

AROUND THE MOUNTAINS CYCLE TRAIL

Consent and Concession Application Document



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1. Purpose of the Document

The primary purpose of this document is to provide a synopsis of the proposal coined the “Around the Mountains Cycle Trail” (or “AMCT” for short) and set out the activities of the proposal on application to each applicable regional and territorial authority along with the Department of Conservation. It is also intended to serve as a reference document to be read in conjunction with the appendices of the proposal namely Route Selection & Construction, Bridges & Structures, Aquatic Ecology and Terrestrial Ecology all prepared by MWH; Landscape Assessment prepared by Blakely Wallace Associates; Around the Mountains Feasibility Study prepared by Mike Barnett & Associates/Strategies Marketing Consultancy; and finally Bridge Design prepared by Heenan Consulting. Specifically, this document will cover –

- An outline of the proposal coined the “Around the Mountains Cycle Trail” or “AMCT” for short; and
- An outline of the particulars of the application pertaining to each affected consenting authority or agency; and
- An analysis of the relevant governing statutory documents for each consenting authority or agency; and
- An outline and assessment of the potential environmental impacts of the proposal; and
- Clear reference points to the reports attached as Appendices and Index Maps

It should be noted that the development of this proposal has been a long one since its inception in 2006 and one that has changed significantly after research and consultation with affected parties ranging from landowners, consenting authorities, engineers, tourism professionals and Fish & Game. Refer to **Appendix 1** – Consultation Strategy.

After reflection of the objectives of the proposal, its elements and the need to minimise the potential adverse effects and maximise the positive effects of the project – the applicant

believes that what is proposed in this document (i.e. the current alignment of the track, construction methods, structure design, maintenance techniques and operation measures) is the best able to achieve those matters.

The track alignment is also designed to cater for a wide demographic market ie. A Grade 1 cycle trail that means that many may utilise the track and hence may see more users drawn to the area. Refer to Section 3.I. of this document.

Moreover to minimise any potential adverse impacts of the proposal, the applicant has suggested a number of terms and conditions through out the document. However, the applicant accepts that these terms and conditions are not exhaustive and the applicant is aware that the decision-maker may impose further terms and conditions as part of any consent granted.

Should this application be granted, the applicant is committed to compliance with consent terms and developing and maintaining a productive working relationship with authorities to make this project a success on all levels.

It should also be noted that given the passage of time and evolution of the project as outlined above, that this document should be read ahead of any appendix documents prepared by the associated consultants. In other words, if there is a contradiction, this document should take precedence and be read as correct.

Should you have any further questions relating to the contents of this document or the proposal itself, please do not hesitate to contact us at our offices. As we would be happy to liaise direct with you or to refer you on to the experts contracted to this project to answer any queries you may have.

Proposal

I. Scope

While it is acknowledged that the project in its entirety is not under application to each varying authority, it is considered beneficial to set out the project as a whole. Sections 4 I –V of this report, set out each activity specifically on application to each relevant agency or authority.

In general therefore, Southland District Council being a territorial authority established in 1989 under the *Local Government Act* wishes to –

i. Construct and maintain –

184 km of cycle trail from Mt Nicholas Station, down along side the Oreti river to Mossburn and Lumsden and then north to Kingston located on a combination of existing roads, road reserve, unallocated Crown Land (Land Information New Zealand “LINZ”), esplanade reserve, private land and conservation land. The track itself will not exceed a width of 2.8 metres at any one point and it is intended that the gradient will not exceed 4% so as to keep the experience of the cycle trail to that of a moderate level. In theory, appealing to a wider cycling audience. The track itself will be similar to a single laned gravel track of AP60 with a top surface of crushed AP20 with a 5%-7% clay mix. The depth of the surface material would be dependent on ground conditions as further discussed at Section 3I of this report.

ii. Construct and maintain -

- a) Nine single full containment toilets at dimensions not exceeding 2 m x 2 m x 2.5 m to be built in materials and non recessive hues in keeping with the surrounding landscape at those points detailed on the attached Index Maps. Each containment tank is a 2,000 litre capacity.
- b) Three, four walled shelters, two at footprints up to 20m² and not exceeding a height of 5 m each located at WP 181 and 193V on the attached Index Maps and one at 150m² plus a deck and not exceeding a height of 5.5 m at WP 106 on the

attached Index Maps all to be built in accordance with buildings in the back country of Mt Nicholas and Walter Peaks Stations *refer: photos below.*



- c) One gravelled carpark at a dimension of approximately 60m² located at reference point 111 on attached Index Map number 13.
- d) A number of culverts not exceeding 1 meter in diameter located at those points detailed on the attached Index Maps and classified as a permitted activity as detailed in the relevant statutory territorial and regional plans
- e) Temporarily open and operate 13 gravel extraction pits, as set out in Addendum 1 of the Landscape and Visual Assessment Report Appendix 5, located at points detailed on the attached Index Maps, and one existing gravel site, a total of 14 gravel extraction sites. The Council will also utilise other existing registered quarries. 11 of which are located within the Eyre Conservation Park, 2 within Environment Southland jurisdiction. It should be noted however, that over the 14 potential pits and existing registered quarries within Northern Southland 60,093 m³ in total will be required to construct the trail. Take from the two gravel pits located within Environment Southland's jurisdiction shall not exceed 7,500m³ of rock per gravel pit and take shall not exceed 5,000m³ per gravel pit within the Eyre Mountains.
- f) Crushing facilities and activities are to be located at gravel pits along the trail. At gravel pits within the Eyre Mountains Conservation Park crushing will be undertaken five days per week (Monday to Friday) between the hours of 8.00am and 7.00pm with public holidays excluded. Elsewhere 5 days per week between

the hours of 8.00am to 6.00pm. All operations will be dependent on weather conditions.

- g) 50 Bridges consisting of 42 bridges in Option A and 8 Bridges in Option B at dimensions mentioned at the Bridge Schedule page 16 “Bridges and Structures” Report **Appendix 3** and at locations detailed on the attached Index Maps.
- h) Rock Protection or Groynes combining to a total of 554m in length being 360m in Option A and 194m in Option B at dimensions set out in the Aquatic Ecology Report at **Appendix 4** and located as page 24 RG1, Page 24 RG2, Page 25 RG3 and Page 23 Option B Bridge A Groyne on the attached Index Maps.
- i) 250 m of wire rope barriers located at Rocky Point, Mossburn between SH 94 and the trail at WP 524 on the attached Index Maps (being defined as a permitted activity by the relevant statutory plan).
- j) Approximately 103 m of boardwalk at 2.5 m width located within the Eyre Conservation Park.
- k) Side barriers to add to the existing bridge on council road at WP 107 as detailed at Bridge Schedule “Bridges and Structures” Report **Appendix 3** and being a permitted activity as defined by the relevant statutory plan.
- l) The removal/modification of indigenous vegetation during the construction of the trail through the Eyre Mountain Conservation Area. Mature trees will be avoided where the track traverses through beech forest. Tussock and grassland areas will be revegetated once construction of the trail is complete. The impact on indigenous vegetation will be only minor outside of the forested area of the Eyre Mountain Conservation Park area as the grasses are generally highly modified or introduced as they have been grazed with farming practices, refer to terrestrial ecology report **Appendix 6**.
- m) NOTE: That if Trail Alignment “Option B” as discussed below is accepted an additional eight bridges and one rock groyne will be required at those dimensions detailed within the Bridge Schedule “Bridges and Structures” Report **Appendix 3** at locations set out on the attached Index Maps.

iii. Maintain the cycle track itself by periodically undertaking inspections -

Over the first five years after construction of the trail it is anticipated that monthly inspections will occur, in particular at any disturbed sites such as the cut and fill construction zones to remove any newly established weed species. Annual inspections are also anticipated of the restored areas to assess regeneration of native species and re-establishment of grassland and turf vegetation. This will be completed using a fixed photo point monitoring system.

Ongoing vegetation management will also be required to keep the trail in good repair and to maintain a safe carriageway for cyclists and walkers. This would include trimming and pruning of vegetation and removal of any invading grassland species.

Annual inspections of all structures along the trail are anticipated to occur so as to comply with Building Code Standards and to keep structures clean and tidy.

II. Operation

With regard to the trails operation, first and foremost it will be open and unrestricted to the public, independent cyclists and walkers however, it is anticipated that guided cycling be a feature of the trail. The trail is to be designed as a 4 to 5 day activity. The general direction of cycling is from Mt Nicholas Station, down the Oreti River to Mossburn, Lumsden and north again to Kingston. However, cyclists and walkers can choose to cycle in different directions if they so desire. While the trail route seeks to maximise the scenic and environmental experience of users, there is also an opportunity for riding through Northern Southland townships of Mavora, Mossburn, Lumsden, Fiver Rivers, Athol, Garston and Kingston.



With regard to future management of the trail, it is the applicant’s intention that the trail be 100% self sustaining in four to five years of the trail being opened. As such, SDC has a plan of how commercial ventures should work in with the “brand” of the trail – so that fees obtained from affiliated businesses can be directed back to the trail and its maintenance. To do this, SDC will require the cooperation of other agencies where their authority extends which may require for example, further management agreements or even a vesting of authority in them so as to effectively achieve the desired outcome. This is so all commercial guided activity on the trail despite the land status on which the activity occurs is governed by the applicant. It is acknowledged that the details of management of the trail need to be mapped out, however the following is envisaged “in general”.

SDC as lead agency would administer the signing of businesses to the brand of the trail (i.e. transport services, accommodation and guided cycling etc but not food and beverage) and all authorisations for commercial use of the trail (i.e. guided cycling or other commercial activities) as a whole. (Other authorisations for activities outside of the trail would remain under the governance of the relevant regional or territorial authority i.e. Building Consents.)

That way a piecemeal approach is avoided and the product can be marketed in its entirety and under one brand.

III. Applicant Details

The applicant is the Southland District Council established by the Local Government Act 1989.

2. Environmental Effects Assessment

The environmental effects of varying aspects of the proposal are in the Landscape Report, Aquatic Ecology Report and the Terrestrial Ecology Report attached as **Appendices 4 to 6** of the Application.

It is acknowledged that each authorities consideration of the Assessment of Environmental Effects will be limited to that which pertains to specific activities under application.

However, for ease of reference, the Assessment of Environmental Effects is set out here covering the entire concept.

I. Positive Effects

- *Individual and Community Benefits:*

This proposal (if granted) will provide a unique outdoor recreation experience for cyclists and walkers from Southland, New Zealand and overseas tourists. This has two main benefits, the first contributing to individual well being through providing a means of exercise, enjoyment and appreciation of the outdoors. The second, being community wellbeing. With the right promotion it is anticipated that the trail will become a draw card to the region and if managed appropriately, extra numbers to the area will contribute to economic growth. This may especially be the case in the smaller affected towns where the trail passes such as Kingston, Athol, Garston, Lumsden and Mossburn – secondary commercial business such as accommodation, food and beverage outlets and transport transfers may prove viable venture options.



- *Low Impact Activity:*

Cycling is considered a low impact activity and compliments other outdoor recreation activities provided in the region such as fishing and tramping. On a general level therefore, user conflicts would be minimal however, any conflicts that may arise would be mitigated through special terms and conditions of the construction, maintenance and route design and, any promotional material with regard to the use of the track.

- *Elevation of Cycling as an Activity:*

Not only is cycling promoted as a sustainable form of transport but this proposal is compatible with other rides in New Zealand which elevate cycling as a tourism opportunity (Refer NZ Cycleway Market Research, September 2009, Ministry of Tourism attached as **Appendix 11**). The Around the Mountains Cycle Trail will be unique in that the affected area takes in some spectacular scenery and it is anticipated that this cycle trail will become one of New Zealand's most iconic walking and walking trails.

II. Operational Impacts

- *Footprint:*

This proposal will have a low impact footprint with the purpose built track itself being 184 km in length and the trail will span no greater than 2.8m wide (Refer Section 5, Cycle Trail Construction Methods “Bridges & Structures Report”) with water tables of up to 300cm each side where appropriate. (The effects of construction of the track are further discussed within the Landscape Assessment attached as **Appendix 5**). The track will be constructed in a manner which will permit wet weather use however, in times of extreme weather parts of the track may need to be closed for safety or maintenance reasons.

