

**BEFORE THE INDEPENDENT HEARING COMMISSIONER APPOINTED BY  
THE WEST COAST REGIONAL COUNCIL**

**UNDER** the Resource Management Act 1991 (RMA)  
**IN THE MATTER** of an application for resource consent under section 88 of  
the RMA by the West Coast Regional Council in relation  
to the alteration of existing stopbanks and construction of  
a new stopbank in the Waiho River.

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**STATEMENT OF EVIDENCE OF PETER LLOYD GLASSON**

**12 July 2023**

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PO Box 323 QUEENSTOWN 9348  
Tel +64 3 379 7622  
Fax +64 3 379 2467

**WYNN WILLIAMS**

Solicitor: A H Balme  
(alice.balme@wynnwilliams.co.nz)

## **Introduction, Qualifications and Experience**

- 1 My name is Peter Lloyd Glasson.
- 2 I hold degrees of BSc (Botany), Bachelor of Town Planning (including Environmental Planning), and Master of Environmental Science all from Auckland University.
- 3 I am a Resource Management and Environmental Planner at Davis Ogilvie and Partners Limited. I have approximately 33 years' experience in planning and professional planning related work. Prior to joining Davis Ogilvie and Partners Limited I was a Planner at two local authorities for a total of three years and then various consultancies including being a Director of both Glasson Potts Fowler Limited for eleven years, and Glasson Resource Management Limited for ten years.
- 4 I have been involved in planning projects on the West Coast of the South Island. More recently I have been and am involved in several other river control and flood protection projects on the West Coast as part of my work for Davis Ogilvie on behalf of the West Coast Regional Council. These include the preparation of the resource consent applications for Stage 1A of the Hokitika River stopbank upgrade project (section 330); Stage 1B of the Hokitika River stopbank upgrade project; and Wanganui River stopbank restoration project (section 330A).
- 5 I was the Project Manager and Planner for the resource consent applications and the preparation of the Assessment of Environmental Effects for the river control works and associated activities for the North Branch and Main Stem of the Ashburton River. This project involved extensive MIKE11 and MIKE21 modelling. I was intimately involved in the relatively complicated interpretation of the effects of the proposed stopbank changes on surrounding and downstream lands and the preparation of the AEE for the resource consent applications for the stopbank upgrades as well as significant consultation with potentially affected parties and the presentation of evidence. The suite of resource consent applications for the flood protection works was granted and the project subsequently constructed.
- 6 I was also the Project Manager and planner for a large proposed irrigation dam using water from the Waihopai River in Marlborough. The AEE that I prepared for the necessary resource consent applications and hearing involved the interpretation of a detailed dam break analysis and

an analysis of the potential adverse effects of flooding on downstream properties due to a dam break. The resource consent applications were granted but the project was not further advanced in terms of construction.

- 7 I have been asked by the West Coast Regional Council (“**the Council**”) to provide independent expert evidence on its application for a land use consent in relation to proposed stop bank alterations and a new stopbank in the Waiho River (“**the River**”), Franz Josef. Throughout my evidence, I refer to the proposed amendments to the stopbanks (Church, Helipad, Havill (collectively referred to as “the existing stopbanks”)), and to a new section of stopbank as “**the Proposal**”.
- 8 The land use consent is one of four resource consents that is required to implement the project.
- 9 The overall Project involves the following required resource consents:
  - (a) Land use consent for the upgrade of the stopbanks and the construction of a new stopbank (the resource consent application the subject of this evidence);
  - (b) Discharge consent for the temporary incidental discharge of sediment during the Proposal;
  - (c) Water permit for the temporary diversion of river water during construction (including ancillary discharge of sediment during diversion activities) (awaiting a decision on section 95 processing matters);
  - (d) Land use consent for the extraction of gravel necessary for the construction of the stopbanks (separately granted – RC-2023-0016);
  - (e) Land use consent for the clearance of indigenous vegetation (to be lodged separately with the Westland District Council).
- 10 The first two consents ((a) and (b) in paragraph 9 above) are the subject of this application and my evidence. The resource consent application for a temporary river diversion has been lodged separately and will be determined by the Regional Council. The gravel extraction consent has been granted by the Council.

- 11 My evidence is confined to the issues relating to the land use application. The determination of the non-notification/ notification decision of the diversion consent application is yet to be made. Additional evidence relating solely to the consent application for diversion can be provided at a later date if necessary.
- 12 I was not involved in the preparation of the original resource consent application and AEE for the land use consent for the stopbank amendments which was prepared “in house” by the West Coast Regional Council and dated 20 March 2022. In addition, I was not involved in the preparation nor processing of the resource consent application for the gravel extraction relating to the stopbank construction dated 10 February 2023 and granted on a non-notified basis on 15 March 2023. I was further not involved in the preparation or processing of the resource consent applications for the proposed Tatare stopbank which were also granted on a non-notified basis. The Tatare Stopbank is a separate flood protection project also located on the true left bank of the Waiho River immediately downstream of the Franz Josef sewage oxidation ponds.
- 13 I was asked to become involved in this project on 10 February 2023 when commissioned to prepare the resource consent application for the proposed temporary two year river diversion which will help to ensure dry riverbed and safe conditions during the construction period. I was subsequently asked to prepare evidence in relation to the land use consent application, subject of this hearing.
- 14 I have undertaken an extensive inspection of the site lasting for almost a day specifically in relation to this Proposal. This involved walking the entire length of all of the stopbanks (both ways) on the true right bank and from the State Highway bridge down to the sewage treatment ponds, walking across the State Highway bridge, walking a considerable area of the Waiho River dry riverbed itself, driving along the top of the Waiho River true left stopbank between the State Highway bridge and Canavan’s Knob, and driving along the true left bank of the Waiho River upstream of the State Highway bridge.
- 15 Although this evidence is prepared for a Council hearing, I have read the code of conduct for expert witnesses contained within the Environment Court Practice Note 2023 and agree to comply with it. Except where I state that I am relying on the specified evidence of another person, my

evidence in this statement is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

- 16 I have been informed that the Council has exercised its emergency works powers under the RMA and construction of the Proposal has commenced. I have not visited the site since construction commenced. Further detail on the current status of the construction works is covered in paragraphs 18 to 20 of the evidence of Mr Pasco. This application is therefore retrospective to an extent.

### **Scope of evidence**

- 17 My evidence addresses the following matters but also relies on evidence of other witnesses (where noted):
- (a) A description of the site and the surrounding location (the technical hydrographical description and basis for the flood hydrology and modelling and engineering description is covered by other witnesses);
  - (b) A description of the proposal and changes made through the processing of the application (this is covered in more detail in the evidence of Dr Thomas, Mr Pasco, and Mr Gardner);
  - (c) Relevant provisions and status of the proposal under the operative Westland District Plan (**District Plan**) and the proposed Te Tai o Poutini Plan (**TTPP**);
  - (d) Relevant provisions and status of the proposal under the West Coast Regional Land and Water Plan (**Regional Plan**);
  - (e) Consultation with respect to the Land Use/Discharge Consent application for construction of the Stopbank subject of this hearing;
  - (f) Consultation with respect to the Water Permit application for Temporary Diversion of the Waiho River;
  - (g) Assessment of Environmental Effects;
  - (h) Assessment of the proposal against section 104 and 104B of the Resource Management Act 1991 (**RMA**);
  - (i) Proposed conditions of consent;

- (j) Conclusions and consideration of matters raised by the submitter;
- (k) Comments on the s42A report;
- (l) Overall conclusion regarding the proposal.

18 In preparing this evidence, I have reviewed and relied on the following (note that some consent numbers referred to here in my evidence may differ to those in the s42A report):

- (a) RC04122 (/1 & /2): Land Use Consent to disturb the bed of the Waiho River for the purpose of removing gravel (/1) & Land Use Consent for the extension of existing stopbank, placement of rock rip rap and associated works along the frontage of the Scenic Circle Hotels Mueller Wing property adjacent to the Waiho River (/2) dated 23 August 2004. These consents were held by Scenic Circle Hotels;
- (b) RC10196 (/1 & /2): Land Use Consent to construct a stopbank in the bed of the Waiho River (/1) and Water Permit to divert water in the Waiho River associated with a stopbank (/2) granted on 29 October 2010. These consents are for the heliport (Hokitika Airport Limited);
- (c) RC-2016-0154 (01 – 03); Land use consent (-01) to disturb the bed of the Waiho River to undertake protection works (rock rip-rap, stopbank construction, and rock spurs); Water permit (-02) to permanently divert water in the Waiho River from protection structures; and Discharge Permit (-03) to temporarily discharge sediment to water associated with the construction of river protection works, Waiho River. These three consents are for the existing stopbank between the Heliport stopbank and the Havill stopbank and which has been referred to as the NZTA stopbank or 55 kph stopbank. It was constructed by NZTA to provide protection against potential flooding of the State Highway portion and bend on the landward side of the Waiho River;
- (d) RC-2017-0099-01: Land use consent to disturb the bed of the Waiho River to undertake protection works including the construction of a rock protection stopbank and the raising of the existing NZTA stopbank. This consent is for the construction of the Havill stopbank which was carried out under s330 of the RMA

(emergency works provisions). Resource consent was granted on 10 September 2018;

- (e) RC-2018-0012 (-01 & -02): Land use consent to disturb the bed and banks of the Waiho River to undertake river training and diversion works (-01) and Water Permit to temporarily and permanently divert water into a new channel of the Waiho River (-02) dated 28 February 2019. These consents are for West Coast Regional Council to maintain the river in a central location;
- (f) RC-2021-0158 (-01 & -02): Land use consent (granted) to disturb the bed and banks of the Waiho River for the purpose of undertaking river protection works (-01) and Discharge consent for the incidental discharge of sediment to the Waiho River while the bund is under construction (-02). These consents are for the West Coast Regional Council to construct the Tatare stopbank;
- (g) Preliminary Design Report: Franz Josef Stopbanks. Client: West Coast Regional Council. Report by Land River Sea Consulting Limited. Dated 26 October 2021;
- (h) RC-2023-0016 Land Use Consent to extract gravel and disturb the dry bed of the Waiho River, Franz Josef Glacier for the purpose of removing gravel dated 15 March 2023. This consent is for the extraction of gravel to be used in the construction of the raising of the existing stopbanks on the true right bank of the Waiho River and in conjunction with the land use consent subject of this hearing;
- (i) RC-2022-0032: Application for resource consent for the use of land to construct stop banks in the Waiho River by the West Coast Regional Council dated 20 March 2022. This is the resource consent application the subject of this hearing;
- (j) RC-2022-0032: Several requests for further information and subsequent responses in relation to the application;
- (k) RC-2023-0030: Water permit application for a temporary (two year) Diversion of the Waiho River in association with the stopbank works and gravel extraction activities; and, land use consent to disturb the bed of the Waiho River in association with the river

diversion, to add additional stopbank protection to existing stopbanks and to construct a new stopbank;

- (l) The evidence of Mr Ben Pasco on behalf of the Applicant;
- (m) The evidence of Dr Dai Thomas on behalf of the Applicant;
- (n) The evidence of Mr Matt Gardner on behalf of the Applicant;
- (o) The section 42A report prepared by Ms Selene Kane dated 05 July 2023.

