures;
- h. The equipment used to measure the vibration generated by the construction works/activities authorised by this Proposal and the qualifications of those operating that equipment;
- i. The procedures that are to be employed by the consent holder to correct the effects of excessive vibration; and
- j. Requirements for pre-construction condition surveys on all structures within and adjacent to the construction site, including the RDR.

**Traffic & Transportation**

Construction Traffic Management Plan

- 10.0 The objective of the Construction Traffic Management Plan is to ensure that traffic generated during the construction phase of the project is effectively managed so that increases in traffic volume are safely accommodated within the existing road network. This will include refining the transportation routes and the traffic safety mitigation measures once the material source locations are known and the construction program has been refined. It is noted that a Corridor Access Request (CAR) must be lodged with ADC for each separate project being undertaken on the road corridor. A Traffic Management Plan (requiring ADC's approval) is a required component of a CAR.

- 10.1 While the CTMP shall be principally focused on managing the actual and potential effects of increased heavy traffic on the local road network, the actual and potential effects of other site generated traffic on the local road network is also to be addressed.

- 10.2 The CTMP shall:

- a. Set out general traffic management procedures and methodologies to be implemented for the duration of the construction work/activities associated with the Proposal;

- b. Set out the major source locations for rock, lining material, concrete, and fuel, and the timing and expected volume of associated traffic movements. The transport routes for vehicles hauling material to the site shall be in accordance with Figure 5 of the report prepared by Traffic Design Group Limited, entitled "*Klondyke Storage Proposal Transportation Assessment Report*" and dated July 2016, a copy of which is attached to, and forms part of these resource consents (refer to Annexure A);
- c. Set out any alternative transport routes required for transport of rock, lining material, concrete, or fuel. These routes shall minimise the use of roads classified as 'local roads' in the Ashburton District Plan. Use of local roads not identified in Figure 5 (refer to Annexure A) will require the CTMP to include a Transport Assessment of the route that considers potential road safety issues on the local road network, and outlines methods to manage road safety related effects to ensure that they are minor in magnitude;
- d. Set out the nature and timing of physical improvement works adjacent to the site to be undertaken on the road network at the consent holder's cost, to accommodate access to the Proposal, as set out in conditions 11.0 and 11.1;
- e. Following confirmation of source material locations and primary transport routes, set out specific traffic management methods and the nature and timing of local physical improvement works that are to be undertaken on the road network (at the consent holder's cost) that is to provide vehicular access to the Klondyke Dam. This shall include the following methods:
  - i. If the transport route includes eastbound travel on Moorhouse Road through Mayfield Klondyke Road, address the safety issues associated with the lack of sight distance from Moorhouse Road to the north in accordance with one of the options set out in Section 9.2.2 report prepared by Traffic Design Group Limited, entitled "*Klondyke Storage Proposal Transportation Assessment Report*" and dated July 2016, a copy of which is attached to, and forms part of these resource consents (refer to Annexure A of these resource consents);
  - ii. Implement, at a level related to the expected heavy traffic volumes, a traffic management plan in accordance with NZTA Code of Practice for Temporary Traffic Management at the Arundel Rakaia Gorge Road / Ealing Montalto Road intersection to highlight the presence of heavy traffic turning and through movements;
  - iii. Implement, at a level related to the expected heavy traffic volumes, a traffic management plan in accordance with the NZTA Code of Practice for Temporary Traffic Management at the Arundel Rakaia Gorge Road / Moorhouse Road intersection to highlight the presence of heavy traffic turning movements;
  - iv. Provide signed access points to the construction site in accordance with NZTA Code of Practice for Temporary Traffic Management. In addition to the localised widening on the frontage road to the construction site, access points shall be no closer than 50m from the nearest local road intersection. Where sight lines are restricted site specific traffic management shall be installed to manage, and minimise any actual or potential safety risks to the point that they are minor; and
  - v. The traffic management measures or improvements identified by a transport assessment conducted in accordance with condition 10.2(c);
- f. Include a map of school bus routes that are operating on the transport routes, a process to ensure that the map is provided to all construction staff and contractors, and set out the measures that are to be taken by the consent holder, the construction staff and the contractors to minimise any actual or potential adverse traffic safety effect on both the school buses and the bus stops to the point that it is minor in magnitude; and
- g. Minimise the periods when public access to the south end of Shepherds Bush Road will be restricted or prevented, and means by which the public, Fish &

- Game New Zealand, the Canterbury Regional Council and the NZFishing.com website will be notified of the access restrictions and access being prevented.
- h. Arrangements for safe car parking at the construction site to ensure the roading network is not obstructed.
  - i. Set out the process whereby alternative routes are able to be used for a short duration where the road controlling authority closes or requires a detour from a transport route defined in 10.2b and 10.2c.
  - j. Set out protocols for informing all persons driving to and from the site of the relevant content of the CTMP, and road safety related driver behaviour requirements, and traffic incident reporting processes.
  - k. A summary of reported traffic related incidents and complaints (including those reported in the register required by condition 7.0), plus actions taken, is to be maintained within the CTMP.
  - l. Set out how relevant content from the CTMP will be made available to the public on request.