- *Rubbish:*

As is the case with other low impact activities such as walking tracks and the Otago Central Rail Trail participants are encouraged to take out what they carry in.

- *Visibility:*

The track will be constructed with ample sight visibility however, where there is potential conflict with roads and motorists, warning signs will be strategically placed along the trail. Refer Section 8 Roads and Section 9 Preliminary Safety Assessment “Bridges & Structures Report” attached as **Appendix 3**.

III. Construction Effects

- *Track Construction:*

Trail construction within the Eyre Mountains Conservation Park will occur between the hours of 8.00am and 7.00pm, seven days per week season dependent and weather permitting. The rationale behind this is to enable construction to be completed as quickly as possible hence minimising the length of time of any potential disruption to the area.

Anecdotal observations by the applicant show that on any one day of the week during the summer period, an average of less than 6 people are encountered in the Eyre Mountains at locations over the 34km of trail as proposed.

Trail Construction outside of the Eyre Mountains Conservation Park will occur 6 days per week between the hours of 8.00am and 6.00pm season and weather dependent. Again the rationale is to minimise any potential disturbance to an area by constructing the trail as quickly as possible. However, the applicant acknowledges that those that reside in proximity to construction areas may require down-time from construction and hence Sundays have been set aside as a rest day.

Depending on sources of community funding for the trail build, total construction of the track is estimated to take 2 years.

- *Gravel Extraction:*

13 new extraction pits as set out in Addendum 1 of the Landscape and Visual Assessment Report Appendix 5, located at points detailed on the attached Index Maps. 11 of which are located within the Eyre Conservation Park, 2 within Environment Southland jurisdiction. It should be noted however, that over the 13 potential pits and existing registered quarries within Northern Southland 60,093 m³ in total will be required to construct the trail. Take from the two gravel pits proposed located within Environment Southland's jurisdiction shall not exceed 7500 m³ of rock per gravel pit and take shall not exceed 5,000m³ per gravel pit within the Eyre Mountains.

With regard to the gravel pits within Environment Southland's jurisdiction, extraction will be carried out 6 days per week between the hours of 8.00am to 7.00pm. This marries up to the hours of construction of the trail. Within the Eyre Mountains Conservation Park, it is proposed that extraction will occur 7 days per week 8.00am to 6.00pm, again this married up to the proposed construction times as detailed above and is seasonal and weather dependent.

All new gravel pits will be restored once the trail is completed. Restoration will occur in consultation with Blakely Wallace and Associates however, in short, top soil will be kept aside and re-laid once the pit is close and then resown with vegetation in keeping with the surrounding landscape.

Gravel required for trail maintenance will be sourced from existing registered quarry sites within Northern Southland including new gravel quarry sites within the Eyre Mountain Conservation Park.

- *Crushing and Screening:*

Crushing and screening will occur at gravel extraction sites and will occur outside the wetted margin of extraction areas along side the Oreti River. (Refer Section 6.1.1.3 Gravel Pits, Turf Dumpsites and Section 7 Burrow Pits “Landscape Assessment” attached as **Appendix 5**.) At gravel pits within the Eyre Mountains Conservation Park crushing will be undertaken seven days per week between the hours of 8.00am and 7.00pm. Elsewhere, crushing will occur five days per week between the hours of 8.00am to 6.00pm. As detailed above, the applicant acknowledges the potential noise of crushing and therefore outside the Conservation Park will only undertake crushing within the typical working week. All operations will be dependent on weather conditions.

- *Working & Storage Sites and Controls:*

The corridor for track construction, footprints for gravel burrow areas, dump and storage sites for sites for machinery, materials and toilets will be clearly defined and marked with waratahs, pegs and tape prior to construction. Such markings will remain in place for the duration of construction and work will be contained within such parameters.

- *Earthworks:*

All earthworks associated with the physical construction footprint of the trail, culverts, bridges and shelters would be undertaken by typical medium sized road construction equipment including but not limited to diggers and trucks to limit any undeliberate scarring of the area. Trail construction methods are further discussed at Section 5, Trail Construction Methods “Bridges & Structures Report” as attached at **Appendix 3**.

- *Vegetation Clearance:*

Vegetation clearance will be necessary where the trail is new or the existing road alignment does not provide a suitable grade in keeping with the objectives of the track. It will involve

removal of turf through affected farmland. For affected land outside the Eyre Mountains Conservation Park the vegetation clearance is considered minimal given little to no indigenous species will be removed. Within the Eyre Mountains Conservation Park, localised removal of regenerated vegetation will occur only and construction of the track including the removal of vegetation will be completed in close consultation with Department staff, so as to minimise scarring on conservation land. No mature beech trees shall be removed in the Eyres Conservation Park.

- *Vegetation Disposal:*

All medium to large trees felled will be cut into 1-2m sections to reduce the risk of outbreak by pinhole borers which could affect adjacent forest. Cutting logs into smaller sections also increases the rate of decomposition. No felled vegetation will be used outside of the trail corridor. No mature trees will be felled on Conservation Land i.e. the trail will follow regrowth (Refer Section 3, Beech Forest & Knoll “Landscape Assessment Methods, Managed by DOC attached as **Appendix 5**).

- *Restoration:*

Loss of soil, land stability, sediment discharge and effects on amenity values are a result of earthworks. (Refer “Landscape Report” attached as **Appendix 5**). However, the construction of the trail will re-stabilise the area and mitigation measures outlined within this report associated with construction of the trail seek to minimise erosion of affected areas. Furthermore, rip rap rock protection proposed and as discussed below further stabilises an area which was prone to erosion regardless.

With regard to the trail corridor - the sides where construction occurred will be smoothed out to enable regeneration of native vegetation. All gravel pits will be restored in consultation with DOC and Blakely Wallace Consultants with a covering of top soil and the area resown in vegetation in keeping with the surrounding landscape.

- *Noise:*

Construction of the trail through out forested sections and near the bed of the Oreti river will be undertaken outside of general bird nesting season (September to 1 December inclusive). Hours of operation are discussed above.

- *Weed Control:*

Machinery used in construction of the trail will be hosed down before commencement of the project to avoid the introduction of weeds to the affected area.

It should be noted that there are several weed species (lupin, gorse, broom) established along the trail route and within the Eyre Mountains Conservation Park however, construction will be phased so as to minimise the spread of existing weeds.

It is also a suggested term and condition of any consent/concession granted that a 12 month maintenance period be imposed to see to the eradication of obvious weed species on and beside the trail corridor.

- *Timing of Riverbed works:*

Construction of rock protection works as discussed below should be undertaken outside the breeding season of any threatened birds that nest on the riverbed and outside the season when trout spawn so as to minimise the effect of works on bird and trout populations in the area. (no rock protection work in riverbed 1 december to 30 April) Provided no birds are found to be nesting on the riverbed, works may be permitted. (Refer Section 4.2 Habitat Quality, “Aquatic Ecology Report” attached as **Appendix 4**)

IV. Trail Structures

(Refer Landscape Assessment Report attached as **Appendix 5** for a full discussion of the effects of structures on the affected environment.)

- *Selection of Gravel Burrow Areas, Dump Sites and Storage Sites:*

Gravel pits, storage and dump sites at those areas as detailed on the attached Index Maps have been chosen because they are already modified areas dominated by exotic species.

Such sites are also in proximity to the trail to maintain a localised approach to construct and

minimise unintentional scarring and damage to the surrounding landscape. Gravel sourced on site minimises the risk of introducing new weed species to an area.

No hazardous substances shall be stored at any sites other than allocated machinery, fuel transfer and servicing sites, designated by DOC and the project manager. Machinery will be checked regularly and maintained so as to eliminate the risk of leaks especially into riverbeds. All machinery will be cleaned and inspected prior to entering Eyre Mountains Conservation Park.

- *Toilets*

Nine single full containment toilets at dimensions not exceeding 2m x 2 m x 2.5 m located at those points detailed on the attached Index Maps. Each containment tank is a 2,000 litre capacity. All toilets will be constructed in materials and in colours that are in keeping with the surrounding environment so as to minimise their impact.

- *Boardwalk*

Approximately 103 m of boardwalk at 2.5 m width located within the Eyre Conservation Park. Construction of the boardwalk will be completed in consultation with Department staff and to DOC standards using typical materials.

- *Carpark*

One gravelled carpark (including a small amount of earthworks ie the removal of some topsoil so that construction can occur), at a dimension of approximately 60m² located at reference point 111 on attached Index Map number 13. This will be simply made from compacted gravel to park cars off the road while cyclists and walkers utilise the track. The carpark will be kept weed free subject to the 12 month monitoring proposed later in this report.



- *Shelters*

Three, four walled shelters total footprints up to 20m² located at WP 181 and 193V on the attached Index Maps, not exceeding a height of 5m and one at a footprint of 150m², not exceeding a height of 5.5m at WP 106 on the attached Index Maps are proposed. Each shelter will be constructed in accordance with current Building Code Standards but will be constructed from materials and colours in keeping with the natural surrounds. Detailed plans shall be provided if consent is granted. Shelter at WP 106 to be in Zinc coated steel in keeping with buildings on Mt Nicholas road.

- *Signage*

Low scale signage will be established for interpretive and informative purposes. Any signage will be designed to be in keeping with that defined as a “permitted activity” in accordance with its placement to the relevant planning document where located along the trail route. For signage within the Eyre Mountains Conservation Park, the applicant will consult with the Department of Conservation as to standards and placement and as stated above. All

signage will be developed to be consistent with any relevant statutory documents in place for the area where signage will be located.

V. Landscape

Please note that this landscape analysis details the proposed trail alignment known as “Option A’ and is the preferred option following the true left of the Oreti River. “Option B” where the trail crosses the Oreti River includes rock protection work and an addition 7 bridges as discussed later in this report.

- *Mt Nicholas Station to deviation from Mt Nicholas Road:*

On this portion of the proposed trail, existing road will be utilised. While it is considered that the proposal would result in negligible effects on the landscape and amenity values, minor changes would occur from the installation of road safety signage, shelters, toilets and bridges necessary to enable cyclists to pass, if consent was granted. The placement and style of signage and structures will be considered carefully to maintain the station’s natural character and sense of “wilderness”. An easement agreement in principle has been established to cross the affected land with landowners RW & LK Butson. A further consent in the form of a pastoral lease will be required however, along this section from LINZ.

- *Oreti River Alignment:*

At this point the trail follows an existing 4wd track however this area of proposed trail is largely free from human impact and has good natural character. Any trail granted will therefore have an impact on this area of land albeit minimal. Although it is considered that given the low impact nature of cycling, the trail itself and structures along with adherence to terms and conditions designed to mitigate adverse effects, that the natural character of this area can be maintained.

- *Oreti Suspension Bridge (true right Oreti River) through to Mossburn:*

This portion of proposed trail enters the Eyre Mountains Conservation Park, Centre Hill Station and crosses freehold land of seven different owners to Mossburn. 250m of trail also follows SH 94. Apart from the Eyre Mountains Conservation Park, this section is a rural setting that is modified. The Eyre Mountains Conservation Park is largely unmodified and

of significant natural character. As above however, it is considered that the proposal will have negligible effects on the environment and amenity values of the area.

- *Mossburn to Lumsden Bridge:*

The proposed trail will run parallel to State Highway 94 along the disused marginal strip of SH 94 and rail corridor (LINZ). Removal of some weed species from the rail corridor will be required however, this is considered a positive effect of any consent granted. As stated above, the low impact nature of the activity is considered to have negligible impacts on this section of the environment.

- *Lumsden Bridge to Lumsden:*



Here the trail would follow the old rail alignment (predominantly) parallel to State Highway 96 including crossing freehold land from one landowner. As such, ED Menlove has agreed an easement in principle to permit establishment of the trail over his land. The trail follows on top of floodbank until Albion Street and then along Iona Street to Marcion Street into the centre of Lumsden.

- *Lumsden to Kingston:*

The Trail predominately follows State highway 6 through the townships of Five Rivers, Athol and Garston ending in Kingston. Along this portion of proposed trail the natural character is rural with vegetation being a mix of pasture, exotic and some native species. Buildings are common with much human modification and living evident. It is therefore considered that any impacts of the cycle trail and operation would be minimal on this landscape amenity.

VI. Waterway, Flood, Instream and Structures

(Refer “Bridges & Structures Report attached as **Appendix 3** for further discussion on the effects of Waterway structures)

- *Bridge Foundation Construction:*

The bridge foundation construction is dependent on the bearing capacity of the ground and the proximity of the bridge to the watercourse.

