

Drury Arterial Network Assessment of Effects on Historic Heritage

January 2021

Version 1

Document Status

Responsibility	Name
Author	Danielle Trilford
Reviewer	Matthew Campbell

Table of Contents

1	Glossary of acronyms and defined terms.....	ix
2	Executive Summary.....	1
3	Introduction.....	7
3.1	Background.....	9
3.2	Drury Package	9
3.3	Purpose and Scope of this Report	10
3.4	Report Structure.....	10
3.5	Preparation for this Report.....	10
4	Assessment Methodology.....	12
4.1	Statutory Requirements.....	12
4.1.1	Heritage New Zealand Pouhere Taonga Act 2014.....	12
4.1.2	Resource Management Act 1991.....	13
4.1.3	Notice of Requirement	13
4.1.4	The New Zealand Coastal Policy Statement	14
4.1.5	Auckland Unitary Plan Operative in Part	14
4.2	Methodology	15
5	Background.....	18
5.1	Desktop Research.....	18
5.1.1	Landscape.....	18
5.1.2	Pre-contact Māori land use	19
5.1.3	Pre-1900 European land use	20
5.1.4	Previous archaeological work near project area	36
5.2	Historic heritage sites	38
5.3	Field survey.....	45
6	NoR D1: Alteration to Designation 6707 - State Highway 22 Upgrade.....	46
6.1	Project Description	46
6.1.1	Project Overview	46
6.1.2	Project Features.....	49
6.2	Site Specific Results.....	49
6.2.1	Historic heritage sites	49

6.2.2	Field Survey	51
6.3	Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects	52
6.3.1	Assessment of Construction Effects.....	52
6.3.2	Recommended Measures to Avoid, Remedy or Mitigate Construction Effects	52
6.3.3	Assessment of Operational Effects	52
6.3.4	Recommended Measures to Avoid, Remedy or Mitigate Operational Effects.....	52
6.3.5	Summary and Conclusions	52
7	NoR D2: Jesmond to Waihoehoe West FTN Upgrade	53
7.1	Project Description	53
7.1.1	Jesmond Road FTN Upgrade Section.....	56
7.1.2	Bremner Road FTN Upgrade Section.....	58
7.1.3	Waihoehoe Road West FTN Upgrade Section	61
7.2	Site Specific Results.....	62
7.2.1	Jesmond Road FTN Upgrade Section.....	63
7.2.2	Bremner Road FTN Upgrade Section.....	65
7.2.3	Waihoehoe West FTN Upgrade Section.....	83
7.3	Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects	91
7.3.1	Jesmond Road FTN Upgrade section	91
7.3.2	Bremner Road FTN section	92
7.3.3	Waihoehoe Road West FTN Upgrade section	98
7.4	Conclusions	101
8	NoR D3: Waihoehoe Road East Upgrade.....	106
8.1	Project Description	106
8.1.1	Project Overview	106
8.1.2	Project Features	107
8.2	Site Specific Results.....	108
8.2.1	Historic Heritage Sites	108
8.2.2	Field Survey	108
8.3	Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects	109
8.3.1	Positive Effects.....	109
8.3.2	Assessment of Construction Effects.....	109
8.3.3	Recommended Measures to Avoid, Remedy or Mitigate Construction Effects	109

8.3.4	Assessment of Operational Effects	109
8.3.5	Recommended Measures to Avoid, Remedy or Mitigate Operational Effects	109
8.3.6	Summary and Conclusions	110
9	NoR D4: Ōpāheke North-South FTN Arterial.....	111
9.1	Project Description	111
9.1.1	Project Overview	111
9.1.2	Project Features	114
9.2	Site Specific Results.....	114
9.2.1	Historic Heritage Sites	114
9.2.2	Field Survey	115
9.3	Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects	117
9.3.1	Positive Effects	117
9.3.2	Assessment of Construction Effects.....	117
9.3.3	Recommended Measures to Avoid, Remedy or Mitigate Construction Effects	118
9.3.4	Assessment of Operational Effects	118
9.3.5	Recommended Measures to Avoid, Remedy or Mitigate Operational Effects	118
9.3.6	Summary and Conclusions	118
10	NoR D5: Ponga and Ōpāheke Road Upgrade	120
10.1	Project Description	120
10.1.1	Ponga Road Upgrade Section	123
10.1.2	Ōpāheke Road Rural Upgrade section.....	124
10.1.3	Ōpāheke Road Urban Upgrade section.....	126
10.2	Site Specific Results.....	128
10.2.1	Historic Heritage Sites	128
10.2.2	Field Survey	133
10.3	Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects	138
10.3.1	Ponga Road Upgrade section	138
10.3.2	Ōpāheke Road (Rural and Urban) Upgrade section	139
10.4	Conclusions	142
11	Conclusions	145
11.1	NoR D1: Alteration to Designation 6707: State Highway 22 Upgrade	145
11.2	NoR D2: Jesmond to Waihoehoe West FTN Upgrade.....	146

11.2.1	Jesmond Road FTN Upgrade section	146
11.2.2	Bremner Road FTN Upgrade section	146
11.2.3	Waihoehoe Road West FTN Upgrade section	146
11.3	NoR D3: Waihoehoe Road East Upgrade	147
11.4	NoR D4: Ōpāheke North-South FTN Arterial.....	147
11.5	NoR D5: Ponga Road and Ōpāheke Road Upgrade	147
11.5.1	Ponga Road Upgrade section	147
11.5.2	Ōpāheke Road (Rural and Urban) Upgrade sections.....	148
12	References	149
13	Historic heritage sites within 200 m of proposed designations but not at risk of damage	152

Tables

Table 3.1	Drury Package: Notices of Requirement and Projects.....	7
Table 5.1.	Summary of all historic heritage sites within 200 m of the proposed designation. Sites shaded in light orange are within the proposed designation.....	39
Table 7.1.	Summary of sites, values, effects, and mitigation (sites shaded orange are within the designation).....	103
Table 2.	Summary of sites within NoR D5, including effects and mitigation.....	143

Figures

Figure 3-1	Drury Package Projects and Notices of Requirement	8
Figure 5-1.	Plan of the historic swamps and proposed designations (map based on information from Manaaki Whenua and information provided by Te Tupu Ngātahi).....	19
Figure 5-2.	Aerial photograph taken in 1967 showing land reclaimed, the blue dashed line shows the edge as seen on pre-1960s aerials (taken from Retrolens.nz, SN3014_C_20).	22
Figure 5-3.	Close-up of a map of Drury in 1864, with NoR D2 overlaid, and buildings shaded in transparent green (note: only those within the designation were added to the SRS). (Auckland Libraries Heritage Collections Map 4498-15).....	23
Figure 5-4.	Close-up of Drury in 1865 or 1862, with NoR2 (orange) and buildings shaded in transparent green (NZ Map 4498-16).....	24
Figure 5-5.	Allotments for sale in Drury in 1860, with many of the streets unnamed. (Auckland Libraries Heritage Collections Map 4183).....	24
Figure 5-6.	Tents at the Commissariat Redoubt, R12/756, taken in 1862 (Alexander Turnbull Library, Wellington, New Zealand: PH-ALB-89-p22-1).	26
Figure 5-7.	The Military camp at Drury c. 1860s, R12/123 (Alexander Turnbull Library, Wellington, New Zealand: PA1-f-027-56-2).	27
Figure 5-8.	“Camps” drawn in 1865 (?), R12/123, as an insert on map NZ Map 4498-16, Auckland Libraries Heritage Collections.	28
Figure 5-9.	Close view of part of the Village and Town District of Papakura, with buildings plotted, drawn in January 1886 (Auckland Libraries Heritage Collections Map 9324)	29
Figure 5-10.	Description of Drury in 1865 (<i>New Zealander</i> , 8 August 1865: 3).....	30

Figure 5-11. Old Plan drawing of Drury drawn in 1865(?) showing a "post office" (circled red) at the side of Norrie Street (NZ Map 4498-16).	32
Figure 5-12. The shops, bakehouse, post-office, and residence in Drury, taken either 1866 or 1867 (Auckland Libraries Heritage Collections 7-A526).	32
Figure 5-13. The branch line to the mineral railway built in 1905 (Auckland Libraries Heritage Collections Footprints 07933).	35
Figure 5-14. Map showing all CHI, SRS, and HHEP within or near the NoRs.	44
Figure 6-1 Overview of SH 22 Upgrade.	48
Figure 6-2. SO 685 with settlements circled in red and the annotation in the red rectangle.	50
Figure 6-3. SO 865 drawn in 1853 showing the track with part of NoR 1 overlaid	50
Figure 6-4. Ngakoroa Stream beneath SH22, facing north east.	51
Figure 7-1. Overview of NoR D2	55
Figure 7-2 Overview of Jesmond Road FTN Upgrade Section.	57
Figure 7-3 Overview of Bremner Road FTN Upgrade Section	59
Figure 7-4 Overview of Waihoehoe Road West FTN Upgrade Section	61
Figure 7-5. Map showing all recorded SRS, CHI, and HHEP sites within or near the Drury township.	63
Figure 7-6. View of down Jesmond Road, facing south.	63
Figure 7-7. Bremner Road upgrade, facing west.	66
Figure 7-8. Four wood posts in the west side of the Ngakoroa Stream, facing west.	66
Figure 7-9. Location of Runciman's homestead, on the east bank of the Ngakoroa Stream from the west bank.	67
Figure 7-10. Area of Runciman's Homestead and the waka tauranga area, facing north west.	67
Figure 7-11. View of the area where reclamation occurred in the 1960s as it separates from what is presumably natural land (taken mid-July 2020).	68
Figure 7-12. View of the area where reclamation occurred in the 1960s as it separates from what is presumably natural land (taken mid-July 2020).	68
Figure 7-13. Former Drury Cheese and Casein Factory, facing west (St Johns Church and Cemetery is immediately to the right hand side of the photograph).	69
Figure 7-14. Grassy area between Hingaia Stream and The Former Drury Cheese and Casein Factory, facing south east.	69
Figure 7-15. St. John's Anglican Church, facing west.	70
Figure 7-16. Close up of 1864 plan showing redoubt defensive boundary, and NoR D2 outline overlaid. Red circled area shows portion of site within NoR D2.	71
Figure 7-17. Wharves (circled red) near Runciman's property in 1864 with NoR D2 overlaid (Auckland Libraries Heritage Collections Map 4498-15).	71
Figure 7-18. SO 865 drawn in 1854 showing three structures on the side of the stream (circled in red), with NoR D2 overlaid and the "Tauranga" also annotated.	73
Figure 7-19. Deed 35 probably drawn between 1865 and 1887, showing "Ligar's Bridge" crossing the Ngakoroa Stream.	73
Figure 7-20. Close-up of a map of Drury in 1864, with NoR D2 overlaid, and buildings shaded in transparent green. (Auckland Libraries Heritage Collections Map 4498-15).	76
Figure 7-21. The Former Drury Creamery and Casein factory	77
Figure 7-22. Close-up of Drury in 1865 overlaid on modern aerial with NoR2 overlaid and buildings shaded in transparent green and R12/1149 circled in red (NZ Map 4498-16).	81
Figure 7-23. Close-up of Drury in 1865 (but probably 1862) overlaid on modern aerial with NoR D2 overlaid and building (R12/1150) shaded in transparent green (NZ Map 4498-16).	84
Figure 7-24. Portion of <i>Auckland Star</i> , 10 May 1889:1, noting the Railway Hotel ran by Godkin.	86
Figure 7-25. Survey plan DP 2885 drawn in 1902 showing "hotel" (R12/1146) at the corner of Waihoehoe and Great South Road and proposed NoR overlaid.	86
Figure 7-26. Railway workers residences in 1942 outlined in purple with NoR D2 overlaid (aerial taken from Retrolens.nz, SN192_274_18).	89
Figure 8-1 Overview of Waihoehoe Road East Upgrade	107
Figure 8-2. Waihoehoe Road, facing east.	108
Figure 9-1 Overview of Ōpāheke N-S FTN Arterial.	113