#### Road Improvement, Maintenance, Monitoring & Actions

- 11.0 The consent holder shall ensure that prior to the commencement of the construction works / activities authorised by these resource consents within the construction site, the following road network improvements are designed and constructed at the consent holder's cost:
- a. Chip-seal the 1.1-kilometre length of Montalto Road from the end of the seal south of Moorhouse Road intersection to the site access immediately west of the RDR Bridge. The seal width is to be at least 6.6 m wide, and include swale drainage on both sides;
  - b. Reconfigure the intersection of Moorhouse Road / Shepherds Bush Road to give Moorhouse Road priority over Shepherds Bush Road. The engineering design shall be in accordance with the concept design included as Figure 9 in the report prepared by Traffic Design Group Limited, entitled "*Klondyke Storage Proposal Transportation Assessment Report*" and dated July 2016, a copy of which is attached to, and forms part of these resource consents (refer to Annexure A of these resource consents);
  - c. The modification of Moorhouse Road / Shepherds Bush Road set out in condition 11.0(b) of these resource consents shall ensure that a Safe Intersection Sight Distance (based on design speed and sightline requirements set out in AUSTROADS Guide to Road Design Part 4A – Signalised and Signalised Intersections) is achieved from the Moorhouse Road approach looking to the west on Montalto Road; and
  - d. Undertake seal widening on Montalto Road at each access point to the construction site, in accordance with the concept design included as Figure 4 in the report prepared by Traffic Design Group Limited, entitled "*Klondyke Storage Proposal Transportation Assessment Report*" and dated July 2016, a copy of which is attached to, and forms part of these resource consents (refer to Annexure A of these resource consents). The seal widening is to ensure turning heavy vehicles can do so within the road carriageway and to reduce wear and tear on the road pavement.
- 11.1 Should the design of the Klondyke Dam necessitate the relocation of Shepherds Bush Road, the new alignment of Shepherds Bush Road shall be constructed in accordance with MWH Plan Z1814702-C023 Rev E and Z1814702-C206 Rev B, a copy of which is attached to, and forms part of these resource consents application (refer to Annexure B of these resource consents). The road shall include a 20m wide road reserve, a 7m wide unsealed road carriageway, and associated drainage. The 100m section of new road west of Ealing Montalto Road shall be sealed following construction and prior to the vesting of the new road reserve with the Ashburton District Council.

- 11.2 The consent holder shall, prior to the construction works / activities authorised by these resource consents commencing and in consultation with the Ashburton District Council, engage an appropriately qualified and experienced independent expert to undertake a survey of the road condition of those parts of the local road network (excluding Mayfield Klondyke Road from Arundel Rakaia Gorge Road to Coskeries Road, and Shepherds Bush Road from Arundel Rakaia Gorge Road to Ruapuna Road) west of Arundel Rakaia Gorge Road and between the Hinds River and the Rangitata River that the CMTP identifies are to be used for the transport of rock, lining material, concrete, fuel, or earthworks material to the construction site for use in the construction of the Proposal.
- 11.3 The expert appointed in accordance with condition 11.2 of these resource consents shall prepare a detailed report that sets out their findings. A copy of the report shall be provided to the Chief Executive (or delegate) of the Ashburton District Council in advance of the construction works / activities authorised by these resource consents commencing.
- 11.4 The consent holder shall, in accordance with standard Ashburton District Council maintenance specifications, maintain the roads identified in condition 11.2 to a safe and comfortable driving surface (at least equivalent to the road surface condition identified by the road condition survey) for the duration of the use of each road for construction works / activities associated with the Proposal. The road carriageways used shall be made good at the end of the use of each road for construction (as set out in the CTMP) and shall be returned to the Ashburton District Council for maintenance responsibility in a condition no worse than what existed prior to the commencement of construction works / activities authorised by these resource consents.
- 11.5 That the plans and specifications of all roading works set out in conditions 11.1 to 11.4, shall be submitted to the Ashburton District Council for certification. Engineering certification of complying documents shall be given in writing and work shall not commence until this has been received from the Council. Any subsequent amendments to the plans and specifications shall be submitted to Council for certification.
- 11.6 That accurate 'as built' plans of all services and assets be provided to the Roading Manager. All data required by Council relating to assets being altered or vested in Council shall be provided in an appropriate electronic format for integration into Council's systems. Actual costs involved in provision and transfer of this data to Council's systems shall be borne by the consent holder.

#### **Bonding Condition**

- 11.7 To secure Condition 11.4, the Consent Holder shall, 3 months prior to any construction activities commencing under this consent, provide and maintain in favour of the Ashburton District Council, a bond covering the construction phase of the project on terms and conditions satisfactory to it in all respects.
- 11.8 The bond shall be in a form generally used by a bank or insurance company registered to conduct business in New Zealand and approved by the Ashburton District Council.
- 11.9 The bond shall apply to works relating to the construction and roading reinstatement phases and shall provide that the Consent Holder be liable for meeting the costs (including any contingency and GST) of reinstating roads affected by the construction, including making safe and mitigating any adverse effects arising from the work undertaken during construction.

- 11.10 The payment of the bond quantum by the Consent Holder shall be guaranteed by a Guarantor acceptable to the Ashburton District Council.
- 11.11 The Guarantor shall bind itself to pay up to the bond quantum for the carrying out and completion of all obligations of the Consent Holder under the bonds.
- 11.12 If the Consent Holder is unable at any time to arrange a Guarantor for the quantum of the bond as determined in accordance with these conditions, or the Guarantor provided is unacceptable to the Ashburton District Council, the Consent Holder shall provide a cash bond or bonds for the required quantum.
- 11.13 The Consent Holder shall not exercise this consent or continue to exercise this consent until the bond or bonds or varied bonds have been executed by the Consent Holder and Guarantor and are acceptable in all respects to the Ashburton District Council and are deposited with the Ashburton District Council.
- 11.14 In the event of the Consent Holder and the Ashburton District Council not reaching agreement on the initial or subsequent bonds and their amounts, they will be assessed by a suitably qualified and experienced independent bond assessor appointed by the Ashburton District Council, and the decision of that person shall be final and binding.
- 11.15 The Consent Holder shall meet the full and reasonable costs of providing any bond, including legal advice to the Ashburton District Council, the costs of preparation of the bond and the costs of any bond assessor engaged to resolve the appropriate quantum of the bond.