Soil bearing capacity is considered as;

- a) “Good Ground” as defined in NZS3604. This criteria s where the ground has an ultimate bearing capacity of 300 kPa (allowable bearing capacity of 100 kPa). This is a typical acceptance criteria for ground conditions required for the construction of a light timber framed house.
- b) Less than “Good Ground”. Where ground conditions are considered to have a ultimate bearing capacity of lees than 300 kPa. This ground could be soft saturated silty material, unconfined sands and free running gravels.
- c) Rock, or a derivation of rock.

- *Bridge Structures up to 6.000m span:*

Bridges up to 6.00m span proposed along the trail are located at sites detailed on the attached Index Maps. The foundations of these and construction methods are described below -

Good Ground

Typically the foundations for these structures will be a simple timber (H5 treated) bearing plate bedded directly on the exposed ground. All top soil and organic matter are to be removed from the foundation footprint. Lateral restraint is provided by backfilling the bearing plate or providing waratah type piles driven adjacent to the bearing plate

Less than Good Ground or adjacent to Water Course Bed

Each end of the structure shall be piled with a minimum 150mm SED Tan Post driven to refusal (solid bearing) and/or to a level determined to be below the adjacent water course bed to prevent future wash out of the abutments. The piles shall be capped with timber bearers of a suitable size and the bridge constructed on these bearers. The pile diameter is dependent on the height above the watercourse the bridge is to be constructed and whether the abutment is required to retain the track formations at each abutment. Driving of the piles will most likely be carried out by vibrating hammer.

Rock

As per good ground with a fixing to the rock for lateral restraint by drilling and grouting anchor bars as required.

- *Bridges 6.000m – 12.000m:*

Bridges of 6.000m – 12.000m span proposed along the trail located at sites detailed on the attached Index Maps. The foundations of these and construction methods are described below -

Good Ground

Either precast concrete or poured in situ concrete abutments with adequate allowance for ground clearances at the abutments. All topsoil and organic matter is to be removed from the foundation footprint.

Less than Good Ground or adjacent to Watercourse Bed

Either precast concrete or poured in situ concrete abutments with adequate allowance for ground clearances at the abutments, with additional driven timber piles cast into concrete

abutments. Reinforced concrete abutments are sized according to the water course bank profile.

Rock

As per “Good Ground”. Allowance is made to key the concrete abutment into the rock surface and grouted bars to the rock if required

- *18.000 m Precast Concrete Bridges:*

18.000 m precast concrete bridges proposed along the trail are located at sites detailed on the attached Index Maps. The foundations of these and construction methods are described below -

All situations

All bridge foundations and abutments are provided by stacked stone Gabion Baskets 1.0 m x 1.0 m x 4.0 m long (a minimum of two full Gabion Baskets). The bridge is bearing on a precast concrete bearing plate set into the top of the Gabion Baskets and held by galvanized anchor bars incorporated into the gabion Baskets. All topsoil and organic matter is to be removed from the foundation footprint. If the ground bearing capacity is less than “Good Ground” additional gabion baskets are to be provided to increase the bearing area at each abutment.

Where bridge is to be elevated, the abutments shall be constructed with braced driven timber piles. Piles shall be driven to refusal or to a depth determined to be suitable for the depth of any adjacent watercourse.

- *12.000m – 25.000m Steel Truss Bridges;*

12.00m – 25.000m steel truss bridges proposed along the trail are located at sites detailed on the attached Index Maps. The foundations of these and construction methods are described below -

Good Ground

Either precast concrete or poured in situ concrete abutments with adequate allowance for ground clearances at the abutments. All topsoil and organic matter is to be removed from the foundation footprint.

Where bridge is to be elevated, the abutments shall be constructed with braced driven timber piles. Piles shall be driven to refusal or to a depth determined to be suitable for the depth of any adjacent watercourse.

Less than Good Ground or adjacent to Water Course Bed

Either precast concrete or poured in situ concrete abutments with adequate allowance for ground clearances at the abutments, with additional driven timber piles cast into concrete abutments. Reinforced concrete abutments are sized according to the water course bank profile.

Rock

As per “Good Ground”. Allowance is made to key the concrete abutment into the rock surface and grouted bars to the rock if required.

- *Suspension Bridges:*

Suspension bridges proposed along the trail are located at sites detailed on the attached Index Maps. The foundations of these and construction methods are described below -

Tower foundations.

A reinforced concrete pad foundation again depends of the bearing capacity of the ground and is defined as follows;

- a) Less than Good Ground or adjacent to Water Course Bed
- b) Cast insitu reinforced concrete pad foundations with additional driven timber piles.
- c) Rock
- d) Cast insitu reinforced concrete pad foundations with additional galvanized steel key bars drilled and grouted to rock

Anchor Blocks

Cast in situ reinforced concrete anchor blocks poured directly against excavated ground. Where rock is encountered at anchor locations, anchor rods are to be drilled and grouted to competent rock to a length determined depending on the quality of rock encountered. All rock grouted anchor rods will be subject to load testing

Tower stay cables and sway cables

Either driven timber piles or drill and concrete encase timber piles to ground as required.

- *Existing Bridges*

Within the original rail alignment there are several bridges which have either existing concrete abutments or existing hardwood timber piles. All existing foundation structures will be used where possible.

- *Rock Groyne*

The proposed trail (Option A) runs along the true left bank of the Oreti River due South of the Mavora Lakes and takes in three erosion scarps within this alignment. These erosion scarps are located at Index Map references RD1, RG2 and RG3 on Maps 23A, 24 and 25 respectively and will require rock armouring in the form rip rap protection.

In particular, site 1 rock rip-rap will be placed 4m out from the true left river bank toward the centre channel to a height of 2m (above the normal river channel) and to a width of 3 metres. The net result is that the left edge of the active river would be shifted 4 m out from its current alignment against the erosion scarp. The proposed works would affect a river reach of approximately 160m in length (being 4m out from the true left bank for 110 m and approximately 2m out for a further reach of 50m).

Rock for the rip rap would be sourced from Mossburn quarry. It would be placed into position via a digger located on the true right riverbank. Gravel sourced from the consented borrow areas (not the active channel) would be transported along the left side of the river by Moxy truck and end tipped to form the track. Hence there would be no need for trucks or the digger to cross the river with rock or gravel.

Sites 2 and 3 rip-rap protection is proposed to be placed in the river against the true left bank by digger operating from the right bank as per Site 1. The placement of the rip-rap protection would shift the active river flow approximately 2 m towards the right bank where it would re-establish a similar bed profile. The works would affect approximately a 70 m long river reach at Site 2 and approximately 130m long river reach at Site 3. (Refer to Section 2.2 Protection Works “Aquatic Ecology Report” for further discussion regarding rock protection works).

Construction methods as described above would be used at Sites 2 and 3 also.

The effect of the proposed rip-rap protection on freshwater ecology is discussed later at point VIII of the report.

- *Route - Option B*

Route alignment Option B has been mooted as an alternative if it is considered by the decision maker that the rock protective works are overbearing on the landscape (albeit rock groynes are a permitted activity as set out in the Regional Water Plan for Southland and environmental investigations have suggested that the works would have a neutral impact on the environment). If a consent is to be granted and Option B is selected as the trail’s alignment then 194 m of rock groyne protective works will be required however, an additional two bridges along the alternative route plus five further bridges along the true right bank of the Oreti will be required to make the route passable. This places a further consenting requirement on the applicant and adds further adverse effects on the landscape due to the additional structures. Because of this therefore, Route B is not the favoured route by the applicant.

VII. Operation and Maintenance

- *Cycling:*

The activity of cycling along the trail is considered low impact on the trail and surrounding area. Cyclists will be educated through promotional material about other users and ways as

to minimise their use against fishers, trampers. As detailed above, regular inspections of the trail will occur so that any degradation of the trail can be repaired.

- *Health and Safety:*

The liability of independent track users will be signposted at the commencement of trail sections whereas guided operations will be responsible for the safety of their clients. Regular inspections of the track will be arranged to ensure the track is maintained and structures safe, secure and compliant with terms and conditions of any consent if granted.

- *Effluent Waste:*

No effluent waste will be discharged to any waterway or the land. Full containment toilets are to be used at the sites detailed on the attached Index Maps.

- *Traffic and Transport:*

Some of the cycle trail (as detailed above) will be located on shared user roads. However, on advice from the project's roading engineer and roading safety co-ordinator, it is considered that given that traffic on the affected shared roads is relatively low, any potential adverse traffic effects between users can be mitigated via the use of signage or upgrading cattle stops and bridges (as applied for in this application).

- *Trail Maintenance:*

Over the first five years after construction of the trail it is anticipated that monthly inspections will occur, in particular at any disturbed sites such as the cut and fill construction zones to remove any newly established weed species. Annual inspections are also anticipated of the restored areas to assess regeneration of native species and re-establishment of grassland and turf vegetation. This will be completed using a fixed photo point monitoring system.

Ongoing vegetation management will also be required to keep the trail in good repair and to maintain a safe carriageway for cyclists. This would include trimming and pruning of vegetation and removal of any invading grassland species.

VIII. Terrestrial Ecology

A comprehensive and separate Terrestrial Ecology assessment was undertaken in April 2011 and is attached at **Appendix 6**. In short, the trail passes through eight vegetation types being Short tussockland, Copper tussockland, Mountain beech forest, Exotic grassland, Improved pasture, Scrub, Shrubland and Wetlands. Many species of fauna exist in the listed habitats including indigenous fauna such as birds, lizards and invertebrates. Signs of introduced mammals were also found along the proposed route ie. Pig rootings, possum scats and rabbit burrows. It is also likely that other feral species such as mice, rats, deer, stoats, cats and hedgehogs reside in the valley where the trail passes.

Most of the construction of the trail will involve the removal of exotic grasses, fescue tussock and brown top. It is acknowledged that special care is required however with regard to choosing the final alignment and construction of the trail within the Eyre Conservation Park so as to minimise the need for the removal of regenerating beech trees and saplings. No mature trees will be removed in construction of the trail. The trail will also be “weaved” around canopy trees and care will be taken with the construction of cut batters so as not to damage any root plates of beech trees upslope of the trail. In locations of cuttings special care will be taken with replanting tussock and grasses.

The current track alignment (especially within the Ashton Flats outwash area and boulderfield south of the Oreti) avoids sensitive Wetland areas and the current trail selection seeks to minimise impacts. The use of some boardwalks further reduce disturbance of the cycle trail and activity on the valley floor.

It is considered that there may be some minor displacement of wildlife once the trail is constructed and the effect of such is determinate on the species displaced. For example, lizards may simply move on while some aquatic bird species may nest elsewhere – although it should be noted that the majority of the trail is located away from the riverbed.

As discussed above, top soil removed during the construction of the trail itself will be smoothed along the side of the trail corridor so that native vegetation may regenerate, in some locations top soil will be transferred to gravel extraction sites.



IX. Freshwater Ecology

(Refer “Aquatic Ecology report attached as **Appendix 4** for further discussion on the effects of the proposal on Aquatic values)

- *Water Quality – Construction:*

While sediment is a natural component of most natural aquatic systems as it is transported at times of high river flows and floods, increases in sediment reduce water clarity and increase turbidity potentially reducing primary production. High sediment concentrations may also harm fish directly and in extreme cases cause death or gill abrasion, reducing growth, resistance to disease and preventing successful egg and larval development, affecting migrations or indirectly reducing their food source. Any activity resulting in increased silt levels is of concern from an aquatic ecology or fisheries management point of view.

Therefore in order to mitigate the adverse effects of construction of structures on or within the Oreti as proposed, works should be undertaken during a period of dry weather when the river flow is low so as to minimise sediment discharge.

The construction methodology has been developed so as to avoid the need of vehicles carrying rock for rock protection works crossing the river to eliminate sediment discharge.

Construction will utilise either a mixing zone or geotech cloth to mitigate risk of fine silts entering the river. The applicant will be advised by Environment Southland on these and other suitable methods to mitigate effects during construction.

The placement of rock rip-rap on the river bed will cause some discharge of sediment which will result in a localised release of sediment into the river however, this will probably not be discernible downstream.