### **Executive summary**

- 19 Significant flood events (outlined in section 4 of the report appended as Appendix 1 to Mr Gardner's evidence) have occurred in the past that have threatened, and indeed flooded, some properties in the Franz Josef township. Significant concern has also been raised regarding the location of the sewage treatment ponds that are located at the downstream end of and on the landward side of the existing Havill stopbank. The Proposal is intended to provide a level of protection from flood events for the township and its critical infrastructure.
- 20 The Council proposes to create a continuous stopbank on the true right bank of the Waiho River, adjacent to the township of Franz Josef, which will be two metres higher than the existing stopbanks. The Proposal is part of a wider programme of resilience infrastructure works in the region including the Hokitika, Grey, and Buller River stopbank upgrades. The proposed upgrade is required due to the significant risk of the Waiho River overtopping the existing stopbanks.
- 21 Affected party approval to the land use consent application was received by all those parties considered by the Council to be potentially affected by the proposal, except Scenic Hotel Group Limited ("**Scenic Hotel**"). The application was therefore limited notified solely to Scenic Hotel who subsequently submitted in opposition on the resource consent for land use.
- 22 In terms of actual and potential effects the following is noted:
  - (a) The construction of the stopbank will not result in any physical encroachment on adjoining private property, and given the



temporary nature of the works, there will not be any significant or long term effect on these properties;

- (b) Modelling (evidence of Mr Matt Gardner) undertaken confirms the flood carrying capacity of the Waiho River will not be affected by the proposal;
- (c) Modelling (evidence of Mr Matt Gardner) confirms that there will be only limited and insignificant additional downstream flooding effect on properties on either the true left or true right banks of the River;
- (d) Machinery working in the riverbed will have *de minimus* effect given proposed conditions requiring that works be undertaken in a dry bed riverbed, cleaning of machinery prior to entry, and that no refuelling occurs in proximity to the riverbed, noting that the river bed contains no significant vegetation and has low ecological value;
- (e) There will be no reduction of natural character of the riverbed noting its broad expanse and existing substantial stopbanks that are an accepted part of the existing environment;
- (f) The completed stopbank will not affect long term public access, although some restriction will be necessary during construction for public safety reasons;
- (g) The Proposal will have positive effects by increasing protection for the Franz Josef township from flood events, including critical township infrastructure (the sewerage oxidation ponds, and the section of the State Highway adjacent to the true right bank of the Waiho River).

### **Description of the site and surrounding location**

- 23 I consider that the key features of the existing environment to be considered as part of this application (refer to location figure in the evidence of Dr Thomas) include the river bed lying within an area bordered by the State Highway 6 bridge across the Waiho River at the upstream end, the stopbanks on the true right and true left banks, the consented but yet to be constructed Tatara stopbank on land on the true right, and downstream to the "Pinch point" formed across much of the

otherwise “open” riverbed and considerably narrows the river at that point.

- 24 As described more fully in the evidence (and Figures) of other witnesses, there are existing stopbanks on the true right bank of the Waiho River located immediately downstream of the State Highway 6 bridge to just downstream of the Franz Josef township sewage treatment ponds namely in three parts (from SH6; Church, Helipad, Havill Wall stopbanks) with a total distance of approximately 1557 metres.
- 25 Existing stopbanks are also located on the true left bank of the Waiho River downstream of the State Highway 6 bridge. I understand that these stopbanks were constructed by NZTA in order to protect the State Highway alignment south of the Waiho River from potential flood events.
- 26 Between the true right and true left stopbanks is located a river braid, or braids, and a broad expanse of river gravel. At the time of my site visit, most of the river bed was dry gravel except for a meandering main river channel and several smaller braids. It is clear from the morphology of the river bed that the river channels change location between the stopbanks during freshes and flood events. Although I walked over a considerable part of the river bed between the two stopbanks, there were no areas of notable or significant vegetation, and no areas of standing water. This includes the area immediately adjacent to the stopbanks on both the landward and river sides of the existing stopbank.
- 27 During consultation, I discussed the ecological value of the Waiho River with both the Department of Conservation, and the West Coast Fish & Game Council. Both organisations reported that because of the high sediment load of the river caused by glacial flour from the Franz Josef glacier, the Waiho River has very low aquatic values. This results further in the River having very low recreational fishery values. Furthermore, consultation with local rūnanga indicated that they were also unconcerned with the Proposal.
- 28 In addition, I inspected the vegetation on the immediate landward (northern) side of the existing stopbank, given that the Proposal involves some clearance in this location. I note that the proposal also requires some vegetation clearance in the immediate vicinity of the Helipad stopbank. The clearance of the vegetation adjacent to the Helipad

stopbank will allow the continued operation of the heliport during the construction works on the Heliport stopbank.

- 29 The Proposal is being undertaken by the Council using the emergency works provisions of the RMA, and I have been informed that the District Council has been notified of the necessary vegetation clearance. The area of proposed vegetation clearance (18,000 m<sup>2</sup>) exceeds the level in the TTPP (5,000m<sup>2</sup>) permitted as of right under rule ECO-R1. I understand that the necessary resource consent will be applied for from the Westland District Council. The minor clearance of existing vegetation is an ancillary activity resulting from the construction activities. My opinion is that the vegetation to be cleared is common West Coast lowland regenerating indigenous vegetation and scrub and is not of significant ecological value with respect to either areal extent nor composition.
- 30 The property of the one submitter to this application, Scenic Hotel, is located landward of the existing Havill stopbank in the vicinity of a bend in the stopbank. The disused hotel buildings are located on low lying ground clearly visible from the top of the stopbank approximately 120 metres north away to the corner of the nearest building. There is an additional existing stopbank, of lesser height, between the Havill stopbank and the Scenic Hotel buildings. The buildings and the property give the appearance of disuse and appear to be in a dilapidated state. I understand that the buildings and site have not been used by Scenic Hotel since they were flooded in the 2016 flood event. The Havill stopbank was constructed in 2017 and was not in existence at the time that the Scenic Hotel property was flooded.

### **Description of the Proposal and changes made through the processing of the application**

- 31 Resource consent is sought by the Council for the following activities:
- (a) use of land to raise existing stopbanks by up to two metres and create a new stop bank along the relevant part of the Waiho River in order to join two existing sections of the stop banks, and any incidental discharges to surface water as a result of those works.

- (b) The proposed stop bank works will occur on the banks of the true right of the Waiho River. The works are proposed immediately downstream of the State Highway 6 bridge by the Franz Josef township and further downstream to the oxidation ponds on Ponds Road, approximately a two and half kilometre stretch of the river.
- (c) It is proposed that the existing stopbanks will be raised to give the township of Franz Josef protection from a 2500 cubic metre flood event which is considered to be an approximate one in 100 year return period flood (1% Annual Exceedance Probability) for the next twenty years until further expected aggradation brings the height of the river back to today's level of protection.
- (d) Further details regarding the Proposal are provided by other witnesses including in paragraphs 8 to 10 and 17 to 21 of Mr Pasco's evidence.

- 32 I refer to the previous report and evidence of Mr Matt Gardner in stating that there is a significant risk to the Franz Josef township from the Waiho river overtopping the existing stop banks. This risk is increased as a result of the bed levels of the Waiho River rising by approximately 180 millimetres per year for the past decades and continuing to rise.
- 33 Other resource consents are also required in relation to the Proposal. The resource consent to extract gravel from the Waiho River to be used as a construction material has been granted by the Council. The resource consent application to temporarily divert the Waiho River to enable the construction of the stop banks, and a discharge of sediment to the Waiho River as a result of the works is presently being processed. It is my opinion that as the works relating specifically to the land use consent activities will be undertaken in dry river bed, there will be de minimus effect caused by any sediment discharge.
- 34 A description of the stopbank design and construction methodology is contained in the evidence of Mr Pasco. The materials to be used include river gravels extracted from the riverbed adjacent to the stopbanks, and rip rap rock transported from Council quarries to the site. The total volume of bulk fill to be used in the upgrade of the stopbanks is approximately 210,000 cubic metres.
- 35 As stated in paragraph 26 of the evidence of Mr Pasco, the stopbank upgrade will occur over an approximately twelve month period – weather

permitting - and within periods when the risk of significant freshes and floods will not affect the requirement to undertake construction activities in dry river bed.

- 36 At present most of the length of the existing stopbanks is able to be easily walked on the top of the stopbank. The only small portion that is not publicly accessible at present is along part of the Heliport stopbank where public walking access is prevented because of public safety concerns relating to the helicopter flights. Except during the construction period of the Proposal, full unrestricted public access will be maintained following the end of construction activities on the same basis as it is at present.
- 37 Since notification, there has been one change to the Proposal. The details of the change are outlined in paragraphs 41 to 43 of the evidence of Mr Pasco. I have examined the proposed change and in my view the change is extremely minor with respect to the environment generally - and the Scenic Hotel property in particular. In fact, the change results in the stopbank being moved further away from the Scenic Hotel property – and has been proposed for river modelling reasons. I consider that the change will have no negative environmental effect on the Scenic Hotel property nor on the environment generally.