## **Terrestrial Ecology**

### **Ecological Refuge Planting & Management Plan**

- 12.0 The objectives of the Ecological Refuge Planting and Management Plan are:
  - a. To establish a permanent ecological refuge comprising six hectares of wetland, native plantings, and lizard habitat; and
  - b. To provide receptor habitat for lizards to assist in meeting the objectives of the LMP.
- 12.1 The ERPMP shall include:
  - a. A detailed plan that shows the area and location of the habitats to be created. The detailed plan shall give effect to the concept plan for the Refuge, which is attached (as Annexure C) and forms part of these resource consents;
  - b. The location, density and species of native plants to be planted in the Refuge;
  - c. A requirement that all plants planted as part of the Refuge are grown from seeds collected from local, naturally occurring indigenous vegetation;
  - d. A requirement for ongoing weed control at the refuge and the timing and methods for weed control;
  - e. A schedule setting out the timing of the site preparation, planting and maintenance activities (including specifying when replacement plantings are needed, and when maintenance activities can cease);
  - f. The methods for site preparation prior to planting, including stock exclusion and clearing and disposal of existing weeds;
  - g. The planting methods to be employed in establishing the Refuge;
  - h. The monitoring activities (and their frequency and duration) that are to be conducted by the consent holder to monitor the success of the activities that are undertaken to establish and maintain the ecological refuge; and
  - i. A performance standard requirement for the planting to achieve established, live plant densities of 90% of the initial planting densities by the end of the maintenance period.

#### Lizard Management Plan

13.0 The purpose of the Lizard Management Plan is to set out detailed methods and timeframes to ensure that the following objectives are achieved:

- a. To provide an area of lizard habitat that is larger than (and at least 120% of) the area of stone piles that will be re-located from the Klondyke Storage Dam footprint to the Ecological Refuge described in condition 12.1 of these resource consents;
- b. To translocate lizards from the existing stone piles within the Klondyke Dam's footprint to the Refuge using methods that will maximise the probability of survival and establishment of a viable population of lizards at the receptor habitat; and
- c. To monitor whether lizards have established successful populations at the receptor habitat.

13.1 The LMP shall include:

- a. The objectives set out in condition 13.0;
- b. Copies of, and a brief explanation of the permits secured under the Wildlife Act 1953 for the translocation of lizards from the Klondyke Dam footprint to the Refuge and the conditions (if any) that apply to the relocation activities;
- c. A map showing the area, location and layout of the lizard habitat within the Refuge;
- d. The methods and timing to be employed by the consent holder for the removal of the existing stone piles from the footprint of the Klondyke Dam and the re-establishment of stone piles within the Refuge;
- e. The methods and timing to be employed by the consent holder for translocating lizards to new or existing lizard habitat at the Refuge;
- f. The identification of suitable nearby unaffected lizard habitat to which lizards may be re-located, if such relocation proves necessary;
- g. The monitoring activities (and their frequency and duration) that are to be conducted by the consent holder to monitor the success of the activities that are undertaken to relocate the lizards and to establish and maintain a viable lizard habitat;
- h. Descriptions of the lizard habitat and fauna at the source site (the Klondyke Dam) and the receptor site (being the Refuge); and
- i. Methods for collection of DNA from lizards captured for translocation.

#### Monitoring & Reporting

14.0 The consent holder shall, not less than six-months prior to the commencement of any construction activities/works authorised by these resource consents, appoint an appropriately qualified and experienced expert to undertake the monitoring required by the ERPMP and LMP.

14.1 The monitoring undertaken by the expert appointed in accordance with condition 14.0 shall occur at the frequency and using the methods set out in the ERPMP and LMP over the course of construction works/activities authorised by these resource consents, and shall continue for not less than five years after the stone pile and lizard relocation activities required by conditions 13.0 and 13.1 commence, and not less than three years after all construction is complete.

14.2 The expert appointed in accordance with condition 14.0 shall prepare an annual report for the first four years of the monitoring required by condition 14.1 and then every two years thereafter until the completion of the monitoring that is required. All of the reports required by this condition shall be issued to the Chief Executive (or delegate) of the Ashburton District Council by no later than the 30<sup>th</sup> of June each year. Each monitoring report shall assess whether the ERPMP and LMP are achieving



the purposes set out in conditions 12.0 and 13.0. If the findings of the expert are that changes to the LMP and/or ERPMP and/or additional measures/actions are needed to achieve the purposes of the plans, they shall make recommendations to the consent holder as to the changes/additional measures/actions that are required.

- 14.3 Where revisions are made to the ERPMP and/or LMP to give effect to the recommendations of the ecologist arising from condition 14.2 of these resource consents, the revisions shall be certified in accordance with the process established by condition 6.0 before they can be implemented, except that the monitoring activities required by conditions 14.0 and 14.1 shall continue while the revisions are certified.

#### **Disruption of Water Supplies**

- 15.0 The consent holder shall, at least three months prior to the commencement of the construction works/activities authorised by these resource consents, supply a report to the Chief Executive (or delegate) of the Ashburton District Council that sets out the procedures that are to be employed to ensure, as a minimum, the continuity of supply experienced by the parties accords with the levels of service that existed prior to the commencement of the construction works/activities authorised by these resource consents for the MHV Water Limited, Ashburton-Lyndhurst and Barrhill Chertsey irrigation schemes, the Ashburton District Council's stock water system and the Montalto and Highbank hydroelectric power generation stations during the construction of the Proposal. This report shall define the level of service that is presently provided, on an average year, to the parties listed in this condition.