A rock bund is also proposed at Rock Groyne Site 1 when gravel is tipped onto the riverbed to form the cycle track platform so as to divert the majority of river flow away from the track formation while it is constructed. Hence ensuring that the effects on water quality are mitigated and localised. Alternatively geotech may be placed behind the rock protection and back filled to prevent sediment discharge into the river.

Finally construction will occur in daylight hours allowing the river to return to ambient water clarity each evening enabling fish movement past the works site.

- *Water Quality Post Construction:*

Experience with other engineering works on other rivers in New Zealand indicates that water quality will return to normal soon after construction is completed. The cycle track is not expected to have any other adverse effects on water quality. Furthermore there should be no long term environmental impacts on water quality, it is anticipated that only short term effects may occur on the river quality (if any) during construction.

- *Habitat Quality:*

With regard to Rock Groyne Site 1, the track formation and rock armouring will reclaim approximately half of the low flow channel which in March 2011, provided a wide variety of habitat types for invertebrates and fish. Such a “pool-run-riffle” structure is one of the reasons why the Oreti can sustain a large trout fishery.

Any temporary loss during construction to habitat will quickly return after works completion and it is considered that biota are well adapted to continual and sometimes rapid changes in the environment.

At Sites 2 and 3, temporary loss of habitat will occur during the construction phase however, once the river settles into its new alignment, habitat values will be fully restored.

In the long term the rip-rap will stabilize the erosion scarp reducing the inputs of sediment to the river. The placement of boulder rip-rap also provides a favourable habitat for juvenile trout and bullies provided there are crevices and spaces between them. On balance it is considered that the overall impact of the proposed works on invertebrate and fish habitat is likely to be neutral.

Didymo has been established in the Oreti River, personnel will need to cross the river at each day to get to work in personnel vehicles. Vehicles will be washed if they are entering other waterways.

X. Cultural

The applicant acknowledges Ngāi Tahu has a long association and involvement with the Oreti catchment and it remains culturally significant. This significance is recognised by the Crown in the Ngāi Tahu Claims Settlement Act 1998. Schedule 50 of the Act is the Statutory Acknowledgement for the Oreti River.

Ngai Tahu Association with the Oreti River

The Oreti River traverses a significant area of Murihiku, stretching from its mouth at Invercargill almost to the edge of Whakatipu-wai-maori (Lake Wakatipu). As such, it formed one of the main trails inland from the coast, with an important pounamu trade route continuing northward from the headwaters of the Oreti and travelling, via the Mavora or Von River Valley, to the edge of Wakatipu and on to the Dart and Routeburn pounamu sources. Indeed, pounamu can be found in the upper reaches of the Oreti itself.

The tupuna had consideration knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Oreti, the relationship of people with the river and their dependence on it, and tikanga for the proper sustainable utilisation of resources. All of these values remain important to Ngai Tahu today. The kai resources of the Oreti would have supported numerous parties venturing into the interior, and returning by mokihi (vessels made of raupo), laden with pounamu and mahinga kai. Nohoanga (temporary campsites) supported such travel by providing bases from which the travellers could go water fowling, eeling and catching inaka (whitebait), and were located along the course of Oreti River.

There were a number of important settlement sites at the mouth of the Oreti, in the New River estuary, including Omaui, which was located at the mouth of the Oreti, where it passes the New River Heads. Oue, at the mouth of the Oreti River (New River estuary), opposite

Omaui, was one of the principal settlements in Murihiku. Honekai who was a principal chief of Murihiku in his time was resident at this settlement in the early 1820s, at the time of the sealers. In 1850 there were said to still be 40 people living at the kaik at Omaui under the chief Mauhe.

As a result of this pattern of occupation, there are a number of urupa located at the lower end of the Oreti, in the estuarine area. Urupa are the resting places of Ngai Tahu tupuna and, as such, are the focus for whanau traditions. These are places holding the memories, traditions, victories and defeats of Ngai Tahu tupuna, and are frequently protected by secret locations.

The mauri of the Oreti represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the river.

Discussion with Te Ao Marama Inc

The applicant has discussed the proposal with Te Ao Marama Inc and they have been invited to put submissions in at any hearing on cultural impacts of the proposal.

Koiwi, Taonga or Artifact, and In-situ Pounamu

The Applicant volunteers the following clauses as the minimum basis for the approach that the applicant will take in the event of an accidental discovery of Koiwi, Taonga or Artifact, and In-situ Pounamu.

The trail does not traverse any historic sites, although the towns that the trail will pass have substantial history in their own right. In the event of any finding of a historic site the applicant will stop work immediately and local authorities and the Historic Places Trust will be advised.

Kōiwi Accidental Discovery

If Kōiwi (human skeletal remains) are discovered, then work shall stop immediately and Te Ao Mārama Inc (Ngāi Tahu (Murihiku) Resource Management Consultants) will be advised.

They will arrange a site inspection by the appropriate tangata whenua and their advisers, including statutory agencies, who will determine whether the discovery is likely to be extensive and whether a thorough site investigation is required.

In recognition of Section 6 of the Resource Management Act 1991 and legal requirements under the Historic Places Act 1993 there is a requirement to consult the New Zealand Historic Places Trust when archaeological sites are disturbed without authorisation previously obtained. The New Zealand Police also need to be consulted if the discovery includes Kōiwi or human remains.

Materials discovered will be handled and removed by Iwi responsible for the tikanga appropriate to their removal or preservation.

Taonga or Artefact Accidental Discovery

Taonga or artefact material (eg pounamu/greenstone artefacts) other than Kōiwi will be treated in a similar manner so that their importance can be determined and the environment recorded by qualified archaeologists alongside the appropriate tangata whenua.

***In-situ* (Natural State) Pounamu/Greenstone Accidental Discovery**

Pursuant to the Ngāi Tahu (Pounamu Vesting) Act 1997, all natural state pounamu/greenstone in the Ngāi Tahu tribal area is owned by Te Rūnanga o Ngāi Tahu. The Ngāi Tahu Pounamu Resource Management Plan provides for the following measure:

- Any *in-situ* (natural state) pounamu/greenstone accidentally discovered should be reported to the Pounamu Management Officer of Te Rūnanga o Ngāi Tahu as soon as is reasonably practicable. The Pounamu Management Officer of Te Rūnanga o Ngāi Tahu will in turn contact the appropriate Kaitiaki Papatipu Rūnanga.

- In the event that the finder considers the pounamu is at immediate risk of loss such as erosion, animal damage to the site or theft, the pounamu/greenstone should be carefully covered over and/or relocated to the nearest safe ground. The find should then be notified immediately to the Pounamu Management Officer.

Contact details for the Pounamu Management Officer are as follows:

Te Rūnanga o Ngāi Tahu
Level 7, Te Waipounamu House
158 Hereford Street
PO Box 13046
Armagh
Christchurch 8141

Phone:(03) 366 4344
Fax: (03) 365 4424
Web:www.ngaitahu.iwi.nz
Pounamu Management Officer
Kaiwhakarite Tiaki Pounamu
Te Rūnanga o Ngāi Tahu

3. Consenting Authorities & Agencies

I. Department of Conservation

a) Application Particulars

The application relates to the construction (including the removal of some seral vegetation but not mature trees) of a purpose built cycle and walking track of approximately 34 kilometres long aligned to the approximate route as detailed on Index Maps 13 to 34. The trail type would be that detailed as Grade 1 as detailed in Section 2.2 Design Standards “Route Selection & Construction Report” attached as **Appendix 2** with the final on the ground design being dependent on the underlying environment in which it is situated. Some boardwalk may be required and as such approximately 103 m at a width no greater than 2.5 m is under application as indicated on the attached Index Maps (again underlying environmental conditions mean that trail design needs to remain relatively fluid however, no significant amendments to that outlined in the application would occur without prior consultation with the Department. A number of culverts are also under application as part of the trail formation (as detailed on the attached Index Maps) however, these all have less than a 1 m diameter. A number of smaller culverts 36cm to 66cm in diameter will be constructed in the Eyre Mountain Conservation Park to direct surface in its natural flow. Construction and use of 13 bridges in Option A and 8 bridges in Option B are required to make the trail passable at various points detailed on the attached Index Maps and the design of each is specified within the Schedule and “Bridges & Structures Report” attached as **Appendix 3**.

To create the trail itself, the extraction and use of approximately 24,300 m³ of gravel is under application from 11 gravel pits located on conservation land as detailed on the attached Index Maps. The quantity extracted from each pit is unknown at this stage and is dependent on the quality and quantities held at each site however, rock take from each pit site shall not exceed 5,000 m³.

By way of structures, four containment toilets located at points detailed in Index Maps 13 to 34 and two shelters having a footprint of 20m², height not exceeding 5m at WP 181 and 193V.

Signage or the concept of (given that the most appropriate locations and information is yet to be determined) is also applied for. Signage is intended to be used to point out hazards and provide interpretative material to cyclists using the trail. The dimensions, content and style of such to be determined in consultation with Department staff should the concession be granted.

Finally the activity of guiding cycling along the trail is under application, in that it is anticipated to allow guided groups of cyclists (no more than 24 per group plus 2 guides) to set off from Walter Peak every day of the year. Within the Eyre Conservation Park, it is anticipated that guided groups will split into two of 12 plus a guide to be consistent with the Conservation Management Strategy for the area. It should also be a condition of any guiding concession granted, that the applicant may sub-licence the concession to a subcontractor, so as to obtain the most effective and efficient operator for its purposes and to provide an excellent guiding service to the public.

A term of 30 years is sought in the form of an easement and guided cycling concession. The term of 30 years is required given this is a proposal which involves the construction and long term investment in significant infrastructure. Therefore security of tenure is required.

b) Statutory Documentation & Analysis

i. Conservation Act 1987

The Conservation Act 1987 is relevant to this application in that the area under application is the Eyre Mountains Conservation Park.

In particular section 6 of the Conservation Act sets out the functions of the Department of Conservation and with it states that the Department should -

(a) *manage for conservation purposes, all land, and all other natural and historic resources,*

.....

(c) *to promote the benefits to present and future generations of—*

(i) *the conservation of natural and historic resources generally and the natural and historic resources of New Zealand in particular; and*

.....
(e) to the extent that the use of any natural or historic resource for recreation or tourism is not inconsistent with its conservation, to foster the use of natural and historic resources for recreation, and to allow their use for tourism:

Part IIIB of the Conservation Act 1987 governs the consideration of concession applications. **Section 17O (1)** states that no activity shall be carried out in a conservation area unless authorised by a concession. **Section 17Q** of the Act gives the Minister the power to grant a concession in the form of a lease, licence ...etc in respect of any activity and **Section 17 S** sets out the elements of which an application must cover. It is considered that this application contains the required information set out in section 17S of the Conservation Act to enable it to be processed.

Section 17W of the Conservation Act 1987 defines the relationship between concession activities and governing conservation management strategies and plans. In particular – **Section 17W(1)** states –

Where a conservation management strategy or conservation management plan has been established for a conservation area and the strategy or plan provides for the issue of a concession, a concession shall not be granted in that case unless the concession and its granting is consistent with the strategy or plan.

This applications consistency with the relevant Conservation Management Strategy is discussed below at point iii.

ii. Conservation General Policy (May 2005)

The Conservation General Policy is applicable to this application as it relates to land administered under the Conservation Act 1987.

Chapter 9 People’s Benefit and Enjoyment covers policies pertaining to the management of recreation opportunities and activities on conservation land. In particular, **Policies 9.1** apply to this application in which –

Policy 9.1(a) - Recreational opportunities will be provided on public conservation lands and waters. Where provided, they should be consistent with the values of and outcomes planned for places.

Policy 9(b) states that opportunities planned for different places will be detailed in relevant conservation management strategies and plans.

Policy 9.1(c) sets out the considerations that should be given by the Minister when assessing the opportunities planned for conservation lands. This includes a number of varying elements relating to the experience of an area to be maintained, current and projected level of use and the wider network of opportunities provided elsewhere.

Policy 9.1(d) states “Conservation management strategies should identify (based on the assessment criteria in policy 9.1(c) how public access is to be enabled and what types of recreation opportunities, activities, information, accommodation, facilities and services (including those provided by concessionaires) are suitable in different places and to what extent.”

Policies 9.1 (e) and 9.1(f) outline tools available to manage opportunities to support the outcomes planned for places as set out in relevant statutory documents and state that activities should be managed to avoid, remedy and mitigate any potential or actual adverse effects of an activity.