#### **Section 42A report**

- 38 I have read the section 42A report prepared by Ms Selene Kane dated 05 July 2023 in respect of this application, and generally concur with its conclusions (except as I have otherwise addressed below) and recommendation.
- 39 I agree with paragraph 24 of the s42A report where it is stated that the land use consent application for the Proposal should be assessed as a discretionary activity.
- 40 I concur with the comments made in paragraph 37 of the s42A report in relation to section 330A of the RMA.
- 41 Paragraphs 40 to 53 of the s42A report contain discussion relating to potential failure scenarios of the proposed stopbank upgrades and new stopbank. I have read the evidence of both Dr Thomas and Mr Pasco

and consider that that evidence adequately addresses the issues raised in the s42A report.

- 42 In paragraph 54, reference is made to the flood carrying capacity of the river and the effect of the stopbanks in mitigating flood effects. I have discussed this issue at length with Mr Gardner and further reviewed his evidence on this matter. It is clear from the MIKE21 modelling and from that evidence that the effect of the Proposal on private properties downstream of the stopbanks is in my view less than minor. Mr Gardner's evidence also addresses the issue of the aggradation of the river and clearly states that the Proposal will only provide additional flood protection for up to the next twenty years – based on present rates of aggradation.
- 43 In paragraph 55 of the s42A report, it is stated that by undertaking the proposed works in dry river bed, the effects of the proposed works will be reduced. While the diversion consent is still being processed, it is my opinion that by undertaking the works in dry riverbed, the effects on the river ecology will be de minimus due to the temporary nature of the works, their minor nature relative to normal fresh and flood effects, working in dry riverbed, and the restricted extent of the construction activities themselves vis a vis the overall comparatively large riverbed that will remain unaltered by the Proposal.
- 44 Paragraph 60 of the s42A report refers to the possibility of the discharge of contaminants *from the land use consent* per se during construction and that these effects will be *reduced* by working in dry river bed. The effects of the gravel extraction have already been assessed and consent granted. The effects of any necessary diversion consent are subject to a separate resource consent. It is my view that the effects of any discharge from the proposed land use consent activities themselves are de minimus. The construction works may expose more sediment during dry river bed operations that could be entrained by future river flows but these amounts – and effects - are likely to be insignificant compared to the natural effects across the river bed from a natural fresh or flood event. During my site inspection, I undertook a visual inspection of water clarity of one of the river braids. Despite relatively low flows, the clarity of the water was visibly reduced by high sediment load. I would expect the concentration to be higher during a fresh or flood event. Therefore I do not recommend that any condition relating to the measurement of

colour change or visual clarity be imposed on any suite of resource consent conditions (paragraph 62).

- 45 Paragraph 64 of the s42A report suggests the imposition of a resource consent condition restricting the proposed works to be undertaken outside of the whitebait season. As stated earlier I was not involved in the preparation of the land use consent application and AEE. However, I disagree with the need to impose such a condition.
- 46 This hearing relates only to the effects of the land use consent application itself. I have previously explained above that the works will be undertaken in dry riverbed. Any effect of change in water quality due to the proposed works – per se – vis a vis the gravel extraction or river diversion activities - which effects are not subject of this application – will be de minimus in comparison to the natural change in suspended solid levels due to natural freshes or flood events. Therefore, I do not agree with the imposition of this proposed condition.
- 47 Paragraph 65 of the s42A report discussed the significance of the vegetation in the riverbed in the vicinity of the proposed (land use) construction activities. The proposed works will occur in a narrow band along the existing banks or very adjacent to them. Having inspected the vegetation in this area, it is my view that it is of very minor, or no, ecological significance, and I agree with the s42A report on this matter. I do not consider that there is a need to identify, or undertake a further ecological assessment of this issue in relation to the vegetation to be removed.
- 48 Paragraph 68 of the s42A report recommends that a consent condition be imposed requiring the identification of the submitter's property boundaries and to ensure that no works be undertaken on the Scenic Hotel property. I concur with this recommendation. However, I note that the recommended conditions attached to the s42A report require surveying of all private property adjoining the Proposal, but condition 8 only seeks to ensure that works do not proceed on Scenic Hotel's property. Despite this being a separate property matter in any event, I consider that condition 7 should be amended to only require surveying of the submitter's property boundaries, rather than all private property adjoining the works.

- 49 I am in agreement with the recommendation (paragraph 70 of the s42A report) that monitoring be required as part of the consent conditions and these are contained in the suite of consent conditions attached as Appendix 1. I do not agree however that there should be a requirement for the consent holder to be required to engage an independent river engineer to undertake weekly inspections and produce a report to the Consent Authority following each inspection. In my opinion, this requirement is overly burdensome and will impose a significant cost on the Council as the consent holder for no real environmental benefit. It is likely that there will be some weeks where no works are occurring at all due to weather conditions or for other reasons. Rather than require weekly inspections, I have amended the conditions relating to the construction schedule to ensure that the Consent Authority is provided with regular updates (monthly) on construction. This will enable the Council's compliance team to keep track of the construction progress and to undertake inspections of their own to ensure compliance with consent conditions if they consider it is necessary at any point during construction.
- 50 Paragraph 71 of the s42A report discusses the positive effects of the Proposal. I have discussed these positive effects in paragraph 22 of my evidence above. The positive effects will provide additional safety and natural hazard risk management and are extremely significant in the context of the economic and social benefits that will accrue to the Franz Josef township. Furthermore, there is a further significant positive sub-regional and regional benefit to the West Coast region.
- 51 I agree with the discussion and conclusions set out in the s42A report that the application is consistent with the Part 2 matters of the Act.
- 52 I have attached a suite of proposed resource consent conditions (based on the conditions attached to the section 42A report but marked up with my suggested changes) should this application be granted consent. It is my opinion that these proposed conditions, if imposed, will ensure that any adverse environmental effects of the construction and ongoing existence of the stopbank will be *de minimus* while conferring significant positive benefits to Franz Josef township, and the sub-region and region. The draft conditions I recommend are attached to my evidence as **Appendix 1.**



## Relevant Provisions and Status of the Proposal under the Westland District Plan

53 The Westland District Plan consists of the Operative District Plan, and the Proposed Te Tai o Poutini Plan (“**the TTPP**”). The TTPP was publicly notified on 14 July 2022 and submissions closed on 11 November 2022.

54 Rule 6.2(i) of the Operative Westland District Plan states:

*(i) Construction and maintenance of any stopbank or culvert.*

The proposed stopbank works are therefore a permitted activity under the provisions of the Operative Westland District Plan.

55 Rule NH-R3 of the TTPP refers to ‘Upgrades to Existing Natural Hazard Mitigation Structures’. ‘Existing Natural Hazard Mitigation Structures’ are defined as: “*means any structure designed to prevent or mitigate natural hazards. It includes but is not limited to: sand fence; seawall; groyne; gabion and revetment; breakwater; stop bank; retaining wall; bund; weir; spillway; floodgate; stopbank; building of rock fall/boulder roll protection structures; the mechanical fixing of rocks in situ; the associated re-contouring of slopes and/or land. It excludes retaining walls not required for a hazard mitigation purpose.*”

56 Rule NH-R3 states that Upgrades to Existing Natural Hazard Mitigation Structures are a Permitted Activity where:

1. *The [structure](#) has been [lawfully established](#);*
2. *[Earthworks](#) and [land disturbance](#) is the minimum required to undertake the [activity](#);*
3. *There is no reduction in public access;*
4. *There is no change to more than 10% to the overall dimensions, orientation or outline of [structure](#) from that originally consented [structure](#); and*
5. *It is accompanied by an assessment undertaken by a Chartered Professional Engineer confirming that the [natural hazard mitigation structure](#) does not increase the natural hazard risk to other properties or any other [lawfully established natural hazard mitigation structure](#), and this assessment is provided to the relevant District Council 10 working days prior to works commencing.*

### Advice Notes:

1. *Where any [natural hazard mitigation structure](#) is also located in another [Overlay Chapter](#) area as identified on the planning maps and in the schedules then resource consent may be required under the relevant rules.*
2. *A West Coast Regional Council resource consent may be required under the West Coast Regional Land and Water Plan and/or Regional Coastal Plan.*

- 57 With respect to condition 1 above (“*The structure has been lawfully established*”), I have examined the relevant resource consents provided by the Council and have concluded that the existing stopbank structures were granted consent and were legally established. I reach this conclusion on the basis that the existing stopbanks were constructed prior to the notification of the proposed TTPP and received the necessary resource consents under the West Coast Land & Water Plan from the West Coast Regional Council. This view is also stated in the section 42A report of Ms Selene Kane.
- 58 As I have outlined above, there will be no permanent reduction in public access.
- 59 The MIKE21 flood modelling undertaken by Mr Gardner indicates that the Proposal “...*will not increase the natural hazard risk to other properties or any other lawfully established natural hazard mitigation structure...*”. Indeed, the Proposal will have a significant positive effect by reducing the flood risk to the Franz Josef township under a 2500m<sup>3</sup>, 1% AEP flood event.
- 60 The Proposal will have a change greater than 10% in the overall dimensions and therefore does not comply with condition 4 of Rule NH-R3 of the TTPP.
- 61 In paragraphs 56 and 57 of my evidence I set out the relevant natural hazard rules in the TTPP relating to the Proposal. While there was a submission in support lodged on Rule NH-R3, there are submissions on the natural hazards provisions more generally seeking deletion of the entire chapter and of the Plan, so the rules cannot be treated as operative or having legal effect.
- 62 The TTPP states that rules having immediate legal effect include those rules relating to Ecosystems and Indigenous Biodiversity, and Natural Character and the Margins of Water.
- 63 Rule ECO-R1 of the TTPP addresses the Indigenous vegetation clearance and disturbance outside of the coastal environment. I note that the objectives and policies relevant to ECO-R1 address areas of *significant* indigenous vegetation but that an assessment of areas of significant indigenous vegetation in Westland District has not been undertaken and, as a result, such an assessment needs to be undertaken at the time of the processing of the resource consent

application. Furthermore, the TTPP does not contain a definition of “indigenous vegetation” – but only “indigenous vegetation clearance”.

