



# **GOLF LINKS ROAD REALIGNMENT: ISSUES AND OPTIONS**

**Hurunui District Council**

**October 2022**

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## 1 Introduction

Golf Links Road is situated north of the Amberley Beach settlement and provides access to the Amberley Golf Course, a parcel of Māori land and the Waipara River Mouth. Coastal storms in May and July 2022 have caused significant damage to Golf Links Road. The road is now considered beyond repair and requires reconstruction. Options are being considered to provide more reliable access to the Golf Course and the recreational users beyond the Golf Course entrance.

### 1.1 Purpose

This report aims to set out the current issues associated with the road and potential realignment. It provides a discussion around the feasibility of some of the options to inform a further discussion with the Golf Course, the Māori landowners and recreation users.

### 1.2 Background

In 2020 the Hurunui District Council commenced a project to identify the current coastal hazards that impact Hurunui's coastal communities and to understand how these hazards will change over the next 100 years. This project is known as "Coastal Conversations." The project seeks to establish a long-term approach for managing the risk of coastal hazards at Amberley Beach in partnership with the local community. The long-term approach will follow a dynamic adaptive planning pathway approach based on the approach set out in the Ministry for the Environment's *Coastal Hazards and Climate Change Guidance for Local Government*.<sup>1</sup>

Two technical reports have been completed by Jacobs (consultancy) for Amberley Beach to inform this work:

- Hurunui District Coastline Hazard and Risk Assessment<sup>2</sup>
- Hurunui District Multi Hazards Coastal Inundation Modelling.<sup>3</sup>

These reports describe the coastal inundation risk, coastal erosion risk and fluvial flooding risk to the Amberley Beach settlement. This information forms the technical basis for the subsequent discussion.

## 2 The issues

### 2.1 Issue 1 – Road closures

Golf Links Road is a low-lying coastal road that provides access to the Waipara River Mouth along the coast. Due to its location, it is vulnerable to coastal storms and has experienced extensive road closures in 2022. The Jacobs reports indicate that the road is going to experience increasing levels of inundation and that the section of the road immediately north of the Amberley Beach settlement is at imminent risk of erosion. The road has been realigned inland to maintain access.

### 2.2 Issue 2 – The road is constrained by the wetland, the Waipara River and the coast

The Amberley Golf Club is north of the Amberley Lagoon. The Lagoon forms part of a wider wetland system that occupies an extensive area bordering the Golf Course to the south and the west. The northern boundary of the Golf Course is the Waipara River Mouth. Access via this route will require the acquisition of some Golf Course land which is already prone to flooding.

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<sup>1</sup> (Bell, Lawrence, Allan, Blackett, & Stephens, 2017)

<sup>2</sup> (Jacobs, 2020)

<sup>3</sup> (Jacobs, 2022)

The current alignment of Golf Links Road crosses the outlet of the Amberley Lagoon by bridged culvert. The road cannot be located further inland due to the wetland and if the road remains along the coast hard protection works will be required to protect it. This work will be costly and unlikely to meet the tests of the New Zealand Coastal Policy Statement discussed in Section 3.3.1.

### 2.3 Issue 3 – The National Environmental Standards for Freshwater (NES-F) and the decision-making framework

The NES-F puts very tight restrictions on what can be undertaken in the vicinity of a wetland. Given the Golf Course is surrounded by wetland to the west and south this makes any works in this area difficult. The decision-making framework is set out in Section 3 below.

### 2.4 Issue 4 – Area is ecologically significant

Council engaged Boffa Miskell to provide some high-level ecological advice around the Amberley Lagoon and associated wetland area. They concluded that the wetland is ecologically significant and any effects in this area need to be carefully considered.

They concluded that presuming the road would need to traverse wetland habitat there would be major consenting hurdles. Even if a consenting pathway exists there will be challenges with meeting the ecological requirements of the NES-F.

### 2.5 Issue 5 – Council does not own appropriate land

Council does not own any alternative land to provide access to the Amberley Golf Course. This would involve acquiring or swapping land with the relevant landowners.

### 2.6 Issue 6 – No requirement to provide formed access

Council has no legal obligation to provide legal access to properties but may choose to do so. Council could provide access to existing activities either via formed legal road, easement, or unformed legal road.