Policy 9.2 “Information including interpretation” is also applicable to this application in that signage is to be provided (should a concession be granted) to assist people in their understanding and appreciation of the area. **Policy 9.2(a)(ii)** which correlates to **Policy 9.3** is also applicable in that signage is to assist people in identifying hazards that may occur on the land and notify them of their responsibility for their own safety while on conservation land.

It is the applicants intention to construct a purpose built cycle/walking track through the Eyre Mountains Conservation Park and therefore **Policy 9.5** is applicable to the application.

This states among other things that the use of vehicles (of which cycles and push bikes fit within the definition of “vehicle” page 62 General Policy) should be compatible with the statutory purpose for which the land is held.

Chapter 10 “Accommodation and Related Facilities” is also relevant to this application in that is intended, should a concession be granted, to construct two shelters with footprints of 150m² and 30m² and four full single containment toilets at locations detailed on Index Maps 13 to 34. In particular, **Policies 10(a) and (b)** state that any facilities permitted should be consistent with the planned outcomes for places (i.e. as that set out in the relevant plan or strategy) and that structures not owned by the Department require a concession. Policy 10(c) takes this further to ensure that any concession for a structure granted must again be consistent with the governing plan or strategy.

Policy 10(d) directs applicants to investigate other locations outside of conservation lands to provide facilities (if possible) and/or share existing facilities. While **Policy 10(e)** covers minimum standards for any structure consented including among other things to be consistent with outcomes detailed in relevant statutory documents, mitigate adverse effects on natural and historic resources and be in keeping with the surrounding landscape.

The structures applied for complement use of the cycle trail and are strategically placed to provide effective shelter from extreme weather conditions and comfort to users for not only the duration of their cycle through the Eyre Conservation Park but as part of the entire 3 to 4 day experience. The sites suggested have been done so in consultation with Department staff so as to mitigate any potential adverse effects of the structures when built. The very purpose of the toilet is to mitigate the adverse effect of toileting waste along the trail.

Finally **Chapter 11** is relevant to this application in that any application for a concession will comply with or be consistent with the objectives of the relevant governing Act and/or conservation management strategy or plan. It is the applicant’s intention to construct a purpose built cycle trail, toilets, shelters and signs. To do this it will require 10 gravel pits located at sites outlined on the attached Index Maps and removal of some seral vegetation. Finally it wishes to conduct guided cycle tours through the Eyre Mountain Conservation

Park – hence a authorisation pursuant to Part IIIB of the Conservation Act is required in the form of an easement and guiding concession for a term of 30 years. The term of 30 years is required given this is a proposal which involves the construction and investment in significant infrastructure. Therefore security of tenure is required.

Policies 11.1(a) to 11.1 (e) direct the basis on which a concession application should be considered and once granted, how the activity should be managed.

It is considered that this application, associated consideration of the potential and actual effects of the activity and adherence to the suggested set of special terms and conditions mean that if granted, a concession for this activity would be consistent with Chapter 11 of the Conservation General Policy.

iii. Mainland Southland – West Otago Conservation Management Strategy (1998 – 2008)

The Mainland Southland – West Otago Conservation Management Strategy 1998 – 2008 (“CMS”) is relevant to this application. **Part 4.3** of the Strategy relates to Recreation and Tourism Development Proposals where there are a number of objectives and Implementation policies that govern facility development. In short any facility development is to be in keeping with the character of the area under application and recreation opportunities should enhance a landscape area not diminish it.

Part 4.4 Recreation and Tourism Concessions is also relevant to this application.

Recreation and tourism concessions are granted to enable a wider visitor enjoyment and appreciation of natural areas. In return for the privilege of a concession, operators must provide quality visitor services commensurate with the natural values in an area.

The first objective of this section is to enable high quality visitor services that are compatible with the recreation opportunities identified with each area and those that will not adversely effect natural or historic resources. In meeting this objective, the Department has identified a number of Implementation Policies of which it is considered that Implementation **Policy 1 – 6 and 8 and 10** are applicable to this application.

Part 4.7 of the Mainland Southland – West Otago Conservation Management Strategy relates to bicycle use and as such is relevant to this application. The objective of this section is to allow bicycle use on formed roads and designated tracks where their use can be undertaken to acceptable levels of ecological, social and physical impact.

Implementation 1 of this section states that “.....*Proposals for the use of other tracks or the development of tracks by mountain bike enthusiasts will be assessed according to their impact on the environment, other users and the recreational opportunity setting of the area.....*”

Part 4.12 covers the use of signs on conservation lands. Signs are permitted where necessary for visitor information and in accordance with the opportunity spectrum of relevant landscape units. Signs are permitted when they have minimal impact on natural and historic resources of an area and should also contribute to people’s enjoyment and understanding of an area.

Part 4.13 Visitor Safety is relevant to this proposal. Should this concession be granted, independent cyclists would be responsible for their own safety while cycling and using the track whereas guided individual’s safety will be the responsibility of the commercial operator as set out in its safety plan designed specifically for the proposal.

Part 4.3 Recreation and Tourism Development Proposals deals with the provision of facilities on conservation land and how development can change the nature of an area if not managed appropriately. i.e. Any development needs to be assessed in terms of impact on the environment and visitors to the area and that facility development will not be permitted unless it is in keeping with the characteristic of an area. This is reiterated in Objectives 2 and 3 of Part 4.3 where –

“.....facilities to both enhance visitor experience and minimise visitor impact on natural and historic resources”

and;

“.....all recreation developments conform with recreational opportunity objectives as set out for each Landscape Unit.....”

As discussed above, two shelters and four single full containment toilets have been applied for (as marked on Index Plans 13 to 34) as associated facilities to complement the construction and use of the cycle trail through the Eyre Conservation Park. It is considered that these are consistent with Objectives 2 and 3 above as the shelter can be used as a comfort stop and a place to reflect out of extreme weather conditions while the toilets contain toileting waste. As detailed below also, it is considered that these structures are consistent with the objectives for the Eyre Mountains conservation unit.

Part 5.10 Mining (Prospecting, Exploration and Mining) And Gravel Extraction

applies to this application in that gravel is required to construct the track (approximately 11,230 m³) and is required to be sourced over 8 gravel pits within the Eyre Conservation Park. The Objectives of this section in short, are to ensure that proposed mining activities are assessed and that potential adverse effects can be mitigated but also to enable local aggregate to be used for the maintenance or formation of tracks and roads on conservation land. **Implementation Policies 1, 4, 7, 8 and 10** are relevant to this application, in that gravel pit sites have been chosen due to their highly modified nature and those that hold little to no significant character. (Refer to section 3 of this document for the EIA on gravel extraction). It is also of benefit that gravel is sourced within the Eyre Conservation Park to construct the trail, so as in avoids further weed infestation as set out in Policy 10.

The landscape unit under application is the Eyre Mountains Conservation Park and as such **Part 6.18** of the Mainland Southland – West Otago Conservation Management Strategy is applicable. The natural landscape of this area is tussock grasslands, beech forest and alpine communities however, the positioning of the proposed cycle track runs through the lowlands which is largely modified vegetation. The Department has identified a number of endemic and threatened species within this conservation unit. Many native birds ranging from NZ Falcon, NZ pigeon, kea, banded dotteral and yellow-crowned parakeet are found in this habitat along with the large beetle *Meceodema chiltoni* found in the Irthing Valley.

The CMS states that the “Eyre Mountains are possibly the most under-utilised backcountry recreation area in Southland.” “...few hunters and trampers make use of the area”. It has been found that there is 4WD use on the periphery of the landscape unit and fishers also enjoy the area.

The Eyre Mountains are currently managed as a backcountry and a remote recreation opportunity. Because of this and the role the unit plays in the full spectrum of recreation opportunities in the Southland region, the CMS directs that the area should be maintained as such and hence no concessions should be allowed. **Implementation 6** reiterates this direction.

However, the CMS also states that “As the Eyre Mountains are dry by Southland standards and that “the opportunity to develop a good mountain bike track may exist.....” The objectives of the landscape unit also point toward enabling the use of mountain bikes while avoiding conflicts with other users. **Implementation 3** elaborates further on this.

While Part 6.18 directs that there be a prohibition on the grant of concession activities in the area section 17Q of the Conservation states that –

- (1) Subject to this Part of this Act, the Minister may grant a concession in the form of a lease, licence, permit, or easement in respect of any activity.*
- (2) The Minister shall not grant an easement in respect of an activity if a lease, licence, or permit may be granted in respect of the activity and the Minister considers that a lease, licence, or permit is more appropriate in that case.*
- (3) [Part 4A](#) of this Act does not apply to any lease or licence granted under this Part of this Act.*

Hence according to section 17Q of the Conservation Act, the Minister has discretion to grant or refuse to grant a concession application in accordance with the principles set out in the rest of Part IIIB of the Act and its purpose, as stated in section 6 and in particular –

(e) to the extent that the use of any natural or historic resource for recreation or tourism is not inconsistent with its conservation, to foster the use of natural and historic resources for recreation, and to allow their use for tourism:

In order for a decision on this concession application to be legal, the Minister must –

1. Consider the application (as per her statutory powers); and
2. Allow the applicant to be heard (through this application and the application process);
and
3. Take a reasoned and measured approach in her deliberations basing her decision on relevant factors only.

(Associated Provincial Picture Houses Ltd v Wednesbury Corporation [1948] 1 KB 223)

The mere fact therefore that a subordinate policy document (the CMS), to the Act prohibits concession activities in the area is not reason to make a prima facie decline under Section 17W(1) which states –

Where a conservation management strategy or conservation management plan has been established for a conservation area and the strategy or plan provides for the issue of a concession, a concession shall not be granted in that case unless the concession and its granting is consistent with the strategy or plan.

It should be noted that the rest of Part 6.18 of the CMS lends itself to the implication that cycle activities may be appropriate in the area. Furthermore and given that the activity under application of building a cycle track and enabling cyclists to use it guided or otherwise, is low impact in nature and therefore it can be argued is not inconsistent for the purpose of which the land is held.

With regard to the associated structures under application, while the section details a prohibition on an increase in track or hut facilities being permitted, it is considered that the application is still consistent with the objectives for the area. It seems that the rationale for the prohibition on increase in facilities was the low usage of the area versus the cost of maintenance for such low use. The associated facilities under are designed to complement

the cycle trail and enhance user experience while in the area. They are not for the provision of overnighting or accommodation and is there for comfort, shelter from extreme weather conditions and to contain toilet waste hence minimising the effect of cyclists in the area. The locality of the sites for the structures has been determined in consultation with Department staff and is strategically placed to minimise any potential adverse effects on the conservation estate and to enhance the journey not only through the conservation estate but over the 4 to 5 day ride. It is therefore considered that the associated facilities are of minimal intrusion and therefore in keeping with the outcomes planned for the Eyre Mountains.

Finally the CMS is out of date and technically expired in 2008. It could be said therefore, that the directions as set out in the CMS are simply guidelines and principles that require updating so as to be reflective of the public's recent desires for the management of the area. Over the past two years, media emphasis has been placed on cycling as a recreation and the benefits cycle trails provide the individual and surrounding affected communities. Such an enterprise may well be wanted in the area, regardless of the directions that were valid from 1998 – 2008.

It is considered that this application is consistent with the purposes and principles set out in the Conservation Act 1987 and the General Conservation Policy 2006. Prima facie the proposal is inconsistent with the relevant CMS for the area but on closer examination, it is regarded that the prohibition of concessions in the area fetters the Ministers statutory discretion to consider concession applications. On closer inspection of Part 6.18, it is also believed that the low impact nature of cycling and the building of a cycle track to facilitate the activity was envisaged for the area. As such this proposal in principle is not inconsistent with the governing Mainland Southland – West Otago Conservation Management Strategy 1998 – 2008.

II. Environment Southland

a) Application Particulars

The application is for the construction and use of one 36 m bridge located at CB 344 on Index Map page 73 at dimensions specified in the attached Bridge Schedule and outlined in

the “Bridges & Structures Report” attached as **Appendix 3**. The application is also for three protective rock groyne structures located at points WP RG1, RG2 and RG3 (as indicated on Index Maps 23A, 24 and 25 respectively) in Option A and one rock groyne indicated on Index Map 23A for Option B. The application is for flood protection causeway approximately 60m at bridge CB 521, page 49 of Maps.