Figure 9-2. Part of the NoR D4 area facing south from Ponga Road.....	116
Figure 9-3. The 1940s Utility building, facing west.....	116
Figure 9-4. View of land facing north as part of NoR D4 with Waihoehoe Stream running through it.	117
Figure 10-1. Overview of NoR D5	122
Figure 10-2 Overview of Ponga Road Upgrade Section	123
Figure 10-3 Overview of Ōpāheke Road Rural Section	125
Figure 10-4. Overview of Ōpāheke Road Urban Section	127
Figure 10-5. Section of SO 18286, showing the Ōpāheke Railway Station, drawn in 1914 (R12/1138).	129
Figure 10-6. Map of the Papakura township drawn in Jan 1886 showing the Presbyterian Section of the Papakura Cemetery (Auckland Libraries Heritage Collections Map 9324) with part of the NoR D5 designation overlaid.....	131
Figure 10-7. Aerial taken in 1960 showing the cemetery use for earlier graves clustered to the northern half of the property with proposed NoR D5 designation (taken from Retrolens.nz).....	131
Figure 10-8. Pre-1900s villa (CHI site 22282, R12/1144) facing south (the building is outside of the proposed designation footprint).....	134
Figure 10-9. Pre-1900s villa (CHI site 22284, R12/1145) facing north (the building is outside of the designation footprint).	135
Figure 10-10. Rock marking Ōpāheke WWII Military Camp, facing east.	135
Figure 10-11. Rock with plaque describing the Ōpāheke WWII military camp.	136
Figure 10-12. View of the Road Reserve and the Ōpāheke Sale Yards area, facing east (the CHI point for the site is outside of the proposed designation footprint).	136
Figure 10-13. Bridge crossing Waipokapū / Hays Stream, facing north.....	137
Figure 10-14. View of the Papakura Cemetery facing north, the pavement up the left of the image is where the intersection upgrade is proposed.	137

1 Glossary of acronyms and defined terms

Table 1: Glossary of technical terms / acronyms

Acronym	Term
AEE	Assessment of Effects on the Environment
AT	Auckland Transport
AC	Auckland Council
AT	Auckland Transport
AUPOIP	Auckland Unitary Plan Operative in Part
CHI	Auckland Council Cultural Heritage Inventory
FTN	Frequent Transit Network
FUZ	Future Urban Zone
HAMP	Historic and Archaeological Management Plan
HHEP	Historic Heritage Extent of Place
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPT Act	Heritage New Zealand Pouhere Taonga Act 2014
NIMT	North Island Main Trunk
NoR	Notice of Requirement (under the Resource Management Act 1991)
NZAA	New Zealand Archaeological Association
NZCPS	New Zealand Coastal Policy Statement
NZUP	New Zealand Upgrade Programme
NoR	Notice of Requirement (under the Resource Management Act 1991)
SH1	State Highway 1
SH22	State Highway 22
SRS	Site recording scheme
Waka Kotahi	Waka Kotahi NZ Transport Agency

Table 2: Glossary of defined terms

Acronym	Term
Auckland Council	Means the unitary authority in the Auckland Region.
Drury Package	Five Notices of Requirement for the Drury Arterial Network for Auckland
HNZPTA authority application	Heritage New Zealand Pouhere Taonga archaeological authority application
Historic Heritage	All heritage sites of interest - including archaeological sites, CHI sites, HHEP sites, SRS sites, and HNZPT Rārangī Kōrero listed sites.
HNZPT Rārangī Kōrero	HNZPT The List / Rārangī Kōrero listed sites.

2 Executive Summary

This report provides an assessment of effects of the projects which comprise the Drury Arterial Network on historic heritage. This report has been prepared in support of the Notices of Requirement (NoRs) (Drury Package) lodged by Auckland Transport (AT) and Waka Kotahi NZ Transport Agency (Waka Kotahi).

Assessment undertaken

The same general approach and methodology was undertaken for the assessment of historic heritage for each NoR. The assessment has considered several websites documenting historic heritage sites, historic maps, aerial photographs and plans, written texts on the history of the area, and websites which provide useful data relevant to historic heritage. The assessment has also involved site surveys of public land, roadside observations of properties and within some private properties. It also included a project briefing with specialists, and communications with Auckland Council (AC) heritage experts. A full list of the resources used can be found in Section 4.

Archaeological sites have been recorded since the 1950s and the quality of site information is variable. Sites were initially recorded on 100-yard grid references, which were converted to 100 m grid references as the map data became metricated in the 1980s. This has led to sites potentially only having a 200 m accuracy.

All historic heritage sites (archaeological sites, CHI items and HHEP) within 200 m of any of the proposed designation boundaries were initially reviewed and assessed as to the likely potential to be encountered during works, and to guide future research where required. The 200 m buffer allows for any discrepancies in the location records of recorded sites, which can happen when old SRS records have not been recently updated.

Once site locations were verified and corrected if necessary, the value of all sites within the proposed designations were assessed under the AUP RPS criterion for assessing historic heritage sites. Potential effects on these sites as a result of the Project were considered, and where necessary, mitigation measures have been identified and recommended to address these potential effects.

General findings for all projects in the Drury Package

Through the alternatives' assessment for the Projects, impacts on known historic heritage sites were minimised where possible. However, there are seventeen recorded historic heritage sites that are likely to be damaged or destroyed by the projects. At this stage, the extent of this potential damage cannot be determined without further research and assessment once detailed design is undertaken and the extent of ground disturbance is confirmed prior to construction. It is therefore recommended that an HNZPT authority is applied for sites which are classed as archaeological sites. Most of these sites are within the NoR D2 designation, primarily within the Bremner Road and Waihoehoe Road West Sections.

Potential unrecorded sites are likely to be present within the Project footprints and could be exposed during construction. This likelihood is based on surrounding site density, recorded land use, and the presence of old transport channels and waterways. While these attributes often help predict the presence of historic heritage sites, it cannot capture all potential unrecorded sites, so sites can be present elsewhere.

Previously unrecorded historic heritage sites could be exposed during construction.

As construction is planned in the longer term and timing has yet to be confirmed, for all of the Drury Package it is recommended that a HAMP is prepared during detailed design of the Projects before construction commences and that this is included as a condition on the proposed designations. As part of the HAMP, further research and survey should be undertaken to support an authority application. Additional research can include the use of a Section 56 exploratory authority under the HNZPT Act to investigate the presence of any in situ material and site extents, Ground Penetrating Radar, and Geomagnetic Survey. The use of a Section 56 authority should consider legal processing times required after the application is applied for, which is around 3 months. Once the works footprint and effects are determined an authority application under Section 44 of the HNZPT Act should be applied for to modify known and potential previously unrecorded archaeological sites.

Specific mitigation measures are listed in the sections below relating to the potential effects on some of the known and higher value sites within NoR D2 and NoR D5.

NoR D1

Results of assessment and recommended measures

There are no recorded historic heritage deposits within the footprint of NoR D1. There are newly recorded archaeological sites near the Ngakoroa Stream (to the north of the proposed designation), which indicate a likelihood of exposing previously unrecorded deposits during construction. The areas with the highest risk for site exposure include those near waterways adjacent to Oira Creek and Ngakoroa Streams. The presence of a track on a pre-1900s survey plan which follows the same general route as SH22 indicates there could be evidence of historic heritage within the proposed designation.

It is recommended that a HAMP is prepared at detailed design before construction commences and this is recommended as a condition on the proposed designation. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority.

Once these measures are implemented, the adverse effects will be mitigated.

There are no operational effects on historic heritage as a result of the Project.

NoR D2

Results of assessment and recommended measures

There are fourteen recorded historic heritage deposits within NoR D2. Many of these have no ground surface evidence remaining and pre-1900 buildings in the Bremner Road section have been replaced by other structures, however subsurface archaeological deposits of these sites could remain. Through the alternatives' assessment of the projects, impacts on known historic heritage have been minimised where possible. This includes:

- Jesmond Road FTN Upgrade section: Widening generally to the west of Jesmond Road to minimise impacts on Aroha Cottage on Jesmond Road (Scheduled Extent of Place 704, Aroha Cottage). Only the driveway of this scheduled site is proposed to be designated to enable driveway regrading.
- Bremner Road FTN Upgrade section:

- Widening generally to the south of Bremner Road to minimise impacts on the Redoubt Wharves (Scheduled Extent of Place 2173, (Slippery) Creek Wharf/Commissariat Redoubt wharf site R12/756). The designation boundary is outside of the scheduled extent of place.
- Widening generally to the south of Norrie Road to avoid the extent of the St Johns Church and Cemetery (Scheduled Extent of Place 707, St John's Church and cemetery). The proposed designation boundary is outside of the scheduled extent of place.

It is recommended that wherever possible, recorded historic heritage sites are avoided. This can be difficult to achieve in the Bremner Road and Waihoehoe Road West Section, where sites flank both sides of the existing roads. Wherever avoidance cannot be achieved, it is recommended that sites of a higher significance are prioritised. Sites which cannot be avoided should be fully assessed under the HAMP, and then managed under an HNZPTA authority.

The former Drury cheese and casein factory and the Railway Worker's Residences are within the proposed designation boundary and will be impacted. It is recommended that a built heritage assessment to be undertaken at detailed design before works commence to inform the design and the approach to mitigation. It is recommended that detailed recording and heritage assessments of the building should be carried out by a built heritage specialist to determine the level of heritage significance and current condition. If the assessments determine these are of significant heritage value, and if its condition permits, it should be relocated on the property or elsewhere within the Drury area prior to the start of works. Should relocation not be achievable, the building(s) should be deconstructed with a building archaeologist on site to record and investigate the building. Any materials could be reused if they are of heritage value. Any information gained during all pre- and post-construction works of the sites(s) should be presented to the community.

Almost all of the historic heritage sites within NoR D2 have a moderate heritage value. In areas where the full archaeological site extent and locations are unknown, such as Runciman's Homestead, it is recommended that non-invasive investigation techniques such as ground penetrating radar and /or magnetometer survey is undertaken before construction works, to identify if there are any surviving subsurface features. Final construction and design should, as much as reasonable, avoid any features identified by non-invasive investigation. Following this, an exploratory investigation authority may be obtained from HNZPT under section 56 of the HNZPT Act to assist detailed design and avoidance.

Any areas of the site that will be used for construction laydown, but not otherwise earth worked, should be isolated with geotechnical cloth and 250 mm of GAP 25 or similar. An authority should be obtained from HNZPT to destroy or damage those parts of the site that cannot be avoided by construction under section 44 of the HNZPT Act. Any information learnt will be reported and information may be shared with the public for interpretation, with involvement from the mandated mana whenua.

There is also reasonable cause to suspect previously unrecorded deposits may be present in areas where the pre-1900 township stood and nearby. There are likely to be adverse effects to historic heritage due to the project. It is recommended that a HAMP is prepared at detailed design before construction commences to mitigate these effects. As part of the HAMP, further research and survey should be undertaken to support an HNZPTA authority for the Project area.

Future research and surveys offer the opportunity to better understand the heritage and archaeology of Drury and the Ngakoroa Stream area. Any information learnt which involves interpretation of Māori deposits must be at the discretion of manawhenua.

There are no operational effects on historic heritage as a result of the Project.

NoR D3

Results of assessment and recommended measures

There are no recorded historic heritage deposits within NoR D3. Previously unrecorded deposits may be exposed during construction. The route of this road is likely the same route that the pre-1900 bullock track followed when exporting coal. Archaeological deposits may be present within the proposed designation relating to both the track, and more broadly pre-European Māori deposits could be present. It is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority. Once these measures are implemented, the adverse effects can be mitigated.

There are no operational effects on historic heritage as a result of the Project.

NoR D4

Results of assessment and recommended measures

A CHI recorded brick utility building, which is post-1900, is the only recorded historic heritage site within NoR D4, and has little heritage value based on the attributes considered. There is reasonable cause to suspect previously unrecorded deposits may be present in areas near the original roading route. It is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority.

It is recommended that the CHI recorded brick utility building is assessed by a built heritage specialist during detailed design (and before construction commences) to inform mitigation.

Once these measures are implemented, the adverse effects can be mitigated.

There are no operational effects on historic heritage as a result of the Project.

NoR D5

Results of assessment and recommended measures

There are several recorded historic heritage deposits near NoR D5, but only two within it, which are the Ōpāheke Railway Station and the edge of the Presbyterian Section of the Papakura Cemetery. Similar to Runciman's Homestead in NoR D2, non-invasive techniques to identify potential subsurface deposits should be undertaken to determine if any deposits are present in NoR D5 at the Presbyterian Section of the Papakura Cemetery.