The realignment of the road is likely to be expensive and Council will need to carefully consider the merits of undertaking this work in conjunction with the public benefit of doing so.

### 2.7 Issue 7 – The future of land use at the coast

Over the next 100 years the Māori land and the Golf Course will be subject to coastal erosion and coastal inundation (exacerbated by the coastal erosion). Any realignment needs to consider the potential long-term future for these activities.

## 3 Decision making framework

### 3.1 Resource Management Act 1991

The Resource Management Act 1991 (RMA) is the primary legislative document guiding national and regional policy planning in New Zealand. The purpose of the RMA is to promote the sustainable management of natural and physical resources (s5). In achieving that purpose councils must recognise and provide for a number of *matters of national importance* including:

- The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development. (s6(a))
- The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers (s6(d)).
- The management of significant risks from natural hazards (s6(h)).

Council is also required to have particular regard to the effects of climate change (s7(i)).

### 3.2 Public Works Act 1981

The Public Works Act 1981 (PWA) and the Local Government Act 1974 (LGA) set out procedures for the stopping of land that has the status of road. The Crown must use the provisions of the PWA to stop roads. Local authorities may use the provisions of the LGA or request the Minister use the provisions of the PWA to stop roads.

### 3.3 National Policy Statements

The purpose of national policy statements is to state objectives and policies to achieve the overarching purpose of the RMA in relation to matters of national significance. The most significant of these in determining the future of Golf Links Road are the New Zealand Coastal Policy Statement 2010 and the National Policy Statement for Freshwater Management.

#### 3.3.1 New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement (NZCPS) states objectives and policies to achieve the overarching purpose of the RMA in relation to the coastal environment. All regional and district plans must give effect to the NZCPS. The NZCPS is important as it guides the policy framework for all planning documents relating to the coastal environment throughout New Zealand. Objective 5 and Policy 27 are the most relevant for the purposes of establishing a future for Golf Links Road.

Golf Links Road provides access to the Golf Course and Clubhouse but no other development. It may be difficult to argue that the Golf Course meets the threshold of significant existing development noted in Policy 27.

#### **Objective 5**

*To ensure that coastal hazard risks taking account of climate change, are managed by:*

- *Locating new development away from areas prone to such risks;*
- *Considering responses, including managed retreat, for existing development in this situation; and*
- *Protecting or restoring natural defences to coastal hazards.*

*Policy 27: Strategies for protecting significant existing development from coastal hazard risk*

(1) *In areas of significant existing development likely to be affected by coastal hazards, the range of options for reducing coastal hazard risk that should be assessed includes:*

- (a) *promoting and identifying long-term sustainable risk reduction approaches including the relocation or removal of existing development or structures at risk;*
- (b) *identifying the consequences of potential strategic options relative to the option of 'do-nothing';*
- (c) *recognising that hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance, to sustain the potential of built physical resources to meet the reasonably foreseeable needs of future generations;*
- (d) *recognising and considering the environmental and social costs of permitting hard protection structures to protect private property; and*
- (e) *identifying and planning for transition mechanisms and timeframes for moving to more sustainable approaches.*

(2) *In evaluating options under (1):*

- (a) *focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions;*
  - (b) *take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change; and*
  - (c) *evaluate the likely costs and benefits of any proposed coastal hazard risk reduction options.*
- (3) *Where hard protection structures are considered to be necessary, ensure that the form and location of any structures are designed to minimise adverse effects on the coastal environment.*
  - (4) *Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so.*

### 3.3.2 National Policy Statement for Freshwater (NPS-FM)

The National Policy Statement for Freshwater Management sets a hierarchy of obligations that prioritises the health and well-being of water bodies and freshwater ecosystems. Of particular relevance is Policy 6. This requires that “there is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.”

A full policy assessment will need to be completed including a discussion around the effects management hierarchy and the functional need of the road in that location.

### 3.3.3 National Environmental Standards for Freshwater (NES-FM)

The NES-FM applies to inland and coastal wetlands. Part 3, Subpart 1 of the NES-F provides strong direction around what can and cannot be done within or near to a wetland.