- 15.1 When preparing the report required by condition 15.0 the consent holder shall consult with the representatives of the listed irrigation schemes, the stock water supply system and the owners of the two hydroelectric power stations (hereafter referred to as 'the parties'). Copies of the responses of the representatives of the parties to the proposed procedures are to be attached (in full) as an appendix to the report. Where the parties do not agree with proposed procedures, the report shall outline the additional measures that the consent holder will implement to ensure that, as a minimum, the continuity of supply experienced by the parties accords with the levels of service that existed prior to the commencement of the construction works/activities authorised by these resource consents.

#### **Treatment of Contaminated Land**

- 16.0 The purpose of the Contaminated Land Remediation Action Plan is to ensure that contaminated land, including that arising from spills and accidents, that is encountered during the construction of the Proposal is managed so that construction workers and the public are protected and exposure pathways to contaminated material are eliminated in accordance with guidelines applicable to the setting.
- 16.1 The CLRAP shall address the matters set out in bullet points (a) to (f) of this condition, to the level of detail appropriate to the degree of risk presented by the disturbance, removal or inundation of each specific contaminated area:
- a. The earthworks and transport controls that will be implemented to minimise the off-site migration of contamination (via air or water during the remedial works);
  - b. The measures that will be implemented to control any odour arising from the works associated with removing/managing the contaminated land;
  - c. The measures that will be implemented to divert stormwater away from the remedial works and the Rangitata River;
  - d. How the contaminated land, stormwater or groundwater in the remediation area will be treated;
  - e. The regime of sampling and reporting that is to be implemented; and

- f. The health and safety requirements for remediation workers that will be implemented.

16.2 In the event of encountering visual or olfactory indicators of waste materials and/or soil contamination or an uncontrolled discharge of contaminants (i.e. inadvertent rupturing/dislodgement of containers or drums that may be present containing liquid) the consent holder or its contractors shall immediately comply with the Contaminated Land Remediation Action Plan and advise both Environment Canterbury and the Ashburton District Council.

### **Cultural & Heritage Considerations**

#### Site Works

17.0 All persons working on the construction of the Proposal shall, prior to commencing work, be briefed on the possibility of encountering archaeological material during the course of earthworks, and on the accidental discovery protocol set out in conditions 18.0 to 18.2.

17.1 The consent holder shall appoint an archaeologist for the Proposal (hereafter referred to as '**the project archaeologist**') prior to any construction authorised by these resource consents commencing.

17.2 The name and contact details for the project archaeologist appointed in accordance with condition 17.1 shall be provided to all personnel working on the construction of the Proposal.

#### Cultural Monitoring

17.3 The consent holder shall invite Te Rūnanga o Ngāi Tahu and Te Rūnanga o Arowhenua to each nominate a representative that can be present on site to monitor all of the topsoil stripping works associated with the Proposal. The consent holder shall pay the fair and reasonable costs associated with this monitoring, upon receipt of an appropriate invoice, as agreed between the parties before the commencement of activities.

17.4 The consent holder shall make any person nominated in accordance condition 17.3 aware of the construction programme and provide not less than 48 hours advance notice to each nominee, of the commencement of topsoil stripping activities associated with the Proposal.

#### Cultural Effects Offsetting - Recognition of the significance of the site to Te Rūnanga o Arowhenua

17.5 The consent holder shall invite Te Rūnanga o Ngāi Tahu and Te Rūnanga o Arowhenua to, should they wish to:

- a. Undertake karakia and other ceremonies prior to construction works / activities associated with the Proposal commencing;
- b. Input into the design of the landscape treatments that are to be implemented to give effect to conditions 12.1, 13.1, and 19.1 prior to the designs being submitted for certification in accordance with condition 6.0. The process followed by the consent holder to give effect to this condition shall accord with that set out in condition 22.0; and
- c. Design and construct a pou whenua that is to be erected at a location agreed with the consent holder, and which is accompanied by information panels that impart information on the historical, and cultural values, and associations that exist on or in close proximity to the Proposal.
- d. In engaging Te Rūnanga o Ngāi Tahu and Te Rūnanga o Arowhenua in undertaking the requirements of condition 17.5(a) the consent holder shall pay the fair and reasonable costs associated with these activities, upon receipt of

an appropriate invoice, as agreed between the parties before the commencement of activities.

#### Accidental Discovery Protocol

18.0 In the event of any discovery of archaeological material the consent holder shall immediately:

- a. Cease work within 10 metres of any part of the discovery and mark off the affected area;
- b. Advise the Canterbury Regional Council and Ashburton District Council of the discovery; and
- c. Advise Heritage New Zealand Pouhere Taonga of the discovery.

18.1 If the archaeological material is determined to be Kōiwi Tangata (human bones) of Māori origin or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the consent holder shall immediately:

- a. Advise the office of Upoko Rūnanga o Arowhenua and Aoraki Environmental Consultancy of the discovery; and
- b. Consult Upoko Rūnanga o Arowhenua on any matters of tikanga (protocol) that are required in relation to the discovery and prior to the commencement of any investigation, and perform those requirements.
- c. Advise the New Zealand Police of the discovery in relation to Kōiwi Tangata (human bones).

18.2 Iwi representatives, Ashburton District Council and Heritage New Zealand Pouhere Taonga Trust shall be afforded the opportunity to visit the site within three working days of the discovery (if and as they consider it necessary). The site inspection shall occur within six working days of the discovery being made.

18.3 Other than in circumstances where an Authority has been granted by Heritage New Zealand Pouhere Taonga, the consent holder may recommence any work if Heritage New Zealand Pouhere Taonga (following consultation with Kaitiaki Rūnanga if the material is of Māori origin) provides a statement in writing to the Council that appropriate action has been undertaken in relation to the archaeological material discovered.