Two gravel pits are also proposed at G12A and G12B on the attached Index Maps to extract gravel to use in construction of the cycle trail as set out in Addendum 1 of the Landscape and Visual Assessment Report Appendix 5. The total estimate of gravel required to build the trail is 60,093 m³. This quantity of rock will be sourced from the 14 proposed gravel pits located along the trail route and from gravel sources elsewhere from existing registered quarry sites in Northern Southland. It is not expected that rock take from the two gravel pits proposed within Environment Southland’s jurisdiction would exceed 13,000m³. Both gravel pits will be restored once trail construction is complete (Refer to Section 3 of this report). Crushing facilities and activities are also applied for at the two proposed gravel pit sites.

The trail alignment itself as shown on Index Maps 7 to 101 does not enter any adjacent water ways. The placement of five full containment toilets detailed at locations on the attached Index Maps are considered permitted activities under the Regional Water Plan for Southland, given there is no discharge of contaminant to land or water. All culverts proposed are less than 1 m in diameter. As such these activities are not under application to Environment Southland.

b) Statutory Documentation & Analysis

i. Resource Management Act 1991

The Resource Management Act (“RMA”) which came into force in 1991 aims at integrating the management of land, air and water resources in New Zealand. The Act is structured to enable the environmental effects of an activity to be identified, examined and if possible avoided or remedied or mitigated.

The definition of “effect” as set out in section 3 of the Act is broad and ranges from positive or adverse effects, temporary or permanent, past, present or future effects, cumulative and potential effects. As case law suggests and the governing plans themselves – some effects from some activities can be tolerated however, there is an onus to avoid, remedy and mitigate adverse effects to an acceptable minimum.

Section 5 of the Act is “*to promote the sustainable management of natural and physical resources*”. For the purpose of the RMA “Sustainable Management” means –

Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while –

- a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- b) Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and*
- c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

In meeting the purpose of the RMA that is primarily a framework for dealing with environmental effects of activities, there are three other principles that should be considered when a decision on consent is made. These are outlined in section 6 – Matters of National Importance, section 7 Other matters and section 8 Treaty of Waitangi which add a further dynamic to the decision making process under the RMA.

Section 6 Matters of National Importance set out a number of different things that are held in high regard that must be recognised in the decision making process such as the natural character of waterbodies, public access to water, natural landscapes, indigenous vegetation, tikanga, historic heritage and customary activities. **Section 7 Other Matters** specifies another series of secondary matters (to those specified in section 6) to be considered for example, the maintenance and enhancement of amenity values, the efficient use of resources and issues surrounding energy usage. While **section 8** requires decision makers to take into account the principles of the Treaty of Waitangi and the relationship

between Maori and the Crown. This involves the right of Maori to govern, to control their own resources, partnership and protection.

Hence the RMA is not solely about protection of the environment but aims to be a mechanism for balancing economic and social benefits of an activity against that of any potential or real adverse environmental effects.

The purpose of the RMA (as outlined above) therefore is then fed into the objectives, policies and rules of the governing regional and district plans. The relevant plan as to where the activity relates will indicate whether or not the activity is permitted, controlled, discretionary, non-complying or prohibited.

In particular - **Section 9** states –

(1) No person may use land in a manner that contravenes a national environmental standard unless the use—

- (a) is expressly allowed by a resource consent; or*
- (b) is allowed by [section 10](#); or*
- (c) is an activity allowed by [section 10A](#); or*
- (d) is an activity allowed by [section 20A](#).*

No person may use land in a manner that contravenes a regional rule unless the use—

- (a) is expressly allowed by a resource consent; or*
- (b) is an activity allowed by [section 20A](#).*

(3) No person may use land in a manner that contravenes a district rule unless the use—

- (a) is expressly allowed by a resource consent; or*
- (b) is allowed by [section 10](#); or*
- (c) is an activity allowed by [section 10A](#).*

(4) No person may contravene [section 176](#), [178](#), [193](#), or [194](#) unless the person obtains the prior written consent of the requiring authority or the heritage protection authority.

(5) This section applies to overflying by aircraft only to the extent to which noise emission controls for airports have been prescribed by a national environmental standard or set by a territorial authority.

(6) This section does not apply to use of the coastal marine area.

Where land is defined by **section 2** as -

- (a) includes land covered by water and the airspace above land; and*
- (b) in a national environmental standard dealing with a regional council function under [section 30](#) or a regional rule, does not include the bed of a lake or river; and*
- (c) in a national environmental standard dealing with a territorial authority function under [section 31](#) or a district rule, includes the surface of water in a lake or river*

A resource consent will therefore be required for many of the associated activities applied for to construct, maintain and operate the “Around the Mountains Cycle Trail”.

Sections 13 and 15 of the RMA are particularly relevant at the interface between Environment Southland’s functions and this application. Section 13, governs restrictions on certain uses of the beds of lakes and rivers where -

(1) No person may, in relation to the bed of any lake or river,—

- (a) 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) excavate, drill, tunnel, or otherwise disturb the bed; or*
- (c) introduce or plant any plant or any part of any plant (whether exotic or indigenous) in, on, or under the bed; or*
- (d) deposit any substance in, on, or under the bed; or*
- (e) reclaim or drain the bed—*

unless expressly allowed by a national environmental standard, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.

(2) No person may do an activity described in subsection (2A) in a manner that contravenes a national environmental standard or a regional rule unless the activity—

- (a) is expressly allowed by a resource consent; or*
- (b) is an activity allowed by [section 20A](#).*

(2A) The activities are—

- (a) to enter onto or pass across the bed of a lake or river:*

- (b) to damage, destroy, disturb, or remove a plant or a part of a plant, whether exotic or indigenous, in, on, or under the bed of a lake or river:*
 - (c) to damage, destroy, disturb, or remove the habitats of plants or parts of plants, whether exotic or indigenous, in, on, or under the bed of a lake or river:*
 - (d) to damage, destroy, disturb, or remove the habitats of animals in, on, or under the bed of a lake or river.*
- (3) This section does not apply to any use of land in the coastal marine area.*
- (4) Nothing in this section limits [section 9](#).*

The application therefore for the use of beds of waterbodies must therefore be consistent with the governing statutory documents as discussed below.

Section 15 governs the discharge of contaminants, where contaminant is defined by section 2 of the Act as including -

any substance (including gases, odorous compounds, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat—

- (a) when discharged into water, changes or is likely to change the physical, chemical, or biological condition of water; or*
- (b) when discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged*

Section 15 states –

- (1) No person may discharge any—*
- (a) contaminant or water into water; or*
 - (b) contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water;*
 - or*
 - (c) contaminant from any industrial or trade premises into air; or*
 - (d) contaminant from any industrial or trade premises onto or into land—*

unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.

(2) No person may discharge a contaminant into the air, or into or onto land, from a place or any other source, whether moveable or not, in a manner that contravenes a national environmental standard unless the discharge—

- (a) is expressly allowed by other regulations; or*
- (b) is expressly allowed by a resource consent; or*
- (c) is an activity allowed by [section 20A](#).*

(2A) No person may discharge a contaminant into the air, or into or onto land, from a place or any other source, whether moveable or not, in a manner that contravenes a regional rule unless the discharge—

- (a) is expressly allowed by a national environmental standard or other regulations; or*
- (b) is expressly allowed by a resource consent; or*
- (c) is an activity allowed by [section 20A](#).*

(3) This section shall not apply to anything to which [section 15A](#) or [section 15B](#) applies.

The application therefore for the discharge of substances must therefore be consistent with the governing statutory documents as discussed below.

ii. Oreti Conservation Order

The Oreti Conservation Order was gazetted in 2008 and applies to the main stem of Oreti River at Rocky Point (NZMS 260 E44373946) upstream to the forks at E42 345 450 and downstream to the Wallacetown Bridge at E46 455 208. It also applies to the Oreti tributaries upstream including Weydon Burn and Windley River and groundwater hydraulically connected to the surface water of the Oreti River (upstream from Rocky Point to the forks as mentioned above).

The outstanding characteristics protected by the conservation order are outlined in clause 4 and include habitat for brown trout, angling amenity, habitat for black-billed gulls and significance in accordance with tikanga Maori. In order to protect these characteristics a number of activities are prohibited on the water.

In particular, **clauses 7 to 9** state that no permit is to be granted which would permit the damming of the waters, adversely effect fish passage or alter the quality of the water.

Clauses 10 and 11 qualify clauses 7 to 9 and provide exemptions to the rules.

The activities under application within the ambit of Environment Southland's authority are not considered prohibited activities (as per the Regional Water Plan) and are considered to be consistent with the Oreti River Conservation Order. In that, damming of waters is not proposed nor will the proposed works adversely effect fish passage or alter the quality of the water. (Please refer to Section 3 of this report in particular Freshwater Ecology).

Environment Southland therefore has discretion under the RMA to issue or decline a consent based on the effects of the activities proposed.

iii. The Regional Water Plan for Southland

The Regional Water Plan for Southland is relevant to this application.

In particular, the plan sets out a number of Objectives and Policies relating to activities that have an effect on water quality. **Objectives 1 and 2** relate to protecting the quality of water in its "natural state" and managing the water of the district so there is no reduction in its quality from the date of the plan. It is considered that this proposal is consistent with these Objectives as significant thought has gone into the proposed route so as to minimise the adverse effects of construction of the trail and associated structures under application to Environment Southland and their effect on waterways.

Objective 3 and 10 relate to maintaining and enhancing the quality of surface water bodies and the diversity of aquatic life. Such objectives are applicable to this application and it is considered that this proposal is consistent with these objectives. In particular, aquatic scientists have considered the structures on application and associated construction techniques and those proposed are believed to mitigate any potential adverse effects on the aquatic species found in the Oreti. Moreover, the suggested terms and conditions relating to

construction, structures and maintenance of that under application, further mitigate and remedy any potential adverse effects.

Objective 11 relates to protecting archaeological sites and wahi tapu. The Accidental Discovery Protocol is a suggested term of any consent granted for this application and Te Ao Marama have been consulted regarding wahi tapu and cultural aspects of this proposal.

Objective 12 relates to maintaining and enhancing public access to river beds. This proposal in conjunction with the suggested terms and conditions of the application that remedy any potential adverse effects seeks to enhance public access along the proposed route and along the Oreti River. It is considered that this proposal is consistent with Objective 12.

Protecting the natural character and natural features from inappropriate use and development is outlined in **Objective 13**. It is considered that this proposal is consistent with this Objective in that the construction the cycle trail bridge and river protective rock groynes will have minimal effect on adjacent waterways along with their maintenance. It is also considered that the special terms and conditions of the any consent granted will mitigate any potential adverse effects associated with the consent.

Policy 1 – Surface water body classes is applicable to this application in that the varying characteristics of different water bodies of which the proposed structures affects need to be recognised along with the application of the Oreti Water Conservation Order and its standards.

No discharges of contaminants are proposed to waterbodies and/or land within this application and hence the rules relating to this are not discussed.

Policy 14 regarding the diversion of water is applicable to this application in that the three Rock Groyne protection works proposed would shift the alignment of the river from 2 to 4 metres. The effects of which are discussed at Section 2 under Structures and Aquatic Ecology and are considered negligible. It has also been suggested by aquatic scientists that

the rock groyne works may provide further habitat for juvenile trout (Refer to Section 4 [habitat quality] of this report).

Policy 32 relating to structures that disturb riverbeds is applicable to this application. Refer to the suggested special conditions of the proposal which seek to avoid, remedy and mitigate any potential adverse effects of the application on water quality, habitat etc. It is also considered that the positive effects of the proposal ie. that the river protection works enhance access along adjacent water ways enabling the public to appreciate the Southland environment and mean that a sustainable balance is struck between use and the mitigation of adverse effects.