Through the alternatives assessment of alignment options, impacts on known historic heritage have been minimised where possible. This includes:

- Ponga Road Upgrade Section: generally widening to the south of the existing road to minimise impacts on the pre-1900s villa at 174 Ponga Road, listed in the CHI and a recorded archaeological site
- Ōpāheke Road Rural Upgrade Section: generally widening to the northeast of the existing road to minimise impacts on the former Ōpāheke stock yards listed in the CHI.
- Ōpāheke Road Urban Upgrade Section: minimising the impacts of the upgraded Ōpāheke/Settlement Road intersection of the Papakura Cemetery.

There is potential to damage subsurface extents of the pre-1900 Ōpāheke Railway Station. There is also reasonable cause to suspect previously unrecorded deposits may be present within the proposed designation. Several nearby recorded historic heritage sites which flank the proposed designation may extend into the boundary, but these cannot be confirmed without further research. It is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority. The opportunity for public interpretation could be made available should valuable information be gained by archaeological and historic heritage investigation expose in situ deposits, such as near the WWII US camp sites (Ōpāheke Camps West and East).

A stone with a plaque marking the WWII east camp is on the road reserve, and its removal, storage, and relocation should be built into the HAMP requirements.

Once these measures are implemented, the adverse effects will be mitigated.

There are no operational effects on historic heritage as a result of the Project.

Overall Conclusions

Drury and the land surrounding the area have had an important role in human history, which is currently poorly represented through the archaeological record. While previously unknown historic heritage sites were recorded during this assessment and added to the SRS, the record is far from complete. Through most of human occupation of the area, the most appealing attribute has been the gateway between the Waikato and Tāmaki Makaurau via the Pahurehure Inlet and Manukau Harbour, as well as the Pahurehure Inlet to the Drury Hills. The location enabled some of the earliest Pākehā settlers to export coal as early as the 1850s, enticed the Crown to build a military garrison to prepare for the land wars and confiscation during the 1860s and enabled the continued exportation of extractive resources through to the 20th century. While the ability to import and export was a useful aspect of the area, other attributes also appealed to humans.

Much of the archaeological evidence in the area is no longer visible, but written records and maps show the extent of human settlement at some phases of human occupation. This assessment has added some sites to the SRS, and it is expected that additional sites will be found during the construction phase of the Projects. The works will result in a better recorded and understood historic heritage record, although the condition of some sites is expected to be compromised by their removal.

Some of these sites fall within or are near the proposed designation boundaries. Nearby sites may have subsurface features that extend into the proposed designation boundaries. The proposed designations could have an adverse effect to several known and potential sites by damaging, removing, covering or compacting features associated with them. The management of site damage to pre-1900 sites, should it be unavoidable, will be managed within an HNZPTA authority. Any

construction impacts on Runciman's Homestead site should be minimised wherever possible, and non-intrusive survey methods such as Ground Penetrating Radar at the Presbyterian section of the Papakura Cemetery will help determine what extents of the site are present.

The Former Drury cheese and casein factory, the Railway Workers Residences, and the CHI recorded brick utility building should be assessed by a built heritage specialist at detailed design. This assessment will inform the design and also inform the methods of mitigation. The management of all site damage or modification to Runciman's Homestead site, should it be unavoidable, will be managed within an HNZPTA authority.

3 Introduction

This report has been prepared for the Drury Arterial Network Notices of Requirement (NoRs) for Auckland Transport (AT) and Waka Kotahi NZ Transport Agency (Waka Kotahi) (the “Drury Package”). The NoRs are to designate land for future strategic transport corridors as part of the Supporting Growth Programme to enable the future construction, operation and maintenance of transport infrastructure in the Drury-Ōpāheke area of Auckland.

The Auckland Council Drury-Ōpāheke structure plan area is expected to grow over the next 30 years and is estimated to provide about 22,000 houses and about 12,000 jobs with a population of about 60,000. The Drury Package will provide route protection for the local arterials, which include walking, cycling and public transport (including the Frequent Transit Network (FTN)), needed to support the expected growth in Drury. This report assesses the historic heritage effects of the proposed Projects, that together comprise the Drury Package, as shown in Figure 3-1.

Table 3-1 Drury Package: Notices of Requirement and Projects

Notice	Project
NoR D1	Alteration to NZ Transport Agency designation 6707 - State Highway 22 (SH22) Upgrade
NoR D2	Jesmond to Waihoehoe West FTN Upgrade
NoR D3	Waihoehoe Road East Upgrade
NoR D4	Ōpāheke North-South FTN Arterial
NoR D5	Ponga Road and Ōpāheke Road Upgrade

The Drury Package has been developed through an alternatives assessment. Corridor alternatives and route refinements were assessed by a multi-disciplinary team against a programme wide Multi-Criteria Assessment. This assessment phase was completed in February 2020, and further design changes have been adopted through the Assessment of Environmental Effects (AEE) process for the Drury Package, in response to a range of construction and environmental considerations.

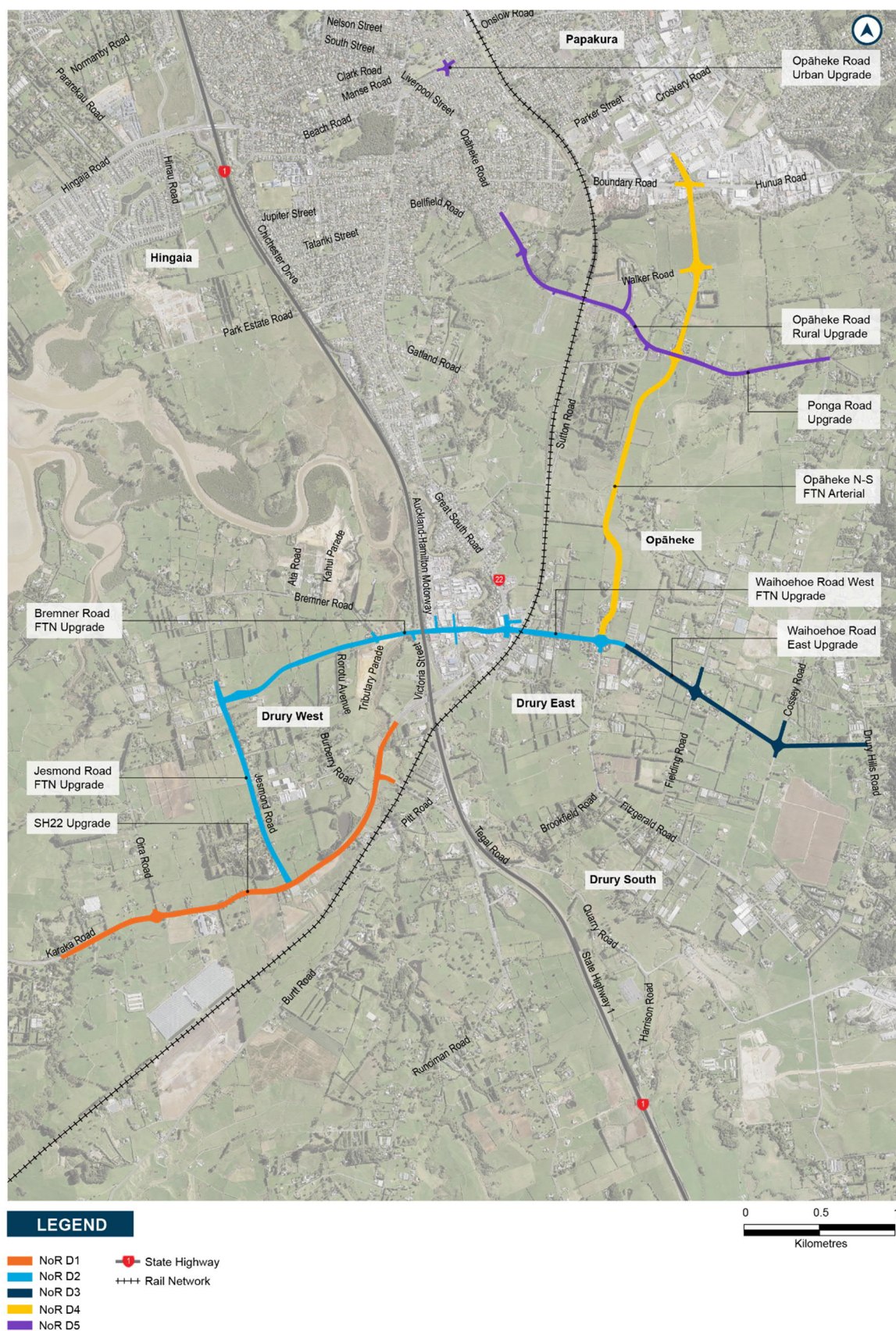


Figure 3-1 Drury Package Projects and Notices of Requirement

3.1 Background

Auckland is New Zealand's largest city, home to approximately 1.65 million people. In 2017, Auckland attracted 36,800 new residents; more than the rest of the country combined. The Auckland Plan 2050 – Development Strategy signals that Auckland could grow by 720,000 people to reach 2.4 million over the next 30 years. This will generate demand for more than 400,000 additional homes and require land for 270,000 more jobs.¹ Most of this growth will go into existing urban areas. However, around a third will go into future urban zone (FUZ) as identified in the Auckland Unitary Plan: Operative in Part (AUPOIP). The FUZ areas are “greenfields”, that is, generally rural land identified to be urbanised over time.

The Supporting Growth Programme is a collaboration between AT and Waka Kotahi to plan transport investment in Auckland's future urban zoned areas over the next 10 to 30 years. AT and Waka Kotahi have partnered with Auckland Council, Manawhenua and KiwiRail Holdings Limited (KiwiRail) and are working closely with stakeholders and the community to develop the strategic transport network to support Auckland's growth areas.

The key objective of the Supporting Growth Programme is to protect land for future implementation of the required strategic transport corridors/infrastructure. As a form of route protection, designations will identify and appropriately protect the land necessary to enable the future construction, operation and maintenance of these required transport corridors/infrastructure. A designation is important as it provides certainty for the Requiring Authority that it can implement the work. It also provides property owners, businesses and the community with increased certainty regarding future infrastructure, so they can make informed decisions (if confirmed it will be identified in the AUPOIP). It can also significantly reduce long-term costs for local and central government and enable more effective land use and transport outcomes.

3.2 Drury Package

The Drury Package proposes an arterial network to support the expected future growth in Drury-Ōpāheke. The Drury Package comprises five separate projects which together form the Drury Arterial Network. The network includes provision for general traffic, walking and cycling, and frequent public transport. Overall, the Drury Package aims to improve connectivity within and through the Drury-Ōpāheke area, providing high quality, safe and attractive transport environments. Each Project within the Drury Package will be designated separately as follows:

- **NoR D1:** Alteration to Waka Kotahi NZ Transport Agency designation 6707 - State Highway 22 (SH22) Upgrade
- **NoR D2:** Jesmond to Waihoehoe West FTN Upgrade
- **NoR D3:** Waihoehoe Road East Upgrade
- **NoR D4:** Ōpāheke North-South FTN Arterial (Ōpāheke N-S FTN Arterial)
- **NoR D5:** Ponga Road and Ōpāheke Road Upgrade

¹ Draft Auckland Plan 2050 Development Strategy: <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/development-strategy/future-auckland/Pages/what-auckland-look-like-future.aspx>

3.3 Purpose and Scope of this Report

This report provides an assessment of effects on historic heritage associated with the construction, operation and maintenance of the Drury Package. This assessment has been prepared to inform the AEE for the NoRs.

The purpose of this report is to:

- Identify and describe the existing and likely future historic heritage environment;
- Identify and describe the actual and potential historic heritage effects of the Projects;
- Recommend measures as appropriate to avoid, remedy or mitigate potential adverse historic heritage effects (including any conditions/management plan required); and
- Present an overall conclusion of the level of potential adverse historic heritage effects of each of the Projects after recommended measures are implemented.

The key matters addressed in this report are as follows:

- Description of the Projects as they relate to historic heritage effects;
- Overview of the methodology used to undertake the assessment and identification of the assessment criteria and any relevant standards or guidelines;
- Identification and description of the existing and likely future historic heritage environment;
- Description of the actual and potential positive effects of each project;
- Description of the actual and potential adverse historic heritage effects of construction of each project;
- Description of the actual and potential adverse historic heritage effects of operation of each project;
- Recommended measures to avoid, remedy or mitigate potential adverse historic heritage effects (including any conditions/management plan required); and
- Overall conclusion of the level of potential adverse historic heritage effects of each of the Projects after recommended measures are implemented.

3.4 Report Structure

This report is structured to reflect the key matters listed above.