#### **Advice Notes**

1. *Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc., may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/kōiwi may date to any historic period.*
2. *It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction. An authority from Heritage New Zealand Pouhere Taonga may be required.*

## **Landscape Considerations**

### Planting Plan

19.0 Planting plans shall be prepared to show the landscape treatments that are to be implemented by the consent holder for the areas listed in bullet points (a) to (e) of this condition:

- a. The shelterbelt and two mitigation planting areas in close proximity to Montalto Road;
- b. The area of, and around, the discharge channel from the Klondyke Dam to the Rangitata River, including the placement of rocks within the channel outlet and restoration planting;
- c. The WWC's surrounds, including the car park and the area around the WWC's public facilities;
- d. Any land beyond the toe of the RDR where it is affected by the RDR modifications and the fish screen, and where it is owned by the consent holder;
- e. The easements that are to be established in favour of the public for walking, cycling and equestrian access to the bed of the Rangitata River and to the Refuge, and the alignment of the tracks that are to be constructed by the consent holder within the easements; and
- f. Measures to ensure the appropriate level of mitigation of the adverse amenity effects of construction on those living adjacent to the storage facility, particularly in terms of separation and/or screening of construction staging areas/depots and dust effects.

### Specifications

19.1 Specifications shall be prepared for the landscape treatments listed in bullet points (a) to (d) of this condition:

- a. Specifications that set out the finished surfaces of the discharge channel from the Klondyke Dam to the Rangitata River, the plants that are to be planted in this area and how the planted areas are to be maintained, including:
  - i. The location, placement and type of exposed aggregate surfacing to be applied to the discharge channel from the Klondyke Dam to the Rangitata River and the application of any oxide colouring to minimise its reflectivity and visual impact;
  - ii. The placement of rocks within and immediately around the point where the channel discharges to the riverbed (including the proposed stilling basin) to help integrate both structures with the surrounding riverbank;
  - iii. The location, type and size of the plants that are to be used around the discharge channel (to replace the pines and other vegetation removed in the course of construction);
  - iv. A maintenance programme for the planting required by bullet point (a)(iii) of this condition, including the methods for site preparation prior to planting, stock exclusion and clearing and disposal of existing weeds; and
  - v. The duration of the maintenance period.
- b. Specifications that set out the plants that are to be planted in conjunction with construction of the Klondyke Dam, and how they are to be maintained, including:
  - i. The location, type and size of the plants to be used for the two proposed 'native planting areas' near Montalto Road;
  - ii. The location, type and size of the plants that are to be used for the proposed shelterbelt planting facing Montalto Road;
  - iii. The location and extent of the re-grassing to be undertaken on the embankments of the Klondyke Dam as soon as practical after works are completed;
  - iv. A maintenance programme the planting required by bullet points (b)(i) and (b)(ii) of this condition, including the methods for site preparation prior to planting, stock exclusion and clearing and disposal of existing

- weeds; and
- v. The duration of the maintenance period.
- c. Specifications that set out the rehabilitation of the existing RDR where it is affected by the RDR mods, including:
  - i. The location and extent of the re-grassing to be undertaken in conjunction with the deepening and widening of the canal;
  - ii. The location and extent of re-grassing and/or other planting to be undertaken in conjunction with construction of the fish screen, new by-pass channel and new bridges;
  - iii. A maintenance programme for any planting (other than re-grassing) required by bullet point (c)(ii) of this condition, including the methods for site preparation prior to planting, stock exclusion and clearing and disposal of existing weeds; and
  - iv. The duration of the maintenance period.
- d. Specifications that address the area surrounding the WWC, including:
  - i. The location and extent of the re-grassing and/or other planting to be undertaken around the WWC and its facilities;
  - ii. A maintenance programme for any planting (other than re-grassing) required by condition 19.1(d)(i), including the methods for site preparation prior to planting, stock exclusion and clearing and disposal of existing weeds; and
  - iii. The duration of the maintenance period for the planting associated with the WWC.

20.2 The purpose of the planting plans (required by condition 19.0) and the specifications (required by condition 19.1) is to ensure that the landscape and visual mitigation measures proposed by the consent holder achieve the level of mitigation set out in the following table:

SCHEME COMPONENT:	SHORT TERM (8-10 YRS):	LONG TERM:
<b>KLONDYKE DAM</b>	Viewpoint 1 (Ealing Montalto Rd) – More than Minor	Less Than Minor
	Viewpoint 2 (Moorhouse Rd) – More than Minor	Less Than Minor
	Viewpoint 4 (Little Mt Peel) – More than Minor	
<b>KLONDYKE DAM</b>	Less Than Minor	
<b>RDR MODS</b>	Less Than Minor	
<b>WWC</b>	Less Than Minor	
<b>FISH SCREEN</b>	Less Than Minor	
<b>DISCHARGE CHANNEL</b>	Viewpoint 3. (Rangitata Gorge Rd & Rangitata River Fairway) – More Than Minor	Less Than Minor

And that the appropriate level of mitigation of the adverse amenity effects of construction on those living adjacent to the storage facility occurs.

### **Additional Operational Matters**

#### Public Access

20.0 At the completion of the construction works/activities authorised by these resource consents, the consent holder shall limit public access to the Klondyke Dam (including its embankments and intake/discharge structure) by erecting secure barriers (such

as fencing and locked gates and/or other such combination of measures that inhibit or prevents access) at the outer toe of the embankments. The barriers shall be consistent with typical farming fences and shall be maintained in a safe operational condition, at the consent holders cost.