Policy 33 – Provide for extraction of gravel is relevant to this proposal in that two gravel pits are proposed at WP G12A and G12B on the attached Index Maps. While the quantities of gravel to be extracted are unknown at this stage, take will not exceed 10,000m³ at any site and the activity will be carried out consistently with Policy 33 in that the gravel extraction will -

- (a) *maintains or enhances aquatic and riparian habitat; or*
- (b) *equates to no net loss of habitat in the river channel and floodplain; or*
- (c) *maintains or enhances flood protection, erosion control or the integrity of physical resources.*

Stormwater runoff collected at gravel pits will meet the parameters stated in Rule 12 (1)(i) to (vi) as it is not intended to store any hazardous substances, oil or grease on site except those substances found in machinery associated with the trail build. All machines will undergo regular maintenance checks and it is not expected that there would be any substance leakage to contribute to the discharge of conspicuous oil seeping into or onto the land. (Refer to Section 3 of this document for further effects discussion.)

Furthermore, if there is accumulated water resting at the bottom of any proposed gravel pit, it will remain there and be included in the restoration of gravel pits as proposed and discussed at Section 3 of this report.

Rule 26 – Bridges is applicable to this application as one bridge at 36 m in length is proposed to be constructed at WP CB 344 on attached Index Map 73. The specifications of the bridge are detailed in the attached “Bridges Schedule” attached as **Appendix 3** and this includes the bridge having support piles located in the bed of the river. This application is therefore a restricted discretionary activity and the decision maker must either decide to grant or decline a consent on the following matters –

- (i) *the design and location of the bridge;*
- (ii) *any effects on flood risk, river morphology and dynamics (including erosion and deposition), aquatic and riverine ecosystems and habitats, cultural and heritage values, natural character and amenity, and navigational safety;*
- (iii) *any standard conditions in Rule 48(a) and (b) that cannot be met.*

The bridge on application has been designed by an engineering specialist and it is considered that the bridge will not have any adverse effects on the flow of the river (within normal and/or times of flood), on any aquatic habitats or natural characteristics of the area. (Refer to Section 3 of this report).

The use of the bridge, if consent is granted to construct it, will be a permitted activity.

The erection of culverts is a permitted activity provided the structure meet the conditions set out in **Rule 28 – Culverts**. In short culverts will comply with the parameters set out in Rule 28(a)(i) to (vii).

Rule 30 (c) – Erosion Control Structures applies to this application for three rock groynes located at RG1, RG2 and RG3 on the attached Index Maps. As discussed above, the works will shift the river alignment by an estimated 2 to 4 metres but stabilise the surrounding area and provide a passable route along the Oreti river to the public. Environmental Scientists have assessed the works and construction methods proposed and it is considered that the effects of these works will be neutral on aquatic habitats, species and the surrounding environment. (See further discussion at Section 3 of this report).

Rule 35 – Maintenance of structures is applicable to this application in that maintenance of all structures, culverts, boardwalks and bridges will be required. This is a permitted activity under the plan.

Rule 39 - Channel realignment or deepening – it is proposed to realign the Oreti river (as discussed above) through by constructing three rock protective rock groynes. This is directly correlated to stabilising three existing erosion scarps along the trail alignment to make the area passable to the public. As discussed above, the effect of which are considered minimal on aquatic life.

Rule 41 – Gravel Extraction is applicable to this application in that two gravel pits are proposed at WP G12A and G12B on the attached Index Maps. The effects of extraction are discussed at Section 3 of this report. According to Rule 41, the activity under application would be a discretionary one based on the effects of the activity on the surrounding environment and species and location.

Rule 45 – relating to the use of machinery to construct the rock groynes and associated trail structures would be permitted if consent is granted for those activities under application.

The applicant accepts **Rule 48** and the associated standard rules should consent be granted.

III. Queenstown Lakes District Council

a) Application Particulars

The application is for the construction and use of one modular truss bridge 18.0m in length located at point 102 on Index Maps 3 and more particularly 3A. It is also for the construction of earth works of the trail (but not the trail itself) as approximately 1,500 m³ of AP60 and 1,125 m³ of AP20 gravel will be required to build the trail section within QLDC boundaries. AP 20 gravel be required to build the trail section within QLDC boundaries. All AP 20 gravel will be sourced from the Southland region and transported into place. It is also for the use of a café/shelter with a footprint of 150m² plus a deck at a height not exceeding

5.5 m located at point 106 on Index Map 4 and more particularly 04A and three full single containment toilets of 2 m x 2m x 2.5 m at WP 101, 103 and 106 respectively.

The cycle trail itself and use of it as shown on Index Maps 1 to 6 and 102 to 103 is considered a permitted activity under the Queenstown Lakes District Plan. Signage is not under application at this stage however, at the very least directional and traffic signage will be required once the trail is constructed. It is anticipated that this signage will comply with Council bylaws however, once signage locations and dimensions are known, the applicant will apply under a separate application for consent and/or a bylaw exemption.



b) Statutory Documentation & Analysis

i. Resource Management Act 1991

Please refer to the discussion outlined at section 4IIb)i of this report.

Section 9(3) of the RMA is relevant to at the interface between Queenstown Lakes District Council “QLDC” functions and this application. In short, no person may undertake an activity on the land unless it is consistent with the governing plan or expressly allowed by the Act.

The governing plan and relevant sections are therefore discussed below.

ii. The Queenstown Lakes District Plan

The Queenstown Lakes District Plan “QLDCP” is relevant to this application as the proposed cycle trail (a permitted activity itself) runs through what is defined by the plan as the Rural General Zone and finishes in the Townships Zone more particularly, Kingston.

The purpose of the Rural General Zone is – *“to manage activities so they can be carried out in a way that:*

- *protects and enhances nature conservation and landscape values;*
- *sustains the life supporting capacity of the soil and vegetation;*
- *maintains acceptable living and working conditions and amenity for residents of and visitors to the Zone;*
and
- *ensures a wide range of outdoor recreational opportunities remain viable within the Zone.”*

On a general level and with reference to section 3 of this report, it is considered that the concept of this application is consistent with the purpose of **Section 5 – Rural General Zone**.

With regard to the purpose of **Section 9 - Township Zone**, it is noted that each township has its own individual character but their commonality includes -

- *function: they have historically been rural service centres. In recent years the role of some townships has diversified, for example into servicing recreational activities and visitor accommodation;*
- *spatial pattern: development within the boundaries of the townships tends to be relatively dispersed, the predominant character being low density;*

- *location: the townships tend to be located on major arterial routes and important thoroughfares;*
- *mix of activities: the townships often comprise a mixture of residential, commercial, industrial, recreational, community and other uses without particular areas being set aside for each activity; and*
- *level of servicing: the majority of townships have community water supplies, with some having community sewerage disposal facilities. The District's townships make an important contribution to the residential*

It is considered that the concept of the trail is in keeping with the purposes of Section 9.

Section 5 outlines a number of rules relating to activities consented within the Rural General Zone. With regard to the concept being consistent with the plan's definition of "Outdoor Recreation Activity" as specified in section 2 of the plan, the cycle trail is a permitted activity (**Rule 5.3.3.1**). As such the trail itself, is not under application.

The associated construction methods to build the trail and associated structures are governed by the following rules –

Rule 5.3.3.2 ix Earthworks – where a maximum of bare soil will be exposed between 1000m² and 2500m² per site within any one consecutive 12 month period and where the maximum volume of earth moved is between 300m³ and 1000m³ per site (as defined in section 2 Definitions of the QLDP) in any one consecutive 12 month period. Earthworks associated with the trail build and associated shelter and toilet construction will exceed these parameters and hence as earthworks per se are not listed as a prohibited activity – this part of the application falls within the Non-complying group status.

As detailed under sub section 5.3.5.1 viii 1. and 2 therefore, all earthworks to construct the trail and associated structures will comply with earthwork standards and height of cut and fill and slope. The applicant also acknowledges points 3. and 4 under this section and will comply with the Environmental Protection Measures and Protection of Archaeological sites and sites of cultural heritage standards outlined therein.

Section 5.3.3.3 i Buildings or Building Platforms is relevant to this application in that the construction of the 18.0 m modular truss bridge at location 102 on Index Maps 3 and 3 A is

proposed. As such, the bridge is a new building as defined by section 2 of the plan and a discretionary activity as defined by Section 5.3.3.3. Section 5.3.5.2 Zone Standards also apply where any new building (not for residential purposes) should not exceed a height of 10 m. In considering this application, the council may consider the material used to construct the bridge and its impact on the surrounding landscape. It is considered that the design of the bridge, its materials and appearance will go toward mitigating any adverse visual and environmental effects on the environment. It's placement (on road reserve) goes toward improving access across land, which is of low usage by the public.

Section 2 Definitions defines “**Buildings**” as having the same meaning as in the Building Act 1991, but does not include:

- Structures less than 5m in area and in addition less than 2m in height above ground level.

The proposed shelter at WP 105 Index Map 4 and three containment toilets at WP 101, 103 and 106 at Index Maps 1, 3 and 4 respectively exceed these parameters. I.e. The shelter has a footprint of 30m² at a height not exceeding 5 m high and the toilets are at dimensions of 2m x 2 m x 2.5m. The activity is therefore a discretionary one and governed by **Rule 5.3.3.3(xii)**. As mentioned at Section 3 of this report, all buildings will be constructed in materials, which are in keeping with its natural surrounds, and to be built in accordance with buildings in the back country of Mt Nicholas and Walter Peaks Stations.

IV. Otago Regional Council

a) Application Particulars

There is no application to the Otago Regional Council (“ORC”) as the construction of a 18m modular truss bridge at location 102 as shown on Index Map 3A as the foundations do not touch the riverbed.

The placement of three single full containment toilets at location points 101, 103 and 105 are considered permitted activities under the Otago Regional Water Plan given there is no discharge of contaminants. The trail itself is also not under application given it does not

enter any adjacent waterways and all culverts used in the trail build do not exceed a 1 m diameter and are hence a permitted activity.

V. Southland District Council

a) Application Particulars

The application to Southland District Council (“SDC”) is for:

- The construction and maintenance of a cycle trail consisting of Options A and B being approximately 140 km in length as shown on the attached Index Maps 7 to 101, including indigenous vegetation and modification works, and related earthworks for Options A and Option B;
- Construction of two shelters located within the Eyre Conservation Park at locations WP 193V and 181 on Index Maps 28 and 21 respectively;
- Six full single containment toilets of dimension not exceeding 2 m x 2 m x 2.5 m with a containment tank of 2,000 litre capacity;
- All bridges, except WP 102 which is located within QLDC, at Index Maps 10 to 96 (total of 49 Bridges within SDC) being 41 Bridges in Option A and 8 Bridges in Option B and at dimensions specified in the attached “Bridges Schedule” at **Appendix 3**.
- Boardwalks totalling 103 metres at WP 202, 203, 207 and 510 at Index Maps 29, 30 and 36 respectively.

Directional traffic signage is the only signage proposed to be used at this stage within the Southland District and will be designed to be in keeping with those permitted parameters under the Southland District Plan. Any further signage required at a later date will be addressed via a separate consent application.

With regard to the addition of railing barriers on the existing bridge located at point 107, it is considered that such a modification is a controlled activity as the alteration will comply with sub section 5.3.3.2 I - Buildings (a) (i) and (ii).

With regard to the suspension bridge 223 at Index Map 33, as the proposed bridge has a total height of 12.85 metres above bridge ground level, this component of the consent is

non-complying with Rule PRA.9 of the District Plan which provides that the maximum permitted height of structures and buildings within the Plains Resource Area is 12 metres. It is considered that the adverse effects of the activity on the environment will be minor and a resource consent may be granted. The bridge has been designed by an engineer to balance safe and efficient use with a design of low impact on the environment. The visual effects of this structure is discussed at page 19 within the Landscape Assessment (attached as **Appendix 5**) and it is considered that this is a structure that the public would expect in the backcountry and will not be intrusive or dominant and the design is an elegant light weight structure similar to many on Department of Conservation Estate.

b) Statutory Documentation & Analysis

i. Resource Management Act 1991

Please refer to the discussion outlined at section 4IIb)i of this report.

Section 9(3) of the RMA is relevant to at the interface between SDC functions and this application. In short, no person may undertake an activity on the land unless it is consistent with the governing plan or expressly allowed by the Act.

The governing plan is therefore discussed below.

ii. The Southland Council District Plan

The proposed cycle trail primarily runs through what is defined by the Southland District Council District Plan as the “Rural Resource Area”, with the exception of where the trail intersects with the towns of Mossburn and Lumsden defined as “Urban Resource Areas”.

