Consent No. ..................................... (for office use only)

11A

**ASSESSMENT OF EFFECTS ON**

**THE ENVIRONMENT**

all applicants to complete

Physical

B.1 Describe the:

(a) landforms

Franz Josef is a small rural town located at the base of the Southern Alps. to the north is the Tatare River and to the south is the Waiho River. Farmland is to the south and west of Franz Josef community.

The Waiho River is a braided river that flows from the base of the Franz Josef Glacier across the river

plains and out to sea. The Southern Alps are significantly being eroded due to uplift and high rainfall

causing signficant landslips in the upper catchment. Rock and gravel from these landslips are moving down the Waiho river, causing significant aggrading of the Waiho river bed. Much of the river bed is significantly higher than the township,making the Franz Josef communnity being more at risk of flood events.

(b) land slopes

The slope of the Waiho River from the base of the Southern Alps to the sea is less than 12 degrees,

making the area relatively flat.

(c) soils

The area is made up of rock gravel and silt.

B.2 Describe any potential for natural hazards (e.g. flooding, erosion, land slip)

The Franz Josef area is at risk of being damaged by earthquakes, flooding and landslips.

The Alpine fault runs directly through the township, making the township at high risk of being destroyed by an earthquake. High rainfall also leads to the area having many landslips occuring in the mountains behind the township. The Waiho River in particular is significantly aggrading because of landslips in its upper catchment, with much of the river bed being higher than the township. Much of the area is now at higher risks of flooding due to the aggradation of sediment in the riverbed.

B.3 Are any of the following present in the area? (delete which do not apply)

(a) river protection works

(b) bridges

(c) railways and roads

(d) telephone/electricity wires or cables

Flora, Fauna and ecosystems

B.4 Describe the vegetation within the application area. List the major species, and any rare or

endangered species. (*Native bush” and “scrub”* is not a satisfactory answer).

Vegetation at the site is made up of gorse and grasses

B.5 Describe and/or list the birdlife, wildlife, freshwater and marine life within the application area, or

in the vicinity and any recognised special wildlife habitats (*“usual West Coast Wildlife” or similar*

*is not a satisfactory answer)*

The site is not known to have any freshwater flora and fauna due to the site being within the

dry bed of the Waiho River. While some fauna may frequent the area, the area is not known to be a

breeding site for any native fauna.

B.6 Describe the effects the activity will have on ecosystems, including effects of plants or animals,

any physical disturbance of habitats in the vicinity:

The activity is not expected to have any effects on ecosystems in the area. The Waiho River is a highly dynamic environment, stopping species from being able to become establised. A number of rock protection works are already located along both sides of the Waiho River for the purpose of reducing the risk of flooding on the community.

Land Use

B.7 Describe the current land use (give as many details as possible).

Residential

Commercial

Public

Public land

B.8 What is the public use of the area?

Walking and fossiking in the riverbed are the main uses. The Waiho River is not known for fishing,

swimming, kayaking or boating.

B.9 Describe any recreational values

Many people use the Waiho river bed and stopbanks to walk their dogs. The Waiho River is not known for fishing, swimming, kayaking, or boating.

B.10 What is the intended post-activity vegetation cover, and land use?

*(e.g. forestry, road, residential subdivision, pasture etc)*

The vegetation at the site is expected to regenerate over time as previously occurred following flood events. The landuse of the site willl continue to be riverbed.

B.11 What effect will this application have on alternative uses of the land, resources and/or the

environment at present or in the future?

*Discuss the reasons for your answer.*

The works are not expected to change the landuse of the area. The riverbed will continue to be riverbed.

B.12 Describe the present land surface and how it will be rehabilitated (if applicable)

Not applicable as the site is in the dry bed of the Waiho River.

Contingencies or Safeguards

B.13 If your activity includes the use of hazardous substances and installations, provide an assessment

of any risks to the following which are likely to arise from such use:

(a) risks to the physical environment

The works will not use any hazardouse substances or installations to complete the works and

so this section is not applicable.