Earthworks within a natural wetland is a prohibited activity under Regulation 53 unless the activity has another status under the Regulations. The taking, use, damming, diversion, or discharge of water within a wetland is also a prohibited activity. This would impact the construction methods.

The only consenting pathway available is if the works are considered specified infrastructure. The NPS-FM defines specified infrastructure as:

- Infrastructure that delivers a service operated by a lifeline utility; or
- Regionally significant infrastructure identified as such in a Canterbury Regional Policy Statement.

Access to the Golf Course is not identified as regionally significant infrastructure in the Canterbury Regional Policy Statement, however, Council is a lifeline utility for the purpose of delivering the roading network. This means there may be a consenting pathway however it is likely to be a difficult consent to obtain.

## 3.4 Planning documents

### 3.4.1 Canterbury Regional Policy Statement (CRPS)

The Canterbury Regional Policy Statement gives an overview of the significant resource management issues facing the region, including issues of resource management significance to Ngāi Tahu. The purpose of the CRPS is to set out objectives, policies and methods to resolve those resource management issues and to achieve the integrated management of the natural and physical resources of Canterbury.

The policy framework set out in the NPS-FM is more stringent than that of the CRPS however, both would need to be considered prior to seeking consent for a proposal.

### 3.4.2 Canterbury Land and Water Regional Plan

The purpose of the Canterbury Land and Water Regional Plan (LWRP) is to identify the resource management outcomes for managing land and water resources in Canterbury to achieve the purpose of the RMA. It identifies the policies and rules needed to achieve the objectives and provides direction in terms of the processing of resource consent applications.

If the works are to be located in, or near to, a waterway resource consent is likely to be required under the LWRP.

### 3.4.3 Canterbury Regional Coastal Environment Plan

The Regional Coastal Environment Plan includes objectives, policies and rules regarding the occupation of the coastal marine area and the activities which can occur within a coastal hazard zone. The policies are generally consistent with the NZCPS, but both need to be considered. The following objectives and policies specifically address coastal protection works.

#### **Policy 8.14**

*In considering applications for resource consents for coastal protection works in the Coastal Marine Area in order to protect existing subdivision, use or development, Environment Canterbury will:*

- a. *only grant the consent where the works are the best practicable option for the future; and*
- b. *consider the option of abandonment or relocation of existing structures; and*
- c. *ensure that any such works are located and designed so as to avoid significant adverse effects on the environment to the extent practicable.*

#### **Objective 9.1**

- a. *To minimise the need for hazard protection works, and avoid or mitigate the actual or potential effects of coastal hazards by locating use and development away from areas that are subject to coastal erosion and sea water inundation.*
- b. *To avoid, remedy or mitigate significant adverse effects on the environment as a result of measures used to manage coastal hazards.*

#### **Policy 9.1**

- a. [...]
- b. *Any new development in the coastal environment should be designed or located in such a way that the need for coastal protection works, now and in the future, is minimised.*
- c. *The continued use and protection of essential infrastructure and services should be provided for, where no reasonable alternative exists, in areas subject to coastal hazards, provided adverse effects on the coastal environment are avoided, remedied or mitigated.*
- d. *New coastal protection works for existing use and development should only be considered where they represent the best practical option for natural hazard mitigation or avoidance, and adverse effects can be avoided, remedied or mitigated.*
- e. [...]

### 3.4.4 Hurunui District Plan

The Hurunui District Plan regulates land use outside the coastal hazard zone. Of relevance it includes provisions around earthworks which will be required for the construction of a new road.

## 4 Options

The following options have been considered in the sections below.

1. New road following the boundary following the property boundary (orange).
2. New road following the existing bund haul road (purple).
3. New road following the Ready Mix site boundary (blue).
4. Form the unformed section of Hursley Terrace Road (yellow).
5. Access via Webbs Road and adjacent to the riverbed (green).
6. Continuing to maintain Golf Links Road.
7. Not providing formed access.

#### 4.1 Options 1-3

Options 1-3 are all located on land belonging to Moir Farms Limited and shown on Figure 1 below. These provide access to the boundary of the Golf Course and the Golf Course would need to construct access to their club rooms and the remaining Golf Links Road.

