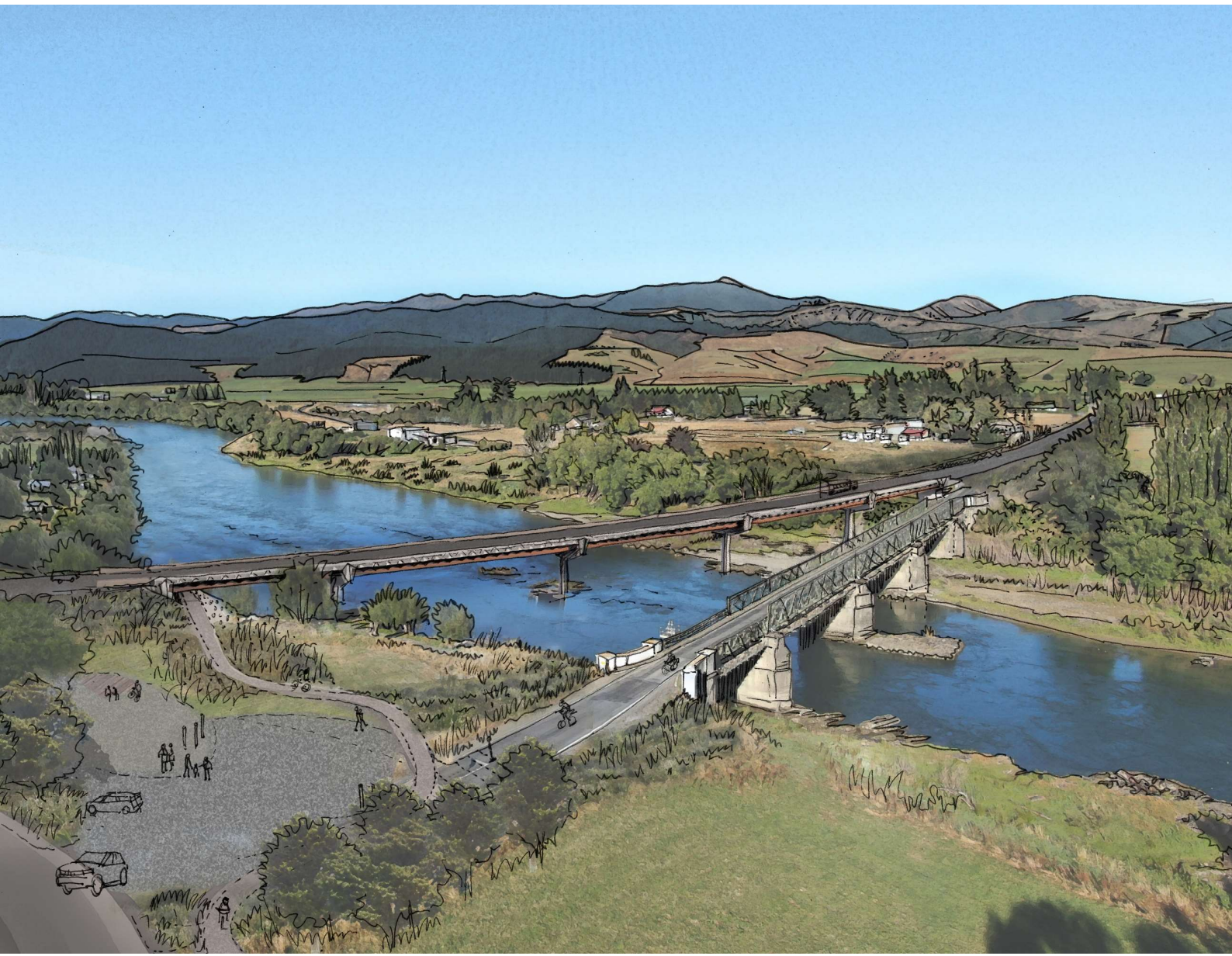




# New Beaumont Bridge

## Archaeological Assessment Report



## Contact Details

**Name: Sam Kurmann**

Opus House, 197 Rattray Street  
Private Bag 1913, Dunedin 9054  
New Zealand

Telephone: +64 3 471 5500  
Mobile: +64 27 647 1261

**Document Details:**

Date: 09/07/2019  
Reference: 6-CT012.01\_00002  
Status: Final

*Prepared By*



---

Sam Kurmann  
Archaeologist

*Reviewed By*



---

Sheelagh Conran  
Principal Archaeologist

# Contents

Executive Summary .....	vii
<b>1 Introduction .....</b>	<b>1</b>
1.1 Purpose of this Report .....	1
1.2 Project Location .....	1
1.3 Background and Proposal .....	2
<b>2 Statutory Requirements .....</b>	<b>3</b>
2.1 The <i>Heritage New Zealand Pouhere Taonga Act 2014</i> .....	3
2.2 The <i>Resource Management Act 1991</i> .....	4
<b>3 Methodology .....</b>	<b>5</b>
3.1 Limitations .....	5
<b>4 Background .....</b>	<b>5</b>
4.1 Environmental setting .....	5
4.2 Māori occupation of Beaumont and along Mata-au .....	6
4.3 Historic-era occupation of Beaumont .....	6
<b>5 Previous Archaeological Work .....</b>	<b>15</b>
5.1 General Archaeological Landscape .....	15
5.2 Previous archaeological reports .....	16
5.3 NZAA site records .....	16
<b>6 Site Visit Results .....</b>	<b>18</b>
<b>7 Research Results .....</b>	<b>28</b>
7.1 Constraints and Limitations .....	28
<b>8 Archaeological and other Values .....</b>	<b>28</b>
8.1 House site (G44/148) .....	29
8.2 Bridge (Beaumont) Hotel and Stables (G44/149) .....	30
8.3 Beaumont Bridge (including the approaches) (G44/150) .....	31
8.4 Unrecorded Māori archaeology sites .....	31
<b>9 Assessment of Effects .....</b>	<b>33</b>
9.1 Proposed works .....	33
9.2 Potential effects .....	33
9.3 Site management .....	34
<b>10 Conclusion and Recommendations .....</b>	<b>36</b>
10.1 Recommendations .....	36

---

11	References.....	37
11.1	Archaeological Site Record Forms.....	37
11.2	Newspaper Articles.....	38
11.3	Archive Records.....	38
	Appendix A – Plans of road realignment.....	39
	Appendix B – History of the Site (Stevens 2016:6-22).....	42
	Appendix C – Locations of Trial Pits.....	48
	Appendix D – Recorded Sites within Project area.....	52

List of Figures

Figure 1. Map showing the general project area (red and blue outlines) for the Beaumont Road realignment (ArchSite)..... 1

Figure 2. Geology Map, provided by WSP Opus Geologists, where F = Tuapeka Fault line; Y TR = Undifferentiated Caples terrane TZ Grade III Schist; Q = Pleistocene River Deposits (Q2-Q3 = late Pleistocene, Q4-Q12 middle Pleistocene). Consisting of sand, silt, clay and gravel. The description is that it is typically comprised of sandy greywacke gravel overlain by loess (Taghipouran and Abbot 2019)..... 6

Figure 3. Detail of Town of Dunkeld Plan 1870 - Otago Crown Grant Index Record Map, north west extent of Project area (red outline; source: Archives NZ at archway.archives.govt.nz)..... 8

Figure 4. Detail of Town of Dunkeld Plan 1870 - Otago Crown Grant Index Record Map, south of the Project area but showing the punt location in blue (source: Archives NZ at archway.archives.govt.nz) ..... 9

Figure 5. Detail of Town of Dunkeld Plan 1870 - Otago Crown Grant Index Record Map, eastern extent of Project area (red outline; source: Archives NZ at archway.archives.govt.nz)..... 9

Figure 6. 1876 Plan of Town of Dunkeld (SO 14210; project area in red)..... 10

Figure 7. Detail of 1876 plan SO 14210 – showing the west side of Beaumont (project area in red) ... 10

Figure 8. Detail of 1876 SO 14210 showing the eastern extent of the Project area (red outline), including the proposed railway reserve..... 11

Figure 9. Beaumont Bridge Site Survey 1882, orientated east (project area in red; source: Archives New Zealand)..... 12

Figure 10. Detail of Beaumont Bridge Site Survey 1882, orientated east showing buildings in the north-western section of Beaumont project area (red outline; source: Archives New Zealand) ..... 13

Figure 11. Detail of Beaumont Bridge Site Survey 1882, orientated east, showing the project area east of Beaumont (red outline; source: Archives New Zealand) ..... 13

Figure 12. Photograph looking at the second and current Beaumont Bridge c.1890 (source: Hocken Collection Asset ID 6264)..... 14

Figure 13. Photograph showing the opening of the Beaumont Bridge in 1887 (source: Hocken Collections Asset ID 6263). The bridge approaches are clear here ..... 14

Figure 14. Photograph of the Golden Gravel Dredging Co. Pontoon c. 1900 (Source: Hocken Collections. Asset ID 6266). The Beaumont Bridge is visible in the left background of the photograph ..... 15

Figure 15. Map showing recorded archaeological sites in relation to the project area (red outline; source: ArchSite)..... 17

Figure 16. Photograph showing the old rail alignment (red arrow) looking north from eastern extent of Project area..... 19

Figure 17. Photograph showing the old rail alignment looking north from further west ..... 20

Figure 18. General strata throughout the geotechnical trial pits..... 20

Figure 19. Low Burn, looking north from near State Highway 8 (eastern extent of Project area)..... 21

Figure 20. Photograph detailing a batter edge on the true left of the bank of the Mata-au..... 21

Figure 21. Photograph looking east of the Beaumont Bridge in the background and the Project area in the foreground..... 22

Figure 22. View looking south of the eastern Beaumont Bridge abutment, showing the built-up bridge approach in foreground ..... 22

Figure 23. View of the Beaumont Bridge from downstream on the true right ..... 23

Figure 24. View of the new road location looking north west (from the western side of Mata-au) .... 23

Figure 25. Photograph from south west of the Beaumont Bridge within the project area. Visible is part of a structure likely associated with an 1870s house .....24

Figure 26. Project area within the paddock on the true right side of the river, looking towards the historic garden site depicted in Plan 748.....24

Figure 27. Approximate location of the 1870s house - visible is the flat platform area (red arrow) ....25

Figure 28. View looking north west of the Beaumont Bridge west abutment.....25

Figure 29. View of paddock between Rongahere Road and the Beaumont Hotel during monitoring, looking west..... 26

Figure 30. View of proposed car park extension in proximity to the Beaumont Hotel (background), looking east .....27

Figure 31. Western extent of the Project area, looking east .....27

Figure 32. Archaeological risk areas that require monitoring - western extent of Project area .....35

Figure 33. Archaeological risk areas that require monitoring - eastern extent of Project area.....35

**List of Tables**

Table 1. Legal Descriptions of Project Area from west to east.....3

Table 2. Recorded archaeological sites around Beaumont.....16

## Document History and Status

Revision	Date	Author	Reviewed by	Approved by	Status
1	29/04/2019	Sam Kurmann	TJ O'Connell		Draft 1
2	17/06/2019	Sam Kurmann	Sheelagh Conran		Draft 2
3	19/06/2019	Sam Kurmann		Sheelagh Conran	Final
4	02/07/2019	Sam Kurmann	Mike Davies	Mike Davies	Final 2

### Revision Details

Revision	Details
1	90% review
2	Final review
3	Final changes
4	Updated for NZTA Comments

## Executive Summary

In May 2018, WSP Opus was engaged by the NZ Transport Agency (NZTA) to undertake the design and construction surveillance for the new State Highway 8 (SH8) Beaumont Bridge. SH8 is being realigned, and a new bridge will be constructed within this alignment downstream of the existing single lane bridge. This report presents the findings of the archaeological assessment for this project.

This report identifies potential and known archaeological risk to the Project, based on the results of the archaeological and historic research, when assessed next to the scope of works. The potential for encountering Māori archaeological remains are high. If Māori archaeological remains are found, the remains are assessed as high value. Archaeological values pertaining to European occupation around the Project area is medium to high. Known European archaeological sites relate to the existing 1880s Beaumont Bridge, the Beaumont Hotel site and a house site that were recorded following the compilation of this archaeological assessment.

This assessment recommends that the proposed works should proceed under an Archaeological Authority from Heritage New Zealand Pouhere Taonga. The following recommendations are made:

- That an Archaeological Authority should be applied for from Heritage New Zealand Pouhere Taonga prior to the works, under Section 44(a) of the HNZPTA. An Archaeological Management Plan should be prepared to support this application.
- That risk areas highlighted in Figure 32 and Figure 33 of this assessment be referred to as a guide to areas that should be monitored by an archaeologist during the construction phase of the new Beaumont Bridge.
- That further consultation with Iwi is undertaken as part of the archaeological authority application.
- That any encountered archaeological remains are recorded and investigated using standard archaeological practice.

As part of the Project works the existing heritage bridge is to be retained and repurposed for pedestrian and cyclists use. These works are subject to a separate Heritage Assessment and management process and are not covered in this report.



# 1 Introduction

## 1.1 Purpose of this Report

WSP Opus were commissioned by the NZ Transport Agency (NZTA) to prepare an archaeological assessment for the new Beaumont Bridge and the associated road realignment, Beaumont, Otago (Figure 1).

This report presents an archaeological assessment of the project area in Beaumont. It identifies the presence and values of archaeological sites in the project footprint and discusses impacts on these sites from the proposed project activities. This report is also intended as a supporting document for an Archaeological Authority application to Heritage New Zealand Pouhere Taonga (HNZPT). It will be used to inform a separate Assessment of Environmental Effects (AEE) report.

Proposed works to repurpose the existing heritage bridge for pedestrian and cyclist use are subject to a separate Heritage Assessment and management process and are not covered in this report.

## 1.2 Project Location

Beaumont is situated in Central Otago, approximately 110 km west of Dunedin. The Beaumont township straddles the Mata-au/Clutha River, and the bridge provides the only physical connection between East and West Beaumont (and effectively east and west Otago). Beaumont straddles the Mata-au/Clutha River in Central Otago along State Highway 8 (Figure 1). The project area begins approximately 0.5 km south east of the Beaumont Bridge near Low Burn. The project area terminates approximately 0.8 km west of the Bridge, along the state highway. The new bridge will be approximately 60 metres south of the current Beaumont Bridge. The new alignment crosses through a paddock to meet the existing State Highway 8 in front of the Beaumont Hotel.

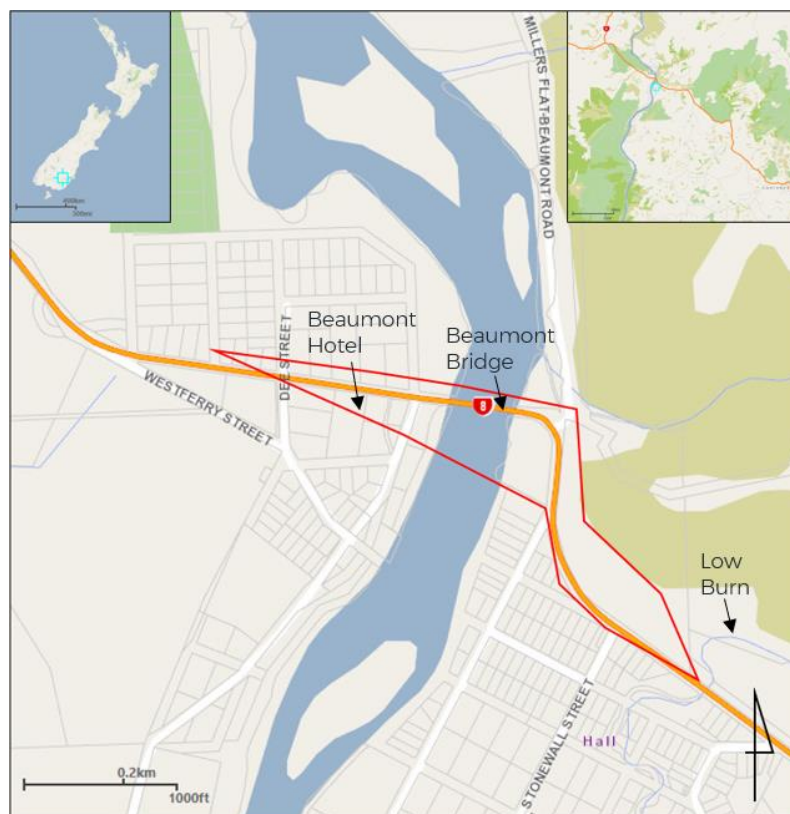


Figure 1. Map showing the general project area (red and blue outlines) for the Beaumont Road realignment (ArchSite)

### 1.3 Background and Proposal

The existing Beaumont Bridge was built in 1887 as a single lane, five span, wrought iron truss bridge. The Beaumont Bridge has an expansive recent history of issues around its structural integrity. For the last 30 years, it has been under scaffolding as various repairs, condition monitoring and strengthening works have been undertaken to manage the bridge for the current heavy vehicle traffic loading.

A design philosophy statement prepared by WSP Opus engineers in 2017 recognised that “the existing bridge is susceptible to fatigue cracking and has a limited remaining economic life” (in Stevens 2016). A solution was presented in the form of a new two-lane structure on a curved alignment, just downstream of the existing bridge and road alignment.

Plans for how to achieve these changes are being developed currently by the WSP Opus design team (see Appendix A). There will also be landscaping and planting activities associated with the car parking around the Beaumont Hotel and within the vicinity of the Project area. The proposed works include:

- Approximately 200m long, 5 span bridge with piled foundations to be excavated into the bedrock within the river and on the river banks;
- Realignment of State Highway 8 on the approaches to the new bridge and construction of approach embankments up to 3m high;
- Intersection modifications including closure of side road intersections with the state highway (Westferry Street, Rongahere Road, Weardale Street) and upgrade of state highway intersections (Dee Street, Craig Flat Road and Stonewall Street);
- Construction of pedestrian and cycle linkages connecting the Clutha Gold Cycle Trail to the Beaumont Hotel and Rongahere Road and repurposing of the existing single lane bridge (deck and handrail modifications) which will be retained to for pedestrian and cyclist use;
- Construction of highway stormwater systems including roadside swales, underground pipes and a landscaped stormwater treatment basin on the eastern side of the river;
- Relocation of overhead power and underground telecoms cables and installation of street lighting at side road intersections;
- Construction of a new safe stopping area (rest area) at the eastern end of the existing bridge comprising car park and picnic facilities accessed from Craig Flat Road.

To complete the project, proposed works will include earthworks (top soil stripping/stockpiling/re-spreading, excavation, placement of imported fill, rip-rap installation), trenching for underground services, pavement construction, excavation in rock for bridge foundations, bridge construction (reinforced concrete and structural steel), landscaping works and temporary works including construction of a temporary work platform into the river and establishment of contractors compound (storage for plant and materials and welfare facilities for workers).