- 64 The rule sets out five conditions that must be satisfied in order for a permitted activity status to be achieved. Rule 5(ii) states that it is a maximum area of 5000m<sup>2</sup> per site, in total, over any continuous three year period. The Proposal requires an area of 18,000m<sup>2</sup> of indigenous vegetation to be cleared. As I have set out in paragraph 29 above, a resource consent is therefore required for the clearance of this vegetation and will be separately lodged with the Westland District Council.
- 65 I have also had regard to the rules contained in the Natural Character and Margins of Waterbodies section of the TTPP. As stated above, these rules also had immediate legal effect at the time of the notification of the TTPP. Rules NC-R1 (Indigenous Vegetation Clearance and Earthworks within the Margin of a River, Lake or Wetland); NC-R2 (Buildings and Structures within the Riparian Margin of a River, Lake or Wetland); and NC-R3 (New Natural Hazard Mitigation Structures) are relevant to the Proposal.
- 66 Rule NC-R1 requires five conditions to be satisfied in order for an activity to be permitted under the Rule. Condition 2 requires that “The amount of indigenous vegetation clearance is not greater than 20m<sup>2</sup> per 200m length of Riparian Margin;”. In my opinion, the Proposal does not comply with this condition and therefore will require consent. Rules NC-R2, and NC-R3 allow the Proposal as a permitted activity as the Proposal is a natural hazard mitigation structure constructed by a statutory agency or their nominated agency (Rule NC-R2); and the new natural hazard mitigation structure is constructed by a Statutory Agency or their authorised contractor (Rule NC-R3). In any case, the vegetation removal is insignificant in the local and regional context.
- 67 I have concluded that the Proposal is a permitted activity under the provisions of the Operative District Plan. However, given that the TTPP confers immediate legal effect to the rules I have set out in paragraphs 62 to 66 above, a resource consent application for the clearance of the indigenous vegetation is required under the provisions of the TTPP and will be lodged with the Westland District Council.

**Relevant Provisions and Status of the proposal under the West Coast Land & Water Regional Plan (Regional Plan)**

68 Rule 20 (section 18.2.1) (Use, extension, alteration, maintenance, repair, reconstruction, removal, or demolition of structure) of the Regional Plan outlines the requirements for the assessment of permitted activities. In particular, the Proposal does not comply with the following rule:

*(b) No reconstruction, extension or alteration of any structure in the bed results in a change of more than 10% to the overall dimensions, orientation, or outline of any structure in the bed from that originally authorised; and...*

69 The proposed alteration of the existing stop banks, creation of a new stopbank, and associated deposition of material on, and disturbance of, the bed of Waiho River does not comply with the above provision and cannot therefore be considered as a permitted activity under the Regional Plan.

70 Rule 35 of the West Coast Land & Water Regional Plan (*Discretionary activity rule for activities outside of a Schedule 1 or 2 wetland*) states:

*Unless permitted by Rules in Section 18.2.1, or managed by Rules in Sections 18.2.2 or 18.2.4, in relation to the bed of any lake or river the following activities outside of a wetland identified in Schedule 1 or 2 are a discretionary activity:*

*(a) To use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed; or*

*(b) To excavate, drill, tunnel, or otherwise disturb the bed; or*

*(c) ...*

*(d) To deposit any substance in, on, or under the bed; or*

*(e)...*

71 Therefore, the Proposal must be assessed as a discretionary activity under Rule 35 of the Regional Plan.

72 Rule 71 of the Regional Plan (*Discharge of any contaminant, or water to water, not complying with Rules 63 to 70*) states:

*Unless permitted by Rules 63, 64, 65, 66, 67, 68, 69 or 70 the discharge of any contaminant or water to water is a discretionary activity*

- 73 The incidental discharge of sediment to the Waiho River as a result of the proposed stop bank works and associated bed disturbance is not authorised by a permitted activity rule. Therefore, the incidental discharge of sediment to surface water is a discretionary activity pursuant to Rule 71 of the Regional Plan.
- 74 Overall, the Proposal should be assessed as a discretionary activity.
- 75 Part 19 of the Regional Plan states the general information requirements for resource consent applications and, in relation to structures and bed disturbance the following requirements apply.

*19.3.2 Structures or bed disturbance*

*1. Location and sensitivity of location to human or habitat values;*

- 76 The proposed works are temporary and minor in nature with respect to offsite effects on adjacent properties. Only one submitter, Scenic Hotel, is located approximately 100 metres from the edge of the existing stopbank. The new stopbank in this area will be a greater distance from the Scenic Hotel property boundary and the nearest Scenic Hotel building – which appears to be disused and in a dilapidated state. I discuss the sensitivity of the existing habitat values to the works associated with the Proposal later in my evidence.

*2. Extent of bed area disturbed;*

- 77 Relative to the extent of riverbed in this location (State Highway bridge to Pinch Point) the works are minor with respect to the extent of bed area disturbed.

*3. Linear dimensions, shape, orientation, and gradient of any structure;*

- 78 These parameters are outlined in the evidence of Dr Thomas (paragraphs 9 to 12).

*4. Effects on water flow;*

*5. Effects on flood carrying capacity, bed pattern, channel cross section, and profile;*

79 These matters are addressed in paragraphs 33 to 34 of Mr Gardner's evidence. He concludes that there will be less than minor effect on the flood carrying capacity of the River.

*6. Timing of the activity;*

80 Mr Pasco outlines in paragraph 26 of his evidence that the works will be undertaken over a 12 month period. I consider that this is a reasonable period for the works to be undertaken and the possible diminished effects on public access etc will be insignificant.

*7. Measures to address effects of erosion or sedimentation;*

81 I discuss this issue more fully in paragraphs 43 and 44 of my evidence. Given that works will be undertaken in dry river bed, and the areal extent of the works is small in comparison to the overall riverbed, I conclude that these effects will be de minimus.

*8. Measures to address adverse effects on affected persons;*

82 It is my view that any minor adverse effects of the works and their temporary nature can be avoided or mitigated by the proposed (and slightly amended) suite of resource consent conditions attached to my evidence.

*9. Effects on wildlife habitats including fish spawning areas;*

*10. Effects on fish passage;*

83 I have discussed the matter of fish ecology with the Manager of the West Coast Fish & Game Council. From those discussions, it is my understanding that the fish ecology of the Waiho River is insignificant given the high sediment load in the river.

*11. Effects on bank and channel stability;*

84 This matter is addressed in paragraph 12 of the evidence of Mr Pasco, and paragraphs 34 to 44 of the evidence of Dr Thomas. I therefore conclude that the Proposal has a sufficient margin of safety with respect to bank and channel stability.

*12. Effects of machinery in riverbeds;*

85 The works proposed as part of the land use consent for the Proposal (the gravel extraction consent has been issued and the diversion consent application is presently being separately processed) are limited

in areal extent. Furthermore, proposed conditions of consent require that machinery be cleaned prior to entering the river bed, and that no refuelling of vehicles be undertaken within the riverbed. I consider this will ensure that any effects of this part of the Proposal will be *de minimus*.

*13. Effects on public access;*

86 At present, public access is only (and permanently) restricted on a section of the Heliport stopbank. All parts of the other two stopbanks are fully publicly accessible at all times. However, during the construction period and due to public safety matters, there will be a temporary need to restrict public access within working areas. As soon as the project is completed full public access will be reinstated on the same basis as presently exists.

*14. Disposal of waste material;*

87 The only waste material generated from the land use consent activities is the clearance of vegetation in three areas of the project. This material will be removed from the stopbank area and disposed of in a Council landfill. The removal and disposal of the vegetation clearance waste material will be part of the subject of a separate resource consent application. Any excess gravel from the stopbank construction will be levelled within the river bed and excess rip rap removed out of the river bed.

*15. The relationship of Ngai Tahu and their culture and traditions with their ancestral lands, waters, sites, wahi tapu, and other taonga;*

88 Te Rūnanga o Makaawhio has provided its written approval to the Proposal.

*16. Addressing assisting the spread of pest plants.*

89 As stated above, equipment working in the river bed will be cleaned prior to entry – as required by a proposed condition of consent (Appendix 1).

90 Further information on the above matters are also addressed elsewhere within my evidence and in the evidence of Dr Thomas, and Messrs Gardner and Pasco.

**Consultation with respect to the Land Use Consent application for construction of the Stopbank subject of this hearing;**

- 91 The Council identified the following ten potentially affected parties to the resource consent application for the land use on land within the existing Havill stopbank on the true right bank of the Waiho River:
- (a) Department of Conservation
  - (b) West Coast Fish & Game Council
  - (c) Westland District Council
  - (d) Westland District Property Limited/ Destination Westland Limited
  - (e) New Zealand Transport Authority
  - (f) Susan Waller/ Duncan Cotterill Christchurch Trustee (2015) Limited
  - (g) Church Property Trust
  - (h) Te Rūnanga o Makaawhio
  - (i) Tourist Hotel Corporation of New Zealand/ Scenic Hotel Group Limited
  - (j) Franz Josef Glacier Guides Limited
- 92 I am unsure of what parameters were used by the Council to identify the above list of potentially affected parties. However, it is my opinion that all of the parties listed above will receive a positive benefit from the Proposal.
- 93 Written approvals were received from nine of the ten entities above. Therefore, any potential effects on those nine parties are not required to be assessed in accordance with section 104(3)(a)(ii) of the RMA.
- 94 Following limited notification only to Scenic Hotel, a submission was lodged by Scenic Hotel stating that it generally supports the proposal to increase the height of the stopbanks, but opposes the resource consent application on the following grounds:
- (a) Inadequate safeguards for the proposal demonstrating the proposal will not cause adverse effects on Scenic Hotel's property;



- (b) “Scenic Hotel does not want to see a repeat of work in the riverbed and on the stopbanks resulting in flooding or damage to its property in the future”.
- (c) “It is important for Scenic Hotel and other third parties that the failures and practices of the past are not repeated to ensure that Scenic Hotel can get long term funding and insurance for its new hotel. For that to happen it needs the protection of proper conditions that are continually monitored and enforced by and against WCRC”.
- (d) Scenic Hotel requires further information on the gravel extraction. Scenic Hotel requires confirmation of certain matters, in particular that no gravel or other material is deposited on Scenic Hotel’s property and no damage will be caused to the property;
- (e) Confirmation required from suitably qualified and independent experts that the works proposed can be undertaken safely;
- (f) Scenic Hotel requires further information in respect of future monitoring, maintenance and repair of the stopbanks.