In order to provide a clear assessment of each project, descriptions and assessments have been separated to reflect each of the notices sought.

3.5 Preparation for this Report

The work undertaken by CFG Heritage Ltd commenced in early March 2020. Preparation for this work by CFG Heritage Ltd has included:

- research into the pre-European Māori, pre-1900 European and historic heritage background to the area;

- familiarisation with the proposed NoR areas;
- familiarisation with the recorded heritage landscape (including those in the CHI, SRS, HHEP, Sites of Significance to Manawhenua, and HNZPT Rārangī Kōrero List);
- a basic survey of all properties accessible to the public (from the road reserve or open space etc only);
- a bus tour on March 11 2020 with AC representatives and the project team for a site brief, followed by a bus tour on July 16 2020 with mana whenua representatives, and a project specialists site survey of some private properties on July 17 2020.

4 Assessment Methodology

Chapter Summary

The protection and management of historic heritage sites is represented in several different statutory requirements, and those considered for the purpose of this report include the RMA, the HNZPT Act, several different aspects of the AUPOiP, and the NZCPS.

The same general approach and methodology was undertaken for the assessment of each NoR. The assessment considered several resources including websites documenting Historic Heritage sites, historic maps, aerial photographs and plans and written texts on the history of the area. The assessment has involved site surveys of public land, roadside observations of properties, and some private properties were also visited.

All historic heritage sites (archaeological sites, CHI items and HHEP) within 200 m of any of the proposed designation boundaries were initially reviewed and assessed as to the likely potential to be encountered during works, and to guide future research where required. Once site locations were verified and corrected if necessary, all sites within the proposed designations had a values assessment undertaken under the AUP RPS criterion for assessing historic heritage sites.

After ascribing value to the site based on the AUP RPS criterion, the potential effects on the values of these sites, as a result of construction and operation of the Projects, were identified. Based on these potential effects, mitigation measures have been identified and recommended to mitigate potential effects where necessary.

4.1 Statutory Requirements

4.1.1 Heritage New Zealand Pouhere Taonga Act 2014

All archaeological sites, whether recorded or not, are protected by the provisions of the HNZPT Act and may not be destroyed, damaged or modified without an authority issued by HNZPT.

An archaeological site is defined in the HNZPT Act 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).

All HNZPT authorities will be applied for at a later date, after detailed design and before any ground disturbance and construction works.

4.1.2 Resource Management Act 1991

The Resource Management Act 1991 (RMA) requires District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the wellbeing of today's communities, while safeguarding the options of future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (Section 6(f)).

Historic heritage is defined in section 2 of the RMA as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- Historic sites, structures, places, and areas;
- archaeological sites;
- sites of significance to Māori, including wāhi tapu;
- surroundings associated with the natural and physical resources.

These categories are not mutually exclusive, and some archaeological sites may include above ground structures or may also be places that are of significance to Māori.

4.1.3 Notice of Requirement

This assessment has been prepared to support the NoR process for the Projects. Section 171 of the RMA sets out the matters that must be considered in making a recommendation on a NoR. This includes consideration of the actual or potential effects on the environment of allowing the requirement, with particular regard to:

- Any relevant provisions of a national policy statement, the NZCPS, and the AUPOIP (in terms of the regional policy statement and regional/district plan provisions);
- Whether adequate consideration has been given to alternative sites, routes or methods of undertaking the work;
- Whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
- Any other matter the territorial authority considers reasonably necessary.

Sections 175 and 176 of the RMA set out the legal effect of a designation, which, once confirmed, must be included in a district plan as if it is a rule, and removes the requirement for a district resource consent in terms of section 9(3) of the RMA.^[1] Essentially a designation is therefore a land use or district planning mechanism. Where a requiring authority submits a notice of requirement to designate land, an assessment of effects is required to address historic heritage as this is a district plan matter.

^[1] The underlying district plan provisions only apply if the land is not being used for its designated purpose (section 176(2) of the RMA).

4.1.4 The New Zealand Coastal Policy Statement

The NZCPS is a national policy statement under the RMA. The purpose of the NZCPS is to state policies in order to achieve the purpose of the RMA in relation to the coastal environment of New Zealand. Policy 17 within the NZCPS serves to protect historic heritage in the coastal environment from inappropriate subdivision, use, and development by:

- (a) identification, assessment and recording of historic heritage, including archaeological sites;*
- (b) providing for the integrated management of such sites in collaboration with relevant councils, heritage agencies, iwi authorities and kaitiaki;*
- (c) initiating assessment and management of historic heritage in the context of historic landscapes;*
- (d) recognising that heritage to be protected may need conservation;*
- (e) facilitating and integrating management of historic heritage that spans the line of mean high water springs;*
- (f) including policies, rules and other methods relating to (a) to (e) above in regional policy statements, and plans;*
- (g) imposing or reviewing conditions on resource consents and designations, including for the continuation of activities;*
- (h) requiring, where practicable, conservation conditions; and*
- (i) considering provision for methods that would enhance owners' opportunities for conservation of listed heritage structures, such as relief grants or rates relief.*

The Coastal Marine Area extends to the northern boundary of Bremner Road bridge within NoR D2, however there are no works proposed with the Coastal Marine Area. The historic heritage provisions in the NZCPS are of relevance (and will be addressed further as part of the AEE).

4.1.5 Auckland Unitary Plan Operative in Part

The AUPOIP contains a number of applicable provisions regarding historic heritage. In the AUPOIP, archaeological sites are defined in accordance with the definitions outlined in the HNZPT Act.

A scheduled historic heritage place can be an individual feature, or encompass multiple features and/or properties, and may include public land, land covered by water and any body of water. A historic heritage place may include; cultural landscapes, buildings, structures, monuments, gardens and plantings, archaeological sites and features, traditional sites, sacred places, townscape, streetscapes and settlements.

Any demolition or modification to the existing structures of the place are considered either discretionary or restricted discretionary activities as outlined in Chapter D.17 (Table D17.4.1) of the AUPOIP. Only one scheduled site extent, Aroha Cottage, is within the proposed designation areas for

the Drury Package. Scheduled extents have been avoided where possible during the alternatives assessment and design phases of this project.

Additionally, there are heritage provisions in the following chapters of the AUP will be addressed further as part of the AEE - E26 Infrastructure, F2 Coastal and E11/E12 land disturbance.

4.2 Methodology

The same general methodology was undertaken for all five NoR areas whenever possible.

The following resources were considered in this assessment:

- All recorded New Zealand Archaeological Association's Site Recording Scheme (SRS), Auckland Council's (AC) Cultural Heritage Inventory (CHI), Heritage New Zealand Pouhere Taonga (HNZPT) Rārangī Kōrero, and Auckland Council's Historic Heritage Extent of Place (HHEP)
- Statutory information from the AUOIP overlays
- Historic maps and plans
- The HNZPT digital library for records of archaeological assessments and investigations in the area
- Land Resource Information Systems Manaaki Whenua database - for historic vegetation and wetlands around the project areas
- Papers Past online database - for historic newspaper articles
- Retrolens.nz and the AC GeoMaps - for historic aerials
- The National Library of New Zealand's DigitalNZ website - for old drawings, photographs, and plans
- Written texts on the history of the area
- The AC cultural heritage inventory (CHI) and the AC GeoMaps GIS – for areas of cultural significance in the vicinity
- Occasional discussions with Robert Brassey of the AC Heritage Unit
- Drury Package project drawings and a GIS viewer with the indicative design and proposed designation boundary (provided by the project team)
- Site surveys - undertaken on 13 and 17 March 2020 by Danielle Trilford of CFG Heritage Ltd. Some private properties were visited on 17 July 2020 with other project specialists (the majority of the NoR D4 alignment through greenfields). Otherwise only publicly accessible land was surveyed. Areas of interest such as inlets, creeks and known pre-1900 historic heritage sites were specifically surveyed. For private properties that were not able to be accessed, a desktop assessment was carried out and these were viewed from public vantage points (for example, from the road).
- Project briefing and site visit - with the Drury Package project team and AC representatives on 11 March 2020, followed by a project tour with several mana whenua representatives and

specialists on 16 July 2020, and a site survey with other project specialists of some private properties on 17 July 2020.

- All previously unrecorded pre-1900 sites recorded during the assessment that are or may be impacted by the designation were added to the SRS.
- All SRS records which were visible from the roadside where updated on ArchSite.
- Waka Kotahi *Historic Heritage Impact Assessment Guide for State Highway Projects* was consulted for works for NoR D1 (as the only State Highway project within the Drury Package).

This assessment is concerned primarily with historic heritage. Notable trees (where relevant) are assessed by the relevant specialist in a separate report.

All historic heritage sites (archaeological sites, CHI items and HHEP) within 200 m of any of the proposed designation boundaries were initially reviewed and assessed as to the likely potential to be encountered during works, and to guide future research to inform detailed design where required. The 200 m buffer allows for any discrepancies in the location records of recorded sites, which can happen when old SRS records have not been recently updated. This is described in full in section 4.2.1.2.

Once site locations were verified, and corrected if necessary, all sites within the proposed designations had a values assessment undertaken under the AUP RPS criterion for assessing historic heritage sites. The values of any historic heritage sites within the proposed designations were assessed against Auckland Council's *Methodology and Guidance for Evaluating Auckland's Historic Heritage*. The statutory framework for the identification and evaluation of Auckland's significant historic heritage places can be found in section B5.2.2 of the AUPOIP. The attributes and significance criteria are assessed as:

- (a) Historical
- (b) Social
- (c) Mana Whenua
- (d) Knowledge
- (e) Technology
- (f) Physical attributes
- (g) Aesthetic
- (h) Context

Values of each attribute are stated based on thresholds established in the Auckland Council *Methodology and Guidance for Evaluating Auckland's Historic Heritage*. Those used in this report are:

- **Moderate [value/significance]:** of some importance and interest; retention of the identified value(s)/significance is desirable.
- **Little [value/significance]:** of limited importance and interest.
- **None/NA [value/significance]:** of no importance and interest.

This information guides the statement of significance.

The recorded points or extents of Historic Heritage sites which were not directly within the proposed designation, but which may extend into the footprint of the proposed designation are considered, and the likelihood of them extending into the footprint is acknowledged.

4.2.1.1 Fieldwork

A site survey was undertaken on 13 and 17 March 2020 by Danielle Trilford of CFG Heritage Ltd (author of this report). A site tour was undertaken with the project team and AC representatives on the 11 March 2020. A site tour with mana whenua representatives was undertaken on 16 July 2020, and a survey of some private properties was undertaken 17 July 2020 (the majority of the NoR D4 alignment through greenfields). Otherwise, due to limited land access, only publicly accessible land was surveyed. Areas of interest such as inlets, creeks and known pre-1900 historic heritage sites were specifically targeted to consider whether any evidence of pre-European Māori or historic evidence of occupation is present.

4.2.1.2 Limitations and accuracy of data

As most sites are recorded on private properties, and property access of many private properties was not obtained, the site survey was limited to the roadside observation. However, some sites are located close to the road side or on public land so this provided useful information. For those sites that could not be viewed from the roadside or public land, the investigation of these sites was undertaken by desktop information only.

Archaeological sites have been recorded since the 1950s and the quality of site information is variable. Sites were initially recorded on 100 yard grid references, which were converted to 100 m grid references as the map data became metricated in the 1980s. This has led to site locations in the SRS potentially only having a 200 m accuracy.

Since the mid-1990s sites recorded by hand-held GPS are generally located to ± 5 m. To ensure all archaeological sites that could be impacted by works are assessed, a 200 m buffer was placed around the proposed extent of works, and all sites contained within that buffer were subject to desktop analysis to see if they are likely to encroach into the proposed extent of works. This includes sites which are not within or directly near the proposed designation, but which may extend into the proposed designation boundaries.

5 Background

5.1 Desktop Research

5.1.1 Landscape

The Manukau Harbour is New Zealand's second largest harbour, with an area of about 365 km² and a shore length of approximately 460 km. It was formed by the development of a Quaternary dune barrier (Awhitu Peninsula) that enclosed a large bay between Port Waikato and the Waitakere Ranges (Kelly 2008: 3).

The study area lies within the Manukau Lowlands, an area of relatively flat land which is situated along the southern edge of the harbour. The study area has several waterways, notably the Ngakoroa / Ōtūwairoa (Slippery Creek) Stream and Hingaia Stream, which flow out to the Pahurehure Inlet through the Drury Creek.