The land parcels that are included in this assessment are listed in the below table:

Table 1. Legal Descriptions of Project Area from west to east

Lot 3 DP 8804	Section 6 TN of Blk IX Dunkeld	Section 1 TN of Blk VIII Dunkeld	Section 2 TN of Blk VIII Dunkeld
Road reserve	Section 7 TN of Blk IX Dunkeld	Section 2 TN of Blk VIII Dunkeld	
Lot 1 DP 19144	Section 8 TN of Blk IX Dunkeld	Section 4 SO 23609	
Lot 2 DP 19144	Section 9 TN of Blk IX Dunkeld	Section 1 SO 23610	
Section 5 TN of Blk IX Dunkeld	Section 4 TN of Blk VIII Dunkeld	Section 2 SO 23610	

## 2 Statutory Requirements

There are two main pieces of legislation in New Zealand that legislate for work affecting archaeological sites. These are the *Heritage New Zealand Pouhere Taonga Act 2014* (HNZPTA) and the *Resource Management Act 1991* (RMA).

### 2.1 The Heritage New Zealand Pouhere Taonga Act 2014

The HNZPTA promotes the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. It provides blanket protection to all archaeological sites whether they are recorded or not, with the purpose of identifying, protecting, preserving and conserving evidence of New Zealand's society and history. The provisions of the HNZPTA are administered by Heritage New Zealand Pouhere Taonga (Heritage New Zealand). It is illegal to modify or destroy archaeological sites, without first gaining an archaeological authority to do so from Heritage New Zealand Pouhere Taonga.

The HNZPTA contains a consent (authority) process for any work affecting an archaeological site. An archaeological site is defined under Section 6 as: (a) any place in New Zealand, including any building or structure (or part of a building or structure), that— (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and (b) includes a site for which a declaration is made under Section 43(1) of the Act.

Under Section 42 of the Act, any person who intends carrying out work that may modify or destroy an archaeological site, or to investigate a site using invasive archaeological techniques, must first obtain an authority from Heritage New Zealand under Section 44(a) of the Act. The process applies to sites on land of all tenure including public, private and designated land. The HNZPTA contains penalties for unauthorised site damage or destruction.

The archaeological authority process applies to all sites that fit the HNZPTA definition, regardless of whether:

- The site is recorded in the New Zealand Archaeological Association (NZAA) Site Recording Scheme or entered into the Heritage New Zealand List/Rārangī Kōrero,
- The site only becomes known about as a result of ground disturbance, and/or,
- The activity is permitted under a district or regional plan, or a resource or building consent has been granted.

## 2.2 The Resource Management Act 1991

Part II of the RMA outlines the Purposes and Principles of the RMA. In outlining the purpose of the RMA, Section 5 states:

- (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
- (2) In this Act, “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 wellbeing 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.

Section 6 of the RMA outlines that “in achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance.” In 2003 amendments to the RMA elevated historic heritage to a Matter of National Importance under Section 6 (f), which identifies the need for “the protection of historic heritage from inappropriate subdivision, use, and development.”

A definition of Historic Heritage was also added with the amendments to the RMA. This defines Historic Heritage as:

- a) Those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures deriving from any of the following qualities:
  - (i) archaeological;
  - (ii) architectural;
  - (iii) cultural;
  - (iv) historic;
  - (v) scientific;
  - (vi) technological; and
- b) Includes –
  - (i) historic sites, structures, places, and areas; and (ii) archaeological sites; and (iii) sites of significance to Māori, including wāhi tapu; and (iv) surroundings associated with the natural and physical resources.

As such, when considering applications under the RMA, the consenting authority must have regard to historic heritage as a Matter of National Importance.

This assessment covers archaeological values only and is based on HNZPTA assessment requirements. It does not include an assessment of the archaeological values associated with the 1887 bridge. The heritage values of this bridge have already been assessed by Chessa Stevens in 2016. However, this archaeological assessment informs the AEE prepared by Shane Roberts (in prep.).

## 3 Methodology

This archaeological assessment report is based on desk-top research, a field survey and monitoring of the excavation of geotechnical test pits in the project area (as approved by Heritage New Zealand Pouhere Taonga). Research was carried out using a range of historic and archaeological information sources including:

- New Zealand Archaeological Association (NZAA) Site Record Database (ArchSite);
- The Heritage New Zealand Pouhere Taonga (HNZPT) List/Rārangi Kōrero;
- Kā Huru Manu, the Cultural Mapping Project by Ngāi Tahu;
- Archaeological journals, theses and reports associated with the area;
- Primary literature;
- LINZ survey plans, historic maps and photographs from various sources;
- Historic newspapers (Papers Past website);
- Published resources about the history of the Beaumont area.

Sam Kurmann carried out an initial site visit on the 10<sup>th</sup> of August 2018 to inspect the proposed works location. She made two further visits on the 15<sup>th</sup> and 16<sup>th</sup> of August and the 24<sup>th</sup> and 25<sup>th</sup> of October 2018 to archaeologically monitor the mechanical excavation of geotechnical test pits where the proposed road realignment will be located. While at Beaumont, site walkovers were also undertaken to identify and, where possible, relocate recorded archaeological sites near the project area.

The assessment of archaeological values was based on a consideration of the impacts of the proposed works on both potential and known archaeological sites in the area. These sites were characterised using the archaeological values of condition, rarity, contextual values, information potential, amenity value and cultural associations. This was done in accordance with the HNZPT guidelines.

### 3.1 Limitations

This report does not include an assessment of Māori cultural values. Statements are made regarding the location and nature of archaeological sites and their archaeological values. The views of Tangata Whenua are not presented in this report. Cultural values may encompass a wider scope than those considered in an archaeological assessment report.

## 4 Background

### 4.1 Environmental setting

The Beaumont township straddles the Mata-au (Clutha) River. The vegetation around the Project area is mainly grass and introduced shrub species. Some trees exist including macrocarpa (*Cupressus macrocarpa*) and other introduced species. The topography around the bridge is flat to undulating, with a steeper slope leading into the historic bridge approach. The geological landscape was provided by WSP Opus engineering geologists. This indicated that the project area is:

“within a valley plain identified as having been deposited in the late quaternary. The geology is likely to comprise primarily of alluvium and colluvium.

These deposits typically consist of unconsolidated to poorly consolidated mud, sand, gravel and peat of alluvial and colluvial origin. The wider area, including the adjacent hills comprise Caples Group Grade TZIII schist rock” (Taghipouran and Abbot 2019).

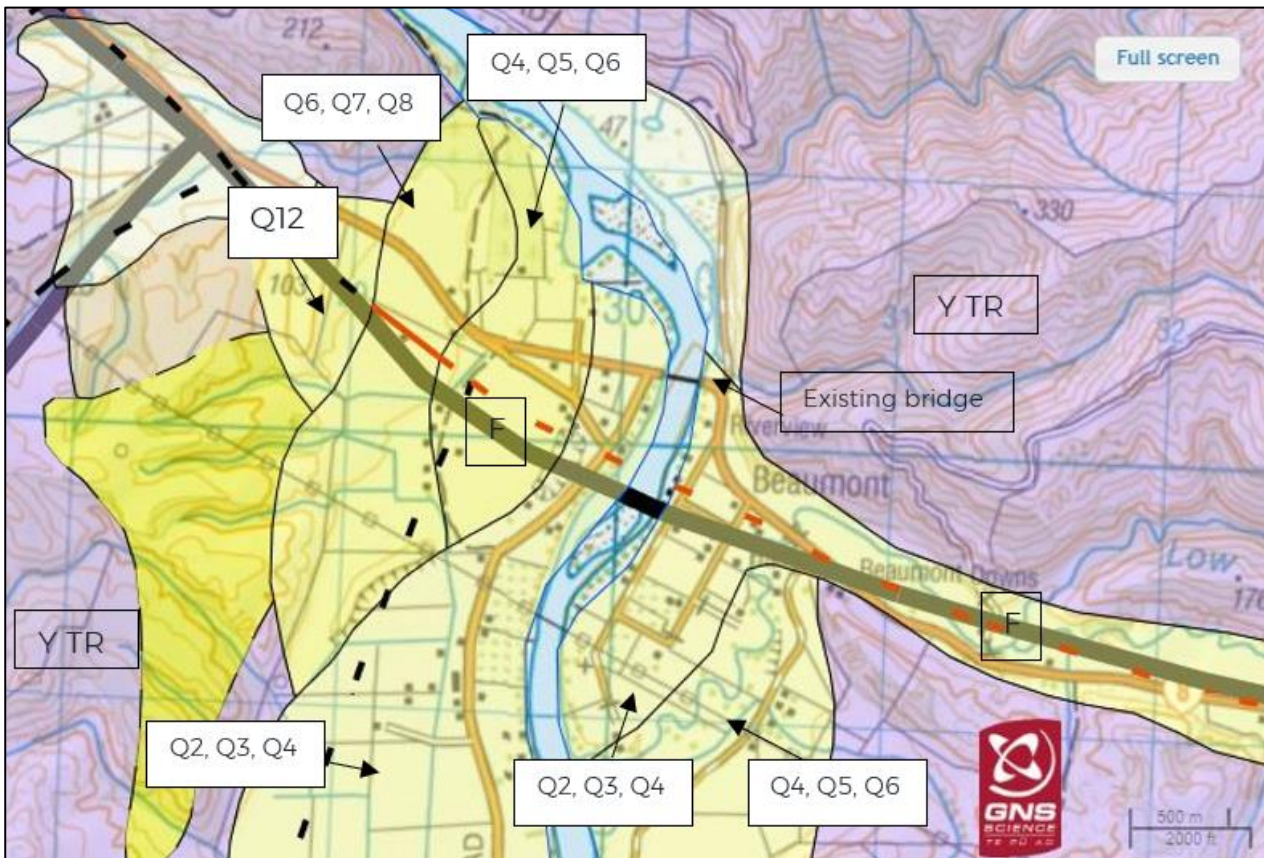


Figure 2. Geology Map, provided by WSP Opus Geologists, where F = Tuapeka Fault line; Y TR = Undifferentiated Caples terrane TZ Grade III Schist; Q = Pleistocene River Deposits (Q2-Q3 = late Pleistocene, Q4-Q12 middle Pleistocene). Consisting of sand, silt, clay and gravel. The description is that it is typically comprised of sandy greywacke gravel overlain by loess (Taghipouran and Abbot 2019)

#### 4.2 Māori occupation of Beaumont and along Mata-au

The Southern South Island was a place of Māori occupation since the earliest peopling of New Zealand. The Waitaha people lived there earliest, followed by Ngāti Mamoe around the fifteenth and sixteenth century (Anderson 1998: 21-23). By the eighteenth century, Ngāi Tahu began migrating to the south. Māori from the earliest periods of arrival to Aotearoa up to European colonisation utilised the interior of Otago. The Clutha River/Mata-au was utilised as a transport route between Wānaka and coastal Otago (at the Clutha River Mouth) throughout the pre-European period. Anderson (2008: 41) describes coastal (temporary and permanent) settlements along the mouth of the Mata-au.

The Ngāi Tahu Atlas, 'Ka Huru Manu' explains that the Mata-au means swirling water. The inland region was utilised for fowling, fishing, trade of pounamu and access to inland resources such as stone sources. Weka were fat in winter time and eel were easily caught during the summer. Mata-au is a Statutory Acknowledgement Area where it was recognised under the Ngāi Tahu Claims Settlement Act for its basis as a descendant of the creation traditions, but also its use as a mahinga kai trail (from Otago Regional Plan - Appendix 2). The archaeological remains pertaining to Māori occupation of this area are detailed in Section 5.1.

#### 4.3 Historic-era occupation of Beaumont

A thorough account of this history of Beaumont was provided by Stevens (2016). This is reproduced, with permission, in Appendix B. Here, it is summarised and tailored to fit the archaeological requirements of the assessment.

Differing accounts into who the first explorers were to Central Otago for gold surveys exist. Hall-Jones (2005: 9) stated that Thomas Archibald prospected for gold as far up the Mata-au as Beaumont Creek in 1851. Another record stated that Beaumont was initially visited by European Nathanael Chalmers in 1853, who accompanied Māori Rangatira Reko inland along the Mata-au. Māori settlements persisted along the river mouth and lower reaches of the river, and temporary settlements existed further up the Mata-au. Three years later, John Turnbull Thomson arrived in Otago as the chief surveyor. He surveyed Otago during 1857 to 1858 and published a map of his findings in 1860. Near Beaumont (also known as Dunkeld), several Stations were established around this time. Following the discovery of gold in Central Otago in 1860, miners began to flock there to establish claims. Beaumont played a pivotal role in the access to the Upper Clutha, where punt river crossings were fast established, and the road was formed to Beaumont by 1864 (Hall-Jones 2005: 65).

A decade later, Beaumont was a well-established stop off point for those travelling through to the gold fields and the interior (Figure 3 to Figure 5). The settlement had hotels, a school, a church and even a race course. Punts ran in the area and were free to use until the erection of the first Beaumont Bridge in September 1874 (Figure 4). The call for the erection of a bridge was made after several dangerous crossings in rough weather conditions. Hayes commissioned the bridge and it was in private ownership. The bridge was only open to foot traffic at this time, and the bridge approaches were not completed until November 1874 following completion of construction of the eastern bridge approach. Roads were only surveyed at this time, the crossing was not suitable for horses and the bridge crossing cost more than the punts, so punts remained the preferred transport route.

In 1875, Hayes put the bridge up for sale (*Tuapeka Times*, 22/09/1875, p.3) and it was sold to Kitching in 1876. Kitching also bought the punt at this time and built the Bridge Hotel. Holding the monopoly over the river crossings, Kitching fielded many complaints around the exorbitant fees being charged for these river crossings. 1876 survey plan SO 14210 shows the detail around the bridge location, including the surrounding Bridge Reserve on either side of the Beaumont Bridge (Figure 6). It also shows a house immediately south of the eastern approach of the bridge (Figure 7). The railway reserve is also depicted in this survey plan (Figure 8). In 1877, the Tuapeka County Council and Government investigated a purchase of the bridge after the complaints of locals were taken seriously. However, in 1878, the bridge was washed away by severe flooding. In a domino-like effect, the Clyde Bridge washed down stream and took out Beaumont Bridge, which together caused the demolition of the Balclutha Bridge (Thornton 2001: 231; *Bruce Herald*, 1/10/1878, p.5).

The Government investigating re-erecting the bridge for some years, which included negotiating the purchase of the same land from Kitching (*Tuapeka Times*, 12/07/1879, p.3). Construction of the bridge was slow. Contractual toing and froing contributed to the hold ups (*Press*, 12/05/1885, p.2) and shoddy building further delayed the opening, with some of the piers being built too high (*Tuapeka Times*, 11/08/1886, p. 3). One result of this back and forth was the survey of the town of Beaumont in 1882 (Figure 9 to Figure 11). Visible in this plan is the Bridge Hotel and its stables, a blacksmith, an historic water race, a house site, the ferry punt, the bridge location to the east (Figure 12). It was not until 1887 that the new Bridge opened (Figure 13), construction possibly being spurred by the drowning of a young girl in a punt accident in November 1886. The opening of the new bridge allowed people to travel into Beaumont and make the use of the town's facilities, which now included a store, bakery, blacksmith and post office.

The 1890s were favourable to the development of Beaumont, as advances in technology allowed more efficient dredges into the Clutha. This resulted in less work and higher yields of gold while dredging in the area. Around Beaumont, the Golden Gravel dredge operated just downstream of the Beaumont Bridge (Figure 14). Approximately 1-2 km upstream of the bridge, a cluster of hut sites associated with the gold mining rush are apparent. Newspaper records describe these as being inhabited by Chinese Miners, including Chung Low who was found dead at his hut in 1892 (*Star*, 23/05/1892, p.3).

Throughout Central Otago, the Roxburgh Line of the Railway was proposed in 1886. A survey was completed in the same year by the Public Works Office (AJHR 1886). There were several railway encampments along the Line. However, there were difficulties with the actual construction of the rail, such as the actual location and dealing with financial issues posed by recessions. The Roxburgh Line did not reach Beaumont until 1905, and was not opened in its entirety until 1928 (Yonge 1995:27; Churchman and Hurst 2001: 205-206; Cowan 2010).