95 With respect to submission point (a) above, the application originally lodged by the Council contained a scarcity of information. Since then full MIKE21 flood modelling has been completed and other additional information provided to the Council. Given the flooding of the Scenic Hotel property in 2016 I understand the concerns of Scenic Hotel. However, since then the substantial Havill stopbank was constructed in 2017. The present land use consent application seeks to further upgrade the protection works along the entire true right bank adjacent to Franz Josef township and will further confer additional protection to the Scenic Hotel property and further decreasing the risk of flooding to the Scenic Hotel property under the 2500 m<sup>3</sup>/s 1% AEP scenario.

96 With respect to submission point (b), I understand that Scenic Hotel is of the opinion that work in the river bed and diversion activities may have contributed to its property flooding in 2016. I am not able to confirm the cause of the 2016 flooding of its property but the present level of protection afforded by the existing Havill stopbank is greater than in 2016, and will be further enhanced by this Proposal.

- 97 With respect to submission point (c), I have attached a draft suite of resource consent conditions to assist the Commissioner should he be of a mind to grant the consent. In my view, the conditions are sufficient to provide protection for neighbouring properties, and the monitoring required to ensure the continuance of that protection.
- 98 Submission point (d) of the relief sought by Scenic Hotel seeks further information on the gravel extraction. The submission does not expand on what further information is required. However, the submission was lodged prior to the granting of the gravel extraction resource consent application by the Council. The issue of the effects of the gravel extraction is therefore outside the scope of this resource consent hearing.
- 99 In submission points (e) and (f), Scenic Hotel seeks further information and assurances that the works can be undertaken safely with proper monitoring, maintenance, and repair. I was not involved in the preparation of the original resource consent application. However, having now reviewed all of the flood modelling and further information available I am of the opinion that the Proposal has the safeguards required by Scenic Hotel and can be granted consent subject to the proposed conditions in Appendix 1 attached.

#### **Assessment of the Proposal against sections 104 and 104B of the RMA**

- 100 The application should be assessed as a discretionary activity for the reasons listed in paragraphs 68 to 74 of my evidence.
- 101 Below I have summarised the assessment of the effects of the Proposal, mitigation measures and further assessed the relevant objectives and policy of the relevant planning documents.

***Effects of the proposal on nearby structures and adjacent land; and  
1. Location and sensitivity of location to human or habitat values;  
(Rule 19.3.2) 8. Measures to address adverse effects on affected  
persons; (Rule 19.3.2);***

- 102 The Proposal has been specifically designed taking into account the boundaries of adjoining private property. As outlined in the evidence of Mr Pasco (paragraph 41) and the evidence of Dr Thomas (paragraphs 49 to 53), in some locations the proposed stopbank has been steepened

in order to ensure that there will be no encroachment on private property anywhere within the Proposal.

103 Overall, the Proposal has been designed in order to protect the Franz Josef township in a 2500 m<sup>3</sup>/s flood event. The Proposal will provide enhanced flood protection to neighbouring properties, including the Scenic Hotel property. In addition, two significant infrastructure features, viz. the Franz Josef sewage oxidation ponds, and the 55 km/h State Highway section are located very close to the Waiho River, and loss of one or both of these vital infrastructure features would have major social and economic consequences to the township and, in the case of the State Highway, to the southern part of the West Coast. The Proposal provides additional flood protection for this infrastructure.

104 In my opinion, the construction works are sufficiently distant and of a temporary nature so that there will a *de minimus* effect on any surrounding properties that have not given their Affected Party Approval. With respect to the Scenic Hotel property, it appears to be disused as an accommodation facility, and the temporary construction effects will therefore not affect the use of the property.

***2. Extent of bed area disturbed; (Rule 19.3.2) 3. Linear dimensions, shape, orientation, and gradient of any structure; (Rule 19.3.2)***

105 These matters, set out as information requirements in Rule 19.3.2 of the Regional Plan, are outlined in other evidence by Dr Thomas, Mr Pasco, and Mr Gardner. I am satisfied that the information now available (including the information required by Rule 19.3.2) on the Proposal is sufficient to fully assess the effects of the activity. I am satisfied based on this evidence that the alignment selected is appropriate, and that the shape, orientation, and gradient of the structure is appropriate for the reasons set out by Dr Thomas.

***Effects of the proposal on bed and bank stability, flood carrying capacity and erosion of the Waiho River; 4. Effects on water flow; 5. Effects on flood carrying capacity, bed pattern, channel cross section, and profile; (Rule 19.3.2) 7. Measures to address effects of erosion or sedimentation; (Rule 19.3.2); 11. Effects on bank and channel stability; (Rule 19.3.2)***

106 I rely on the evidence of the other witnesses in order to be comfortable in stating that sufficient assessment of the above matters has been

undertaken on these matters. I have analysed the MIKE21 flood modelling outputs provided by Mr Gardner and reviewed his conclusions. I have further concluded that there will be an insignificant additional flood effect on land outside of the existing stopbanks. My conclusion is based on the results of the MIKE21 modelling set out in Mr Gardner's evidence viz. the large flood carrying capacity of the area within the stopbanks, the current bed level, and a *de minimus* effect in the 20 year aggradation scenario, given the very minor addition to the spatial extent and depth of floodwaters demonstrated by the modelling.

***Timing of the activity (Rule 19.3.2)***

- 107 Although I have not viewed the work myself, I am informed that the construction of the Proposal has already commenced. I understand that one twelve month period has been allowed for completion of the Proposal, dependant on weather and River conditions. Given the advice from the Fish & Game Council, and the Department of Conservation, that the river contained no significant aquatic values, and no aquatic recreational values, and that the works will only be undertaken in dry river bed, I do not consider it necessary that work be prevented from occurring at any time within the twelve month period.

***12. Effects of machinery in riverbeds; (Rule 19.3.2); 16. Addressing assisting the spread of pest plants. (Rule 19.3.2)***

- 108 The Proposal requires heavy machinery works in the bed of the Waiho River. I have stated above that the riverbed contains no significant vegetation and has low ecological value – partially due to the constantly changing nature of the river braids over a large ordinarily dry riverbed. Proposed conditions of consent require that the works be undertaken in dry river bed.
- 109 I have suggested that a further condition of consent necessarily requires that any machinery working in the bed of the river be cleaned prior to entering the riverbed in order to eliminate the possibility of the introduction of weed species (despite the fact that because of the changing location of the river braids it is very unlikely that any weeds would establish within the riverbed). Furthermore, refuelling of any machinery that will work in the riverbed will be required to be undertaken at least 20 metres from the landward side of the existing stopbank.

***Effects of the proposal on water quality, ecosystems, aquatic species and fish passage; 9. Effects on wildlife habitats including fish spawning areas; (Rule 19.3.2); 10. Effects on fish passage; (Rule 19.3.2)***

- 110 All construction activities on the river side of the existing stopbanks i.e. in the riverbed will be undertaken in dry river bed. It is acknowledged that the Waiho River carries a relatively high sediment load (glacial flour) due to the source of water from the Franz Josef glacier. Furthermore, river diversion activities will ensure that active river braids are kept away from the construction working area. Because of this there will be only a *de minimus* effect on aquatic ecological values.

***Effects of the proposal on cultural values; 15. The relationship of Ngai Tahu and their culture and traditions with their ancestral lands, waters, sites, wahi tapu, and other taonga; (Rule 19.3.2)***

- 111 I discussed the Proposal with a representative of Te Rūnanga o Makaawhio. He verbally indicated to me that it had no issues with the Proposal and did not wish to hold up the project. It subsequently gave written approval to the application. On this basis, I consider there are no adverse effects of the Proposal on Māori cultural values, or the relationship of Ngāi Tahu with the river.

***Effects of the proposal on natural character***

- 112 The Proposal is located within a very broad expanse of riverbed between two already significant stopbanks on the true left bank and true right bank of the Waiho River. Furthermore, there are a very large number of rivers on the South Island West Coast emanating from the Alps and flowing to the sea. Many of those rivers are already “controlled” within existing stopbanks. The existing stopbanks on the Waiho River form part of the existing environment and the natural character of the West Coast rivers. It is my opinion that the Proposal including the further increase in height of the existing stopbanks and the new section of stopbank will not be out of character with what is existing at present, and therefore the effects of the Proposal on natural character will be *de minimus*.

***Effects of the proposal on recreational values; 13. Effects on public access; (Rule 19.3.2);***

113 As stated earlier, apart from a short section of the Heliport stopbank (excluded for safety reasons), all of the other length of the existing stopbank can be accessed by the public at any time. It can be walked or driven. Access will be curtailed within sections during construction but will be fully open again (except for the Heliport section outlined earlier in paragraph 86 of my evidence) to the public following the completion of construction. It is my view that the stopbanks actually increase the availability of access to the river by the public as well as affording expansive views of the downstream Waiho River and upstream to the Southern Alps.