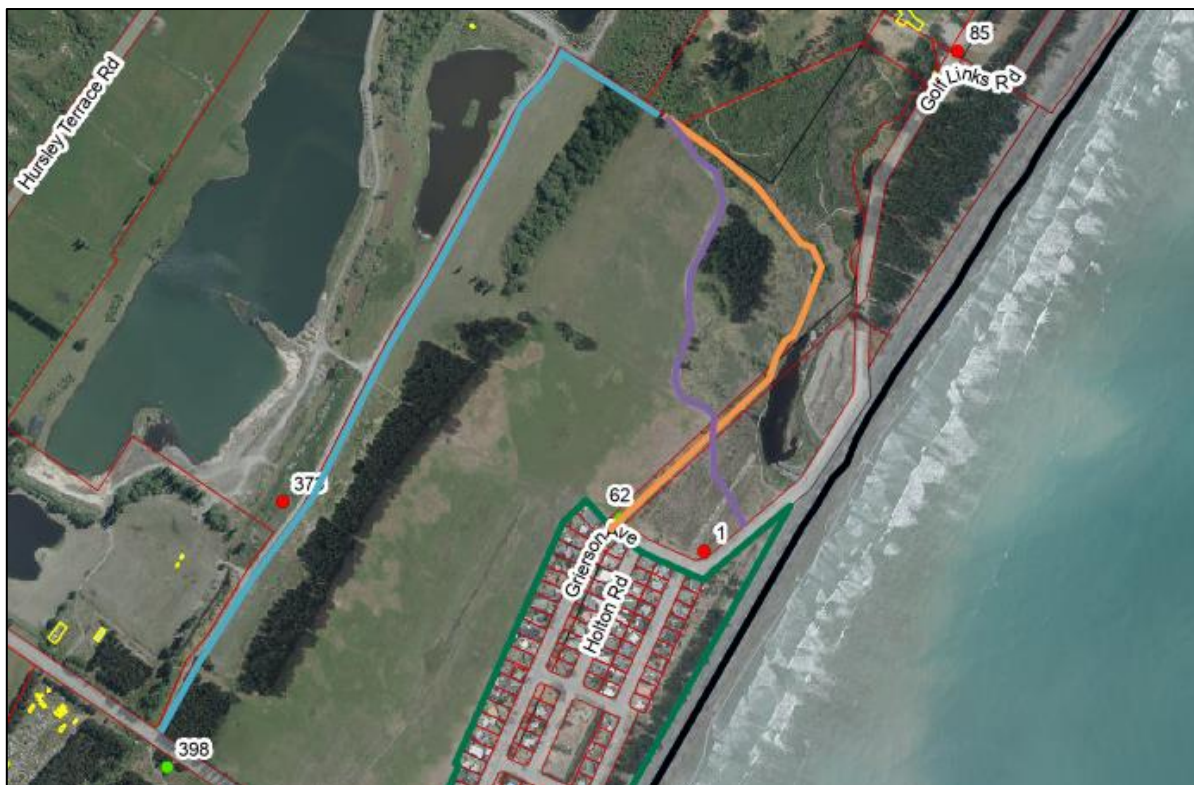


Figure 1: Options 1-3 for realigning Golf Links Road

Option 1 is located primarily in wetland. Council would be unable to obtain a resource consent for this and therefore the option was disregarded. Option 2 is located on the current haul road used to maintain the bund and Option 3 runs parallel to the ReadyMix access track. Option 2 was considered the most feasible and ecological advice on this option has been obtained to guide this report. Most of the comments below are however applicable to Options 1, 2 and 3.

##### 4.1.1 Ecological considerations

The Golf Course is surrounded by wetland habitat to the south and west of the property. The NES-FM puts significant constraints on the activities that can occur in, or near to, wetlands and therefore a high-level ecological assessment was completed to consider the initial feasibility.