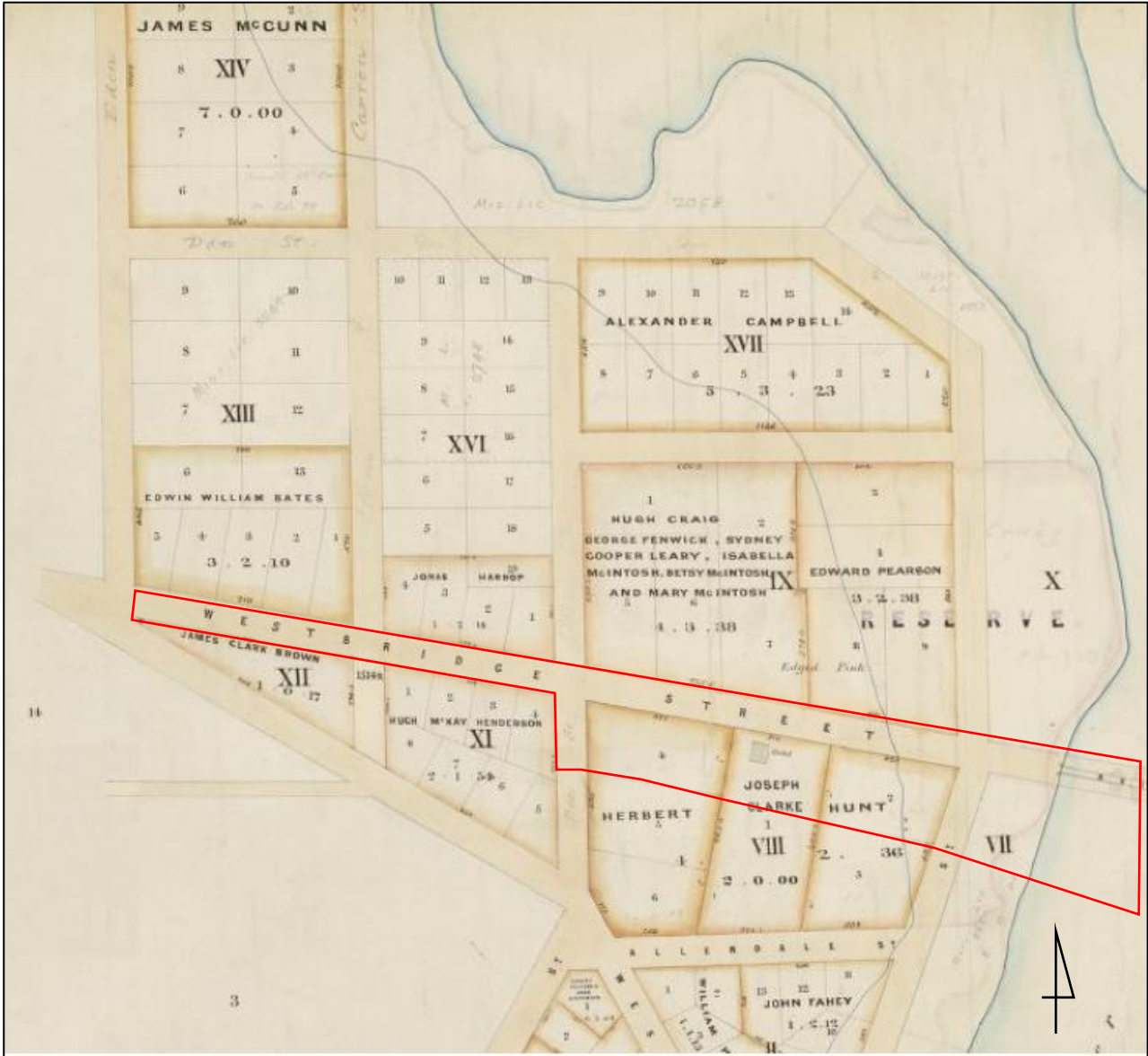


Figure 3. Detail of Town of Dunkeld Plan 1870 - Otago Crown Grant Index Record Map, north west extent of Project area (red outline; source: Archives NZ at [archway.archives.govt.nz](http://archway.archives.govt.nz))



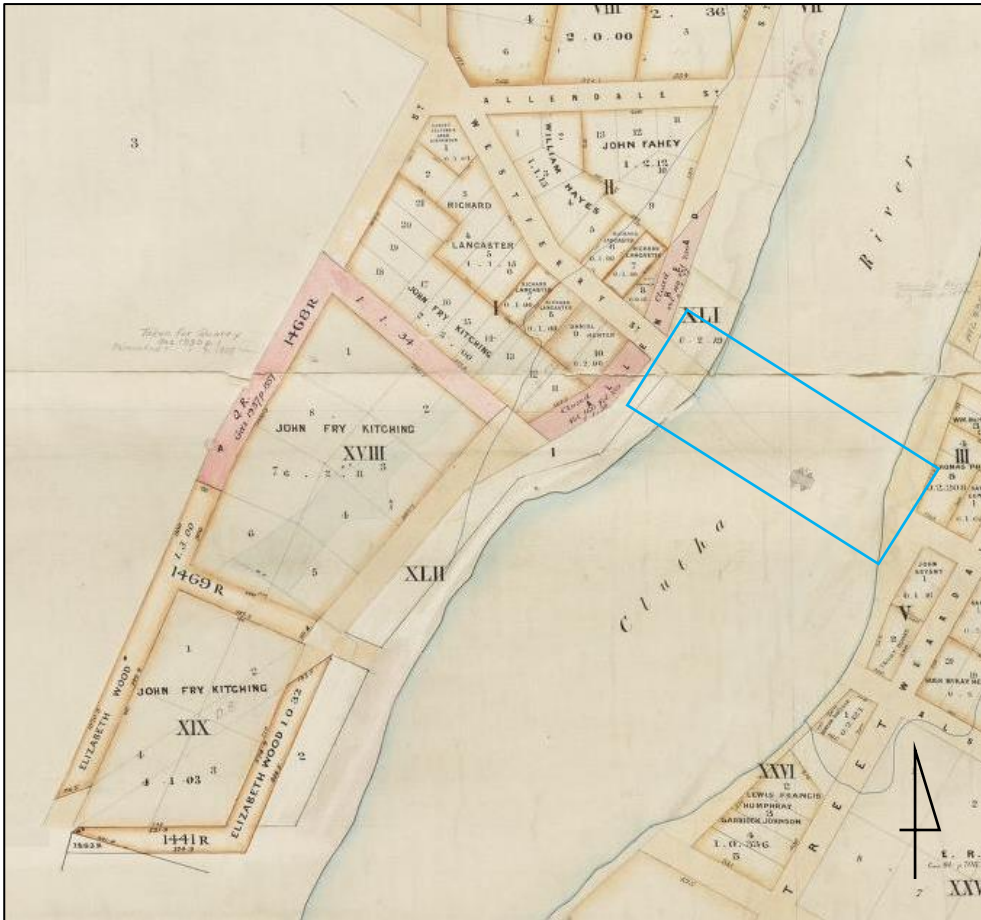


Figure 4. Detail of Town of Dunkeld Plan 1870 - Otago Crown Grant Index Record Map, south of the Project area but showing the punt location in blue (source: Archives NZ at [archway.archives.govt.nz](http://archway.archives.govt.nz))



Figure 5. Detail of Town of Dunkeld Plan 1870 - Otago Crown Grant Index Record Map, eastern extent of Project area (red outline; source: Archives NZ at [archway.archives.govt.nz](http://archway.archives.govt.nz))

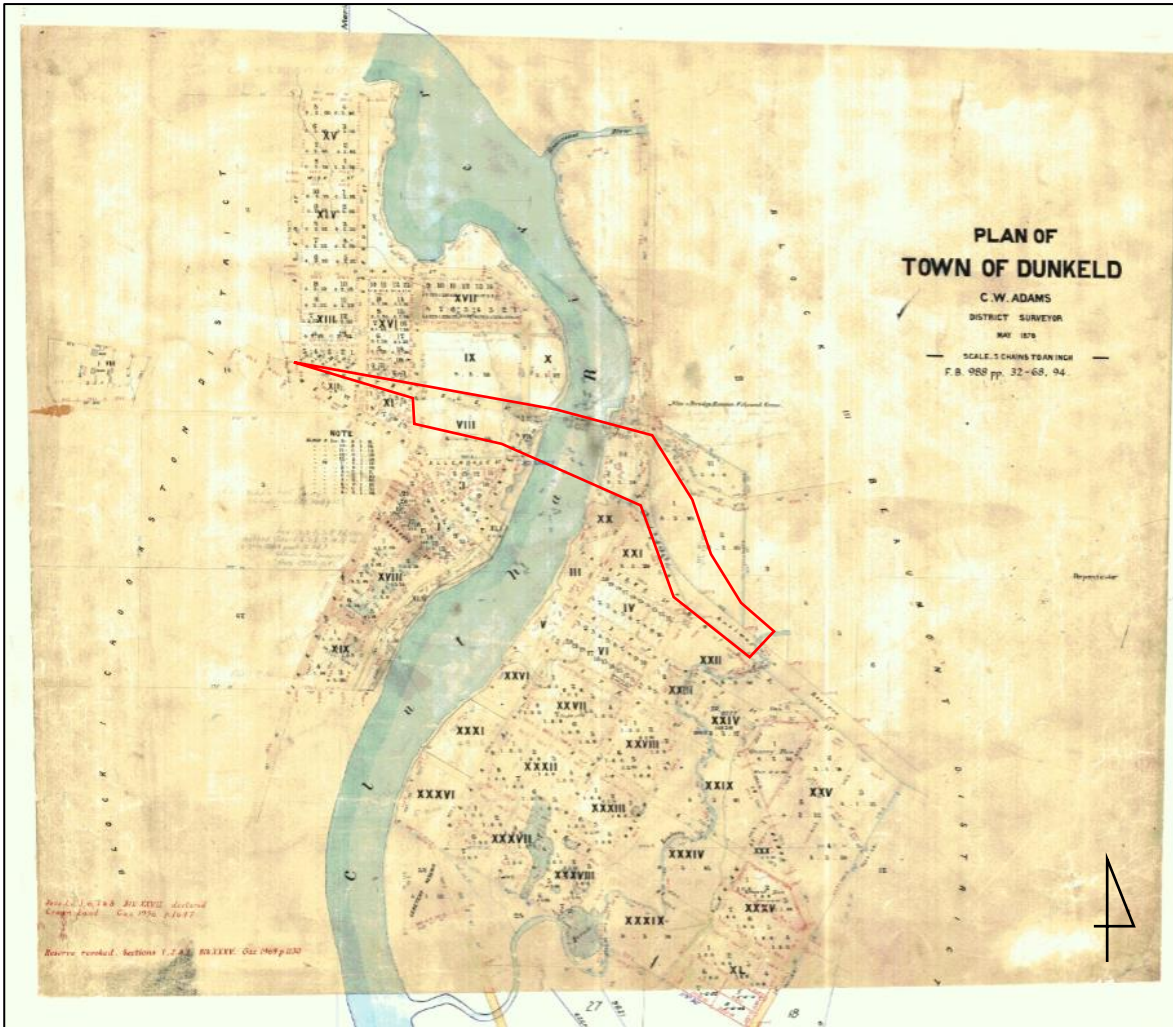


Figure 6. 1876 Plan of Town of Dunkeld (SO 14210; project area in red)

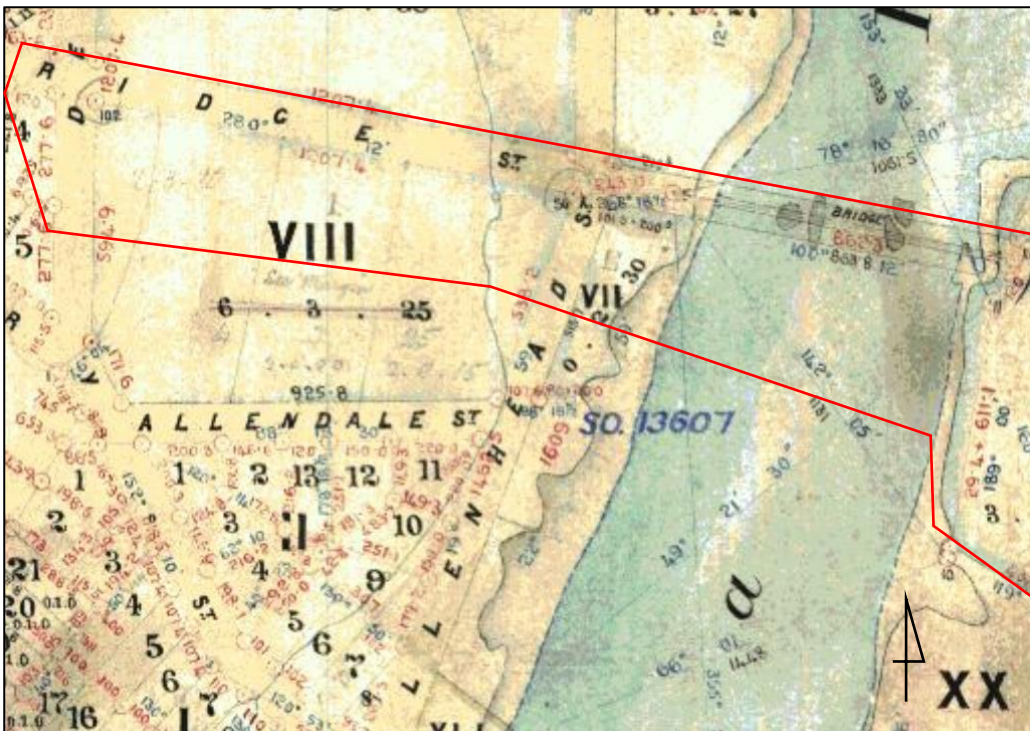


Figure 7. Detail of 1876 plan SO 14210 - showing the west side of Beaumont (project area in red)

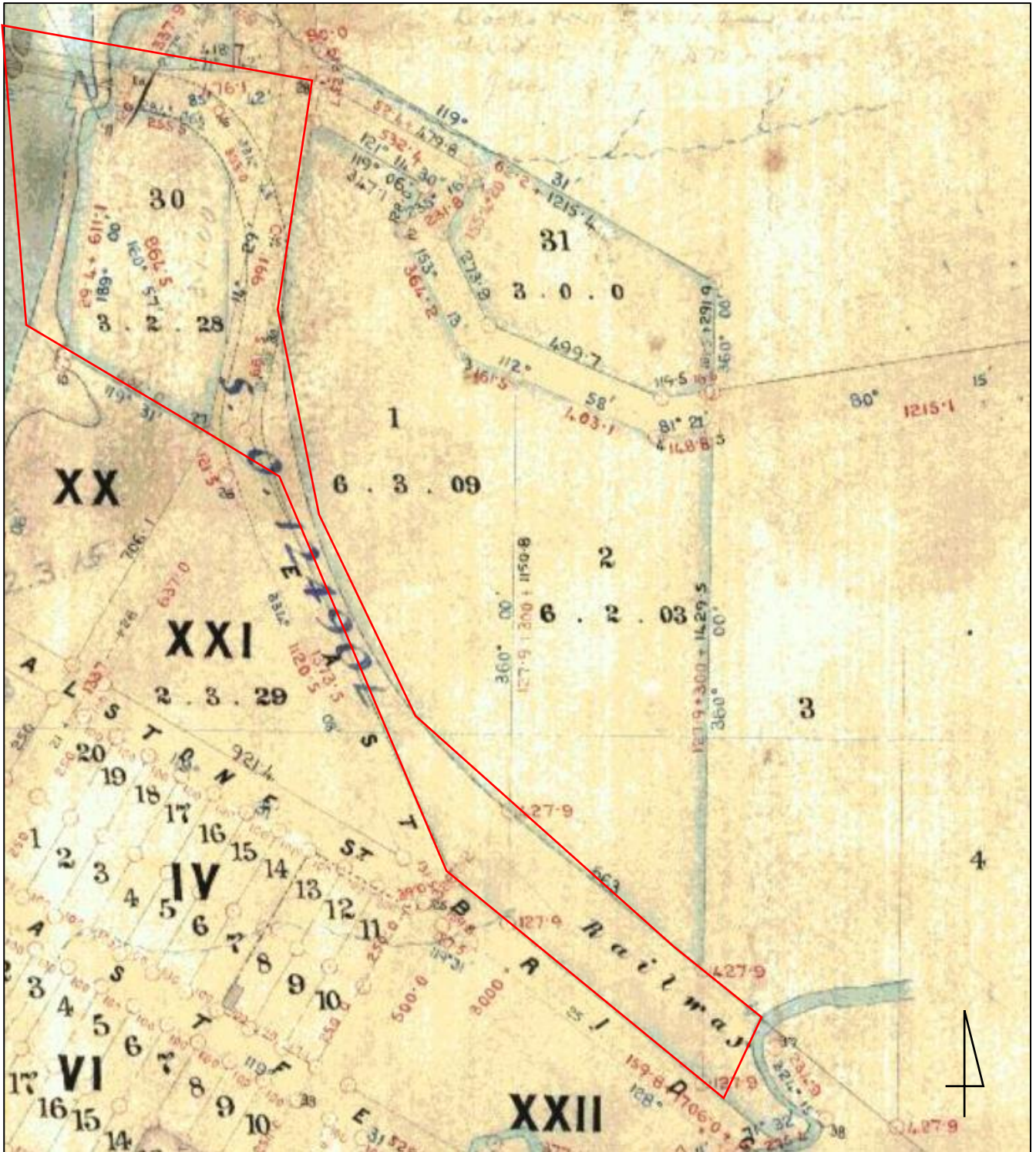


Figure 8. Detail of 1876 SO 14210 showing the eastern extent of the Project area (red outline), including the proposed railway reserve

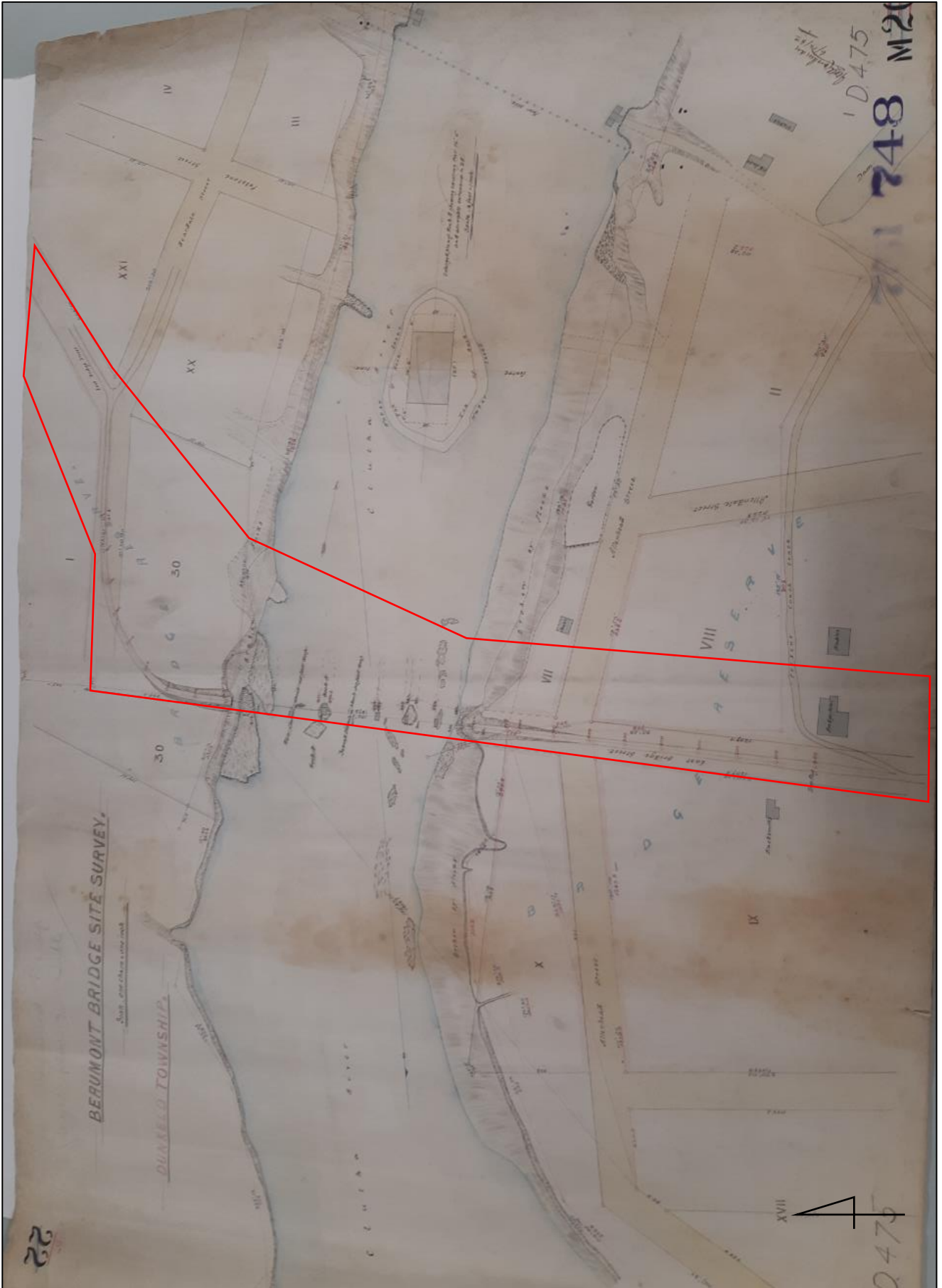


Figure 9. Beaumont Bridge Site Survey 1882, orientated east (project area in red; source: Archives New Zealand)