(b) the neighbourhood

(c) the wider community

B.14 Describe any mitigation measures (safeguards and contingency plans where relevant) to be

undertaken to help prevent or reduce the actual or potential effect of any chemical or other

contaminant accidents. *(i.e. where will the contents go, how will they be contained, treated,*

*recycled or disposed?)*

(continue on separate sheet if necessary)

B.15 Describe any possible alternative locations or methods for undertaking the activity.

Monitoring

B.16 How will the effects of the activity be monitored?

The effects of the activity are considered to be minimal and so mornitoring

is not expected to be required.

B.17 Who will monitor the effects of the activity?

Monitoring is not expected to be required as the effects are expected to minimal.

Socio-economic impacts

B.18 State the numbers of people who will work at the site

12 full time workers

B.19 Give details of the hours of work *(Provide details of any shift times)*

Work will be undertaken within normal business working hours.

B.20 Do you intend working on weekends or outside the hours 7 a.m. to 6 p.m.?

No

Noise

B.21 Is a residential area or any occupied dwelling close by or within the application area?

No

B.22 Give details and distances.

B.23 Give details of any anticipated noise levels and likely impacts on both wildlife and residents in the

area.

The noise level at the site is not expected to impact on residents as the main body of the works are a significant distance from Franz Josef township and will be undertaken within normal business hours. The works are also not expected to have significant impacts on wildlife in the area due to the area not being known for having native flora and fauna.

B.24 Details of noise reduction measures *(rubber lined hoppers, mufflers, shelters, vegetation or soil*

*screens etc.)*

Not required

B.25 Will you use explosives?

No

B.26 If so give details of purpose, public warning methods, frequency, timing, storage and handling

facilities, type and quantity of blast. Discuss the impacts blasting will have on nearby residents

and any measures that will be taken to minimise such effects.

Maori Interests

B. Give details of particular Maori interest in the land or water within or bordering the application

area, or likely to be affected by the application *(sacred or spiritual sites and values, traditional*

*food gathering areas etc).*

The area is not known to have any sacred or spriritual sites and values or be an area

where food is gathered.

Visual Impacts

B.28 Is the operation or activity visible from:

- nearby dwellings NO

- roads (including rest areas) YES – Only the State Highway 6 Bridge

- walking tracks YES – Public use the existing stopbanks as walking tracks

- known observation points NO

- areas of public access? YES

If so give details, and discuss any measures that will be taken to minimise the visual impact *(i.e.*

*buffers, vegetation, screens planted trees etc).*

The work sites will be visible to the public who are using the area for walking etc. The works will also be visible from the Heliport and the State Hiway 6 bridge. All works will be carried out by an experienced Contractors. These works will be carried out using a methodology that will keep the work areas tidy at all times. The Contractor will also put out a sufficient amount of signage to warn the public of the construction area, this may include using fences/barricades.

Effects on present and future generation

B.29 Discuss socio-economic and cultural effects the *(both positive and/or adverse)* activity will have

on the immediate neighbourhood and where relevant the wider community for present and future

generations *(e.g. additional housing and service requirements, noise, vibration, dust, lighting,*

*aesthetic values, change of lifestyle, recreation, scientific values, water supply, increased traffic,*

*historical, spiritual values etc).*

The proposed works will give flood protection to the Franz Josef township. Protection against a 100 year flood event for the next 20 years. The successful Contractor who constructs this project will utilise the accommodation in the township, shops & restaurants. Some local Contractors from Franz Josef will also be involved in the construction works.

B.30 Describe any effects *(both positive and negative )*on natural and physical resources having

aesthetic, recreational, scientific, historical, spiritual, or cultural, or other special value for present

or future generations:

The works are expected to have a positive effects for the community as the works will protect the area from significant flooding, ensuring the safety and wellbeing of the community is maintained. No negative effects are expected.

Other Information

B.31 Outline other information (if any), required to be included in the application by the district plan or

regulations.