According to environmental factors such as soil types, climate, and similar factors, there were large wetland ecosystems around the area (Figure 5-1) (Whenua Māori Visualisation Tool, n.d.). Those which were closest to the NoRs is one which runs north – south along the west end of NoR D1, and a second at the east end of NoR D1. This also extends onto the Bremner Road Section of NoR D2. Another large wetland was located east of the Ngakoroa Stream which overlaps with portions of NoR D3, NoR D4, and NoR D5. In precontact Māori settlement, these wetlands were utilised for hunting of waterfowl and eels, transportation, storage, and the edges of some wetlands are suitable to cultivate taro.

The geology of the survey area is dominated by late Pliocene and early Pleistocene non-marine sediments belonging to the Puketoa formation of the Tauranga group (Edbrooke, 2001: 47). The top layers of soil are dominated by two soil types, with moderately well drained allophanic orthic granular soils around Jesmond and Bremner Roads, and gley soils closer to the coast and into Runciman. The gley soils generally have poor quality drainage, and many have only been able to be used for agricultural grazing once large-scale drainage systems were able to be installed. The gley soils would not have been suitable for pre-European Māori horticulture.

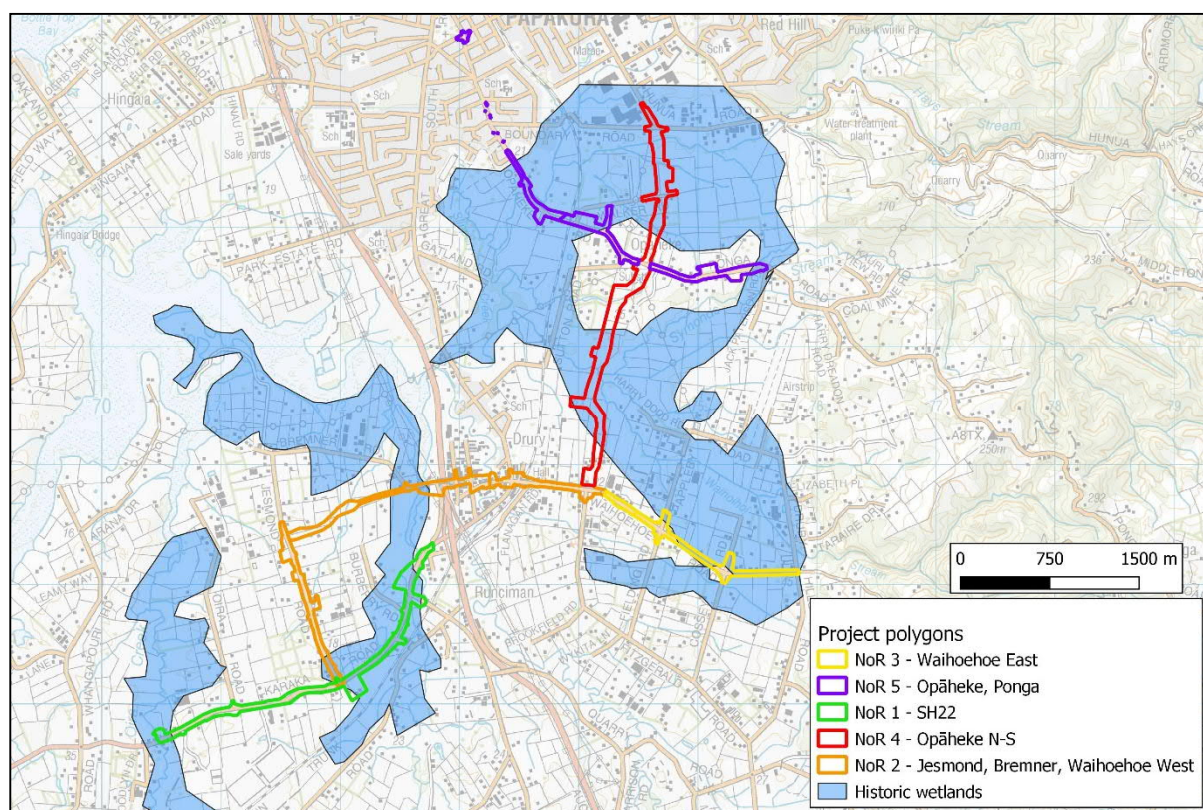


Figure 5-1. Plan of the historic swamps and proposed designations (map based on information from Manaaki Whenua and information provided by Te Tupu Ngātahi).

5.1.2 Pre-contact Māori land use

Drury

The purpose of this section is to document the presence of a precontact Māori landscape within the area. Well-documented backgrounds of the precontact Māori landuse and the signfance of these areas are found in mana whenua reports, such as: Te Roopu o Kaitiaki o Papakura (2010), Ngāti Te Ata Waiohū (2014) and similar texts prepared by mana whenua representatives.

While many of the soils in and around Drury are generally not suitable for kūmara harvesting, there are several other attributes that made the area appealing for human occupation. These include waterfowl and eel to hunt, waka storage and transport systems through the many wetlands and waterways, and plant materials for resources (Te Roopu Kaitiaki o Papakura 2010: 7; Tatton 2001: 45). The foothills of the Hunua Ranges were used for extensive cultivation areas and settlement, including the settlement at Ōpāheke.

The area was also significant to Māori as a link between the Auckland Isthmus, the Waikato and the Hauraki Gulf. The Hingaia Stream, while not currently documented on the Sites of Significance to Mana Whenua Schedule on the Auckland Council website, has in the past been recognised as a wāhi tapu more generally (Te Roopu Kaitiaki o Papakura 2010: 16-17). A significant pā at Maketu overlooked the Ararimu Track, the inland route to the Waikato (Clarke 1983) and the Hauraki Gulf was accessed via an overland route through to present day Clevedon (Tatton 2007).

The Papakura Portage route extended from the area of present-day Papakura town to the Wairoa River (Hooker 1997). It is most likely that Old Wairoa Road marked on present day maps is the track followed by the Papakura portage. This portage route likely runs around 1.4 km north of the northern extent of NoR D5.

Murdoch (1990) describes that at the time of European arrival to the wider area, all those who lived in the wider area traced their whakapapa to the *Tainui* waka. He also notes that these people all associated to Te Waiohū, a confederation of several hapū and iwi in the region.

Drury has long been regarded by mana whenua as having a strategic position to Tāmaki Makaurau (Te Roopu o Kaitiaki o Papakura 2010). The waterways enabled people to visit, battle and trade, and often enabled people to access areas of land faster than by foot. Several complex inter-tribal relationships developed around the harbour shoreline. The area is under-recorded on the SRS and it is possible many of the heritage sites associated with pre-European Māori land use has been damaged since the 1850s. Within each of the NoR areas, there are no recorded sites on the AC Sites of Significance to Mana Whenua overlay layer.

According to Lennard (1986: 4), Drury's "...previous Maori name was Tauranga". This is not recorded on other historic texts or available CIA reports but is a notable detail.

Papakura

The area around Papakura provided access to inland areas like the Hunua Ranges and Clevedon. Similar to Drury, pre-European Māori settlement around Papakura was intensive and was focussed around the waterways.

Settlement can be traced back to the arrival of the *Tainui* waka, which entered the Manukau Harbour in the 14th century (Murdoch 1990). The strategic location of the area meant that multiple different iwi occupied the area intensively with seasonal settlements (Harlow et al. 2007, Murdoch 1990). Fortified pā such as that in the Pukekiwiri / Red Hill area protected the resources available (Murdoch 1990).

5.1.3 Pre-1900 European land use

Drury

The European purchases and alienation of Māori from their land in the wider area began in 1842, and a series of purchases and attempts to claims were made, until in 1848, the Government took possession of much of the land, part of which was later included in the sale of Crown land to settlers to establish the Village of Drury (Brown and Brown 2017).

The first Government sales just north of the town that was then called Slippery Creek (now Drury) took place in 1852 (*New Zealander*, 1 September 1852: 4). In June 1854 the 35,000 acre Hunua Block was sold by the Government, and in August 1855 sections in the village of Drury (just north of the Runciman property) were offered for sale (Brown and Brown 2017). In 1852 Scotsman Thomas Runciman made an application for the Tuimata Run (Morris 1965). Thomas and Isabella Runciman had four children and lived in a two-story house with a cattle station on what is now land between the motorway and the Ngakoroa Stream. This is near NoR D2. Old newspaper records show they were living here by 1852 (Simms 1999; *New Zealander*, 22 May 1852: 2). Their home is recorded in the SRS as R12/1131. A. Kennedy travelled through New Zealand in 1852, and in his note book he records "... Mr Runciman has a cattle station... the site of his cottage is good, having on his left a tidal

creek connected to the Manukau, on his right a considerable stream of freshwater...” (cited in Morris 1965: 78). The exact location and extent of the house is unknown, but it appears the home was likely a little further east of the current location on the SRS. The recorded location is on the land reclamation evident in aerials between 1960 and 1967 (Figure 5-2). While the true location and extent is unclear, the site stands near the current recorded point. Further research may provide more information of the location and extent.

By 1857, Runciman’s wharf was operating out of Ngakoroa Stream (*New Zealander*, 31 May 1862: 3). The wharf was used to export timber that was being shipped in for the construction of the area’s Presbyterian Church, which opened on 20 June 1858 (Brown and Brown 2017).

In Morris (1965: 78), there is mention of a second Runciman home, which was noted by the grandson of Thomas Runciman. Morris records: “the Runciman home was situated opposite where the Masonic Lodge now stands, on the same side as the St. John’s Church, but this must have been the second home. No doubt it was built when the road was put through and when there were not the needs to depend on water communication”. It cannot be determined at this stage if the second Runciman home is pre-1900s, or if it falls within or near the NoR D2 designation, but this could be determined with additional research in the future.

Another record of a potential significant early building location is a cottage of Captain Drury, noted in Morris (1965: 79-80). The book explains that in 1954 an old house “next to Down’s Garage” burnt down. This was said to be the home of Captain Drury. By coincidence, other than the better-known Captain Byron Drury, there was supposedly another “Captain Drury” in the area, he was Henry Kingsmill Drury, who was stationed in the area during the land wars (Morris 1965). Further investigation may determine whose house it was, the chronology, location, and if subsurface deposits of the house extend into any of the proposed designations.

Early maps show where other settlers lived around the area from the 1860s, two of which show buildings within Runciman and Drury townships. Several of these buildings fall within NoR D2. The 1864 map which covers the Runciman township shows at least one building which falls within NoR D2 (Figure 5-3). The map drawn over Drury township shows at least five historic buildings, and a bridge, which fall within the proposed footprint of NoR D2 (Figure 5-4). These buildings are classified as archaeological sites under the provisions of the HNZPT Act and those sites which overlap with the Bremner Road Section of NoR D2 have been added to the SRS.

Papakura

From 1834, missionaries had been travelling through the area, staying at Ōpāheke, in a kāinga near Ōtūwairoa Creek (Harlow et al. 2007). In 1842, owing in large part to its strategic location, the New Zealand government purchased the Papakura Block, which stretched from what is now Papatoetoe to south of Papakura (Harlow et al. 2007; Murdoch 1990). In 1852 and 1854, additional land was purchased by the Crown, including the whole upland section of the Hunua Block. The Kirikiri Block remained in possession of the Māori owners (Murdoch 1990).

The first European settler to purchase land in Papakura was McLennan, in 1842. Though he purchased the land in 1842, he then returned to Auckland, coming back to settle in 1847. Cole and Willis also arrived in 1847, taking up land. Willis established the first store in Papakura, near the current location of the Papakura Golf Club (Willis 1932).

The Papakura Cemetery, on the corners of Settlement and Ōpāheke Roads, was present before the 1860s (CHI record 16001). According to the CHI record, each of the major religious denominations owned their own block of land in this cemetery, and many early settlers are buried in this section. The Presbyterian Section is the largest of the sections, on the corner of Settlement and Ōpāheke Roads.