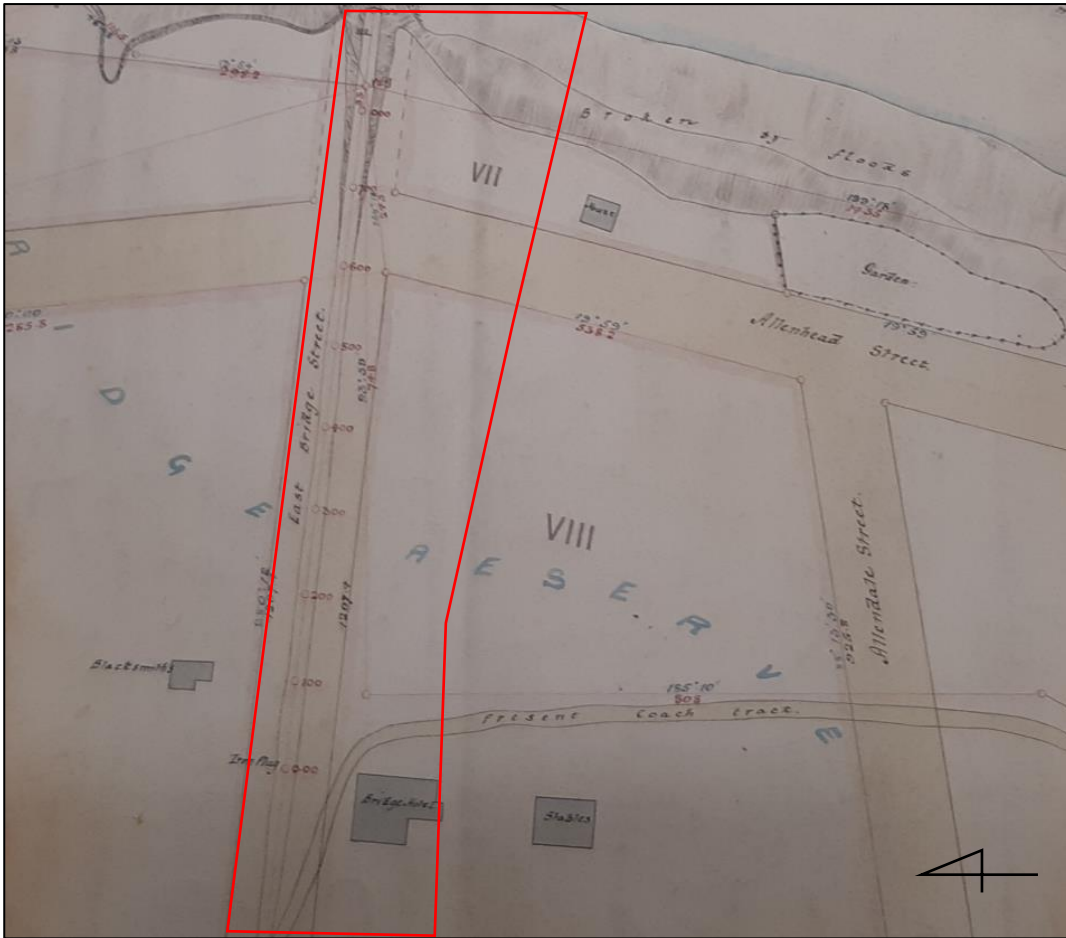


Figure 10. Detail of Beaumont Bridge Site Survey 1882, orientated east showing buildings in the north-western section of Beaumont project area (red outline; source: Archives New Zealand)



Figure 11. Detail of Beaumont Bridge Site Survey 1882, orientated east, showing the project area east of Beaumont (red outline; source: Archives New Zealand)



Figure 12. Photograph looking at the second and current Beaumont Bridge c.1890 (source: Hocken Collection Asset ID 6264)



Figure 13. Photograph showing the opening of the Beaumont Bridge in 1887 (source: Hocken Collections Asset ID 6263). The bridge approaches are clear here



Figure 14. Photograph of the Golden Gravel Dredging Co. Pontoon c. 1900 (Source: Hocken Collections. Asset ID 6266). The Beaumont Bridge is visible in the left background of the photograph

## 5 Previous Archaeological Work

### 5.1 General Archaeological Landscape

The archaeological landscape around Central Otago pertaining to Māori occupation consists of initial use predominantly for fowling, especially of moa (Hamel 2001: 15). Throughout Otago, these early sites were expansive and contained evidence of moa butchering and campsites that were repeatedly occupied. Few controlled excavations have occurred at these sites. Hamel (2001: 44) notes that many inland archaeological sites pertaining to Māori use of the interior are recorded as “ovens”, a term that can encompass umu tī and large oven sites, although ploughing makes these features indistinguishable.

The largest known early period site along Mata-au and near to Beaumont is the Millers Flat site (G44/10) situated approximately 17 km upstream of Beaumont (Hamel 2001: 19). This site consists of highly clustered oven sites that extend over at least three acres (SRF G44/10). This site is situated along a river flat and is distinguishable by surface scatters of oven stones, flaked stone material, adze fragments and moa bones. These have been disturbed by farming practices such as ploughing. The Millers Flat site is important to the discussion on Beaumont because it shows that relatively flat areas along the Mata-au were occupied by Māori and the remains of these occupations are visible within the highly silted reaches of the banks of the Mata-au. Archaeological sites (discussed in Section 5.3) record Māori use around Beaumont, although these have not been formally surveyed.

The European archaeological landscape around the interior of Otago is focused on gold mining activities. These started in the region as early as the 1850s, although it intensified in the 1860s (Hamel 2001: 158). Industrial archaeological sites such as dredges and tailings can be found along Mata-au. Townships tended to be established around gold-bearing seams, allowing miners to reduce travel

and farming practices also set up in the vicinity of these 'urban' centres. Historic domestic sites are found throughout the Central Otago region, as well as transport and communication and hotel archaeological sites.

## 5.2 Previous archaeological reports

An archaeological site survey was consulted that surveyed the Lower Clutha Area (Holdaway and Foster 1983). This report presented the results of eight weeks of survey prior to dam developments along the Clutha River, including the Project footprint. This survey looked at recorded archaeological sites that are discussed in Section 5.3. Holdaway and Foster characterised the Māori archaeological landscape in Beaumont as consisting of encampments. Information gathered for an archaeological survey revealed that river bank ovens are common archaeological site types throughout the area (Holdaway and Foster 1983: 15). During this survey, the authors noted that there was no visible surface evidence of the site (G44/3), however, test putting revealed that undisturbed material existed below the plough zone. The connection between this site was made with other early Māori sites such as the Miller's Flat site.

Brooks, Walter and Jacomb (2010) describe a dearth in archaeological knowledge regarding Māori in Central Otago, after the moa went extinct in the fourteenth century. Colonisation phase archaeological sites have been found throughout Central Otago, especially along major rivers that were utilised as transport routes. Māori archaeological sites throughout the area are typically stone quarries, artefact find spots, and midden and oven sites.

A heritage assessment was prepared by Chessa Stevens in 2016. This detailed the heritage components of the extant Beaumont Bridge structure and did not discuss the wider archaeology besides a brief discussion.

## 5.3 NZAA site records

Two archaeological sites, recorded in the 1960's, are located close to Beaumont Bridge (Figure 15). These are sites G44/3 (midden/oven) and G44/4 (find spot). Details are contained in Table 2. Following their initial recording in the 1960s and the revisit in the 1980s (Holdaway and Foster 1983). The sites were revisited in 2012, which revealed that oven sites remain below the plough zone (see Table 2). This is a clear indication that Māori were utilising the flat area around Beaumont.

Five other archaeological sites (G44/64, G44/86, G44/87, G44/88 and G44/143) are recorded between 0.8-1 km north of the Project area. These all pertain to historic era mining practices, including domestic and transport sites. Table 2 contains more detail about these recorded archaeological sites.

Table 2. Recorded archaeological sites around Beaumont

NZAA ID	Site Type	Grid Coordinates (NZTM)	Approximate distance to the nearest point of project area	Details from Site Record Forms
G44/3	Midden/Oven	E1330715 N4919071	0.3 km	Site recorded along 1966 fence line leading down small gully as ovens over 1.5 acres. Recorded as ploughed, which brought charcoal, oven stones and flakes to the surface. SRF contains limited information, although an update in 2012 notes that it was down Chinamans Flat Road in middle of paddock on left-hand side, past landowners house. During the site upgrade, a test pit revealed that there is undisturbed material below the plough zone.



G44/4	Artefact find	E1330286 N4919434	0.7 km	Site recorded as a find spot of a 1A adze on Mrs Morris's land. Recorded in 1965 and not revisited during the Site Upgrade Project.
G44/64	Mining - gold	E1330008 N4921080	1 km	Located upstream of Beaumont Bridge on river's true left. Recorded as tailing and dredge ponds across the whole flat, approximately 600 m upstream of the Beaumont River Mouth.
G44/86	Historic domestic	- E1330183 N4921035	0.9 km	Site recorded as a hut/floor site, associated with the railway. Site situated on river side of old railway formation approximately 20-30 metres north of the Beaumont River.
G44/87	Transport/communication	E1330333 N4920922	0.8 km	Old road bridge next to the old railway bridge. It is a mortared schist bridge abutment on both banks of the Beaumont creek.
G44/88	Mining - gold	E1330369 N4920978	0.8 km	Water race approximately 40 metres from new bridge. Is revetted in places. Race is 1.5 m wide.
G44/143	Historic domestic	- E1330309 N4920959	0.8 km	Hut platform by a revetment, supposedly built after 1900. Includes a hut floor site and a benched track that runs to the south of the project area.

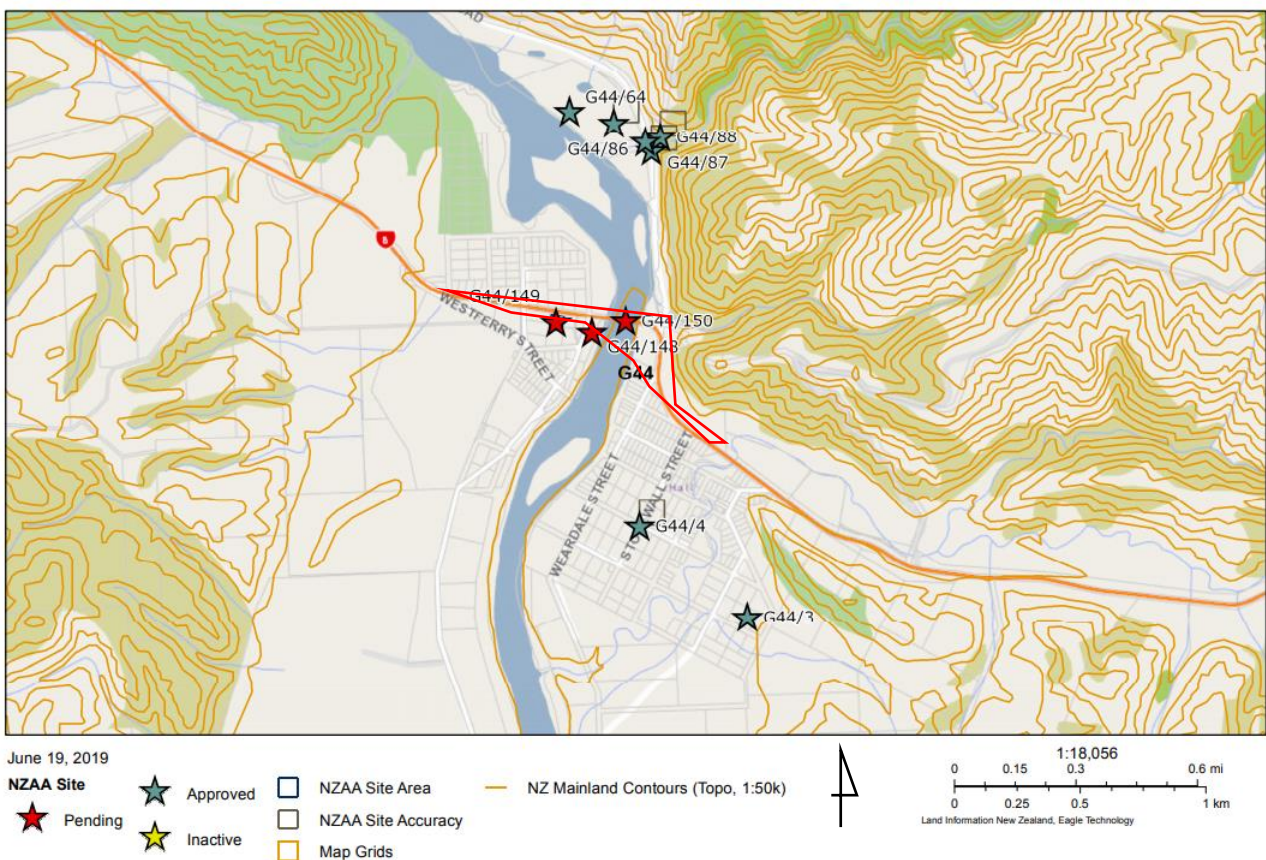


Figure 15. Map showing recorded archaeological sites in relation to the project area (red outline; source: ArchSite)

## 6 Site Visit Results

Three site visits were undertaken to the Beaumont Bridge by archaeologist Sam Kurmann. The first of these occurred on the 10<sup>th</sup> of August 2018 and was limited to a site walk over. The second occurred over the 15<sup>th</sup> and 16<sup>th</sup> of August 2018. The third occurred over the 24<sup>th</sup> and 25<sup>th</sup> of October 2018. The focus of the latter visits was to undertake monitoring of geotechnical trial pit excavations, which were undertaken to investigate the ground condition. Appendix C shows the locations of these trial pits, although note that Trial Pits 15 to 17 were not excavated. These geotechnical excavations were monitored under an Archaeological Discovery Protocol (ADP). This protocol worked under the limitations that if any intact archaeological deposits were encountered, the excavations had to stop, the archaeologist was required to record the archaeological remains and the trial pit could not be excavated further without an archaeological authority to do so from HNZPT.

The results of the archaeological survey and walk revealed two obvious subsurface archaeological remains near to the Project footprint. A house platform was encountered just south of the Project area (see below). The extant Beaumont Bridge approaches also comprised an obvious archaeological deposit.

The eastern extent of the road realignment was within a paddock (Figure 16 and Figure 17). The railway formation was visible in some areas of the walkover. Trial Pits 18 to 22 were located in this area and monitoring of these pits occurred on the 16<sup>th</sup> of August 2018. Ground truthing near the 1905 railway alignment revealed that the railway ballast must have been removed during decommissioning of the Roxburgh Line because it was not present at the site. The ground consisted of medium brown loamy soil with water-rolled gravels overlying a yellow silty clay deposit (Figure 18). These deposits were standard of the stratigraphy in the Beaumont Project area.

In TP 20, one plain, frogged brick fragment was encountered within the medium brown loamy soil, but no other potential archaeological remains were encountered. No subsurface archaeological evidence existed to indicate that archaeological features pertaining to the 1905 railway station existed.

A walkover was undertaken around the extent of Low Burn, the eastern most part of the Project area (Figure 19). Two archaeological sites were recorded on the lower reaches of the stream, and it was considered that there was potential for further Māori archaeological remains to be located. There were no potential archaeological deposits encountered during the site walkover. An attempt was made to relocate the previously recorded oven site (G44/3), however, this was unsuccessful. No attempt was made to relocate the find spot site (G44/4).

The survey began on the eastern bank of the Mata-au and walked over the road alignment in that area. There was one depression in the ground on the eastern bank that was near to a macrocarpa tree. There was a small brick scatter in the area, but no other surface evidence archaeological features. The topsoil of a small area on the eastern side of the bridge was stripped to allow access of the drill rig to the river channel (Figure 20). This consisted of grey silt and grey silty sand deposits. These deposits were alluvial in origin and could have formed in this area following the commissioning of the Roxburgh and Clyde Dams upstream and flooding events throughout the area.

A brief inspection of the extant Beaumont Bridge approaches was undertaken (Figure 21). This showed a dry-stacked stone wing wall on the eastern approach that was possibly associated with the 1877 original bridge (Figure 22). There was a significant amount ground that had been modified to allow the bridge approach to reach the deck of the bridge (Figure 23). The western side of the bridge revealed a similar amount of ground that had been modified to form the bridge approaches.

On the western side of the Mata-au, three trial pits were excavated. One (Trial Pit 12) uncovered a ring seal bottle top within grey silt in the upper layers. The other two trial pits consisted of grey silt

in the upper layers, which would have been deposited by flooding and general alluvial events. Other trial pits that were monitored that were further away from the river revealed a medium brown loamy soil with water-rolled gravels within it. The western area in proximity to the bridge abutments were terraced( Figure 24).

In the paddock immediately east of Rongahere Road existed a flat terraced platform (Figure 25 to Figure 27) near to where a house was depicted on the 1882 map (Figure 10). It is likely that this contains subsurface evidence pertaining to the house, such as a house foundation, rubbish pits and/or latrines. No subsurface investigations were undertaken.

Moving further west, the paddock that was immediately east of the Beaumont Hotel was examined because of the road alignment through this paddock (Figure 29). There was a shallow topsoil underlain by bedrock encountered from within the two test pits in the Project area. The current Beaumont Hotel was built upon the same location as the old Bridge Hotel (Figure 30). A camping ground at the rear of the hotel site is located approximately where the stable was depicted in the 1882 map (Figure 10). No visible evidence of archaeological remains existed within this part of the Project area, however, these could survive below the surface.



Figure 16. Photograph showing the old rail alignment (red arrow) looking north from eastern extent of Project area



Figure 17. Photograph showing the old rail alignment looking north from further west



Figure 18. General strata throughout the geotechnical trial pits



Figure 19. Low Burn, looking north from near State Highway 8 (eastern extent of Project area)



Figure 20. Photograph detailing a batter edge on the true left of the bank of the Mata-au



Figure 21. Photograph looking east of the Beaumont Bridge in the background and the Project area in the foreground



Figure 22. View looking south of the eastern Beaumont Bridge abutment, showing the built-up bridge approach in foreground



Figure 23. View of the Beaumont Bridge from downstream on the true right



Figure 24. View of the new road location looking north west (from the western side of Mata-au)



Figure 25. Photograph from south west of the Beaumont Bridge within the project area. Visible is part of a structure likely associated with an 1870s house



Figure 26. Project area within the paddock on the true right side of the river, looking towards the historic garden site depicted in Plan 748





Figure 27. Approximate location of the 1870s house - visible is the flat platform area (red arrow)



Figure 28. View looking north west of the Beaumont Bridge west abutment



*Figure 29. View of paddock between Rongahere Road and the Beaumont Hotel during monitoring, looking west*



Figure 30. View of proposed car park extension in proximity to the Beaumont Hotel (background), looking east



Figure 31. Western extent of the Project area, looking east

## 7 Research Results

The documentary sources indicate that the Beaumont township was first utilised as a place of temporary encampments as Māori were moving through the landscape between coastal and central Otago. Research at the Millers Flat site (G44/10) reveal information about the largest known early Māori archaeological site along Mata-au. This site extends for a large area and consists of oven and midden features that contain large amounts of artefact scatters. In Beaumont, similar archaeological site types are recorded to the eastern extent of the Project area, along Low Burn. While no archaeological remains pertaining to Māori occupation were encountered during the course of this archaeological assessment, only a limited area surrounding the waterways was ground truthed and there is still huge potential for encountering unrecorded Māori archaeological remains within the Project area. Holdaway and Foster noted that the banks of the Mata-au were highly populated with Māori settlements and it is possible that further unrecorded archaeological remains could exist along the banks of the Mata-au.