- 20.1 The consent holder shall, prior to the construction of the Dam (or the first stage thereof) being completed, form and maintain public access tracks from the western end of Shepherds Bush Road (following the SBR Relocation) to the margins of the Rangitata River and the Refuge. The public access tracks are to be formed and maintained to the 'walking track' standard (as defined by SNZ HB 8630:2004, New Zealand Handbook Tracks and Outdoor Visitor Structures), with the exception that the 'grade requirements' of this standard do not apply. Rather, the consent holder shall ensure that the grade of the public access tracks is appropriate to topography and to the health and safety of those using it.
- 20.2 Easements shall be established over the public access tracks provided in accordance with condition 20.1 within 12 months of the construction of the Dam (or the first stage thereof) and shall be registered on the certificates of title to secure enduring public access on the tracks. Use shall be restricted to access by foot, cycle or horse.
- 20.3 The consent holder shall, prior to the construction of the Dam (or the first stage thereof) being completed, construct and maintain a car park for a minimum of three vehicles at the western end of Shepherds Bush Road (following the SBR relocation). A stile shall be constructed and maintained by the consent holder in close proximity to the car park to enable pedestrian access to public access ways constructed in accordance with condition 20.1, and gates shall be provided to enable access by people on cycles and horses.
- 20.4 The consent holder shall install and maintain two signs, one adjacent to the stile required by condition 20.1 and the second in close proximity to the public access tracks where it crosses the discharge channel. The signs shall:
- Enable public access on the margins of the Rangitata River and the Refuge on formed tracks only,
  - Warn users of the potential activation of the discharge channel, and to encourage users to evacuate the discharge channel and/or the margins of the Rangitata River if an earthquake occurs;
  - Prohibit public vehicle access beyond the extent of Shepherds Bush Road (following the SBR Relocation); and
  - Prohibit the use of firearms on private land and/or near the public access tracks and the Refuge.
- 20.5 The access tracks, car park, stiles, gates and signs required by conditions 20.0 to 20.4 of these resource consents shall be constructed / in place prior to the Klondyke Dam first being filled with water and maintained by the consent holder in good order thereafter.
- 20.6 Public access to the embankments and storage pond by unauthorised persons shall be prevented through provision of secure barriers such as fencing and locked gates and/or other such combination of measures that inhibits or prevents access.
- 20.6 That the surface of the storage facility waterbody shall not be used by motorcraft (including but not limited to waterskiing boats and jetskis) for the purpose of recreation. Note: this limitation shall not apply to motorcraft being used for purposes associated with the maintenance, survey and general operation of the Dam or for the purpose of deterring waterfowl from using the storage dam over the first two weeks of each year's duck hunting season.

- 20.7 During construction of the fish screen, disruption to public access on the existing public easement beside the RDR canal shall, as far as practicable, be minimised and practical access maintained at all times during weekend periods, public holidays and the month of January.
- 20.8 Upon completion of construction of the fish screen (being the completion of physical works but prior to the issue of the Code Compliance Certificate under the Building Act 2004), the existing public access easement will be transferred to the new alignment beside the RDR canal and registered on the certificate of title.

#### White Water Course Management Plan

- 21.0 The objective of the White-Water Course Management Plan is to ensure that the WWC is managed in a sustainable, appropriate and safe manner.
- 21.1 The purpose of the WWCMP is to define the responsibilities, roles and expectations for the operation, inspection, maintenance and control of the WWC.
- 21.2 The WWCMP shall set out:
- The management and maintenance responsibilities for the WWC and associated facilities, including an accepted asset ownership and administration model;
  - The operating procedures for the WWC, including hours of operation and flow-setting protocols;
  - The surveillance, emergency and safety management procedures that are to be put in place. This shall include a health and safety plan for the WWC;
  - The protocols for community and commercial events to be held at/hosted at the WWC; and
  - That, outside of commercial events conducted at the WWC (in accordance with protocols required by condition 21.2(d) of these resource consents), the public will be able to access with the WWC without cost.
- 21.3 The consent holder shall review the WWCMP at a frequency not less than every five calendar years to ensure that it is kept up to date in regard to use patterns, and health and safety methods and approaches. Where revisions are made to the WWCMP, the revisions shall be certified in accordance with the process established by condition 6.0 before they can be implemented.

#### WWC Facilities

- 21.4 The WWC facilities required by this resource consent will be built and maintained by the consent holder in accordance with the WWCMP required in conditions 21.0 to 22.3 of this resource consent and its ongoing operation provided free of charge for use by the community.
- 21.5 Prior to the commencement of the design work for the WWC and for the purpose of informing the design, the consent holder shall:
- Conduct a consultation process, which includes as a minimum, an invitation to the public, Whitewater NZ Incorporated, the Ashburton Zone Committee, the Regional Committee (of the Canterbury Water Management Strategy) and those groups that have expressed an interest in assisting in the development of the WWC, to identify features they would like to see incorporated into the final design through written comments and a collective meeting;
  - Notwithstanding condition 21.5(a), the design of the WWC shall, as a minimum, include:
    - An area for swimming in still water;
    - An area with eddies for swimming kayaking and rafting in flowing water;
    - A wave feature; and

D. Variability in the water flow rate.

For the avoidance of doubt, the final design of the WWC is entirely at the discretion of the consent holder, but must as a minimum include the features listed in condition 21.5(b).