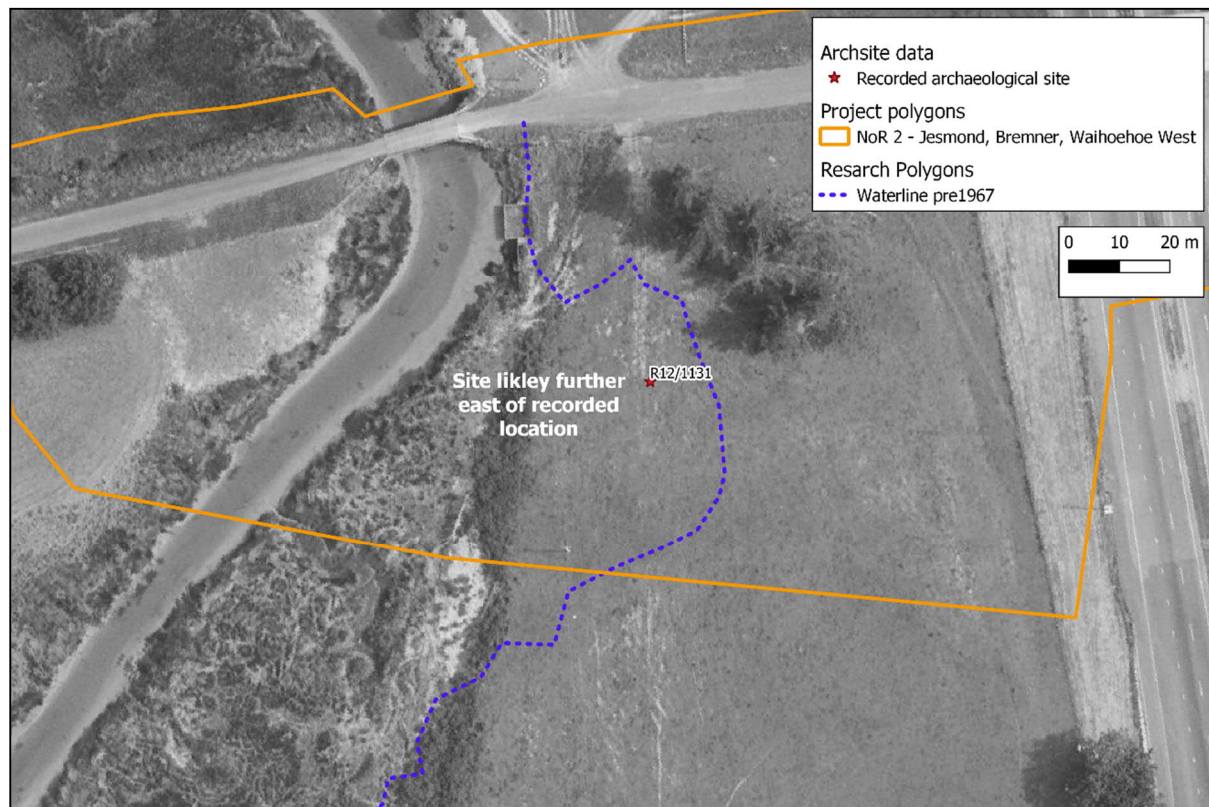


Figure 5-2. Aerial photograph taken in 1967 showing land reclaimed, the blue dashed line shows the edge as seen on pre-1960s aerials (taken from Retrolens.nz, SN3014_C_20).

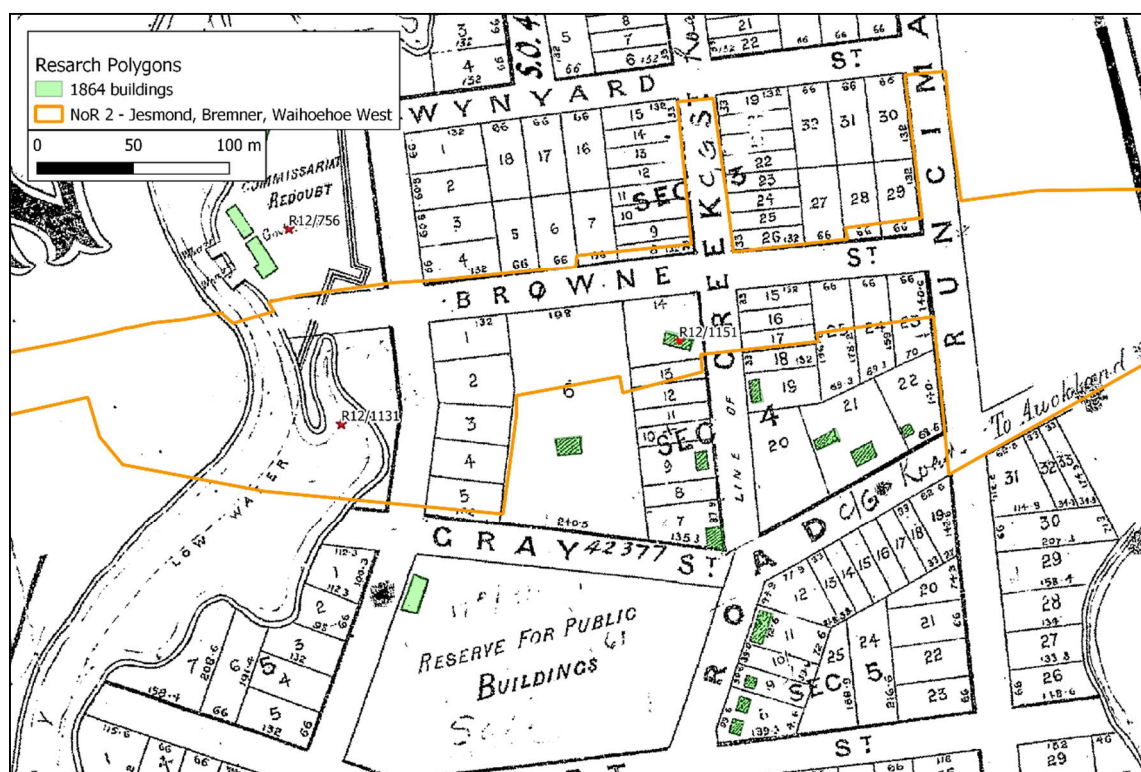


Figure 5-3. Close-up of a map of Drury in 1864, with NoR D2 overlaid, and buildings shaded in transparent green (note: only those within the designation were added to the SRS). (Auckland Libraries Heritage Collections Map 4498-15).

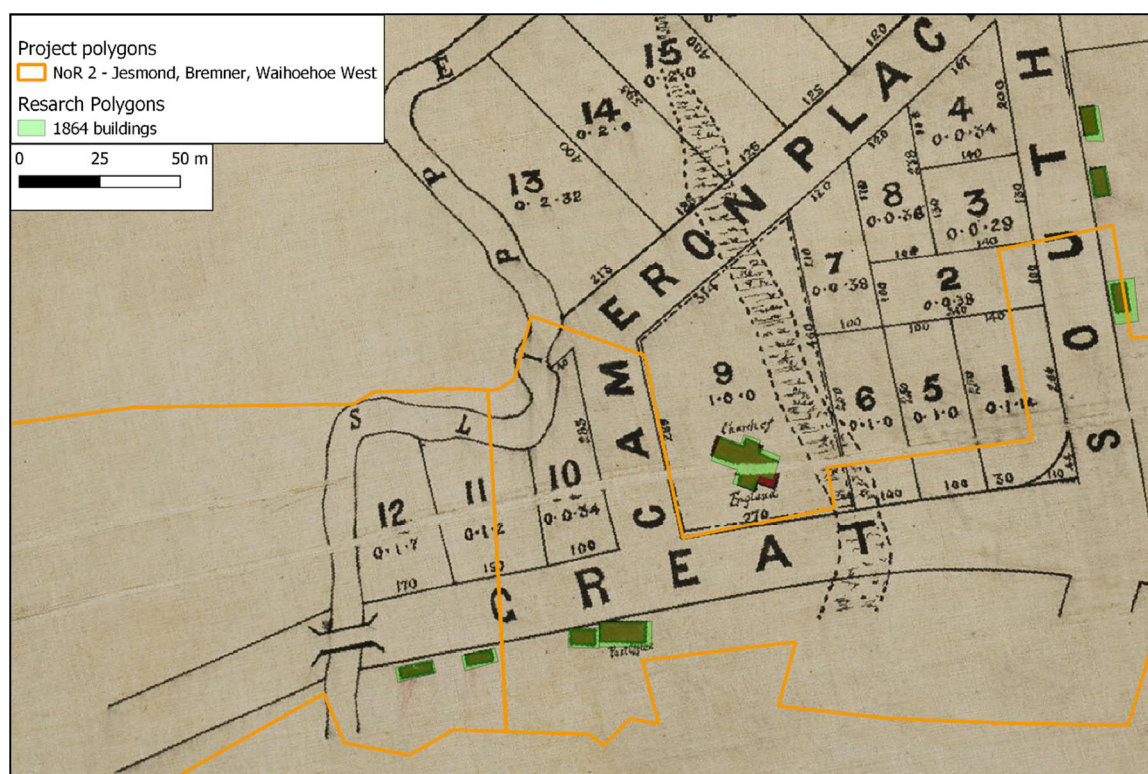


Figure 5-4. Close-up of Drury in 1865 or 1862, with NoR2 (orange) and buildings shaded in transparent green (NZ Map 4498-16).



Figure 5-5. Allotments for sale in Drury in 1860, with many of the streets unnamed. (Auckland Libraries Heritage Collections Map 4183).

5.1.3.1 The 1860s Waikato Campaign

Drury

Māori remained alienated from their land, and unease had been building from the 1850s. By 1856, the concept of a Māori king was being openly discussed. However, the Crown saw the Kīngitanga movement as a direct attack on British sovereignty and by the late 1850s the seeds of the land war had already taken root. The Kīngitanga movement opposed the sale of Māori land and although some were receptive to leasing, the Crown saw this as a further obstruction to development. In the 1860s the Taranaki Wars had caused European settlers of the Papakura and Drury unease, some of whom were concerned that nearby Māori could “be so infatuated as to attempt to create disturbance within this Province.” (*New Zealander*, 1 December 1860: 6).

Construction of Great South Road began in December 1861 under the orders of Governor Grey who was preparing for war with Māori (O'Malley 2019: 259). The road was constructed by British Army troops and provided access to north Waikato from Auckland. By March 1863 the road construction was complete, and Grey had by then obtained additional British troops and armour-plated steamers (O'Malley 2019: 103).

Tensions between Māori and Europeans in the Auckland and Waikato districts gradually increased and in July 1863 Governor Grey issued an ultimatum to the Waikato tribes around Auckland to

immediately swear an oath of allegiance to the Queen and to put down their arms. Those who did not comply were told to remove themselves to the Waikato, beyond the Mangatawhiri, effectively declaring themselves as rebels against the Government (O'Malley 2019).

Drury was seen as a gateway between the Waikato and Auckland by both Māori and Pākehā and was established as a military garrison by the Crown. The access to the Manukau Harbour through the Pahurehure Inlet and its location on the Great South Road meant the town served as a supply base and staging post for the Waikato Wars. The military used the Pahurehure Inlet for access to Drury. The water access at Drury made it easy to get supplies from Onehunga, as these did not need to travel down the Great South Road.

Captain Mairis of the Royal Engineers recommended the construction of two stockades (redoubts) in the area (*New Zealander*, 1 December 1860: 6). Records cited by Brown and Brown (2017: 23) explain: “one of which was built alongside Great South Road in Drury, on land owned by A B Abraham (present day site 217-219 Great South Road, opposite the Jolly Farmer Inn)”. This is recorded as archaeological site R12/123 which does not fall within the proposed designation boundaries. A newspaper article from 1865 explains that: “on the bend of the road, about midway between the Farmers and Raven’s, stands an old redoubt... going to fast decay...” (*New Zealander*, 8 August 1865: 3). This most likely refers to site R12/123. Old photographs and maps of the camps show the size of the redoubt (Figure 5-7, Figure 5-8). Drury also hosted a headquarters for General Cameron’s 65th Regiment Camp (R12/755).

The other redoubt, now known as the “Commissariat’s Redoubt” (R12/756) lies north of the Bremner Road across the road from Runciman’s Homestead. The redoubt was established to act as a base for supplies of food and equipment for the British campaign in the 1860s land wars (Figure 5-6).

Papakura

During the New Zealand Wars in the 1860s there was an influx of people to Papakura with the town becoming a military garrison, acting as supply base and staging post. Great South Road was the main land transport route to the Waikato, and improvements and extensions were made, particularly around Papakura.

Many Māori of the area had moved to the Hunua Ranges or the Waikato by mid-1863. In July of that year British troops crossed the Mangatawhiri River and a battle broke out between the militia and Māori occupants of Te Aparangi. European settlers were temporarily evacuated (Murdoch 1990), and over the next eight months soldiers based in Drury were actively engaged in the war, involved in well-known skirmishes such as at the church in Pukekohe and at Burt’s Farm (Clarke 1982). By March 1864 General Cameron had moved well into the Waikato, and after several battles culminating in Orakau, he took hold of the region (Clark 1982). In 1865 the Kirikiri Block was confiscated by the Crown (Murdoch 1990).