Europeans later settled at Beaumont after the 1850s. Beaumont's potential was first realised when reports of gold were relayed back to coastal settlements around Dunedin in the 1850s. People travelled to Beaumont along Mata-au and started to prospect for gold. Beaumont as a township was centred around being a key transport route for both pre-European Māori and later European use. It provided the first river crossing during the start of the gold rush in the form of a punt that was established to the south of the current bridge site in the 1860s. By 1874 the first bridge site was established on the same alignment as the current bridge. Later, in 1887, the current bridge was erected and still remains. By 1882, hotels, houses and stables were also established in Beaumont, along with a school, a black smith and other commercial buildings. The railway formation also exists within the Project area, however, because this was not started until 1905, it does not warrant protection under the HNZPTA, and therefore, has not been discussed in further detail.

As a result of this research, three archaeological sites were recorded in ArchSite that existed near to or within the Project area. These pertained to the house site located east of Rongahere Road (G44/148), the Hotel and Stable site (G44/149) and the extant Beaumont Bridge (G44/150) – see also Appendix D. It is also considered that further archaeological remains pertaining to the Māori occupation of Beaumont possibly exist, especially in proximity to the water ways.

### 7.1 Constraints and Limitations

This report is an archaeological assessment of the archaeological values of the project area. Statements are made as to the location and nature of archaeological sites, and their archaeological values. There are no statements on the Māori cultural significance of the project area, nor are the views of Tangata Whenua represented in this report. An assessment of cultural significance will not necessarily correlate with an assessment of the archaeological significance of the area.

## 8 Archaeological and other Values

Archaeological values relate to the potential of a place to provide evidence and information on the history of New Zealand. This is framed within the existing body of archaeological knowledge and current research. Statements on archaeological values of the project area are made below in regard to the Heritage New Zealand Pouhere Taonga guidelines for writing archaeological reports. No recorded archaeological remains are situated within the area of proposed works. However, unrecorded archaeological potential was identified in the area resulting from historic research and the site investigations.

This section presents the archaeological values that relate to archaeological sites G44/148, G44/149 and G44/150 that were recorded during the course of this archaeological assessment. It also presents the potential archaeological values that are associated with as yet unrecorded Māori archaeological

remains within the Project area. Based on the historic research for the Project area, it is unlikely that Chinese archaeological remains will be encountered. This statement considers the location of Chinese mining and encampment archaeological sites that are located to the north of the Project area, and the historic knowledge that Chinese communities were generally pushed to the fringes of European settlements (eg. Lawrence and Cromwell).

The following criteria are accounted for to assess archaeological values from within the project footprint:

- Condition – is the site in good condition?
- Rarity or uniqueness – is the site notable in any other way in comparison to other sites of its kind?
- Contextual value – context or group value arises when the site is part of a group of sites which taken together as a whole, contributes to the wider values of the group or archaeological, historic or cultural landscape. There are potentially two aspects to the assessment of contextual values; first, the relationship between features within a site, and second, the wider context of the surroundings or setting of the site.
- Information potential – what current research questions or areas of interest could be addressed with information from the site?
- Amenity value (e.g., educational, visual, landscape) – Does the site(s) have potential for public interpretation, access and education?
- Cultural associations – Does the site(s) have any special cultural associations for any particular communities or groups, e.g. Māori, European, or Chinese.

### 8.1 House site (G44/148)

This archaeological site is immediately south of the Project area on the true right river terrace of the Mata-au. It will not be directly affected by the current Project works; however, vehicle movements have the potential to affect the archaeological site.

Archaeological Values	House Site (G44/148)
Condition	The condition of the House Site is unknown. Any features will be in ground so may be relatively well preserved. However, it is possible that some damage to the site may have been caused by ploughing and other farming practice.
Rarity/Uniqueness	House sites are not rare throughout Central Otago, although few have been investigated through archaeological methods, making this a unique opportunity.
Contextual Value	The house site contains contextual value to other house sites throughout Beaumont, but also throughout the wider Central Otago region that pertain to gold mining era European occupation.
Information Potential	There is potential to gather information pertaining to foundation construction techniques. There is also potential to see diet from the contents of rubbish pits and latrines that could exist in the vicinity of the house site.
Amenity Value	The house site is situated on private property. However, it is close to the road, so the amenity values are moderate.
Cultural Associations	Colonial-era New Zealand

## 8.2 Bridge (Beaumont) Hotel and Stables (G44/149)

The Bridge Hotel and Stables sit within proximity to the Project area. It is possible that buried archaeological features relating to this archaeological site could be affected by the works.

Archaeological Values	Bridge (Beaumont) Hotel and Stables (G44/149)
<b>Condition</b>	The condition of the Hotel site and stables are unknown. Any features will be in ground so may be relatively well preserved. However, it is possible that some damage to the site may have been caused by farming practices or development associated with the current Beaumont Hotel and camp ground.
<b>Rarity/Uniqueness</b>	Hotel sites throughout Central Otago are not rare, although study's that use archaeological techniques to investigate hotel and stable sites throughout Central Otago are uncommon.
<b>Contextual Value</b>	The Bridge Hotel and Stables site will contain contextual value to other hotel sites throughout Beaumont, but also throughout the wider Central Otago region that pertain to gold mining era European occupation. The hotel and stable features would hold intra- and inter-site relationships between hotel sites from the late 1800s in relation to the Central Otago Gold Rush. There will also be contextual values to the colonial era landscape around Beaumont.
<b>Information Potential</b>	<p>There is potential to gather information pertaining to the layout of the wider Hotel and Stable site. Relationships between the hotel landscape could be revealed, such as locations of hitching poles, paths that allowed access to the hotel and associated out buildings, locations of latrines and rubbish pits.</p> <p>The actual contents of these potential features will allow information into construction techniques and materials to be gathered. The potential to see diet from the contents of rubbish pits and latrines that could exist throughout the site.</p>
<b>Amenity Value</b>	The Hotel and Stable site is situated on private property. However, it is used by the public. The amenity values are moderate.
<b>Cultural Associations</b>	Colonial-era New Zealand

### 8.3 Beaumont Bridge (including the approaches) (G44/150)

While the existing Beaumont Bridge is not within the scope of this report, the bridge approaches overlap the current Project area and are considered below given the potential to be affected by the works.

Archaeological Values	Beaumont Bridge (G44/150)
Condition	The condition of the bridge approaches is relatively intact.
Rarity/Uniqueness	Bridge sites throughout Central Otago are becoming more unique due to their age increasing. The Beaumont Bridge is especially unique because it is one of few iron-girder bridges. It has high heritage values, and the historic background in this report shows the importance that the bridge held to the Beaumont community but also the wider Central Otago connectivity that the bridge has allowed historically and presently.
Contextual Value	Holds contextual values with other bridges along Mata-au and other bridges around Central Otago, especially the Henley Bridge which is of a similar form to the Beaumont Bridge.
Information Potential	The Project will potentially be able to reveal some information about the construction of the bridge approaches.
Amenity Value	The Beaumont Bridge is situated on road reserve. The amenity values of the Bridge will improve as a result of this Project. It reduces the motor vehicle traffic over the bridge and will also be incorporated into the Clutha Gold Trail as primary access between the east and west sides of the Mata-au.
Cultural Associations	Colonial-era New Zealand

### 8.4 Unrecorded Māori archaeology sites

It is impossible to discuss these archaeological sites due to the nature of these sites not being found or possibly not in existence. However, potential values are presented based on local factors in and around the Beaumont realignment and Project area. They are also based on the likelihood of finding unrecorded archaeological remains in or near the Project area.

Archaeological Values	Unrecorded Māori archaeological sites
Condition	<p>The area around Beaumont has been used for farming and is prone to flooding. Farming practices have often included processes such as ploughing. Ploughing is detrimental to archaeological sites, especially midden and oven sites. It is possible that if archaeological remains are found that pertain to these site types, that the archaeological remains may be impacted by these farming practices. Archaeological sites that have been affected by these types of farming practices are likely to be in a poor to moderate condition.</p> <p>The condition of midden and oven archaeological sites around Beaumont will also likely be affected by flooding. However, in some instances (especially closest to Mata-au), the flooding could result in better preservation of archaeological sites due to the deposition of silt. This deposition provides a</p>

cap, or protective layer, that results in the archaeological site being less prone to erosion. In this instance, any unrecorded archaeological sites that have been affected by this process are likely to be in moderate to good condition. It is likely that these sites may be investigated using archaeological methods.

**Rarity/Uniqueness** While traditional accounts have strong evidence detailing the use of Mata-au as a thoroughfare between the coast and the interior, limited archaeological evidence has been located. The only known investigation of these sites is the Millers Flat site. This is due to issues such as mining and farming practices throughout Central Otago that have detrimentally affected the preservation of archaeological sites. Therefore, any potential archaeological remains that pertain to the Māori use of the Mata-au will have high rarity values. It will allow for investigation through archaeological methods that will add substantially to the archaeological knowledge of Central Otago. Moreover, it will add to the traditional knowledge of the area.

**Contextual Value** The contextual value of any Māori archaeological remains will be high. These could relate to the archaeological landscape at a local Beaumont level, including in relation to recorded archaeological sites G44/3 and G44/4 that are outside of the Project area (and were unable to be relocated). It will also hold contextual value throughout the wider, regional archaeological landscape from Lake Wānaka to the Mata-au River Mouth and the wider catchment of the Mata-au.

**Information Potential** Although information potential is largely dependent on the condition of any encountered archaeological sites, the information potential values range from moderate to high. There is potential to add to the knowledge about the Māori use of Otago's interior, including looking at practices around food procurement such as fishing (for tūna and other native fish species), fowling (for moa in early period but also there are strong traditions around weka hunting in the area) and harvesting of trees such as tī (*Cordyline australis*) through macro- (midden) and micro- (phytolith, starch etc) analyses.

Depending on the preservation of the archaeological remains, there could also be some archaeological evidence pertaining to intra-site structure and layout. The information potential is high.

**Amenity Value** It is impossible to comment on the amenity value of unknown sites.

**Cultural Associations** There are cultural associations between multiple Ngāi Tahu whanui in the area. These are:

- Te Rūnaka o Ōtākou
- Hokonui Rūnaka
- Te Rūnaka o Awarua
- Te Rūnaka o Waihōpai.



## 9 Assessment of Effects

### 9.1 Proposed works

The following scope of works pertains to the package of works proposed by the WSP Opus design team. The Project comprises the construction of a new two-lane bridge downstream of the existing structure including:

- Installation of an approximately 200m long, 5 span bridge with piled foundations excavated into the bedrock within the river and on the river banks;
- Realignment of the state highway on the approaches to the new bridge and construction of approach embankments up to 3m high;
- Intersection modifications including closure of side road intersections with the state highway (Westferry Street, Rongahere Road, Weardale Street) and upgrade of state highway intersections (Dee Street, Craig Flat Road and Stonewall Street);
- Construction of pedestrian and cycle linkages connecting the Clutha Gold Cycle Trail to the Beaumont Hotel and Rongahere Road and repurposing of the existing single lane bridge (deck and handrail modifications) which will be retained to for pedestrian and cyclist use;
- Construction of highway storm water systems including roadside swales, underground pipes and a landscaped storm water treatment basin on the eastern side of the river;
- Relocation of overhead power and underground telecoms cables and installation of street lighting at side road intersections;
- Construction of a new safe stopping area (rest area) at the eastern end of the existing bridge comprising car park and picnic facilities accessed from Craig Flat Road.

To complete the project, works will require earthworks (top soil stripping/stockpiling/re-spreading, excavation, placement of imported fill, rip-rap installation), trenching for underground services, pavement construction, excavation in rock for bridge foundations, bridge construction (reinforced concrete and structural steel), landscaping works and temporary works including construction of a temporary work platform into the river and establishment of contractors compound (storage for plant and materials and welfare facilities for workers).

This work scope is relatively general and the specific areas that will be affected have not been highlighted with certainty. For that reason, the next section is deliberately broad.

### 9.2 Potential effects

All pre-1900 archaeological sites are protected under the provisions of the HNZPTA, whether the sites are recorded or not. It is illegal to destroy or modify archaeological sites without an archaeological authority from Heritage New Zealand. This archaeological assessment has identified that there are risk areas associated with the Project works at Beaumont to realign the road and provide an alternate bridge crossing.

There is a risk of encountering unrecorded archaeological remains within the Project area. These potential remains are likely to be modified or destroyed by the road realignment and associated works.

There are potential effects posed to known or potential archaeological sites surrounding the Beaumont area associated with tranches of the work required to successfully realign the road and bridge around Beaumont. Works around the banks of the Mata-au pose risk for encountering unrecorded Māori archaeological remains, such as ovens. Excavation in these zones will be required for the bridge approaches and the realignment of the road. The potential effects of these proposed works are destruction or modification of any archaeological features.

Intersection modifications could have effects on unrecorded archaeological remains, however, these effects are currently unknown.

Works to repurpose the existing 1880s Beaumont Bridge that may include modifications will require additional archaeological and heritage inputs. A separate Heritage Assessment will provide advice on how to deal with affects to the bridge, being prepared by Chessa Stevens. However, works to or around the bridge approaches as part of the road realignment will be included in this package of works covered by this archaeological assessment.

Trenching and landscaping for drainage and services also has the potential to effect known and potential archaeological remains.

The safe stopping area may involve excavation in an area near to the Beaumont Bridge approaches. This will involve modification to part of an archaeological site.

All of these works have the potential to affect archaeological remains.

### 9.3 Site management

The management of the archaeology risk posed by the Project works should be undertaken under the guidance of an archaeological authority. The archaeological authority should be applied for to manage the potential of encountering and affecting archaeological sites throughout the entire Project area.

The archaeological authority should also specifically pertain to the following two images that were prepared to highlight the risk areas associated with the scope of works at Beaumont (Figure 32 and Figure 33). The red polygons highlight the general risk areas, which are based on (from west to east):

- Proximity to the Bridge Hotel and Stables. Archaeological risk is posed by those features as well as potential latrines, cobbled paths near stables and rubbish pits. This archaeological site is likely to be affected by the Project works, especially car parking and landscaping.
- Proximity to black smith, north of the Bridge Hotel. This site is outside of the Project area and is unlikely to be affected.
- Proximity to the Mata-au, a risk area for encountering Māori ovens and occupation sites. Should unrecorded archaeological sites pertaining to Māori occupation exist within the Project area, these are likely to be affected by the Project works.
- Proximity to the Beaumont Bridge, including its approaches. This archaeological site is near the Project area and the approaches are likely to be affected.
- Proximity to the house site along Rongahere Road. This archaeological site is just south of the Project area. Vehicle movements and temporary storage facilities could affect this archaeological site.
- Proximity to Low Burn, a risk area for encountering Māori ovens and occupation sites. This archaeological risk area is immediately east of the road realignment. The potential to affect unrecorded archaeological sites exists but is likely to be outside of the Project area.

Works within the highlighted areas should be actively monitored by a suitably qualified archaeologist, as will be stated in the archaeological authority. Particularly, monitoring of topsoil stripping, bulk excavation and trenching will require active archaeological monitoring. Works outside of the identified risk areas should be included in the archaeological authority area but should be monitored using On-Call Procedures. Works in these areas will require archaeological briefing to contractors but will not be actively monitored by an archaeologist. Instead, the contractor will be responsible for informing the Project archaeologist of any encountered suspected archaeological material. The archaeologist may choose to undertake compliance checks throughout the course of this phase of works.

Once Project timelines and personnel have been finalised and the archaeological authority is in place, a brief Site Instruction document should be prepared to highlight responsibilities of consultants, contractors and other team members in regard to the archaeological authority. This

will also detail contact mechanisms for Iwi, Heritage NZ and the Project archaeologist, where required.



Figure 32. Archaeological risk areas that require monitoring - western extent of Project area



Figure 33. Archaeological risk areas that require monitoring - eastern extent of Project area

## 10 Conclusion and Recommendations

NZTA are proposing to construct a new bridge across the Clutha River at Beaumont, downstream of the existing structure. This archaeological assessment has reviewed the archaeological landscape around the Project area in Beaumont, Clutha District.

The land around Beaumont has been used by people since Māori arrival to Aotearoa. Māori utilised Mata-au as a transport route into the interior of the South Island. Known early sites exist 16km of the Project area at Miller's Flat. There are other occupation sites throughout the Mata-au catchment, within 1 km of the Project area. Following European arrival, Beaumont was also utilised since the 1850s as part of the gold rush. Beaumont became a thriving township, centred on access to the gold fields and pastoral farming. Several different transport routes were bottlenecked at Beaumont, including the punts, the bridge and rail. These transport options were pivotal for the development of Central Otago during the latter half of the nineteenth century.

The proposed works are extensive within the Project footprint and involve the realignment of the road and supplementary works to provide services, improve intersections and associated landscaping activities. Some of these works have the potential to modify or destroy known and unknown archaeological sites. Therefore, a general archaeological authority should be applied for under Section 44(a) of the *Heritage New Zealand Pouhere Taonga Act 2014* from Heritage NZ. This is a requirement prior to the works proceeding.

The processing of the archaeological authority application should be determined under Section 50(1)(a) of the HNZPTA, whereby it should be processed within 20 working days following a 5 working day acceptance period. There is a further 15 working day statutory stand-down period for appeals. Allowance for the processing time for the archaeological authority should be made within the programme for this Project. The statutory processes required under the RMA will be covered in more detail in the AEE, which this archaeological assessment report informs.

### 10.1 Recommendations

The following recommendations are made regarding the road realignment and new bridge construction at Beaumont:

- That an Archaeological Authority should be applied for from Heritage New Zealand Pouhere Taonga prior to the works, under Section 44(a) of the HNZPTA. An Archaeological Management Plan should be prepared to support this application.
- That risk areas highlighted in Figure 32 and Figure 33 of this assessment be referred to as a guide to areas that should be monitored by an archaeologist during the construction phase of the new Beaumont Bridge.
- That further consultation with Iwi is undertaken as part of the archaeological authority application.
- That any encountered archaeological remains are recorded and investigated using standard archaeological practice.