This makes the following observations:

- Where the existing haul road crosses an area of exotic between a farm paddock and the existing Golf Links Road, there is potential habitat for indigenous lizards. Otherwise, the area does not appear to be of any importance as habitat.
- Where the haul road crosses a paddock, some areas are extremely low lying and may be inundated by the Amberley Lagoon at times. It is expected that a realigned Golf Links Road would need to be elevated c. 0.5 m above the paddock in this area.
- Earthworks and vegetation clearance to construct an elevated road in this paddock area would largely or entirely affect exotic vegetation including pasture, but may have implications for the hydrology of Amberley Lagoon (in terms of water supply or the ability of the Lagoon to expand during flood events). It is anticipated by HDC that a culvert will be needed to allow water exchange between the lagoon and the adjacent periodically inundated paddock in order to avoid hydrological impacts to the Lagoon.
- At the northern end of the existing haul road the road would need to cross the wetland area. The wetland is narrow at this point (c. 40 m wide, or perhaps less), but it includes deep water channels and indigenous wetland vegetation. Construction of a bridge across this wetland / water body (or a culvert within it) would therefore be needed. While these would be reasonably small-scale works (in terms of their physical footprint), the potential for ecological impacts in an ecologically significant habitat needs to be carefully considered. The possible ecological impacts of road construction across this wetland include indigenous vegetation clearance, loss of wetland extent, works in waterways leading to construction effects (sediment discharge etc.) and possible mortality of freshwater fauna, impacts to fish passage, and an increased potential for ongoing disturbance to wetland fauna. Wetland bird species vulnerable to anthropogenic disturbance (spotless crane / pūweto) have been recorded in the Lagoon in the past.

The report makes a series of recommendations but suggests that expert planning advice is sought prior to proceeding further to confirm there is a consenting pathway.

#### 4.1.2 Consenting

Consenting is likely to be the greatest hurdle due to the location of the wetland. We are likely to require the following resource consents:

- Rule 5.6 of the LWRP for contravening section 14(2) of the RMA (discretionary activity);
- Rule 5.161 of the LWRP for reducing the area of a wetland (restricted discretionary activity);
- Rule 5.169 of the LWRP for vegetation clearance and earthworks adjacent to a wetland boundary (restricted discretionary activity);
- Rule 5.175 of the LWRP for excavating land over a semi-confined aquifer (restricted discretionary activity).
- Regulation 45 of the NES-FM for the construction of specified infrastructure (discretionary activity).
- Rule 3.4.3.16(c) of the HDP for earthworks within 50 metres of a wetland (discretionary activity).

If we do need to work within a waterbody we will require additional consents for this.

Can we even get consent?

Due to the ecological significance of the area obtaining a resource consent for this project is likely to be very difficult. The NES-FM puts significant restrictions on works in, or near to, wetlands. Constructing a road to the boundary of the Golf Course possible provided:



- The road is located at least 10 metres from the wetland wherever possible and does not reduce the size of the wetland. This is likely to require a realignment of the haul road especially at the northern end; and
- A culvert is installed at the southern end to allow water to drain from the Amberley Lagoon into the paddock to maintain the hydrological connection.

The challenge lies at the boundary of the Amberley Golf Course where the road would need to cross the wetland. There is no consenting pathway for private access therefore any crossing would need to form part of a public through road. Council would need to prove there is a functional need to locate the road in that location. This means we have considered all other options and that this is the only option available.

On 14 May 2021 Environment Canterbury released: *Technical Advice Note: National Policy Statement for Freshwater Management 2020 – What is a Functional Need?* This details out multiple scenarios and how they would be interpreted. The example below is the most similar to Golf Links Road.

*“Example 2: Construction of a new public highway through a wetland.*

*There is a proposal to construct a new public highway through a wetland as this is the shortest and most efficient route to connect two townships. In the alternative, there is no reason (e.g. terrain constraints), other than increased cost, why the road could not be routed around the wetland.*

*In this instance, the highway is likely to be considered specified infrastructure under the NPS-FM 2020 as it would deliver a service operated by a lifeline utility (it may also be noted as regionally significant infrastructure in a regional policy statement). However, while the wetland option is cheaper, and therefore operationally desirable, given the alternative route is possible (in this instance), there is not a functional need to construct the road in that location.”*

Based on this advice note it seems unlikely Golf Links Road would meet this test as there are other options available.

If this option was to be pursued, it is likely a single span bridge would be the most consentable option as it would have the least impact on the wetland. Even if a bridge was to be pursued there is no guarantee a resource consent would be granted.