***Positive effects***

- 114 In 2016 there was significant flooding of some properties on the true right bank of the Waiho River during a flood event. Following that event the Havill stopbank, between the end of the Heliport stopbank and the Franz Josef sewage oxidation ponds, was constructed in 2017.
- 115 Following further flood modelling analysis, it was decided that a sufficient level of protection for Franz Josef township was required for a 2500 m<sup>3</sup>/s flood event.
- 116 The Proposal will provide this protection not only for the township, including the Scenic Hotel property, but also for the critical infrastructure of the Franz Josef sewage oxidation ponds and the State Highway. If the sewage ponds were damaged or destroyed during a flood event raw sewage would need to be discharged to the River for a considerable period until the damage was repaired. In the case of the State Highway, even a temporary loss of the State Highway section at this point would result in the West Coast south of Franz Josef being isolated with resultant economic and social effects (for example, potentially including raw milk not being able to be delivered to the Hokitika milk treatment factory and having to be dumped into local waterways).
- 117 Therefore, the construction of the Proposal has significant positive effects locally to the Franz Josef township, and significant positive regional economic and social effects.

### Summary of Effects

- 118 It is my view that any adverse effects of the Proposal are of a *de minimus* nature and are temporary, including on the Scenic Hotel property. I consider that the land use consent should be granted for the full 35 year period (although, as detailed in the technical evidence, river aggradation will reduce the effectiveness of the Proposal within twenty years at present aggradation rates).
- 119 The positive effects of the Proposal for Franz Josef township locally, and the West Coast region, are very significant.

### Assessment of Objectives and Policies of relevant documents

#### ***West Coast Regional Policy Statement***

- 120 The West Coast Regional Policy Statement (“**the RPS**”) includes objectives and policies relevant to the proposal. In particular, those objectives and policies included in Chapter 3 – Resource Management Issues of Significance to Poutini Ngāi Tahu, Chapter 7 – Ecosystems and Indigenous Biological Diversity, and Chapter 7A Natural Character. The key objectives and policies that are relevant to the proposal include:

#### Chapter 3

- (a) Objective 2 Recognise and provide for the relationship of Poutini Ngāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga within the West Coast Region.

- 121 Te Rūnanga o Makaawhio has indicated that it has no concerns with the Proposal and has provided its Potentially Affected Party Approval.

#### Chapter 7

- (a) Objective 2 Protect significant indigenous vegetation and significant habitats of indigenous fauna.

#### Chapter 7A

- (b) Objective 1 Protect the natural character of the region’s wetlands, and lakes and rivers and their margins, from inappropriate subdivision, use and development.

- (c) Objective 2 Provide for appropriate subdivision, use and development to enable people and communities to maintain or enhance their economic, social and cultural wellbeing.
- (d) Policy 4 Allow activities which have no more than minor adverse effects on natural character.

122 I have considered the effect of the Proposal on natural character in paragraphs 22, 44, and 112 above and concluded that the effects on natural character will be *de minimus*. The Proposal will enable the Franz Josef community locally, and the greater West Coast region, to maintain and enhance its economic and social wellbeing in accordance with Objective 1 of Chapter 7A of the RPS.

#### Chapter 8

- (a) Objective 1 The life-supporting capacity of freshwater is maintained or improved.
- (b) Objective 3 Provide for a range of land and water uses to enable the economic, social and cultural wellbeing of West Coast communities while maintaining or improving water quality and aquatic ecosystems.

123 The granting of the land use consent will have *de minimus* effect on water quality nor on aquatic ecosystems.

#### Chapter 11

- (a) Objective 1 The risks and impacts of natural hazard events on people, communities, property, infrastructure and our regional economy are avoided or minimised.
- (b) Policy 1 Reduce the susceptibility of the West Coast community and environment to natural hazards by improving planning, responsibility and community awareness for the avoidance and mitigation of natural hazards.
- (c) Policy 4 The appropriateness of works and activities designed to modify natural hazard processes and events will be assessed by reference to: a) The levels of risk and the likely increase in disaster or risk potential; b) The costs and benefits to people and the community; c) The potential effects of the works on the environment; and d) The effectiveness of the works or activities



and the practicality of alternative means, including the relocation of existing development or infrastructure away from areas of natural hazard risk.

- 124 While the risk of flood damage was significantly reduced by the construction of the Havill stopbank in 2017, based on the evidence of Mr Gardner and Dr Thomas, the Proposal will further reduce the flood risk, and its potential effects, to hydrological events in the Waiho River exceeding 2500 m<sup>3</sup>/s. I have previously discussed the potential effect of flooding on critical infrastructure i.e. loss of the sewage oxidation ponds, and the disconnection of the State Highway, as well as the effect of flooding on local property within the Franz Josef township. I consider that the potential positive effects of the Proposal are in accordance with Objective 1 and Policies 1 and 4 of Chapter 11 of the Regional Policy Statement.
- 125 Overall, I have concluded that the Proposal is in accordance with the relevant objectives and policies of the Regional Policy Statement.

### ***West Coast Land and Water Regional Plan***

- 126 The Regional Plan includes a number of objectives and policies relevant to the proposal, in particular those included in Chapter 3 – Natural and Human Use Values, Chapter 5 – Lake and Riverbed Management, and Chapter 8 – Surface Water Quality.
- 127 The key objectives and policies that are relevant to the proposal include:
- Chapter 3 – Natural and Human Use Values
- (a) Objective 3.2.2 To protect water bodies from inappropriate use and development by maintaining and where appropriate enhancing their natural and amenity values including natural character and the life supporting capacity of aquatic ecosystems.
  - (b) Objective 3.2.3 To maintain or where appropriate enhance the spiritual and cultural values and uses of significance to Poutini Ngāi Tahu.
  - (c) Objective 3.2.4 To avoid or mitigate the exacerbation of any natural hazard or the creation of a hazard.

- (d) Policy 3.3.1 In the management of any activity involving water to give priority to avoiding, in preference to remedying or mitigating, adverse effects on identified spiritual and cultural values, and adverse effects which cause or exacerbate flooding, erosion, land instability, sedimentation or property damage.
- (e) Policy 3.3.7 In the management of any activity involving water, to avoid, remedy, or mitigate adverse effects on, water quality, amenity values, indigenous biological diversity, intrinsic values of ecosystems.

128 I have discussed the lack of potential effects of the Proposal on the natural character of the Waiho River in paragraphs 22, 44, 112, and 122 of my evidence and that any adverse effect on adjacent properties as a result of the Proposal will be *de minimus*. I consider that the Proposal is in accordance with Objective 3.2.2 of the Regional Plan. The local Rūnanga has provided its written Potential Affected Party Approval. Public access and amenity values will be unchanged following the end of construction. Therefore the Proposal supports and is consistent with the relevant objectives and policies of Chapter 3 of the Regional Plan.

#### Chapter 5 – Lake and Riverbed Management

- (a) Objective 5.2.1 To avoid, remedy, or mitigate the adverse effects of lake and riverbed activities on: (a) The stability of beds, banks, and structures; (b) The flood carrying capacity of rivers; (c) The natural character of wetlands, lakes and rivers and their margins; (d) Indigenous biodiversity and ecological values, including fish passage; (e) Amenity, heritage, and cultural values; (f) Sports fish habitat values; (g) Water quality; (h) Navigation; and (i) Regionally significant infrastructure.
- (b) Policy 5.3.1 To provide for appropriate use and development in lakes and rivers and recognise the social and economic benefit particularly related to West Coast communities of maintaining existing structures and infrastructure.
- (c) Policy 5.3.2 To manage bed disturbance, reclamation, deposition and the use, erection, extension, reconstruction, maintenance, alteration, demolition, or removal of structures in, on, under, or over the bed of any lake or river, so that the activity does not cause or contribute to significant adverse effects on: (a) The

stability of beds and banks; (b) The capacity of rivers to carry flood flow; (c) Heritage, amenity or cultural values; (d) Water quality; (e) Existing structures or existing uses; (f) Navigational safety; (g) Aquatic ecosystem values (including habitat values and fish passage); (h) The natural character of the coastal environment, wetlands, rivers and lakes and their margins; (i) Significant indigenous vegetation and significant habitats of indigenous fauna.

- 129 The stability of the existing and proposed stopbanks has been addressed by Mr Pasco (paragraphs 38 to 40) and they have demonstrated that they are fit for purpose. Mr Gardner's evidence (paragraph 38) demonstrates that the flood carrying capacity of the Waiho River in this location is sufficient so that there will be only a *de minimus* effect on adjacent land from the Proposal. There will be no negative effect on the natural character of the margins, nor on ecological values or water quality, of the Waiho River in this location. Amenity values will be maintained by the continued provision of walking and vehicular access along and/or beside the stopbank. The Proposal will enhance the economic and social welfare of the local and sub-regional communities. Therefore, the Proposal is in accordance with Objective 5.2.1 and Policies 5.3.1 and 5.3.2 of Chapter 5 of the Regional Plan.
- 130 I have assessed the potential effects of the Proposal against the Objectives and Policies of the Regional Plan and conclude that it is in accordance with those provisions.

***National Policy Statement for Freshwater Management 2020***

- 131 The National Policy Statement for Freshwater Management (**NPS-FM**) came into effect on 3 September 2020 and provides a long-term framework for achieving improvements in freshwater quality. The proposed works will be undertaken in dry river bed. The resource consent for the extraction of gravel has been granted. The resource consent for diversion of the river to ensure that the river braids remain clear of the working area is being separately processed. Given that this hearing is confined solely to the assessment of the effects of the land use consent application for the Proposal and I am of the opinion that the effects of the proposed temporary construction activities in dry riverbed are insignificant with respect to the provisions of the NPS-FM, I have not

considered the NPS-FM here in detail. However, for completeness, I have attached an analysis of the Proposal against the NPS provisions as **Appendix 2** of my evidence.

### ***Part 2 Purpose and Principles***

132 There is generally no requirement to assess Part 2 as the RPS and Regional Plan have been prepared having regard to Part 2 of the RMA. However, if Part 2 was required to be assessed, I consider the proposal would be consistent with the purpose and principles of the RMA. The stopbank works will be undertaken in such a way to mitigate any potential effects on the environment. Importantly, the construction of the new stopbank and raising of the existing stopbanks is essential for ensuring the safety and wellbeing of the Franz Josef township and the wider community.