## 11 References

- Anderson, A. 1998. *The Welcome of Strangers: An ethnohistory of southern Māori A.D. 1650-1850*, Otago University Press, Dunedin, N.Z.
- Anderson, A. and T. M. Tay (Eds). 2008. *Ngāi Tahu: A Migration Story*. Wellington: Bridget Williams Books.
- Brooks, E., Walter, R. and C. Jacomb. 2010. *Archaeological Baseline Survey and Management Plan of the Clutha Mata-au River*, Unpublished report prepared by Southern Pacific Archaeological Research for the New Zealand Historic Places Trust.
- Churchman, G. B., and Hurst, T. 2001. *The Railways of New Zealand: A journey through history*, Harper Collins Publishers, New Zealand.
- Cowan, W. J. 2010. *Rails to Roxburgh: the story of a provincial railway*. The Molyneux Press Ltd, Dunedin.
- Hall-Jones, J. 2005. *Goldfields of Otago: An Illustrated History*, Craig Printing Co Ltd, Invercargill, N.Z.
- Hamel, J. 2001. *The Archaeology of Otago*, DOC Science Publishing, Science and Research Unit, Wellington, N.Z.
- Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA)*
- Holdaway, S. and Foster, D. 1983. 'Lower Clutha Valley Archaeological Survey: A Survey of Prehistoric and Historic Sites in the Lower Clutha Area, Central Otago', unpublished report prepared for the New Zealand Historic Places Trust. Available through the Heritage New Zealand Pouhere Taonga Digital Library.
- Otago Regional Council, *Otago Regional Plan*, available online at <https://www.orc.govt.nz/plans-policies-reports/regional-plans-and-policies>
- Resource Management Act 1991 (RMA)*
- Stevens, C. 2016. *Heritage Significance Assessment: Beaumont Bridge, Clutha, Otago*, unpublished report prepared for NZTA.
- Taghipouran, N. & L. Abbot. 2019. *SH8 Beaumont Bridge Realignment: Geotechnical Factual Report*, unpublished report prepared for NZTA.
- Thornton, G. 2001. *Bridging the Gap: Early Bridges in New Zealand 1830-1939*. Reed Books, Auckland, N.Z.
- Yonge, J. 1995. *New Zealand railway and tramway atlas*, Quail Map Company, Southern Press Ltd, Wellington, N.Z.

### 11.1 Archaeological Site Record Forms

- Site Record Form, G44/3, NZAA SRS, 20/09/2018, available at <https://archsite.eaglegis.co.nz/NZAA/>
- Site Record Form, G44/4, NZAA SRS, 20/09/2018, available at <https://archsite.eaglegis.co.nz/NZAA/>
- Site Record Form, G44/64, NZAA SRS, 20/09/2018, available at <https://archsite.eaglegis.co.nz/NZAA/>
- Site Record Form, G44/86, NZAA SRS, 20/09/2018, available at <https://archsite.eaglegis.co.nz/NZAA/>
- Site Record Form, G44/87, NZAA SRS, 20/09/2018, available at <https://archsite.eaglegis.co.nz/NZAA/>
- Site Record Form, G44/88, NZAA SRS, 20/09/2018, available at <https://archsite.eaglegis.co.nz/NZAA/>

---

Site Record Form, G44/143, NZAA SRS, 20/09/2018, available at <https://archsite.eaglegis.co.nz/NZAA/>

## 11.2 Newspaper Articles

*Bruce Herald*, 1/10/1878, p.5, available at [paperspast.natlib.govt.nz](http://paperspast.natlib.govt.nz)

*Press*, 12/05/1885, p.2, available at [paperspast.natlib.govt.nz](http://paperspast.natlib.govt.nz)

*Star*, 23/05/1892, p.3, available at [paperspast.natlib.govt.nz](http://paperspast.natlib.govt.nz)

*Tuapeka Times*, 11/08/1886, p. 3, available at [paperspast.natlib.govt.nz](http://paperspast.natlib.govt.nz)

*Tuapeka Times*, 12/07/1879, p.3, available at [paperspast.natlib.govt.nz](http://paperspast.natlib.govt.nz)

*Tuapeka Times*, 22/09/1875, p.3, available at [paperspast.natlib.govt.nz](http://paperspast.natlib.govt.nz)

## 11.3 Archive Records

Archives New Zealand: Beaumont Bridge Site Survey 1882

Archives New Zealand: Town of Dunkeld Plan 1870

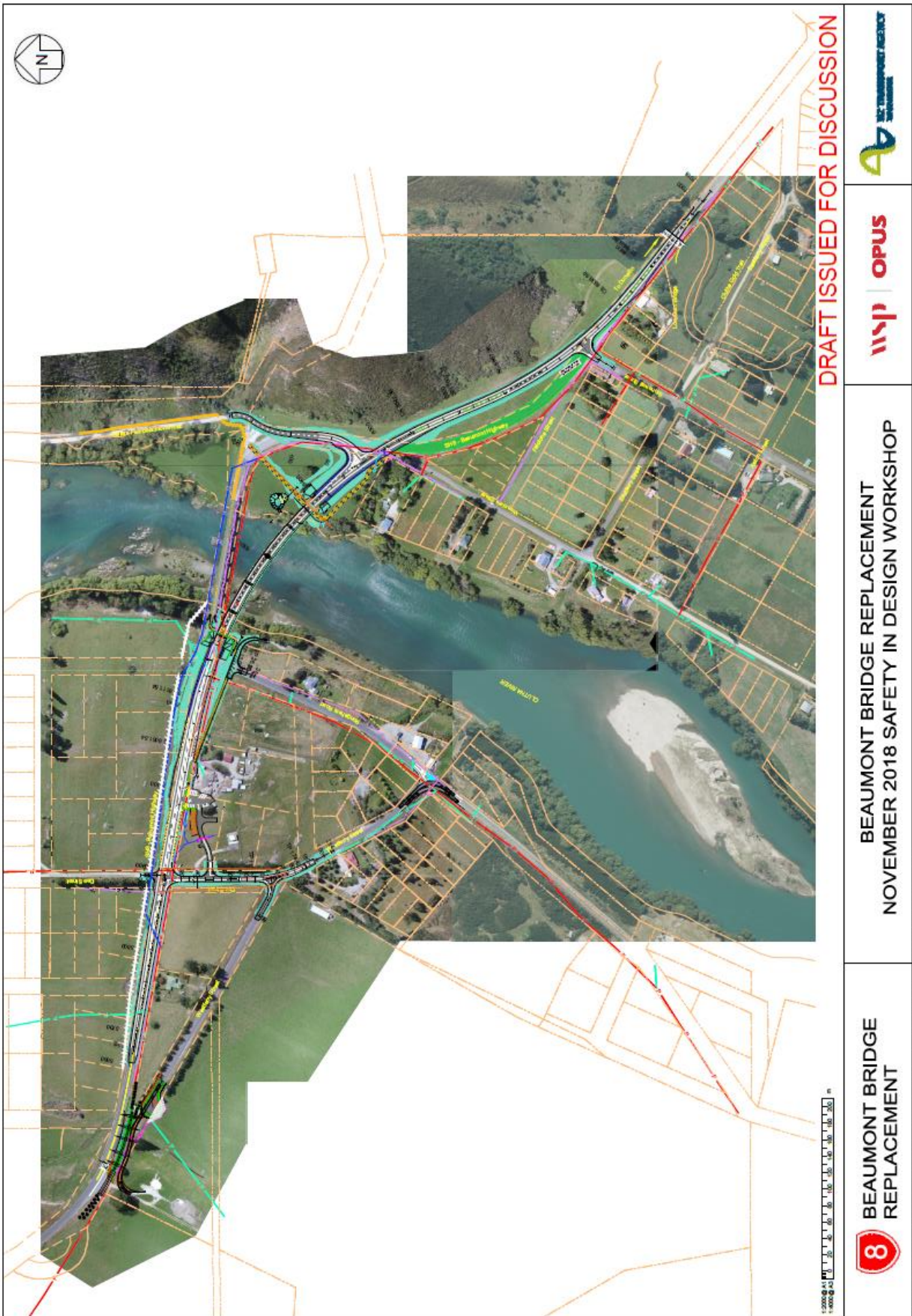
Hocken Collections Asset ID 6263

Hocken Collections Asset ID 6264

Hocken Collections Asset ID 6266

Survey Plans via Quickmap

# Appendix A – Plans of road realignment





DRAFT ISSUED FOR DISCUSSION



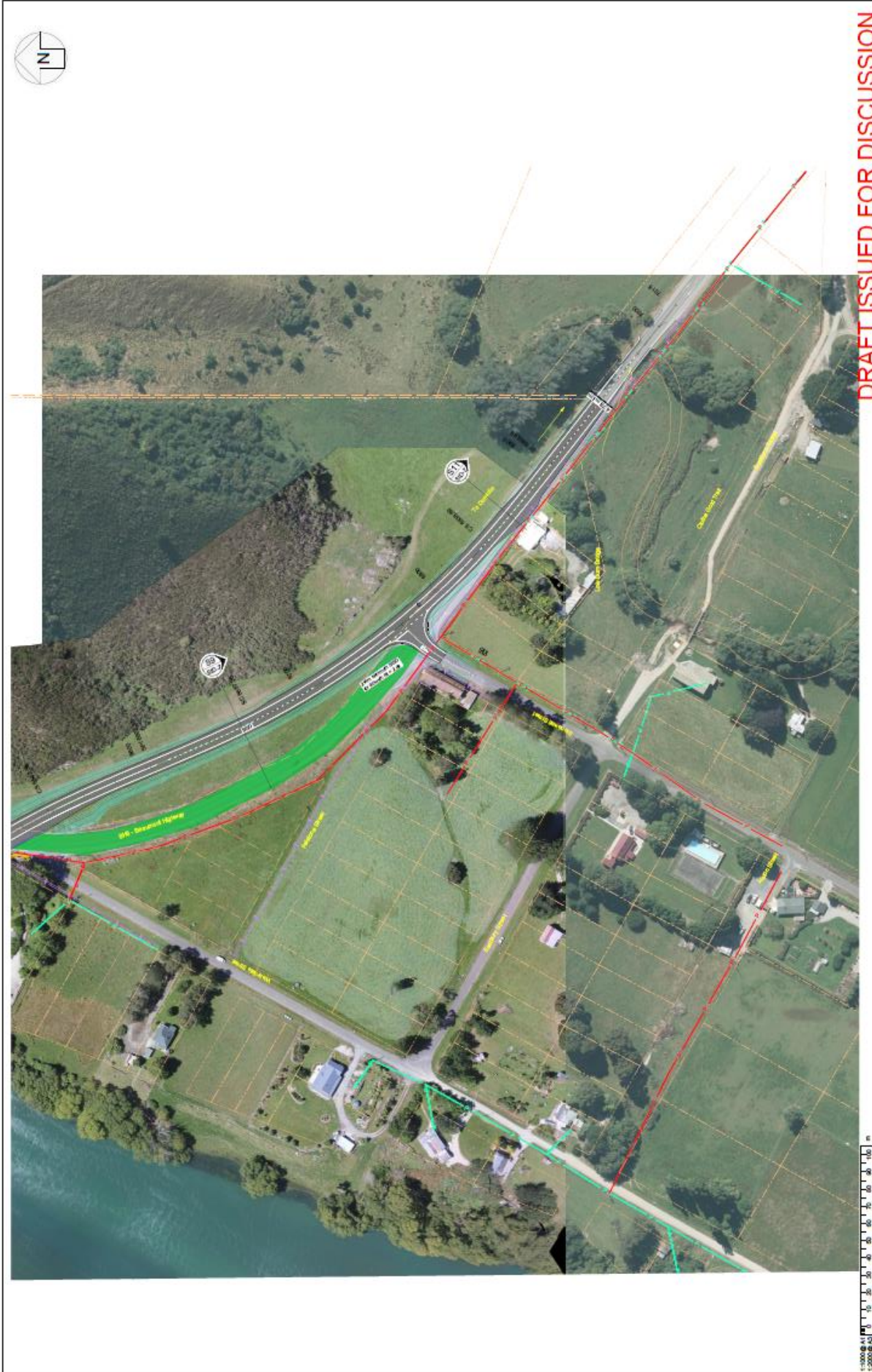
BEAUMONT BRIDGE REPLACEMENT  
NOVEMBER 2018 SAFETY IN DESIGN WORKSHOP

8 BEAUMONT BRIDGE REPLACEMENT



DATE: 04/07/2019 PROJECT NUMBER: 6-ATM19-00 SHEET 018 OF 81





DRAFT ISSUED FOR DISCUSSION



BEAUMONT BRIDGE REPLACEMENT  
NOVEMBER 2018 SAFETY IN DESIGN WORKSHOP

8 BEAUMONT BRIDGE REPLACEMENT

## Appendix B – History of the Site (Stevens 2016:6-22)

Archaeological research suggests that Maori presence in central and southern Otago dates back at least as far as the 13th century, and that the area was an important focus of activity during the Archaic (or moa hunting) period. Summarised histories prepared by community groups and local authorities refer to the seasonal explorations and establishment of river trails through inland Otago by early Maori; and particularly to mahinga kai trails along the Mata-au (Clutha River).

According to the Central Otago District Council:

The Mata-au [Clutha River] marked the boundary between Ngāi Tahu and Ngāti Mamoe. Ngāi Tahu held the mana over the land north of the Mata-au and Ngāti Mamoe south. Eventually the division was overcome with union between the two tribes. For Ngāi Tahu the Mata-au was part of a mahinga kai trail that led inland used by Otakou hapu including Ngāti Kuri, Ngāti Ruahikihiki, Ngāti Huirapa and Ngāi Tuahuriri.

Archaeological discoveries of stone quarries, as well as tools, sharpening stones, feathers and bones indicate that these trails were also used to collect materials such as argillite, transport pounamu to and from the west coast, and hunt Moa. During these explorations, campsites or seasonal settlements were established; and the remains of such sites have been found near Beaumont. These were recognised from the earliest days of European Settlement, with one of the first stations to be established being named Oven Hills Station, referring to the high concentration of Māori ovens on the land. Urupa (burial places), tauranga waka (landing places), and battlegrounds have also been found along the Mata-au.

According to Brooks et al (2010):

Very little is known of the use of the interior of southern New Zealand after the extinction of the moa [14th century] and it is possible that Central Otago was more or less abandoned until shortly before European contact.

The coastline of Otago was recorded by Captain James Cook during his navigation of New Zealand aboard Endeavour in 1770. Molineux's Harbour – the mouth of the dual branches of the Clutha River (Figure 2) - was named for Robert Molineux, the Endeavour's sailing master. However, Cook did not land in the area. The first contact between local Maori and Europeans is understood to have come sixty years later, when the American sea captain and explorer Benjamin Morrell visited Molineux's Harbour in 1830. In his disputed memoir, *A Narrative of Four Voyages*, Morrell refers to the harbour as "Molyneux" Harbour, and describes visiting a local Maori settlement inland from the harbour on the banks of the river.

It is by combination of these events that the Clutha River and wider area became known as "the Molyneux" as McLintock (1966) explains:

The early whalers and settlers of South Otago called the [Clutha] river and the district the Molyneux, and the name survived well into the gold mining era. It has often been stated that Cook gave the name Molyneux to the river, but this is incorrect for he never saw it ... The correct name is the Clutha, first suggested in 1846 when the Scottish emigrants were preparing to settle in Otago.

Clutha is derived from Cluidh, the Scots Gaelic name for the River Clyde in Glasgow, Scotland.<sup>13</sup>

In 1853, the 23-year-old Nathanael Chalmers was the first European to venture up the Clutha River. Chalmers had first arrived in Otago in 1849 with his brother G. A. Chalmers; and, after a brief attempt at gold mining in Australia, returned to Invercargill from where he assisted in driving a mob of cattle overland to Dunedin. On this journey he met the Maori chief Reko, who agreed to take Chalmers inland to the north in search of good farming country. Travelling on foot, he was guided by Reko

and another Maori chief, Kaikoura, from Tukurau, southwest of Gore, up to Lake Wakatipu and beyond. When Chalmers became ill with dysentery Reko and Kaikoura constructed a flax raft or mokihi, and travelled down the Clutha River back to European company, passing through the sites of later European settlement including Beaumont.

Explorer-surveyor John Turnbull Thompson was appointed to the position of chief surveyor of Otago following his arrival in New Zealand in 1856. Up until this time, only the coast of Otago had been mapped.

... Thomson accepted the challenge of exploring and mapping this huge territory... During 1857 and early 1858 he carried out his marathon reconnaissance survey of Otago, covering the whole province on horseback in a series of sweeps that took him as far west as the Waiau River and as far north as Mt Cook ... As a result of his survey the first map of the interior of Otago was published in 1860.

In the same year as Thomson began his surveys, European run holders began to explore the Upper Clutha valley in search of land suitable for establishing new sheep runs. Several large stations were soon established along the Clutha River, including: Bellamy Station, the starting point for run pioneers heading further into the Upper Clutha; Beaumont Station of over 30,000 acres on the eastern side of the river, named for Beaumont Burn on its southern boundary; Dunkeld Station, across the river from Beaumont Station; and Moa Flat Station of over 71,000 acres on the western side of the river.

In conducting his survey, Thomson named several areas after places in his home country of Scotland. Beaumont township, which was established at the location of a natural river crossing on the borders of Bellamy, Beaumont and Dunkeld Stations, was originally named by Thomson as "Dunkeld", a Gaelic name from Perthshire. However, the Beaumont Burn quickly became familiar to local residents and travellers, who inevitably began to refer to the area as "the Beaumont".

Following the discovery of gold at nearby Gabriel's Gully in May 1860, miners and prospectors began exploring the lower and upper Clutha en masse, and the river crossing at Beaumont quickly became vital. An account of Beaumont's history given by the website of the Beaumont Residents Group states that the first Beaumont punts operated from 1860; however, an article in the Otago Daily Times in 1864 states that various private applications to put punts in place at Beaumont and Teviot had been turned down by the Government on the grounds that they were about to undertake the works. It is evident that a punt was operating by 1868, when the lessee, Mr Botwell, requested that the approaches to the punt be repaired.

From 1863, Beaumont was also the head of navigation for steam-powered trading vessels travelling up the river from Balclutha. In this same year, gold dredging on the river was pioneered near the settlement as alluvial gold became scarce; though it was not until the 1890s that dredging became a popular method of sourcing gold.

By 1870, there were three hotels catering for travellers in the settlement - the Crookston, the Beaumont Ferry and the Duke of Edinburgh; the Beaumont Racecourse was opened; and the last town sections were put up for sale by auction at a cost of £5. The earliest survey map of the area that has been sourced in preparing this assessment is dated 1871 (Figure 8). Development continued throughout the 1870s, with the opening of a church and the school.

Around this time, a traveller through Beaumont observed:

that several new buildings or improvements were in the course of erection. Mr. Cowap is having a commodious hotel built on the site of the old house, and I have no doubt the establishment will prove highly convenient to all travellers. My consternation may be imagined when I was informed that there was very little chance of my getting across [the

river] as the high wind rendered the passage dangerous; however ... I was safely ferried over the broad bosom of the Molyneux.