#### 4.1.3 Cost

It is anticipated that the road to the Golf Course would need to be approximately 660m long. We would require a 40 m bridge to cross the wetland and there would be a further 375m required to reach the Clubhouse. The costs below are very indicative and should this be the preferred option more detailed costings would need to be prepared.

The costs do not include:

- Additional cost to raise the road to prevent inundation
- Consenting costs or technical reports.

	<b>Estimated cost</b>
New road to Golf Course Boundary	\$650,000
Bridge over wetland	\$1,200,000
New road within the Golf Course	\$366,000

## 4.2 Options 4 and 5

A section of Hursley Terrace Road is unformed legal road. This runs between Amberley Beach Road and the Waipara River. It would be possible to form this road and look to acquire land from Ready Mix and the Golf Course to access Golf Links Road to the north.

Alternatively, access could be continued from Webbs Road with the same land acquired from Ready Mix and the Golf Course to access Golf Links Road to the north. These options are shown in Figure 2 below.

Initial conversations with the Golf Course suggested that this option wasn't desirable so the detail in the dialogue below reflects that position.



Figure 2: Options 4 and 5 for realigning Golf Links Road

### 4.2.1 Ecological significance

An ecological assessment is likely to be required to manage any effects associated to the proximity to the wetland and/or riverbed.

### 4.2.2 Flood risk

A road located to the north of the Golf Course would be located within the Waipara River flood path. This would be most vulnerable in a 2% AEP fluvial event but could be inundated in a 2% AEP tidal event as well, as shown in Figure 3 below.