### **Conditions of consent**

133 I have attached as Appendix 1 to this evidence, a suite of draft resource consent conditions should the consent be granted (both in tracking and clean). The draft resource consent conditions contain suggested amendments by way of addition and deletion to those proposed in the section 42A report. I have added an explanation where I have suggested a change.

### **Overall conclusion regarding the proposal**

134 I have undertaken a comprehensive inspection of the site, reviewed the Proposal in detail, and evaluated the potential effects of the Proposal. Furthermore, I have reviewed the Proposal against the relevant provisions, and Objectives and Policies of the Operative and Proposed District Plans, Regional Policy Statement, and the Land & Water Regional Plan. I have concluded that the Proposal is in accordance with the aforementioned provisions and can be granted consent subject to the draft resource consent conditions I have compiled and set out in Appendix 1 appended to this evidence.

.....

**Peter Glasson**

**12 July 2023**

**APPENDIX 1 – APPLICANT RECOMMENDED CONDITIONS**

## RC-2022-0032 RECOMMENDED ~~RECOMMENDED~~ CONSENT CONDITIONS

Pursuant to Section 108 of the Resource Management Act 1991, the Resource Consents include the following conditions:

### General Conditions:

1. Works and activities shall be carried out in general accordance with the details contained in the consent application submitted to the Consent Authority, except where inconsistent with these conditions.
- ~~2. Any person working under these consents shall have a copy of the consents on site and present it to an officer of the Consent Authority upon request.~~
2. The Consent Holder shall supply any agent or contractor carrying out the works the subject of this resource consent with a copy of the consent conditions, which shall be held on site and presented to an Officer of the Consent Authority on request.
3. The Consent Holder shall construct the river protection at the location indicated on the attached plans labelled "**RC-2022-0032, Stopbank Location & Preliminary Design - Waiho River Stopbanks**" and "**Stopbank Alignment - Waiho River Stopbanks**", unless otherwise approved in writing by the Consent Authority.
4. The Consent Holder shall construct the river protection in accordance with the design plan attached "**RC-2022-0032, Stopbank Location & Preliminary Design - Waiho River Stopbanks**", unless otherwise approved in writing by the Consent Authority.
5. Within 20 working days of the consent being granted the consent holder shall provide Engineering design plans designed by a suitably qualified engineer. The Plans shall be reviewed and certified by an independent River Engineer. ~~Written certification shall be provided to the Consent Authority no less than one (1) month prior to works commencing.~~ Any amendments made to the Plans shall be certified by an independent River Engineer and certification provided to Council as soon as practical. Written certification that the works have been constructed in general accordance with the Plans shall be provided to the Consent Authority no less than one (1) month after the works have been completed.
6. Within 20 working days of the consent being granted the consent holder shall engage a suitably qualified surveyor to survey the boundary of the private property immediately adjoining the area of works, as listed below. The surveyor shall peg the boundary of these boundaries. The consent holder shall ensure that the pegs are visible at all times. The consent holder shall provide the Consent Authority with survey plans and certification from the surveyor that the boundaries have been defined.
  - SEC 1 SO 11504 BLK VII WAIHO SD
  - LOT 1 DP 1474 BLK VII WAIHO SD
7. No works are to occur across the boundary of the boundary of Lot 1 Deposited Plan 1474 and Section 1 Survey Office Plan 11504 identified by the surveyor under condition 7 above.

### Construction Management Conditions:

8. Within 20 working days of the consent being granted the consent holder shall provide a construction schedule to the Consent Authority. The schedule shall include as a minimum:
  - the commencement and end date of the works;
  - ~~if the construction is to be undertaken in stages, the construction schedule shall include the breakdown of the stages and how the conditions of the resource consent will be given effect to;~~
  - A requirement to update the construction schedule on a monthly basis and for the updated schedule to be provided to the consent authority.

~~5. Within 20 working days of the consent being granted the consent holder shall engage a suitably qualified surveyor to survey the boundary of all private and public property immediately adjoining the area of works, as listed below. The surveyor shall peg the boundary of these boundaries. The consent holder shall ensure that the pegs are visible at all times. The consent holder shall provide the Consent Authority with survey plans and certification from the surveyor that the boundaries have been defined.~~

~~— LOT 1 DP 703 BLK XI WAIHO SD~~

~~— RS 3689 BLK XI WAIHO SD~~

~~— SEC 4093 & PT 3114 BLK XI WAIHO SD~~

~~— SEC 1 SO 11504 BLK VII WAIHO SD~~

~~— LOT 1 DP 1474 BLK VII WAIHO SD~~

~~— LOT 4 DP 419200 LOT 1 DP 2170~~

~~SEC 1 SO 11501 BLK VII IX WAIHO SD;~~

~~PT RES 1015 BLK VII WAIHO SD LOCAL PURPOSE RESERVE;~~

~~— LOT 4 DP 419200 LOT 1 DP 2170;~~

~~— LOT 5 DP 419200;~~

~~Local Purpose (Aerodrome) Reserve New Zealand Gazette 1996 p 4303~~

~~Local Purpose (Public Utility) Reserve [Waiho Gorge Recreation Reserve] New Zealand Gazette 1996 p 4303~~

~~CL WAIHO R/BED OPP SEC 2997 RES ADJ 823 BLK VII XI WAIHO SD INCL SEC 2 4 4 SO 11501~~

~~Conservation purposes Section 62(1), Conservation Act 1987 SO 11209 H35/18 & 27~~

~~— RS 4690 BLK XI WAIHO SD~~

~~6. No works are to occur across the boundary of the boundary of Lot 1 Deposited Plan 1474 and Section 1 Survey Office Plan 11504 identified by the surveyor under condition 7 above.~~

9. All practical measures shall be taken to avoid sediment discharge arising from the works where possible. Any sediment discharges associated with disturbance of the riverbed shall not give rise to any conspicuous change in the colour or visual clarity of the waters in the river, beyond the timeframe of works taking place in the active watercourse.

10. The Consent Holder shall use existing access routes as far as is practicable while undertaking these works.

11. The Consent Holder shall ensure all machinery is cleaned prior to its transport to the site to ensure that any weeds and seed sources have been removed.

12. All equipment refuelling, lubrication and mechanical repairs shall be undertaken in an area that provides sufficient mitigation measures to ensure that no spillages onto the land surface or into water occur. No refuelling, lubrication or mechanical repairs shall be undertaken on the bed of the river or creek.

~~13. The Consent Holder shall avoid damage to riverbanks and riverbank vegetation wherever practicable.~~

14. In the event of any disturbance of Koiwi Tangata (human bones), Taonga (artefacts including pounamu), potential area or sites of historic value the Consent Holder shall:

a) Cease any further excavation for a period of at least 24 hours;

b) Immediately advise Consent Authority of the disturbance;

c) Immediately advise the Upoko of the Papatipu Runanga, or the representative, of the disturbance; and

d) Immediately advise the Regional Archaeologist of Heritage New Zealand except in relation to disturbance of unworked pounamu.

15. The Consent Holder shall ensure that the site is restored on completion of the works as follows:

a) The banks are left in a stable condition and revegetated (if vegetation was present before the



- works commenced) as soon as practicable.
- b) All rubbish, left over materials and debris are removed from site and disposed of in a legal manner.
- a)c) All equipment and signs associated with the operation are removed.

**Post Construction Management Conditions:**

1. Upon completion of works or each stage of works a Practical Completion Certificate shall be issued by a suitably qualified engineer. The Certificate shall be provided to the Consent Authority within one (1) week of issue.
2. Within one (1) month of the practical completion certificate for the works being provided to the Consent Authority ~~of~~ (or if the works are staged, the practical completion certificate for each stage of works being ~~provided-completed~~) an Asset Monitoring and Inspection Plan (AMIP) shall be developed for the Stopbanks. The purpose of the AMIP is to specify the monitoring, inspections and maintenance work that will be carried out post construction of the Stopbanks. The ~~Plan~~ AMIP shall be provided to the Consent Authority for certification. The AMIP shall include as a minimum:
  - A requirement for the consent holder to engage a suitably qualified independent river engineer to undertake inspections of the Stopbanks in accordance with table 1 below
- 7.—Upon completion of works or each stage of works a Practical Completion Certificate shall be issued by a suitably qualified engineer. The Certificate shall be provided to the Consent Authority within one (1) week of issue.
- 2.—The consent holder shall engage a suitable qualified independent river engineer undertake inspections required by inspections in line with table 1 below:

<b>Stage of activity</b>	<b>Frequency</b>
<u>Construction</u>	<u>Weekly</u>
<u>For two (2) Years from issue of Practical Completion Certificate, or following any significant flood event</u>	<u>Four-monthly</u>
<u>After two (2) years or following any significant flood event</u>	<u>Annually</u>

Table 1

- A definition for a "significant flood event" in relation to the Waiho River
  - A requirement for the engineer undertaking the inspection to prepare an inspection and condition report and provide that report to the Consent Authority within one (1) month of the inspections dates. The inspection and condition report shall include the following:
    - Site photos
    - Details of river condition at time of inspection
    - Location of river within the riverbed
    - Overall condition of the stopbanks
    - Key issues, risk areas or critical faults identified
    - Maintenance requirements and timeframe for completion
  - An outline of the maintenance plan for the Stopbanks including details of routine maintenance that will be required and any vegetation management required.
- 3.—An inspection and condition report prepared by a suitably qualified independent river engineer shall be provided to the Consent Authority within one (1) month of the inspections detailed in condition 12 above. The Inspection and condition report shall include the following:

- ~~a) Site photos~~
- ~~b) Details of river condition at time of inspection~~
- ~~c) Location of river within the riverbed~~
- ~~d) Overall condition of the stopbanks~~
- ~~e) Key issues, risk areas or critical faults identified~~
- ~~f) Maintenance requirements and timeframe for completion~~

~~4. Within one (1) month of completion of each stage a Maintenance Plan should be developed for the stopbanks. The Plan shall be provided to the Consent Authority for certification. The Maintenance Plan shall include:~~

- ~~a) Details of regular maintenance required~~
- ~~b) Details of vegetation management required~~