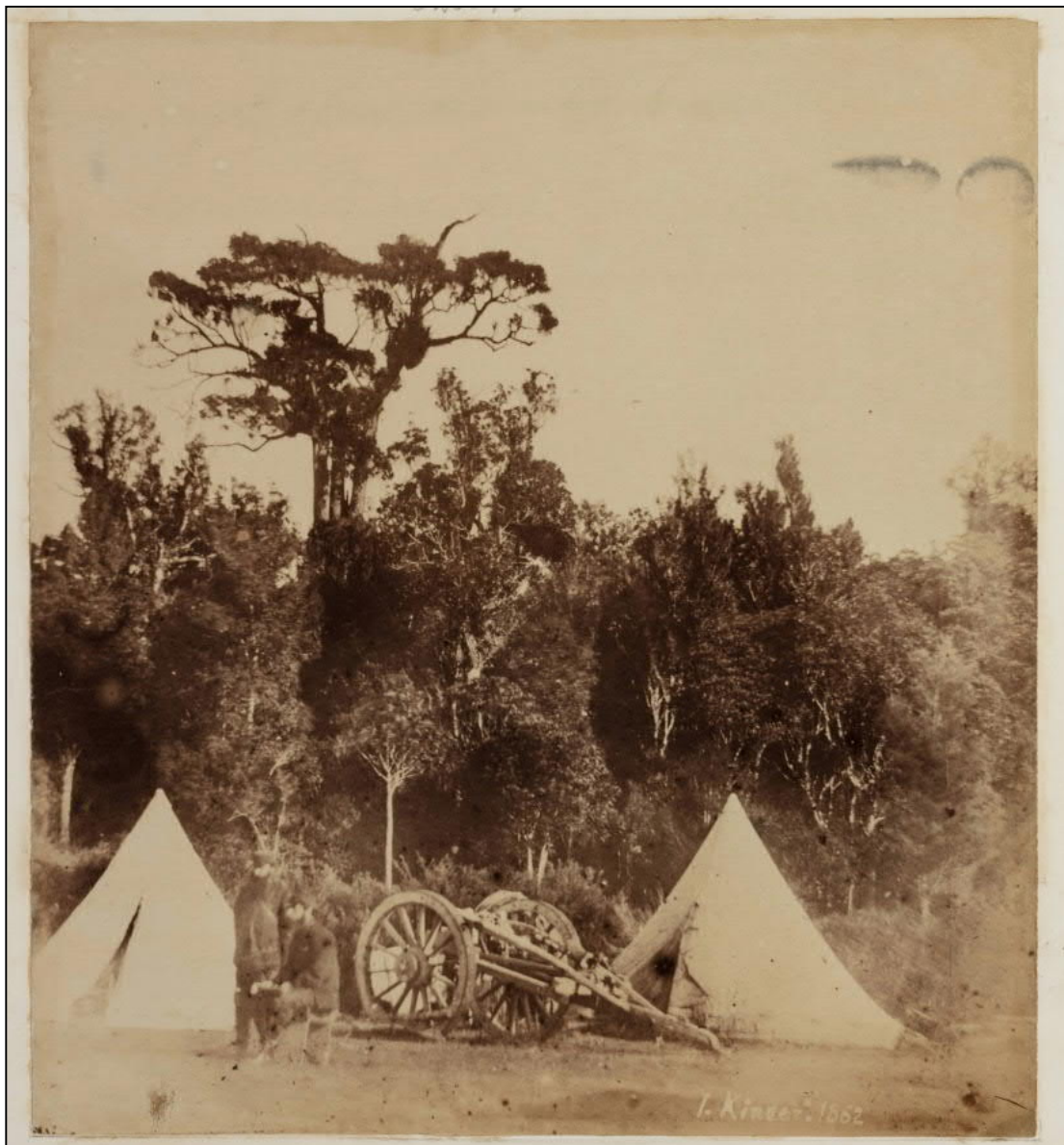


Figure 5-6. Tents at the Commissariat Redoubt, R12/756, taken in 1862 (Alexander Turnbull Library, Wellington, New Zealand: PH-ALB-89-p22-1).



Figure 5-7. The Military camp at Drury c. 1860s, R12/123 (Alexander Turnbull Library, Wellington, New Zealand: PA1-f-027-56-2).

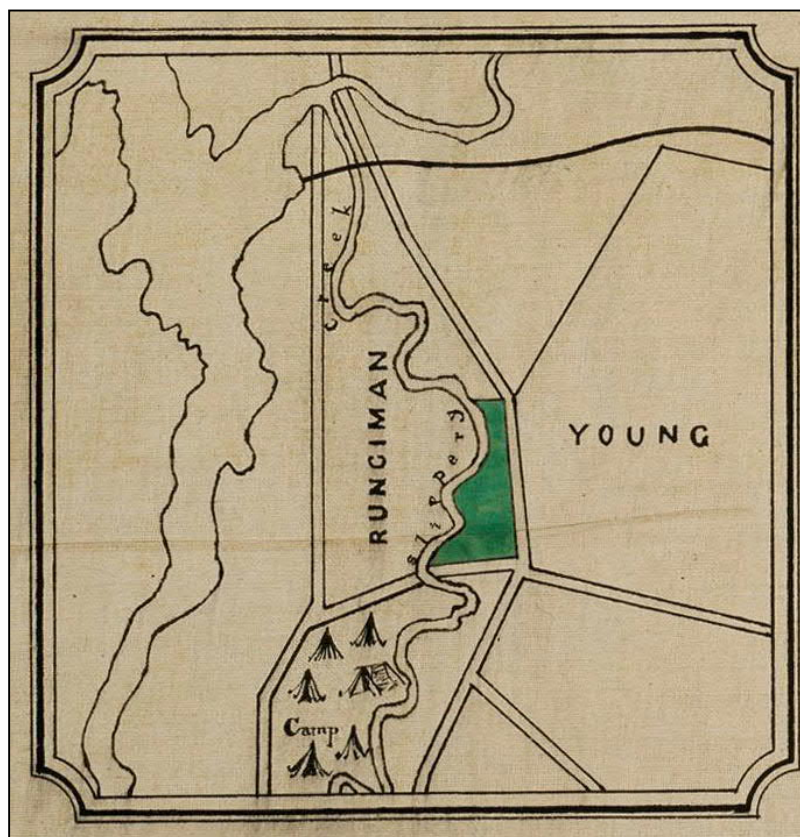


Figure 5-8. “Camps” drawn in 1865 (?), R12/123, as an insert on map NZ Map 4498-16, Auckland Libraries Heritage Collections.

5.1.3.2 Post-Land Wars settlement

In an effort to increase security, consolidate territorial gains, and display government presence, in 1864 the New Zealand Government encouraged South African and British migrants to move to New Zealand by offering free 5 to 40-acre blocks. These immigrants were to occupy Waikato lands that had been confiscated following the land wars. The scheme did not take off, after the promised financial incentives were not provided (Morris 1965). Around Drury and Runciman many of the proposed subdivisions seen on early plans were to accommodate for those arrivals, most of which did not eventuate.

Old newspaper records from 1865 provides information on some sites and note the size of Drury. One article explains that the population was between 400 and 500 people, at which stage it had two hotels. One of the two hotels was Farmers Hotel, which is sometimes known as Young's Hotel. The other is the Great South Road Hotel, better known as Raven's Hotel (*New Zealander*, 8 August 1865: 3). Importantly, the article also describes three stores – the Middlemass store, the Rhodes store and the Simpson “new” store. Only the Middlemass is on the SRS, added during this assessment. The locations of the other stores is uncertain, which further supports the likelihood of potential unrecorded historic heritage sites in the area. While it is likely these other stores are within or near the NoR D2 area, because that is where the old township stood, this cannot be demonstrated without further research. Morris (1965) notes that the Rhodes store was opened to service supplies for the military during the land wars, so was likely built before 1862.

In Papakura, the development of many industries, particularly agriculture, was boosted by the construction of the railway line from Auckland to Mercer in the early 1870s. Urban growth increased in Papakura township (Murdoch 1990) (Figure 5-9).

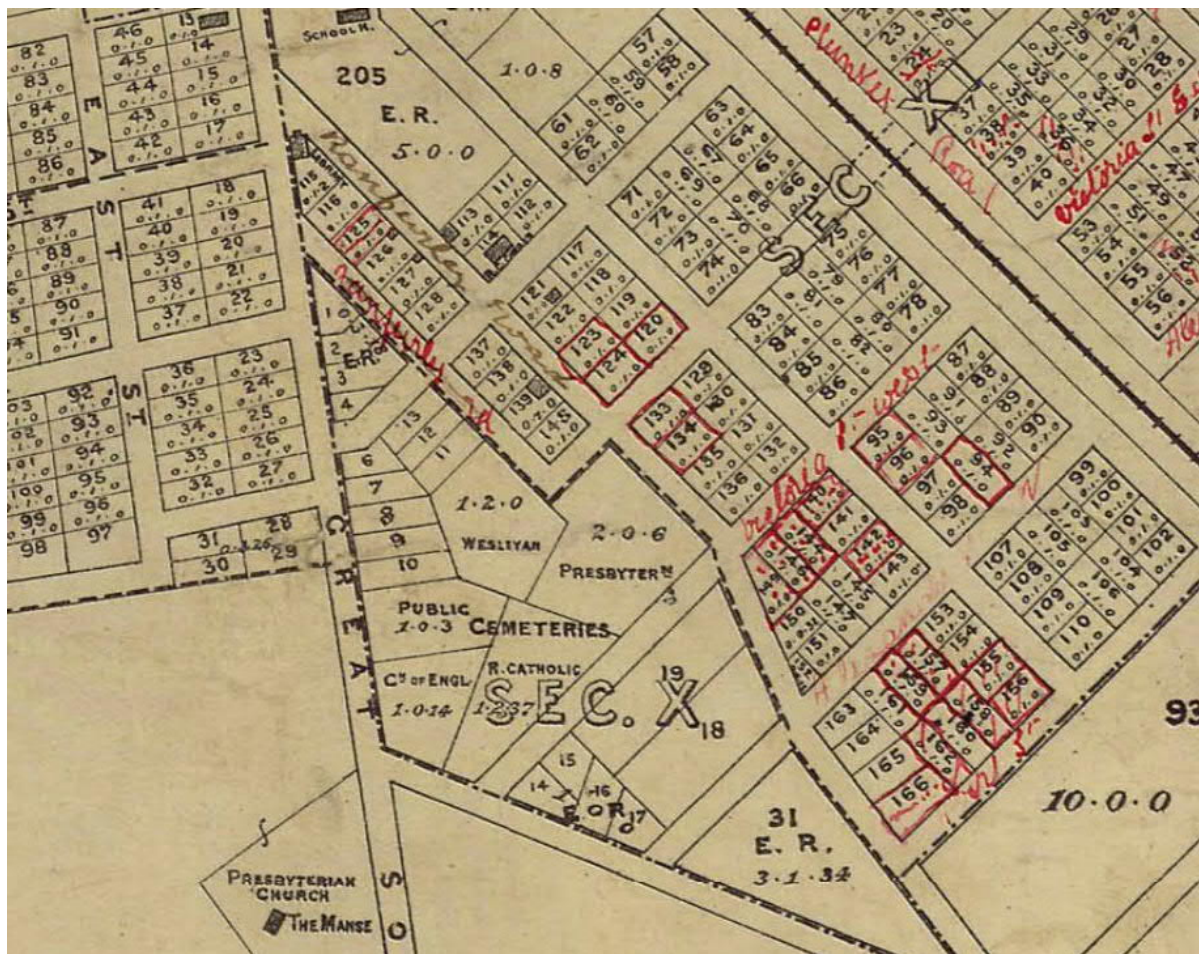


Figure 5-9. Close view of part of the Village and Town District of Papakura, with buildings plotted, drawn in January 1886 (Auckland Libraries Heritage Collections Map 9324)

I should imagine the population of Drury was between four and five hundred : the township containing two hotels – the Farmer's (change house) and the Great South-road hotel, better known as Raven's, for Mr. Raven is an old and popular favorite on the road. Three stores – that of Mr. Middlemass, which is also the post office ; one belonging to Mr. Rhodes, and last, but not least, Mr. Simpson's new store, which is a pattern building, well situated, and approached from the road by a clean plank causeway, so that customers can enter without soiling their boots. On the bend of the road, about midway between the Farmer's and Raven's, stands an old redoubt, now going fast to decay. It would be well if we could consider the blessings of peace so well secured that we might abandon all the redoubts to decay. I am far from holding that opinion, and I am sorry that the prevailing conviction tends to a similar result. The saddest feature of all to me in and around and on the road to Drury was the neglected, and in some instances deserted, farms where cultivation is almost entirely suspended, and in some instances altogether abandoned. The largest paddock under cultivation which I saw on the road could not possibly be more than thirty acres, producing barley or oats, or some cereal of insignificant

Figure 5-10. Description of Drury in 1865 (*New Zealander*, 8 August 1865: 3)

5.1.3.2.1 The Middlemass buildings

This information relates to buildings within the footprint of NoR D2. There are likely to be many unrecorded historic sites across the project area which may be identified through additional desktop research. An example of this is the four buildings photographed between 1866 – 1867 (Figure 5-12). The photograph shows what is described on the Auckland Libraries Heritage Collections as a:

“residence, general store, bakehouse and Post Office (run by Mr and Mrs J Middlemiss) opposite the Anglican Church at Drury. There is a poster advertising the services of photographer Charles Burton Hoare on the front of the building nearest the camera”.