- 21.6 The design of the WWC shall be undertaken by a suitably qualified and experienced person with specific expertise in designing such structures. The appointment of the designer shall be undertaken following the consultation undertaken in condition 21.5. Following its development by the appointed course designer, the concept and final designs shall be provided to the parties that participated in the WWC scoping exercise provided for by condition 21.5(a), who will be invited to make comment on the design in writing and through a collective meeting. A report of all consultation undertaken, including copies of all written comments provided to the consent holder, and documents setting out the final design of the WWC shall be provided to the Ashburton District Council and those parties that participated in the consultation process, prior to construction commencing. For the avoidance of doubt, the final design of the WWC is entirely at the discretion of the consent holder, but must as a minimum include the features listed in condition 21.5(b).
- 21.7 Prior to the first operation of the WWC, the designer appointed in accordance with condition 21.6 shall certify that the WWC has been constructed in accordance with the final design provided to the Ashburton District Council in accordance with condition 21.6.
- 21.8 The consent holder shall construct/install the following facilities when it is constructing the WWC:
- a. An all-weather gravelled car-parking area that can accommodate 40-parked cars and 2 buses. The parking area shall have minimum stall dimensions of 2.5m wide and 5.0m deep, with a circulation aisle of at least 6.2m wide. Two of the car-parking spaces that are located closest to the WWC shall be increased in width to 3.6m and be signed as mobility parking spaces. To comply with NZS4121:2001, these spaces should have a stable and firm surface, which will require a high quality unsealed surface (or sealing).
  - b. Allowance shall be provided for bus turning so that only one reverse manoeuvre is required when entering and exiting the car parking area associated with the WWC;
  - c. An additional overflow parking area able to accommodate 30 car-parking spaces shall be formed and oversewn with grass;
  - d. Toilet and change facilities for men, women, and wheelchair accessible/non-gender specific facilities;
  - e. Live, recorded web-based camera service (for public use and security/surveillance);
  - f. Security fencing around the WWC and its facilities, but excluding the car park areas;
  - g. An emergency stop, and remote control, for the WWC flow control mechanism;
  - h. Emergency telephone for direct contact with course managers and emergency services;
  - i. Landscaping to provide sun and wind protection;
  - j. A warning mechanism for flow changes (which shall include a siren and a flashing light); and
  - k. Signs at the entrance to the WWC setting out the rules associated with its use, and the hazards that are associated with its use as recommended by the WWCMP.
- 21.9 The WWC and facilities required by conditions 21.5 and 21.4(a) of these resource consents shall be constructed/in place prior to the Klondyke Pond first being filled



with water and shall be maintained by the consent holder in good working order for their specified use at all times.

#### Engagement Over Draft Reports, Plans & Specifications

22.0 The consent holder shall:

- a. Forward draft copies of the documents prepared in accordance with conditions 14.2, 17.5(b), 19.0 and 19.1 to Te Rūnanga o Arowhenua for their review and comment at least six-weeks prior to the documents being submitted to the Ashburton District Council for certification. Any comments made by Te Rūnanga o Arowhenua shall be considered by the authors of the documents, and are to be attached (in full) as an appendix to the reports that are submitted to the Ashburton District Council for certification; and
- b. Forward final (certified) copies of all monitoring reports produced in accordance with conditions 14.2, 19.0 and 19.1 of these resource consents to Te Rūnanga o Arowhenua. The reports shall be forwarded to Te Rūnanga o Te Rūnanga o Arowhenua at the same time that they are forwarded to the Ashburton District Council.

#### Review of Conditions

23.0 Pursuant to section 128 of the Resource Management Act 1991, the Ashburton District Council may review any of the conditions set out in these resource consents by serving notice either:

- a. Within 2 months of the date of commencement of the construction works/ activities authorised by these resource consents; or
- b. Within 3 months of each anniversary of the commencement of these resource consents for any of the following purposes:
  - i. To deal with any unanticipated adverse effects on the environment which arises from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - ii. To require the consent holder to adopt the best practicable option to avoid, remedy or mitigate any unanticipated adverse effect upon the environment; or
  - iii. To deal with inaccuracies contained in the resource consent application that materially influenced the decision made on the application and that warrant additional or amended conditions; or
  - iv. To deal with any recommended changes to the construction or operation of the Proposal arising from a review undertaken in accordance with conditions 6.0 and 14.2 which require changes to the condition of this consent; or
  - v. To deal with a complaint that is made regarding the Proposal (in accordance with conditions 7.0 to 7.3) which requires changes to the conditions of these resource consents; and
  - vi. To deal with feedback arising from an annual meeting undertaken in accordance with conditions 51 and 52 of CRC170657 and conditions 7.8 and 7.9 of LUC16/0067 and LUC17/0122 that require changes to the conditions of these resource consents.

23.1 All reasonable costs incurred by the Ashburton District Council when undertaking a review of these resource consents under section 128 of the Resource Management Act 1991, (as specified in condition 23.0) shall be borne by the consent holder.

#### Construction, operation, monitoring and remediation bond condition

23.2 The Consent Holder shall, to secure compliance with all of the conditions of consents LUC16/0067 and LUC17/0122 provide and maintain in favour of the

Canterbury Regional Council and the Ashburton District Council a bond on terms and conditions satisfactory to the Councils in all respects.

- 23.3 All bonds shall be in a form generally used by a bank or insurance company registered to conduct business in New Zealand and approved by the Ashburton District Council and the Canterbury Regional Council.
- 23.4 The bonds shall apply to construction as well as providing cover for operational, maintenance, and reinstatement phases and works relating to this consent and the other identified consents, and shall provide that the Consent Holder shall be liable and remain liable for meeting the lesser costs (including any contingency and GST) of:
- a. Completion costs; or
  - b. Operation and maintenance costs; or
  - c. Costs for reinstating land affected by the construction, including making safe and mitigating any adverse effects arising from the work undertaken during construction.
- 23.5 The bond shall be divided into three component parts, providing a bond for construction, operation and maintenance, and reinstatement.
- 23.6 The payment of the bond quantum by the Consent Holder shall be guaranteed by a Guarantor acceptable to the Ashburton District Council and the Canterbury Regional Council.
- 23.7 The Guarantor shall bind itself to pay up to the bond quantum for the carrying out and completion of all obligations of the Consent Holder under the bonds.
- 23.8 If the Consent Holder is unable at any time to arrange a Guarantor for the quantum of the bonds as determined in accordance with these conditions, or the Guarantor provided is unacceptable to the Ashburton District Council and the Canterbury Regional Council, the Consent Holder shall provide a cash bond or bonds for the required quantum.
- 23.9 The bonds shall be executed at least four months before the commencement of any construction works associated with this consent, and may be renewed from time to time in accordance with this condition, and shall remain in place for the duration of this consent.
- 23.10 The Consent Holder shall not exercise this consent or continue to exercise this consent until the bond or bonds or varied bonds have been executed by the Consent Holder and Guarantor and are acceptable in all respects to the Ashburton District Council and the Canterbury Regional Council and are deposited with the Canterbury Regional Council who will hold it on behalf of itself and the Ashburton District Council.
- 23.11 The bonds may vary from time to time, but at any given time shall be sufficient to cover the lesser of the estimated costs of completion (including any contingency and GST), operations and maintenance, and remediation and reinstatement, and/or compliance with all conditions.