As this passage implies, the Beaumont punt was vulnerable to weather conditions and could be unreliable, leading to calls for the construction of a bridge. The first bridge at Beaumont was privately commissioned by William Hayes in 1873, and constructed by David McDonald. Supported by stone piers and abutments set onto rock, this bridge had six spans constructed in timber: two of 16 metres at each end, being “ordinary undertrussed girders”; and two of 30 metres in the centre, “built on the lattice girder principle”. The cost of construction was approximately £7,000.

While construction commenced at pace, significant delays were caused when the wire rope used to convey the blocks of stone from the river banks to the piers snapped only a few months into the project. However, McDonald executed the installation of the 30 metre-long bridge girders without incident; and the bridge was opened to foot traffic in September 1874. While it was not heralded for its architectural beauty, the bridge was evaluated by the public as an imposing structure with “a look of strength and durability”.

The construction of roads in the area was slow, and McDonald and his team were forced to build their own tracks to get materials to the bridge site. Roads connecting with the bridge were surveyed in 1874, and construction then began on the approaches. However, these remained incomplete when the bridge was opened to pedestrians; and it was not until November 1874 that the eastern approach, which had to be built up by approximately 10 metres, was passable for traffic.

It was expected that traffic on the road through Beaumont would be substantially increased as a result of the erection of the bridge; however, the slow construction of adequate roads servicing the area restricted use of the route, and therefore the bridge. The comparatively low cost of the punt, and the lack of facilities such as a hotel and paddocks for resting animals at the site, also contributed to the poor uptake in use of the bridge.

In 1875 Hayes placed the bridge on the market; and, in 1876, it was sold to the New Zealand Loan Company who on-sold it to J. F. Kitching. Kitching also purchased the punt. With his ownership over both methods of river crossing secured, Kitching increased the bridge tolls. This caused widespread complaint; however, Kitching refused to lower his prices, stating that the bridge being private property and he was entitled to charge as he pleased. Kitching also constructed a new hotel at the bridge – the Bridge Hotel – along with his own stables and outbuildings.

Towards the end of 1877 the Tuapeka County Council began investigating the purchase of the bridge; and the Government agreed to contribute the sum of £5,000 to the cost. While there was some dispute over the state of the bridge – particularly the extent of rot in the main timbers – and Kitching made it clear that he would not accept an offer of £5,000, the Council pursued the purchase. This had the general support of the community who were in favour of removing the tolls opening the bridge for free traffic.

Before any purchase could be agreed, however, the Clutha River experienced severe flooding. On 27 September 1878, the water was reported as being right up to the roadway of the bridge, which was “shaking in a most dangerous manner”. On 28 September, the Tuapeka Times reported that one of the piers and the abutments on the Lawrence side of the bridge had been carried away, and one of the “principal beams” of the bridge was cracked. Floodwaters subsided briefly, but began to rise again on the morning of 30 September; and the centre of the bridge was washed away that afternoon. The Evening Star described the event:

Mr Jacob Davidson, with a buggy, was the last person to cross, and just as he landed on the Lawrence side the bridge went away in two pieces. Both sections of the superstructure sailed away down the river, locking like two large punts. One stone pier was carried away, and there are two apparently sound... The telegraph line crossing the river is broken and cannot be repaired, as there is no boat available, and it is questionable if one could live in such a torrent...

Beaumont town is partly under water. Some of the residents cleared out last night. No communication can be held verbally with the opposite bank, owing to the high wind.

Several other bridges over the Clutha were also washed away in the flood.

Under the instruction of the County Engineer, work to construct a free punt across the river at the site of the bridge was commenced as a temporary measure while the re-erection of the bridge was discussed. However, Kitching, with his own punt back in operation, quickly asserted his right to both banks of the river for three miles either side of the bridge site. The Council conceded, and ceased construction of the free punt, while Kitching once again began to charge exorbitant tolls.

With the loss of the bridge, and the high cost of the punt, traffic between Dunedin and Alexandra, Clyde, Cromwell, Cardrona, and other goldfields in the area was diverted to other roads, and local businesses in Beaumont began to suffer. At a public meeting in March 1879, the Council agreed to offer Kitching the sum of £3,000 for purchase of the bridge site including the punt; however, negotiations between the two parties failed to result in an agreement.

In late 1879, the community petitioned the Government to re-erect the bridge, or to force the Council to do so. In response, the Parliamentary Public Petitions Committee stated that the Government had already agreed to contribute £5,000 for the purchase of the previous bridge, £3,000 of which had already been advanced to the Council for this purpose. Further, the Public Petitions Committee noted, the £3,000 had not yet been used to make the purchase, and they recommended the Government take immediate action to recover the money. Simultaneously, the New Zealand Loan and Mercantile Agency Company began demanding payment of the greed £3,000 with interest on Kitching's behalf.

The Tuapeka County Council finally paid to Kitching, with interest, the sum of £3,000 to purchase the land associated with the former bridge and existing punt in January 1880. The County Engineer, William Smaill, estimated the cost of constructing a new bridge in the same location at just over £7,000. The Council resolved to call for tenders for the construction of a new bridge on the basis that the Government's offer to contribute £2,000 to the cost of construction was secured. The Council was also faced with the cost of repairing roads and other bridges throughout the district following the floods, and finances were tight.

In February 1880, John McCormick, who had erected two bridges over the Kawarau River and was, at the time, erecting another on the Queenstown Road, made an offer to the Council to construct this bridge in iron imported from England, to plans and specifications prepared by "a competent Engineer". However, his offer was rejected by the Council on the grounds that no plans or specifications were presented to show the style, materials, height or width of the bridge; and his price was too high. This caused considerable debate within the Council, especially as some councillors considered it likely that the Government's offer to contribute a further £2,000 to the cost of the bridge would soon lapse.

The Government did not withdraw the funds; however, a letter from Public Works Office to the County Council in April 1880 confirmed that they would not enter into any agreement to provide the money unless and until the expenditure of money already advanced had been properly accounted for.

In May 1880 a second offer to construct the bridge was made to the Council, this time by R. Campbell & Co of Dunedin; and, like McCormick's offer, this was declined.

The Council continued to seek payment of the £2,000 from the Government; and, in June 1880, a deputation was put before the Minister of Public Works. The Minister responded that the Government "would be prepared to pay it as a first progress payment on the Council entering into a contract for the re-erection of the bridge". Still an agreement between the two parties could not be reached, with many councillors arguing that the County did not have the necessary funds to

make its contribution; especially given the high cost of maintaining the roads in the area. Motions by pro-bridge councillors to call for tenders to construct the bridge were repeatedly lost to those who were against. Letters were exchanged between the Council, the Department for Public Works, and Treasury; but the Government remained unmoved. Meanwhile, the punt continued to operate at what many members of the community considered to be an unreasonably high cost.

Finally, the Council was advised to apply for assistance under the newly passed Roads and Bridges Construction Act 1882 for the balance of funds; and, after the Council applied for a much higher sum of £7,000 the Government agreed to contribute £6,000; however, this was also to cover the cost of re-erecting another bridge over the Clutha River at Roxburgh. Plans and specifications for the Beaumont Bridge, were received by the Tuapeka County Clerk in April 1883; and the first tenders were called for its construction.

Construction of the Beaumont Bridge was carried out under two contracts: the first for the piers and abutments; and the second for the superstructure. The first contract commenced in September 1883 and was set down for completion in January 1884; however, for reasons discussed in Section 2.2.1 it was not until mid-1885 that the piers and abutments were complete and construction of the superstructure was able to commence.

During this time, the punt continued to ferry passengers, vehicles, and stock across the river at Beaumont. In November 1886, it overturned, throwing the punt man, three passengers, and a wagon of goods drawn by four horses, into the river. Men working on the Beaumont Bridge witnessed the accident, and managed to rescue three of the four passengers from downstream. The fourth passenger, a nine year old girl, was unable to be rescued. The punt reopened within a few weeks; however, the accident led some to believe that the state of the punt had been neglected by the Council due to the imminent completion of the bridge.

The Beaumont Bridge officially opened in March 1887, by which time the township of Beaumont had a store, butchery, bakery, blacksmith, and post office, in addition to the hotels, church and school. With the opening of the bridge, the punt was finally closed. This was a relief to the Council, who, by ruling of the Supreme Court, were held responsible for the punt accident. To recoup the resulting financial losses, the Council proposed to charge waggoners a toll for crossing the new Beaumont Bridge. Not surprisingly, this proposal was not viewed favourably, and the matter was later dropped.

Land on either side of the bridge, held in reserve, then became the subject of community debate, with the Land Board resolving to keep some in reserve, with a remainder being surveyed into one acre lots and offered for sale. The land held back was leased periodically to locals for pastoral purposes.

Beaumont boomed in the 1890s with the arrival of steam-powered and then electric-powered gold dredges to the Clutha. In 1895, a correspondent for the Tuapeka Times reported:

The Molyneux and the Beaumont are now attracting the attention of the mining public. The local Co-operative Hydraulic Sluicing Co., whose claim is located a little above the Beaumont bridge, have started the cutting of their headrace. Two parties have contracted for over threefifths of the entire length... This claim has the reputation of having a very rich run of wash (an old bed or channel of the river) running through it. This channel or riverbed was followed by a party of miners in the sixties till they were bested by water... Two licensed holdings are also applied for, one above the Beaumont bridge and one below, and it now remains only a matter of time when the whole of his hitherto neglected, portion of the river will be taken up for dredging purposes.

Similar reports continued throughout the late 1890s, as reported in the Otago Witness:

The Tuapeka Dredging Company, whose claim is above the Beaumont bridge, are very reticent as to their returns. I was privileged, however, at their last week's wash-up to get the yield handed to me for my judgment as to weight, and it was heavy, considering the ancient and out-of-date dredge they have to work with. This party, I understand, are negotiating for a new and powerful dredge to supplant their present one, and when this is achieved something phenomenal in the way of returns is expected.

In January of this year [1897] three dredging claims were taken up in the Molyneux River – seven, nine and 12 miles respectively – below Beaumont bridge ... the area of each of the claims is 50 acres, and the total capital proposed to be invested is £19,000.

It has been estimated that approximately 150 gold-dredges were active on the Clutha River during the 1890s. By the turn of the century the boom had reached its high point, and slowly began to decline; though dredging continued on the Clutha for several decades leading to a second, smaller boom in the 1930s.

In 1905, construction of a long awaited extension of the railway line from Lawrence, through Beaumont to Roxburgh, commenced. It was hoped that, by making access to the Upper Clutha easier, industries other than gold mining and sheep farming would begin to prosper – particularly the industry of fruit growing. However, construction of the line was slow, taking almost ten years to reach Beaumont. By this time, the local population had lost all expectation that the line would ever reach Roxburgh; and, instead, began to demand that the main road be made suitable for motor vehicles. Never-the-less, construction continued and, during the following decade, the population of Beaumont reached its highest point as railway workers and their families took up residence. Beaumont remained the terminus of the branch line until 1925 when the extension to Millers Flat finally opened. The line did not reach Roxburgh until 1928, by which time it was not just fruit growing, but also forestry, that had become established industries in Beaumont.

These industries saw Beaumont through the Great Depression. The Beaumont Racing Club continued to operate; and a new hotel was constructed to replace the Bridge Hotel shortly before the outbreak of the Second World War. This hotel remains operational at the time of preparing this Assessment.

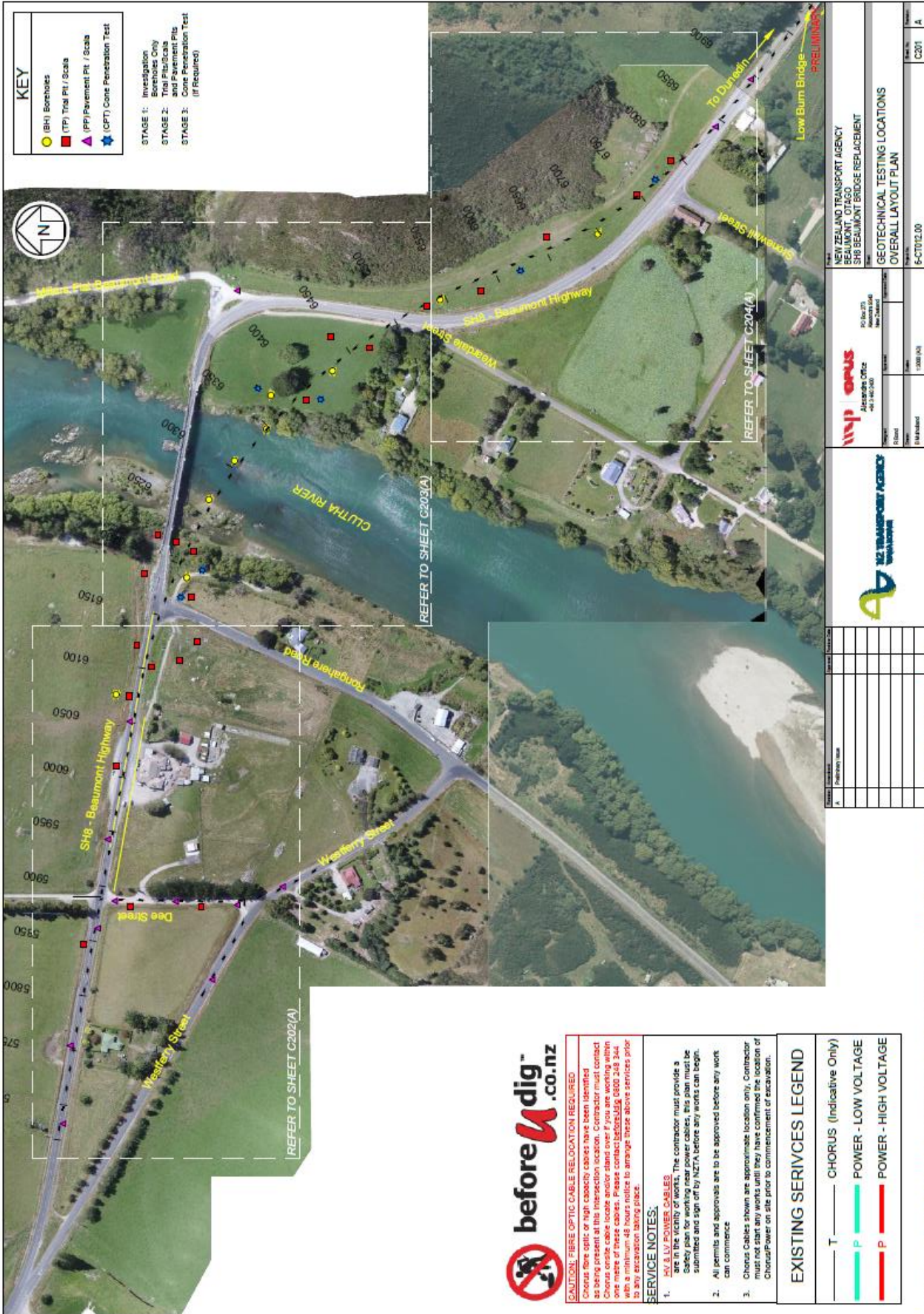
However, closure of the railway branch line in 1968 signalled the start of a significant decline that was exacerbated by the rise of large land holdings, changes in the horticultural sector, and closure of the local forestry headquarters. During the 1980s, the Racing Club and the school were officially closed. The school house remains extant today, though it is evident that it has been considerably modified over the course of its life. The racecourse has been utilised for horticultural purposes.

These factors notwithstanding, an aerial photograph of Beaumont taken in 1955 (Figure 18) indicates that the size of the settlement has changed little since this time. While some homes and farm buildings have been demolished, many remain though may have been extensively modified.

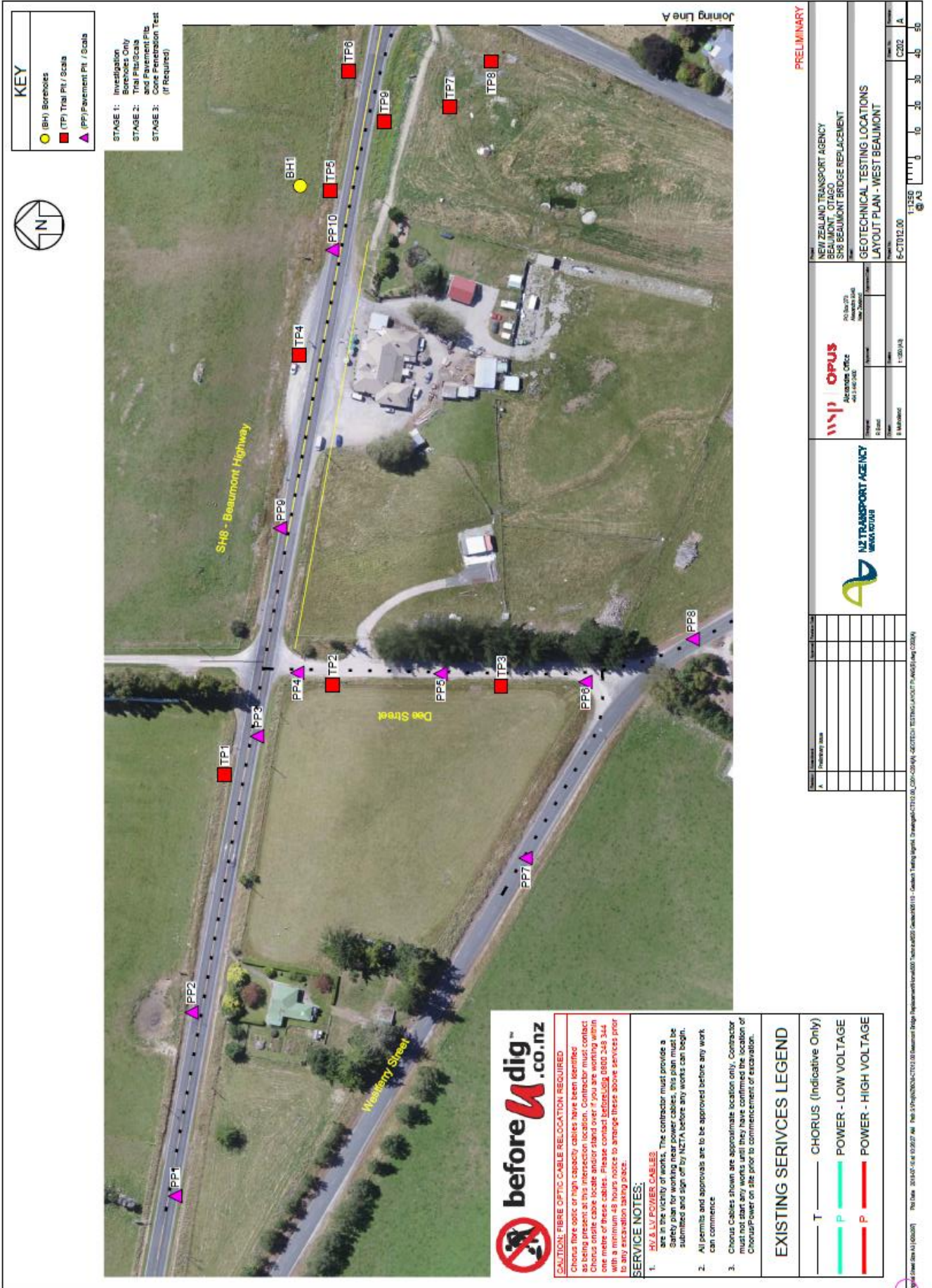
In 1992, the Electricity Corporation of New Zealand (ECNZ) proposed the construction of a dam at Tuapeka Mouth that would flood 3,000ha of land, including all of Beaumont. Some locals agreed to sell their land; however, others were determined to resist, forming lobby groups including "Hands off Beaumont" to protect the township's "rich history and its attractive and distinctive environment". Plans for this dam, along with others along the Clutha, were officially abandoned in 2012.<sup>89</sup>

The Beaumont Hotel remains open for meals and accommodation, and hosts the annual Beaumont Motorcycle Rally along with other community events.