Section 3 District Plan – General Objectives and Policies

Section 3.4 Heritage

Two policies are relevant to this application HER 3 and HER 4. These pertain to natural heritage and seek to encourage the enhancement and regeneration of significant landforms and habitat. It is considered that this application is consistent with these policies as the earthworks associated with the trail build and supporting structures will enhance access and appreciation of the area by the public.

Section 3.10 Amenity Protection: It is considered that if granted, this proposal during construction and use will have minimal effect on amenity values at affected areas. The most prominent effect, if any, however, would be that of dust from earthworks and building the cycle trail itself. It is considered that the activity of cycling along the trail will generate little to no dust.

Objectives AME.1, Policy AME.1: AME.2, AME.3 are applicable to this application. In particular, Method AME.1 outlines what is required with regard to the mitigation of dust on the amenity of environs. It is considered that this application is consistent with that direction and that by adherence to the suggested terms and conditions of any consent granted, potential adverse effects of dust would be mitigated.

Section 3.11 – Signs: While it is considered that signs provide important information, the location, design and size of signs can adversely affect the amenities of the District. As such, **Objective SIGN.1 and Policies SIGN 1. - SIGN.5** aim to reduce the adverse impacts on traffic and amenity values. In saying that however, “Welcome to” signs and the use of international symbols to provide information is supported.

Rule SIGN 2 (c) relates to signs that direct or warn traffic which are defined as a permitted activity provided its dimensions meet the regulations. At this point, only directional, road safety signage is proposed and any signage will be consistent with the said regulations and hence be a permitted activity. Any future signage other than directional signage will be applied for under a separate consent application.

Section 3.12 – Noise: Southland District is considered to be a relatively quiet district. Noise can impact on the amenity values of an area including people and other species. As such, the Objective and Policies of this section are designed to mitigate the adverse effects of noise and define performance standards to manage this.

Rule NSE.2 – Construction Noise: applies to this application. Noise generated by construction that meets the guidelines set out NZS 6803:1984 “The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work” is considered

a permitted activity. It is intended that all construction activities associated with this application will be consistent with this rule and it is recommended that this be a condition of consent, if granted. Also refer to Section 3 of this report for further discussion on mitigation measures on noise.

Rule NSE.3 – Vibration: As above with NSE.2, it is intended that all resulting vibration associated with construction of the cycle trail will meet the standards set out in NZS 4403:1976. As such no blasting is proposed with regard to any earthworks and/or associated gravel extraction.

The activity of cycling itself along the trail will generate minimal noise and is considered a permitted activity.

Section 4.1 District Plan – Rural Resource Area

Section 4.1 of the District Plan is applicable to this application. Section 4.1 among other things sets out several general issues that requires management in the area relating to the mitigation of rural activities adverse effects on soil and water, amenity values, conversion of indigenous forest and the change from traditional uses to more intensive rural uses. These general issues as set out in the objectives and policies of the section then flow on to a series of Methods or Rules that relate to specific activities and their management.

It is considered that the following objectives and policies are relevant to this proposal –

- **Objectives and Policies**

Objective RU.1 relates to a management framework that promotes sustainable management of the resources in the District. This proposal is consistent with RU.1 in that the activity of cycling is a sustainable mode of transport and recreation that if managed appropriately will benefit the individual and wider communities affected by the trail. (See section 2 this report for further discussion on the effects of the proposal.)

It is considered that this proposal if granted, would comply with **Objective RU.2**. This is due to the construction methods, materials used and management techniques suggested in

Section 2 of this report and attached **Appendices 2, 3, 9 and 10**, which seek to avoid and mitigate any adverse effects that the activity may have on the soil and water resource of the District.

Policies RU.1 to RU.3 are applicable to this application. While the trail itself is not under application, the associated earthworks and structures supports a recreation cycle trail where scenery and nature is the draw card. The construction and management techniques used to construct shelters, toilets, bridges and the trail itself seek to mitigate any potential adverse effects on soil and water, and look to minimise the removal of indigenous vegetation from affected riparian areas.

Policies RU. 4 to RU.11 and Policy RU.13 are also applicable to this application. The proposed route is set down to move through pockets of indigenous vegetation at the Eyre Mountains Conservation Park (note that elsewhere where the trail alignment is proposed, takes in mostly modified and seral vegetation). As per above, appreciation of the surrounding scenery is a primary purpose of the trail. Therefore it is the applicant's intention to minimise vegetation removal (ie. No mature beech trees shall be removed in construction of the trail in the Eyre Mountains Conservation Park) however it is acknowledged that some seral species removal will be required.

The trail and activity of cycling over it seeks to blend into the existing environment. The low impact nature of the trail and activity along with the suggested terms and conditions of any consent, if granted, should mitigate any potential adverse effects on amenity values and noise. Furthermore, any shelters and toilets will be designed and strategically placed at points along the trail in a manner that camouflages the structure. Thus reducing any visual impact. Again it is considered that the activity under application is compatible with RU.11 in that appreciation on scenery and natural landscapes is a primary focus.

Objective MRA.1 deals with maintaining the visual effect of the existing Mountain landscape along with **Policy MRA.1** which states that siting and design of structures should be considered so as to do the same. This is applicable to the application in that the trail passes through what is defined by the District Plan as the "Mountains Resource Area" from

Index Map 10 to 25. The trail from a practical perspective due to its width 2.8m and construction of AP 60 gravel with a top surface of AP 20, will blend into the surrounding environs. The trail itself at its highest, will only reach an incline gradient of 4% and therefore will be based in the low lying areas of the Mountain Resource Area. It is considered therefore, that the trail will not interfere with the mountain's visual effect.

The three rock groynes proposed will also be benched into the hillside to avoid any adverse visual effects on the landscape and the associated shelters and toilet structures will be constructed of materials in keeping with the surrounding landscape and in a non recessive hue.

All bridges have been designed by an engineer to balance safe and efficient use with a design of low impact on the environment. See section 3 for further discussion on visual effects of structures.

- **Rules**

PRA.2 – Rural Activities: PRA.2(ii)(b) applies in that the structures associated with the cycle trail, if granted, will attract the general public to the site for the purpose of tourism (in general). This application intends to comply with all other relevant rules and standards of the plan in respect of signage, disposal of waste, noise, amenity values as discussed in this report.

PRA. 4 – Soil Displacement Activities: PRA.4(ii) is applicable to this application in that earthworks associated with the construction and maintenance of the cycle track will involve cuts and/or fill that is greater than two metres in height or depth but will not involve re-contouring of the land. Refer to Section 3 of this report for discussion on the effects of earthworks and gravel extraction.

PRA.5 - Land Use Effects on Water: It is intended, given the route of the cycle trail, to remove vegetation within five metres of natural water courses during the construction of the trail. Where possible the sides of the track will be smoothed out with top soil from

construction and left in a state that indigenous vegetation can regenerate. This will further mitigate any adverse effects of earthwork during trail construction on water quality.

PRA.6 – Land Use Effects on Soil: It is considered that this application if granted, shall comply with PRA.6 (c). Refer to section 2 of this report.

HER 3. – Any consent to clear indigenous vegetation under this application is considered a discretionary activity.

MRA.1 – Structures and Buildings: It is intended to construct bridges, shelters and toilets within the Mountain Resource Area at Index Maps 10 to 39. As discussed above, structures have been designed to be in keeping with the surrounds of where they are placed, so as not to impede on the natural vista of the area. (Refer Section 2 of this report).

4. Consultation

Refer to consultation strategy report **Appendix 1**.

5. Suggested Consent and Concession Special Conditions

The applicant proposes the following consent and concession conditions for discussion:

Environment Southland

The consent holder or its agent(s) shall:

- a) Avoid any instream works outside of the period 1 December to 31 April
- b) Avoid as far as practicable river crossings by trucks, diggers or other heavy machinery.
- c) Isolate track formation activities from the flowing river, as far as practicable by construction of a rock bund prior to tipping gravel
- d) Fish passage shall not be impeded as a result of the activity.

Department of Conservation

That the concession holder or its agent(s) shall:

Construction:

- a) Ensure that any vegetation removal and soil disturbance necessary to construct the trail and associated structures must be kept to a minimum.
- b) The surrounding area of the trail must be reinstated in a tidy manner following the construction of the trail and associated structures.
- c) The Concessionaire must ensure that all machinery, tools and equipment used in undertaking the Concession Activity is steamed cleaned and weed free prior to being taken onto the Land.
- d) The Concessionaire must ensure that all gravel and other materials used in undertaking the Concession Activity are from a weed free source.
- e) That, prior to construction, the Concessionaire must:
 - Mark the centre line of the trail with tape on the ground, for the approval of the **Murihiku**
 - Area Manager and the Concessionaire must use its best endeavours to conform to that approved route.
 - Any deviation or variance within a 2 metre radius from the approved route requires the prior written consent from the **Murihiku** Area Manager. For the avoidance of doubt, at any point the trail width must not exceed a width greater than **2.5** metres.
 - Provide to the **Murihiku** Area Manager for his approval, a work plan detailing the contractors to be used, commencement dates, timelines, construction methods and standards.
 - Prepare an annual maintenance programme for the approval of the **Murihiku** Area Manager.
 - The Concessionaire must implement an on-going weed control programme to the satisfaction of the **Murihiku** Area Manager, to keep the Land free from all introduced weeds, resulting from the Concessionaire's use of the Land.
- f) The Concessionaire must take all reasonable care to avoid any archaeological values on the Land. If any archaeological evidence is uncovered, the Concessionaire must stop all works immediately and notify the **Murihiku** Area Manager. Works may not recommence until authorised by the **Murihiku** Area Manager to do so.

Southland District Council

The consent holder or its agent(s) shall:

Construction Management

All works shall be carried out in accordance with a Construction Management Plan prepared by the consent holder at the consent holders cost under all resource consents held by the consent holder. Specifically, the plans shall address how the activity:

- a) demonstrate how noise will comply with NZS 6803:1999 Acoustics - Construction noise. Noise associated with construction activities other than blasting shall not exceed 70 dBA_{LA eq} (1h) and 85 dBA_{LAF max}.
- b) identify any additional measures to ensure that stormwater and sediment discharges to surface waters are minimised.
- c) identify amended or additional measures with respect to temporary traffic management, with any such changes to be prepared in consultation with the Council.
- d) identify amended or additional measures to ensure that any discharge of dust shall not cause an objectionable or offensive effect on any person, facility or activity beyond the immediate area of where the discharge originates. In particular, discharge of dust shall not cause a safety concern for the Oreti River.
- e) identify amended or additional measures to control the invasion of weeds into areas that have been cleared or disturbed.
- f) identify amended or additional measures to provide for reinstatement and landscape management.

The Construction Management Plan shall be submitted to the Council's Manager - Resource Management for confirmation that it is in accordance with the conditions of consent 2 weeks prior to the commencement of the activities subject to this consent.

Queenstown Lakes District Council

The consent holder or its agent(s) shall:

Construction Management

All works shall be carried out in accordance with a Construction Management Plan prepared by the consent holder at the consent holders cost under all resource consents held by the consent holder. Specifically, the plans shall address how the activity:

- g) demonstrate how noise will comply with NZS 6803:1999 Acoustics - Construction noise. Noise associated with construction activities other than blasting shall not exceed 70 dBA_{LA eq} (1h) and 85 dBA_{LAF max}.
- h) identify any additional measures to ensure that stormwater and sediment discharges to surface waters are minimised.
- i) identify amended or additional measures with respect to temporary traffic management, with any such changes to be prepared in consultation with the Council.
- j) identify amended or additional measures to ensure that any discharge of dust shall not cause an objectionable or offensive effect on any person, facility or activity beyond the immediate area of where the discharge originates.
- k) identify amended or additional measures to control the invasion of weeds into areas that have been cleared or disturbed.
- l) identify amended or additional measures to provide for reinstatement and landscape management.

The Construction Management Plan shall be submitted to the Council's Manager - Resource Management for confirmation that it is in accordance with the conditions of consent 2 weeks prior to the commencement of the activities subject to this consent.

6. Conclusion

While the complete concept of the cycle/walking trail is not under application to each affected authority of agency, the assessment of the individual components of it are considered of minimal impact on the environment. Furthermore, the applicant's assessment of environmental effects and associated suggested construction conditions, further mitigate any potential adverse effects of that proposed. The trail concept as a whole is low impact and once constructed and in use, will have significant benefit to the area and public enabling access, enjoyment and appreciate of the Northern Southland environment.