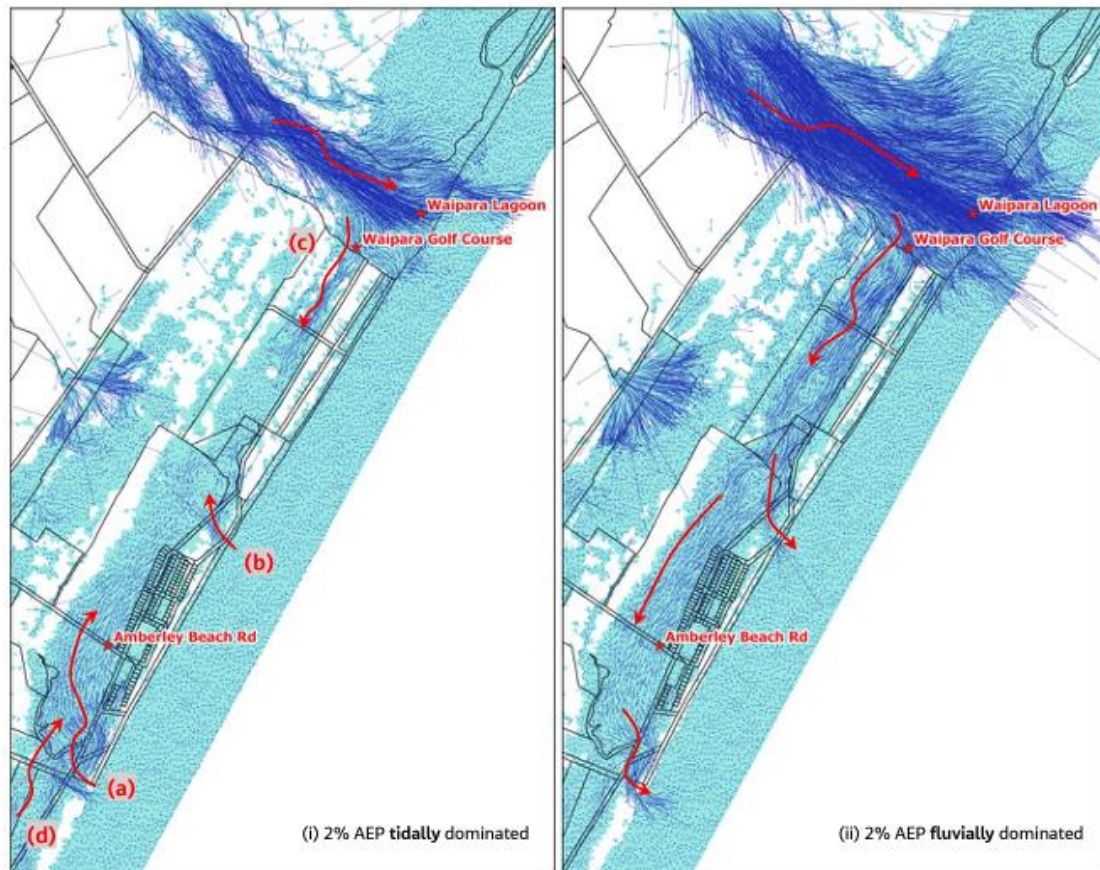


Figure 3: Model flood extents for 2% AEP tidally dominated and 2% AEP fluviially dominated event, both with 0.5 m sea level rise showing the main flood flow path for Amberley Beach

#### 4.2.3 Consenting

The road is unable to be constructed in a riverbed and therefore needs to be located inland of this on Ready Mix and Golf Course land. This land is subject to flooding and consideration would need to be given to ensure the longevity of the road.

Depending on the exact alignment resource consent is likely to be required from Hurunui District Council for earthworks and possibly Environment Canterbury due to its proximity to the river and/or wetland. Provided no wetlands are identified in this area the option is likely to be easier to consent than Options 1-3 above.

#### 4.2.4 Cost

It is anticipated that the road between Webbs Road and the Golf Course would need to be approximately 585m long. If Hursley Terrace Road was to be formed this would add an addition 1.7km of road. There would be a cost associated with acquiring land to bring the road down parallel to the Waipara River. It is possible that a setback of 50 metres from the river might be required and therefore the total land required could be around 4.8ha.

Once at the boundary of the Golf Course the road would need to extend approximately 380 metres to meet the existing northern section of Golf Links Road. The costs below are very indicative and should this be the preferred option more detailed costings would need to be prepared. These costs do not include consenting costs or ongoing maintenance costs.

	Estimated cost
New road to Golf Course Boundary	\$570,000 (or \$2,227,875)
Acquisition of 4.8ha of land	Unknown
New road within the Golf Course	\$371,000

### 4.3 Option 6

Option 6 considers continuing to maintain the existing Golf Links Road. The maintenance of Golf Links Road would require hard protection works to be installed. These works would need to be located within the existing roading footprint. This means that any protection works would need to be engineered to serve as both the coastal protection works and the road.

An alternative to this would be to use a beach renourishment bund to protect the most vulnerable part of the road. This is expected to have a very limited life (possibly 5 years) due to its exposure to wave energy.