~~8. No works shall occur within the bed of the river during the whitebait spawning season.~~

~~9. The Consent Holder shall use existing access routes as far as is practicable while undertaking these works.~~

~~10. The Consent Holder shall ensure all machinery is cleaned prior to its transport to the site to ensure that any weeds and seed sources have been removed.~~

- ~~11. All equipment refuelling, lubrication and mechanical repairs shall be undertaken in an area that provides sufficient mitigation measures to ensure that no spillages onto the land surface or into water occur. No refuelling, lubrication or mechanical repairs shall be undertaken on the bed of the river or creek.~~
- ~~12. The Consent Holder shall avoid damage to riverbanks and riverbank vegetation wherever practicable.~~
- ~~13. In the event of any disturbance of Koiwi Tangata (human bones), Taonga (artefacts including pounamu), potential area or sites of historic value the Consent Holder shall:
  - ~~a) Cease any further excavation for a period of at least 24 hours;~~
  - ~~b) Immediately advise Consent Authority of the disturbance;~~
  - ~~c) Immediately advise the Upoko of the Papatipu Runanga, or the representative, of the disturbance; and~~
  - ~~d) Immediately advise the Regional Archaeologist of Heritage New Zealand except in relation to disturbance of unworked pounamu.~~~~
- ~~14. The Consent Holder shall ensure that the site is restored on completion of the works as follows:
  - ~~b) The banks are left in a stable condition and revegetated as soon as practicable.~~
  - ~~c) All rubbish, left over materials and debris are removed from site and disposed of in a legal manner.~~
  - ~~d) All equipment and signs associated with the operation are removed.~~~~

#### **ADVICE NOTES**

The Consent Holder is advised that **the consents do not confer a right of access** and the Consent Holder should be aware the permission of the legal owner or administering body of the bed of the creek may also be required.

## **RC-2022-0032 RECOMMENDED CONSENT CONDITIONS**

Pursuant to Section 108 of the Resource Management Act 1991, the Resource Consents include the following conditions:

### **General Conditions:**

1. Works and activities shall be carried out in general accordance with the details contained in the consent application submitted to the Consent Authority, except where inconsistent with these conditions.
2. The Consent Holder shall supply any agent or contractor carrying out the works the subject of this resource consent with a copy of the consent conditions, which shall be held on site and presented to an Officer of the Consent Authority on request.
3. The Consent Holder shall construct the river protection at the location indicated on the attached plans labelled "**RC-2022-0032, Stopbank Location & Preliminary Design - Waiho River Stopbanks**" and "**Stopbank Alignment - Waiho River Stopbanks**", unless otherwise approved in writing by the Consent Authority.
4. The Consent Holder shall construct the river protection in accordance with the design plan attached "**RC-2022-0032, Stopbank Location & Preliminary Design - Waiho River Stopbanks**", unless otherwise approved in writing by the Consent Authority.
5. Within 20 working days of the consent being granted the consent holder shall provide Engineering design plans designed by a suitably qualified engineer. The Plans shall be reviewed and certified by an independent River Engineer. Any amendments made to the Plans shall be certified by an independent River Engineer and certification provided to Council as soon as practical. Written certification that the works have been constructed in general accordance with the Plans shall be provided to the Consent Authority no less than one (1) month after the works have been completed.
6. Within 20 working days of the consent being granted the consent holder shall engage a suitably qualified surveyor to survey the boundary of the private property immediately adjoining the area of works, as listed below. The surveyor shall peg the boundary of these boundaries. The consent holder shall ensure that the pegs are visible at all times. The consent holder shall provide the Consent Authority with survey plans and certification from the surveyor that the boundaries have been defined.
  - SEC 1 SO 11504 BLK VII WAIHO SD
  - LOT 1 DP 1474 BLK VII WAIHO SD
7. - No works are to occur across the boundary of the boundary of Lot 1 Deposited Plan 1474 and Section 1 Survey Office Plan 11504 identified by the surveyor under condition 7 above.

### **Construction Management Conditions:**

8. Within 20 working days of the consent being granted the consent holder shall provide a construction schedule to the Consent Authority. The schedule shall include as a minimum:
  - the commencement and end date of the works;
  - if the construction is to be undertaken in stages, the breakdown of the stages and how the conditions of the resource consent will be given effect to;
  - A requirement to update the construction schedule on a monthly basis and for the updated schedule to be provided to the consent authority.
9. All practical measures shall be taken to avoid sediment discharge arising from the works where possible.

10. The Consent Holder shall use existing access routes as far as is practicable while undertaking these works.
11. The Consent Holder shall ensure all machinery is cleaned prior to its transport to the site to ensure that any weeds and seed sources have been removed.
12. All equipment refuelling, lubrication and mechanical repairs shall be undertaken in an area that provides sufficient mitigation measures to ensure that no spillages onto the land surface or into water occur. No refuelling, lubrication or mechanical repairs shall be undertaken on the bed of the river or creek.
13. In the event of any disturbance of Koiwi Tangata (human bones), Taonga (artefacts including pounamu), potential area or sites of historic value the Consent Holder shall:
  - a) Cease any further excavation for a period of at least 24 hours;
  - b) Immediately advise Consent Authority of the disturbance;
  - c) Immediately advise the Upoko of the Papatipu Runanga, or the representative, of the disturbance; and
  - d) Immediately advise the Regional Archaeologist of Heritage New Zealand except in relation to disturbance of unworked pounamu.
14. The Consent Holder shall ensure that the site is restored on completion of the works as follows:
  - a) The banks are left in a stable condition and revegetated (if vegetation was present before the works commenced) as soon as practicable.
  - b) All rubbish, left over materials and debris are removed from site and disposed of in a legal manner.
  - c) All equipment and signs associated with the operation are removed.

**Post Construction Management Conditions:**

1. Upon completion of works or each stage of works a Practical Completion Certificate shall be issued by a suitably qualified engineer. The Certificate shall be provided to the Consent Authority within one (1) week of issue.
2. Within one (1) month of the practical completion certificate for the works being provided to the Consent Authority (or if the works are staged, the practical completion certificate for each stage of works being provided) an Asset Monitoring and Inspection Plan (AMIP) shall be developed for the Stopbanks. The purpose of the AMIP is to specify the monitoring, inspections and maintenance work that will be carried out post construction of the Stopbanks. The AMIP shall be provided to the Consent Authority for certification. The AMIP shall include as a minimum:
  - A requirement for the consent holder to engage a suitably qualified independent river engineer to undertake inspections of the Stopbanks in accordance with table 1 below

<b>Stage of activity</b>	<b>Frequency</b>
For two (2) Years from issue of Practical Completion Certificate, or following any significant flood event	Four-monthly
After two (2) years or following any significant flood event	Annually

Table 1

- A definition for a "significant flood event" in relation to the Waiho River
- A requirement for the engineer undertaking the inspection to prepare an inspection and condition report and provide that report to the Consent Authority within one (1) month of the inspections

dates. The inspection and condition report shall include the following:

- Site photos
  - Details of river condition at time of inspection
  - Location of river within the riverbed
  - Overall condition of the stopbanks
  - Key issues, risk areas or critical faults identified
  - Maintenance requirements and timeframe for completion
- An outline of the maintenance plan for the Stopbanks including details of routine maintenance that will be required and any vegetation management required.

#### **ADVICE NOTES**

The Consent Holder is advised that **the consents do not confer a right of access** and the Consent Holder should be aware the permission of the legal owner or administering body of the bed of the creek may also be required.

## APPENDIX 2

### Assessment of the Proposal against the NPS-FM

- 1 Consistent with Te Mana o Te Wai, the NPS Freshwater Management contains a single objective, which establishes a hierarchy for the manner in which freshwater resources are to be managed:
  - (a) First, the health and well-being of water bodies and freshwater ecosystems;
  - (b) Second, the health needs of people (such as drinking water); and
  - (c) Third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.
- 2 The proposal is consistent with this objective given that the health and wellbeing of the Waiho River will not be adversely affected with all construction works to be undertaken in the dry riverbed and conditions put in place to ensure that machinery is cleaned before entering the riverbed and any refuelling of machinery occurs outside the riverbed. The health needs of people will not be affected by the Proposal but the works will benefit the social and economic wellbeing of the community by increasing protection of public assets (such as the State Highway and the sewerage oxidation ponds) and private assets from flooding. The Rūnanga has not expressed any concerns in respect of Maori cultural values.
- 3 The following policies of the NPS-FM are also relevant to the proposal:
  - (a) Policy 1: Freshwater is managed in a way that gives effects to Te Mana o Te Wai;
  - (b) Policy 2: Tangata whenua are actively involved in freshwater management (including decision making processes), and Māori freshwater values are identified and provided for;
  - (c) Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments;
  - (d) Policy 7: The loss of river extent and values is avoided to the extent practicable;

- (e) Policy 9: The habitats of indigenous freshwater species are protected.
  - (f) Policy 15: Communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with this National Policy Statement.
- 4 In respect of these policies
- (a) Te Mana o Te Wai is given effect to (Policy 1) as discussed above in paragraph 94;
  - (b) There has been consultation with tangata whenua in which no concerns were raised (Policy 2);
  - (c) There are no wider adverse effects from the Proposal on properties downstream (see evidence of Mathew Gardner) in terms of Policy 3;
  - (d) The existing stopbanks are part of the existing environment and an increase in their height will not affect the extent of the river and I do not consider that there will be any loss of natural values given the existing structures in place and their isolated location. The new section of stopbank is located between two existing stopbanks in a modified environment in which there is no realistic alternative in respect to its placement (Policy 7);
  - (e) Habitats of indigenous freshwater species will be protected given that works will occur in the dry bed and appropriate management practices around machinery put in place (Policy 9);
  - (f) Communities will have their social and economic wellbeing enhanced with the added protection provided for community assets and private property in Franz Josef township, and in which the method of added protection can be accommodated with this NPS-FM (Policy 15).
- 5 For these reasons, I consider the Proposal is consistent with the objectives and policies of the NPS-FM.