# Appendix C – Locations of Trial Pits







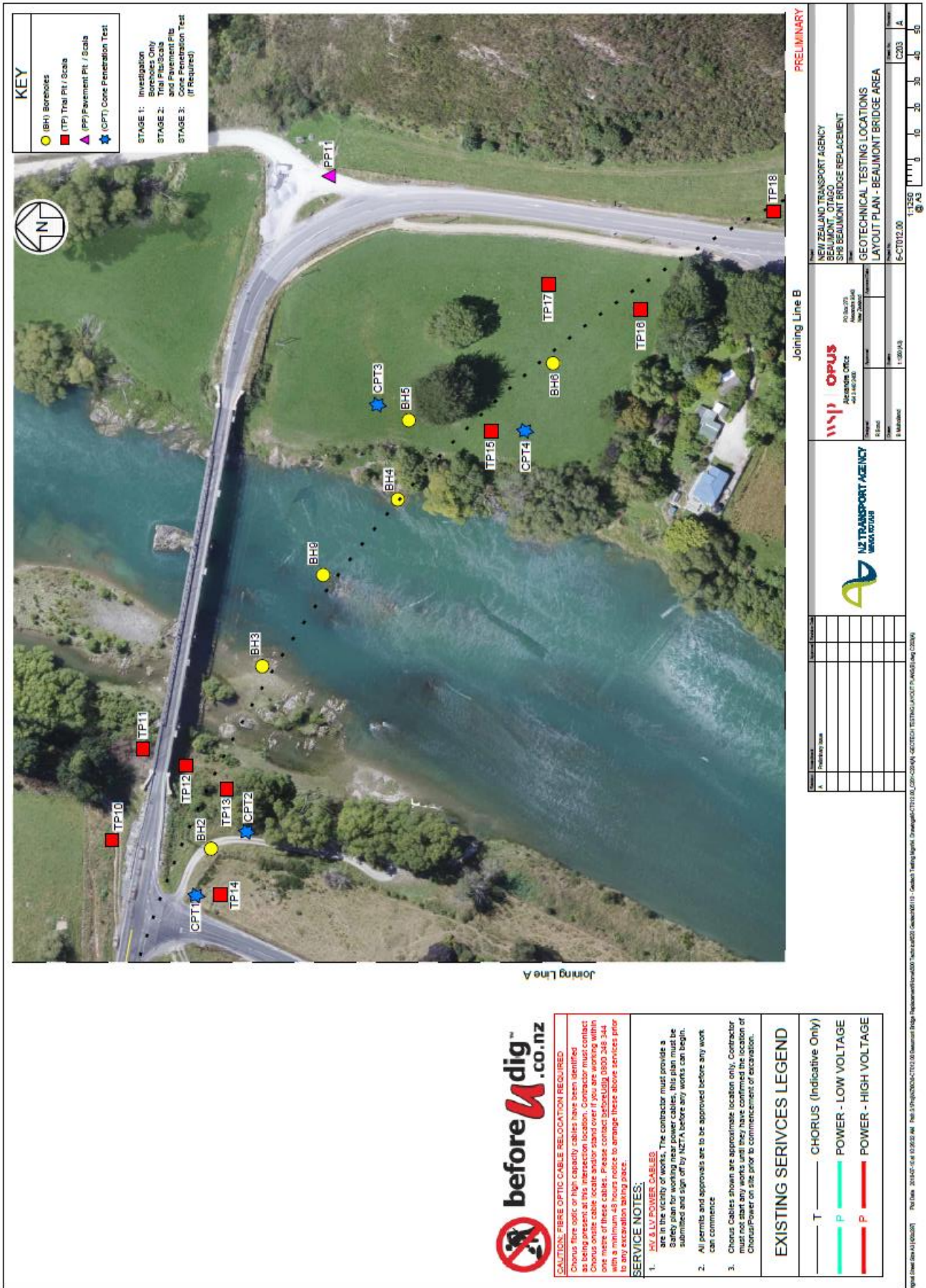
**PRELIMINARY**

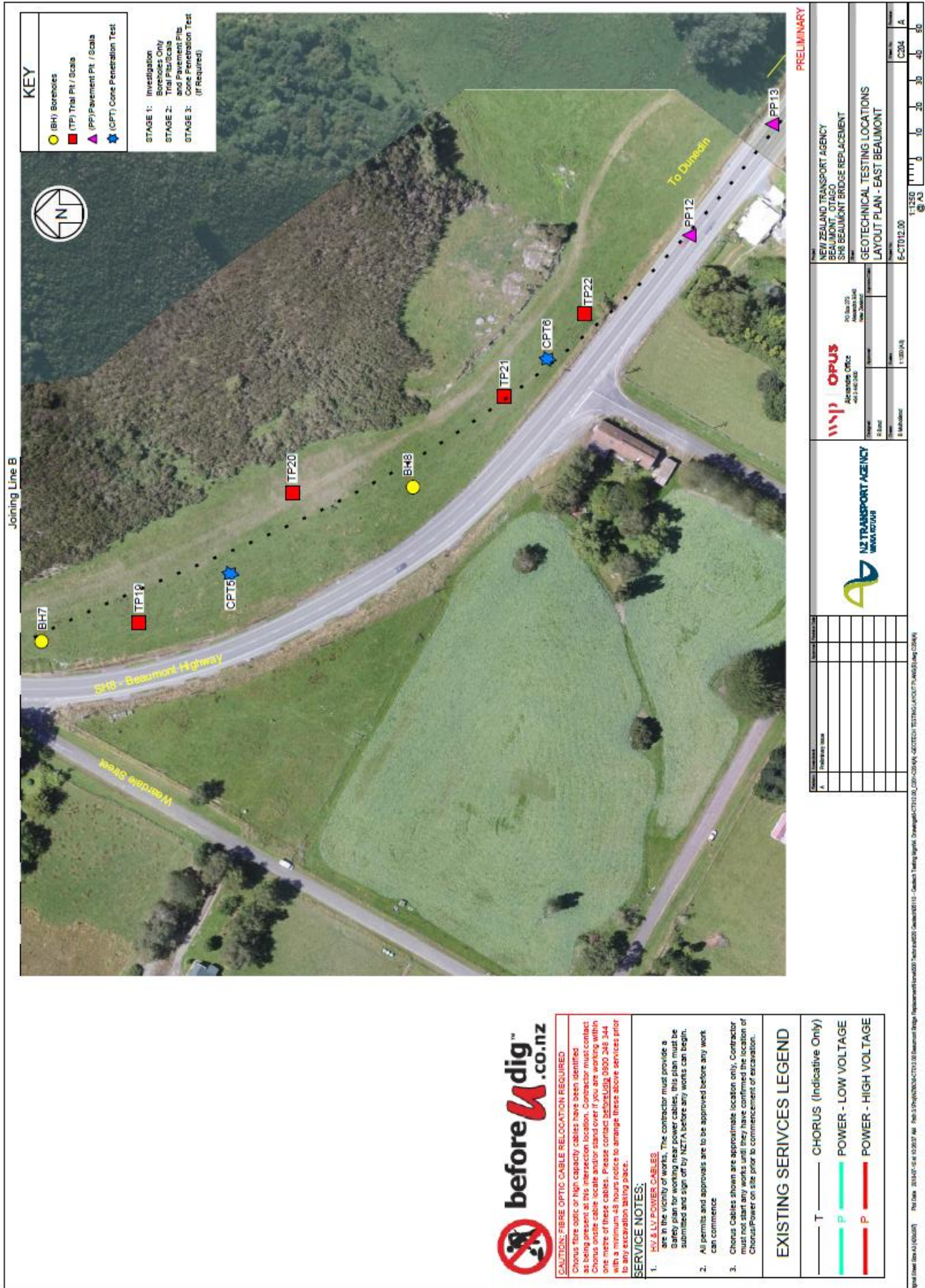
Client	NEW ZEALAND TRANSPORT AGENCY BEAUMONT, OTAGO
Project	SH8 BEAUMONT BRIDGE REPLACEMENT
Drawn	OPUS
Checked	OPUS
Scale	1:200 (A3)
Date	6-CT012.00
Revision	A
Drawn	OPUS
Checked	OPUS
Date	6-CT012.00
Revision	A

Geotechnical Testing Locations Layout Plan - West Beaumont

Scale: 1:200 (A3)



Scale: 0 10 20 30 40 50





## Appendix D – Recorded Sites within Project area


NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p><b>Site Record Form</b></p>	<p><b>NZAA SITE NUMBER:</b> G44/148</p> <p><b>SITE TYPE:</b> Historic - domestic</p> <p><b>SITE NAME(s):</b></p> <p><b>DATE RECORDED:</b></p>
<p><b>SITE COORDINATES (NZTM) Easting:</b> 1330096      <b>Northing:</b> 4920201      <b>Source:</b> On Screen</p>	
<p><b>IMPERIAL SITE NUMBER:</b>      <b>METRIC SITE NUMBER:</b> G44/148</p>	
 <p>Scale 1:2,500</p> <p>Send Information New Zealand, Eagle Technology</p>	
<p><b>Finding aids to the location of the site</b> In paddock east of Rongahere Road approximately 70 metres south of the SH8</p>	
<p><b>Brief description</b></p>	
<p><b>Recorded features</b> Foundations, House floor/ site</p>	
<p><b>Other sites associated with this site</b></p>	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

<p><b>SITE RECORD HISTORY</b></p>	<p><b>NZAA SITE NUMBER:</b> G44/148</p>
<p><b>Site description</b>                  Updated 18/03/2019 (Field visit), submitted by samkurmann , visited 24/10/2018 by Kurmann, S                  Grid reference (E1330096 / N4920201)</p> <p>House platform of a house depicted in 1882 survey plan "Beaumont Bridge Site Survey".</p> <p><b>Condition of the site</b>                  Updated 18/03/2019 (Field visit), submitted by samkurmann , visited 24/10/2018 by Kurmann, S</p> <p>There is a flat terrace area at the same spot that a house is depicted on an 1882 survey map. It is likely that some below ground archaeological remains exist.</p> <p><b>Statement of condition</b></p> <p><b>Current land use:</b></p> <p><b>Threats:</b></p>	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p><b>Site Record Form</b></p>	<p><b>NZAA SITE NUMBER:</b> G44/149</p>
	<p><b>SITE TYPE:</b> Commercial</p> <p><b>SITE NAME(s):</b> Beaumont Hotel</p> <p><b>DATE RECORDED:</b></p>

**SITE COORDINATES (NZTM)** Easting: 1329955      Northing: 4920240      Source: On Screen

**IMPERIAL SITE NUMBER:**      **METRIC SITE NUMBER:** G44/149



**Finding aids to the location of the site**  
 Beaumont Hotel - same site. At the rear of the hotel is the stable location

**Brief description**


**Recorded features**  
 Building - accomodation/ boarding house, Building - hotel, Building - stable

**Other sites associated with this site**

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

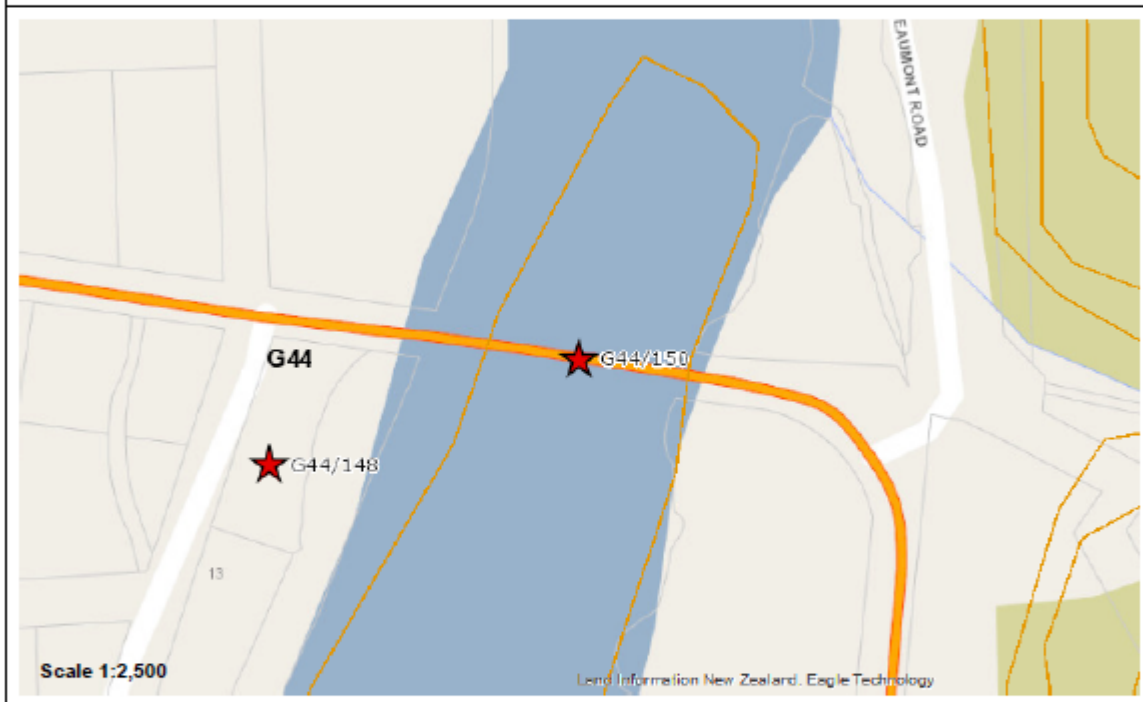
<p><b>SITE RECORD HISTORY</b></p>	<p><b>NZAA SITE NUMBER:</b> G44/149</p>
<p><b>Site description</b>                  Updated 18/03/2019 (Field visit), submitted by samkurmann , visited 15/08/2018 by Kurmann, Sam                  Grid reference (E1329955 / N4920240)</p> <p>The site of the original Beaumont Hotel. There is also an associated stable located out the back of the hotel.</p> <p><b>Condition of the site</b>                  Updated 18/03/2019 (Field visit), submitted by samkurmann , visited 15/08/2018 by Kurmann, Sam</p> <p>Recording based on historic records (Beaumont Bridge Site Survey from 1882). Surface evidence of either the hotel or stable was not visible, however, it is possible that subsurface remains exist.</p> <p><b>Statement of condition</b></p> <p><b>Current land use:</b></p> <p><b>Threats:</b></p>	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p><b>Site Record Form</b></p>	<p><b>NZAA SITE NUMBER:</b> G44/150</p>
	<p><b>SITE TYPE:</b> Transport/ communication</p> <p><b>SITE NAME(s):</b> Beaumont Bridge</p> <p><b>DATE RECORDED:</b></p>

**SITE COORDINATES (NZTM)** Easting: 1330231      Northing: 4920247      Source: On Screen

**IMPERIAL SITE NUMBER:**      **METRIC SITE NUMBER:** G44/150



**Finding aids to the location of the site**  
 The Beaumont Bridge, on State Highway 8 over the Mata-au/Clutha River, and it's approaches.

**Brief description**

**Recorded features**  
 Bridge

**Other sites associated with this site**



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

<p><b>SITE RECORD HISTORY</b></p>	<p><b>NZAA SITE NUMBER: G44/150</b></p>
<p><b>Site description</b></p> <p>Updated 18/03/2019 (Field visit), submitted by samkurmann , visited 15/08/2018 by Kurmann, Sam Grid reference (E1330231 / N4920247)</p> <p>The following history is from Kurmann, S. 2019. Beaumont Bridge Archaeological Assessment. Unpublished report prepared for NZTA.</p> <p>In 1875, Hayes put the original Beaumont bridge up for sale (Tuapeka Times, 22/09/1875, p.3) and it was sold to Kitching in 1876. Kitching also bought the punt at this time and built the Bridge Hotel. Holding the monopoly over the river crossings, Kitching fielded many complaints around the exorbitant fees being charged for these river crossings. 1876 survey plan SO 14210 shows the detail around the bridge location, including the surrounding Bridge Reserve on either side of the Beaumont Bridge.</p> <p>In 1877, the Tuapeka County Council and Government investigated a purchase of the bridge after the complaints of locals were taken seriously. However, in 1878, the bridge was washed away by severe flooding. In a domino-like effect, the Clyde Bridge washed down stream and took out Beaumont Bridge, which together caused the demolition of the Balclutha Bridge (Thornton 2001: 231; Bruce Herald, 1/10/1878, p.5).</p> <p>The Government investigating re-erecting the bridge for some years, which included negotiating the purchase of the same land from Kitching (Tuapeka Times, 12/07/1879, p.3). Construction of the bridge was slow. Contractual toing and froing contributed to the hold ups (Press, 12/05/1885, p.2) and shoddy building further delayed the opening, with some of the piers being built too high (Tuapeka Times, 11/08/1886, p. 3). One result of this back and forth was the survey of the town of Beaumont in 1882. Visible in this plan is the Bridge Hotel and its stables, a blacksmith, an historic water race, a house site, the ferry punt, the bridge location to the east.</p> <p>It was not until 1887 that the Beaumont Bridge opened, construction possibly being spurred by the drowning of a young girl in a punt accident in November 1886. The opening of the new bridge allowed people to travel into Beaumont and make the use of the town's facilities, which now included a store, bakery, blacksmith and post office.</p> <p><b>Condition of the site</b></p> <p>Updated 18/03/2019 (Field visit), submitted by samkurmann , visited 15/08/2018 by Kurmann, Sam</p> <p>The condition of the bridge was not formally assessed here. The Beaumont Bridge has been maintained over the last 120 years. The last 30 years have seen the Bridge covered in scaffolding to ensure the integrity of the structure. The concrete bridge abutments have considerable cracks in them. The superstructure has been repaired repeatedly over the last 120 years</p> <p><b>Statement of condition</b></p> <p><b>Current land use:</b></p> <p><b>Threats:</b></p>	

**WSP | OPUS**

[www.wsp-opus.co.nz](http://www.wsp-opus.co.nz)