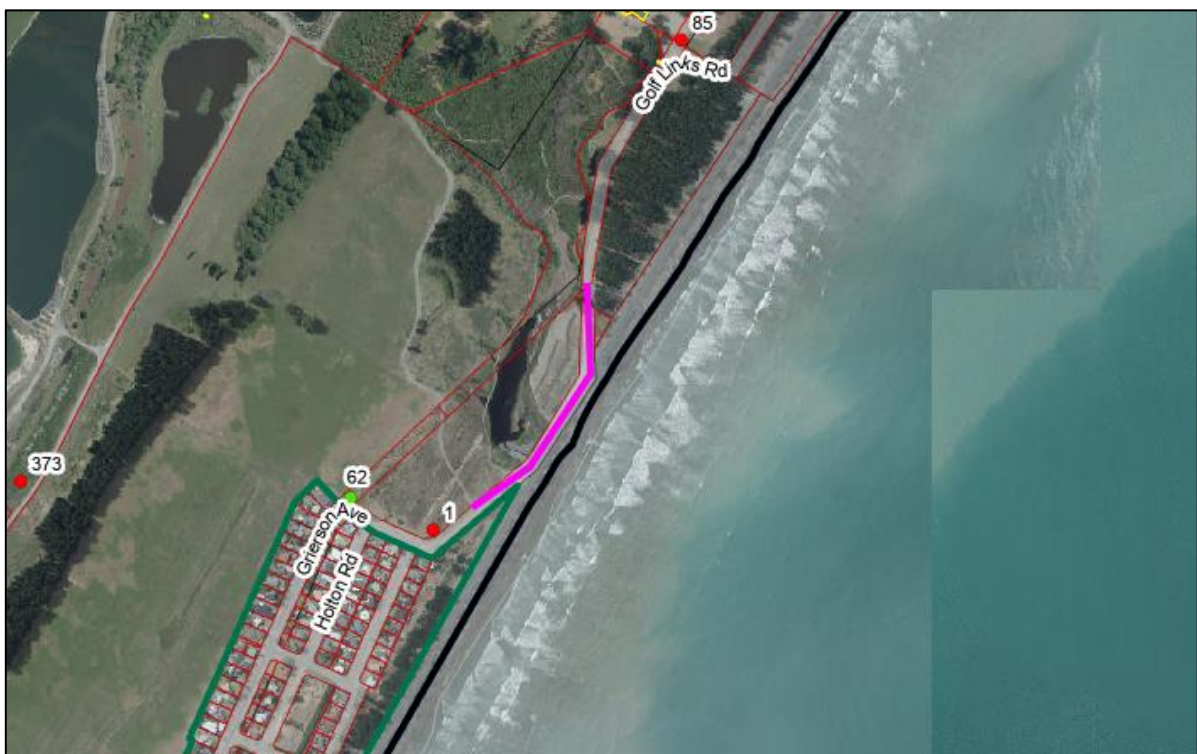


Figure 4: Option 5 showing the area to be protected on Golf Links Road

#### 4.3.1 Ecological considerations

An ecological impact assessment will be required to support the work. However, if the works are conducted within the existing roading corridor the effects should be able to be mitigated through the construction methodology and design.

#### 4.3.2 Engineering considerations

The road would serve as both coastal protection works and the road. It would require hard protection works to preserve the alignment and prevent the road from being washed away. Over time the hard protection works will sit proud of the rest of the coastline and will be subject to greater wave energy and potentially maintenance.

Consideration would need to be given to the effect of this hard protection on the coastal processes and how this might impact the Amberley Beach bund.

#### 4.3.3 Consenting considerations

The existing alignment of Golf Links Road is currently located within the Coastal Hazard Zone and therefore consent is required under the RCEP and LWRP (depending on alignment). The works would be in close proximity to the coastal marine area and the wetland and depending on the exact alignment a resource consent for hard protection works may be difficult.

In particular Policy 27(4) of the NZCPS states that: “Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so.”

#### 4.3.4 Cost

A rock revetment structure is likely to be the easier option to obtain resource consent for. A 1 km length of rock revetment has been costed at \$22 million. As a rough estimate the 250 m of rock revetment required would be one quarter of this cost. The other option could be an interlocking seawall. This is cheaper and would involve building the road up to run along the top of the sea wall.

- Rock revetment approximately \$5.5 million, or
- Interlocking concrete wall \$1.7 million plus additional roading costs.

#### 4.4 Option 7

Realigning the road is likely to be expensive even if the ecological and consenting hurdles can be overcome. An alternative option would be to provide a walking link to the Golf Course. The cheapest option would be to follow the existing road corridor around the wetland. This may still require regular maintenance, but the access would only be maintained to provide walking access.

An alternative option could be to upgrade the existing Amberley Lagoon Walkway by raising and widening the current boardwalks to provide easier access. The feasibility of providing golf cart access via the existing walkway could be explored.

Prior to not providing vehicle access Council would want to consider:

1. The number of people who rely on the road for access
2. Alternative access ways
3. The cost of constructing and maintaining the legal road
4. The effect of losing the road on the community
5. The available resources of Council
6. Funding options
7. The cost of the properties compared to the cost of the road
8. Future threats to the road
9. Whether the road forms part of an evacuation network.

## 5 Summary of options

The table below summarises the options.

	Ecological	Engineering	Consenting	Cost
New road following the boundary following the property	High values	N/A	Not possible	N/A
New road following the existing bund haul road	Moderate	Minimal	Very difficult	\$2.2 m
New road following the Ready Mix site boundary	Moderate	Minimal	Very difficult	N/A
Form the unformed section of Hursley Terrace Road	Unknown	Minimal	Moderate	\$2.2 m
Access via Webbs Road and adjacent to the riverbed	Unknown	Minimal	Moderate	\$570,000
Continuing to maintain Golf Links Road	Moderate	Complex	Difficult	\$1.7 m +
Not providing formed access	Moderate	Minimal	Easy	Unknown