- 23.12 In the event of the Consent Holder and the Ashburton District Council and the Canterbury Regional Council not reaching agreement on the initial or subsequent bonds and their amounts, they will be assessed by a suitably qualified and experienced independent bond assessor appointed by the Ashburton District Council and the Canterbury Regional Council, and the decision of that person shall be final and binding.
- 23.13 The amount of the bonds will be reviewed and reassessed by the Consent Holder and the Ashburton District Council and the Canterbury Regional Council every 12 months from the date the initial bond amount was lodged.
- 23.14 During the construction, operation, maintenance, and reinstatement phase of the Scheme, a scope of works planned for each phase will be provided by the Consent Holder to the Ashburton District Council and the Canterbury Regional Council, both prior to setting the initial bond amounts, and again at each annual reassessment and six months prior to any change in phase, to assist in setting the bond amounts.
- 23.15 The Consent Holder shall meet the full and reasonable costs of providing any bonds, including legal advice to the Ashburton District Council and the Canterbury Regional Council, the costs of preparation of the bonds and any substitute bond, and the costs of any bond assessor engaged to resolve the appropriate quantum of the initial bond to be provided or any varied bond on review and reassessment.
- 23.16 If at any time the amount of the bonds are varied, then the Consent Holder and guarantor approved by the Ashburton District Council and the Canterbury Regional Council, shall within 30 working days of notification to the Consent Holder of the varied bond amount, execute and lodge with the Ashburton District Council and the Canterbury Regional Council a new bond for the varied amount or the additional amount required in excess of the existing bond.
- 23.17 At all times the Consent Holder shall comply with the terms of the bond or bonds or varied bond(s).
- 23.18 Should the Consent Holder, the Ashburton District Council or the Canterbury Regional Council not agree with the bond quantum determined in accordance with these conditions then the matter shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1996.
- 23.19 Arbitration shall be commenced by written notice by the Consent Holder to the Ashburton District Council and the Canterbury Regional Council advising that the amount of the bond is disputed. Such notice to be given within 14 days of the bond sum being set. If the parties cannot agree upon an arbitration within 7 day of the notice of arbitration, then an arbitrator shall be appointed by the President of the Institution of Professional Engineers of New Zealand. Such arbitrator shall give an award in writing to the parties within 30 days after his or her appointment, unless the parties agree otherwise. The Consent Holder shall bear the full and reasonable costs of the parties in connection with the arbitration. Pending the outcome of the arbitration, the current bond and bond sum will continue in force. However, the bond quantum shall be adjusted in accordance with the arbitrator's decision.

**Advice note:**

This condition is replicated in CRC170652. The intention is that only one construction, operation, monitoring and remediation bond is required for both the Canterbury Regional

Council and the Ashburton District Council.

**Administrative Charges and Other Costs**

- 24.0 The Consent Holder shall pay to the Ashburton District Council any administrative charges fixed in accordance with s 360 RMA and any other relevant legislation. The administrative charges shall be paid to the Ashburton District Council for the carrying out of their functions in relation to the administration, monitoring and supervisions of these consents and for carrying out their functions under s 35 RMA.
- 24.1 Where ADC engages independent experts in relation to these consent conditions, costs incurred will be met by the applicant.
- 24.2 Where ADC is required by these conditions to undertake monitoring, the full costs of monitoring will be paid by the applicant to ADC.

**Advice notes:**

- 1.0 This resource consent only provides approval under the Resource Management Act 1991. Should the storage Dam require authorisation under other legislation the Consent Holder will need to obtain the relevant approval prior to works commencing. This may include an Authority to destroy, damage or modify that site or building from Heritage New Zealand under the Heritage New Zealand Pouhere Taonga Act 2014.
- 2.0 Items included in these consents require Building Consent and are not covered/contained within the Building Consent for the Dam itself considered by the Canterbury Regional Council. Facilities requiring further Building Consent from Ashburton District Council include (but are not limited to):
  - 2.1 Bridges
  - 2.2 Toilet facilities
  - 2.3 Parking Areas
  - 2.4 Security Fencing (in certain circumstances)
  - 2.5 Other construction works, possibly including the whitewater course itself.

The Consent Holder is advised to contact the Ashburton District Council prior to commencement of works onsite to ascertain certainty over what additional Building Consents will be required.

- 3.0 The applicant is advised that amendments to the proposal arising from Building Consent engineering processes do not override the conditions of this consent and that changes should be discussed with the Council(s) at the earliest opportunity so as to ensure the correct regulatory response and consideration.
- 4.0 Should the storage Dam require the relocation of Shepherds Bush Road, the legal stopping of the road will be required to be undertaken in accordance with the provisions of the Local Government Act at the applicants cost.