The only land which is opposite St. John's Anglican Church with a road between is where the former cheese and casein factory currently stands. Old newspaper records note the correct surname is spelt

Middlemas. The same newspaper article from 1868 has a statement from Sarah Ann Middlemas who said, "... I am the storekeeper at Drury" (*Daily Southern Cross*, 21 March 1868: 3).

Morris (1965: 80) explains the Middlemas post-office was built and serving the community as early as 1857: "Joesph Middlemas had a store where the Drury cheese and casein factory now stands, it was here December 1857, he opened the first post-office in the village".

Mitchell and Seffern (1866: 64) also show that Sarah Ann Middlemas also ran the Drury post office in 1866–1867. Supplementing this information is a plan drawn in 1865 (but possibly as early as 1862), show a "Post Office" and other buildings in the Drury township (Figure 5-11).

Newspaper reports dating to 1863 note a bridge at the Middlemas property which was damaged by government soldiers, and an application was made by Sarah Ann for funding for the bridge repair (*Daily Southern Cross*, 23 March 1865: 5). It is not clear where this bridge originally stood but it would have been to cross the Hingaia Stream. The bridge seen in Figure 5-11 is likely to be that bridge. The bridge has been added to the SRS as R12/1152.

An early plan of Drury drawn in what is recorded as 1865 notes the "Post Office" across from the church (Figure 5-11). This has another structure immediately next to it, but are not the four buildings as seen in the 1866 - 1867 photograph. This suggests the buildings surrounding the post-office were either built shortly after the post-office, or simply were not drawn. The site was added to the SRS during this assessment as site R12/1143.

Old newspaper articles (*Auckland Star*, 2 January 1897: 5) document that by 1897 Mr. Hodge owned the store and post-office:

when the buildings used by Mr Hodge as a dwelling-house and store, and a detached building, formerly an old bakery, but latterly used as a gum store, were all burnt to the ground... active exertions of the neighbours some of the articles of furniture and gum were saved. The Anglican Church, on the opposite side of the road, caught fire twice, but was saved from real damage, as was also Mr Prince's dwelling, towards which the sparks were carried by the wind. No one was in the building when the fire broke out...

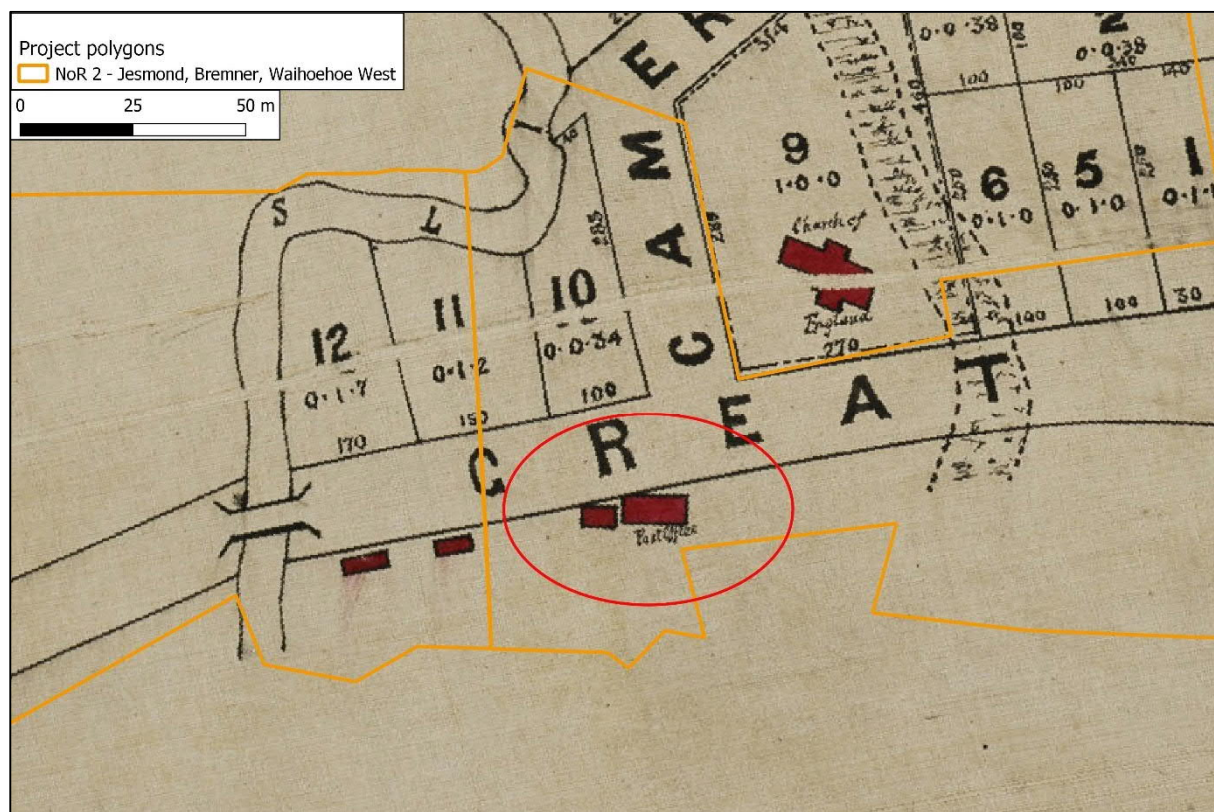


Figure 5-11. Old Plan drawing of Drury drawn in 1865(?) showing a "post office" (circled red) at the side of Norrie Street (NZ Map 4498-16).



Figure 5-12. The shops, bakehouse, post-office, and residence in Drury, taken either 1866 or 1867 (Auckland Libraries Heritage Collections 7-A526).

5.1.3.3 Extractive industries

Coal was mined at 'Waihoihoi' (Waihoehoe) by the Waihoihoi Coal Mining Company from the late 1850s on land owned by James Farmer (Brassey 2020: 5; *New Zealander*, 25 September 1858: 2; *Daily Southern Cross*, 23 November 1858: 1).

By 1858 people were prepared to work the seams at James Farmer's property in Waihoihoi (*New Zealander*, 25 September 1858: 2). In 1859 the Waihoihoi Mining and Coal Company was in existence and plans were underway for the construction of supporting transport systems to export material out of Drury (Brown and Brown 2017). To export the materials mined, a wharf was also built at Abraham's Point in the early 1860s. In 1864 the company operated at a loss, and closed two years later. A new company called the Drury Coal Mine Company opened its own mine and branch rail link in July 1905 and diversified into a brickworks in 1906 (*New Zealand Herald*, 1 February 1906: 3).

Brick production and exporting had begun earlier in Drury. It was linked with the Waihoihoi Coal Mining Company established in the 1850s, with thousands of bricks a week produced and shipped from Drury. The industry collapsed by 1885 (Brown and Brown 2017). The brickworks were reorganised into a new company in 1909 but went into liquidation from 1914. The coal company disappeared around this time. Most of these operations are closest to NoR D2.

5.1.3.4 Transport systems

Records suggest that in the first stages of European settlement roads were simply tracks through the bush, some of which followed existing tracks established by Māori. Records show that from at least the 1850s Great South Road was established as far as Drury. Norrie Road, where NoR D2 passes, was called "Old Great South Road" by the 1860s. After the Land Wars, populations were growing considerably, and the demand for reliable transport routes were increasing. However, once the British military left the area in 1865, a lot of the commercial opportunity dropped, and the area became depopulated.

Some historic research has identified that many existing roads in the wider area were early pre-1900 routes. For example, Ponga Road, which is part of NoR D5, was once known as Hill's Route (Spring-Rice 1984: 43). Ponga Road is expected to have been a route based on the pre-1900 villas flanking the road both north and south. In many cases these pre-1900 transport routes were utilising existing transport routes established by Māori.

The coal mined from Waihoihoi from the 1850s was exported on a short self-acting tramway which was a ¼ mile long (around 400 m) (Brassey 2020). There were several subsequent steps before it reached the Auckland township, one of which was to transport the coal by bullock teams to the wharf, likely travelling what is now Waihoehoe Road and Norrie Road, terminating at Runciman's Wharf (Brassey pers. comm.). This approach to transporting the coal was not meeting expectations, and by 1860 there were plans to extend the tramway to Abraham's Point in Ngakoroa Stream (Brassey 2017; *New Zealander*, 11 January 1860: 3). A brickworks and pottery were also being planned to take advantage of the cheap fuel and good quality fire clay associated with the coal.

The extension to reach Abraham's wharf was designed and marked out the same year it was proposed (*Daily Southern Cross*, 13 December 1861: 3). It was opened 1 May 1862. The tramway was a single horse-drawn service which was built on a bank of shale tailings from the coal mine. The sleepers were made from local cut puriri, and the rails of square rimu. The mine was producing poor

quality coal and poor returns saw the mine close during the Land Wars (Brassey 2020; *New Zealand Herald*, 18 April 1904: 6).

In 1864 the Provincial Government prepared for the construction of a railway from Auckland to Drury. This began in 1865 and had reached Drury in 1874. Railway construction required a redesign of the tramway which no longer ran along its original route.

In 1904-5 a new syndicate, the Drury Coal Company, opened a coal mine and built a new 'mineral railway'. Research by Robert Brassey (2020) identified that the new mine appears to be in close proximity to the ca. 1859–1864 coal mine and they appear to have upgraded and modified the existing tramway route to create the new railway. However, during this phase of use the railway terminated at Drury railway station rather than at Slippery Creek (Figure 5-13). Demand for coal increased and within a couple of years, the expansion meant the railway was upgraded to the same scale as the Auckland – Drury railway so that ordinary railway trucks could be used to deliver products directly via a private siding without being transferred (*New Zealand Herald*, 4 December 1906: 3; *Auckland Star*, 20 August 1908: 7).

The tramway is recorded on the SRS as R12/1222, however the single point at 230 Fitzgerald Road is easily misinterpreted as an isolated site which in fact spans many properties toward Abraham's Point and the Drury Station.

Brassey (2020) summarises the phases of construction of the tram/railway:

1. Self-acting incline from mine. Bullock road to Slippery Creek wharf (1859-);
2. Horse-drawn tramway replaces bullock road (1862-);
3. Narrow gauge steam powered railway replaces tramway, terminates at old Drury station (1906-);
4. Railway upgraded to wider gauge and linked by private siding to main line (1908-);
5. Decline, closure and demolition (-1921).

There are three known pre-1900 wharves around the Ngakoroa Stream area, all of which were on the east bank. The first of the three was Runciman's Wharf, which supported the export of coal in the early years of the industry. Records suggest the wharf was built by 1857. A little further north is the wharf built to support the Commissariat Redoubt. It is likely this was built around 1863 to service the redoubt, but further research could determine this. The other known wharf was that at Abraham's Point, built between 1860 – 1862. The proposed works are close to Runciman's Wharf and the Redoubt Wharf, but Abraham's Wharf is further north of NoR D2. The recorded extents of the wharves and redoubt have been avoided through options assessment and specific design measures incorporated into the NoRs.



Figure 5-13. The branch line to the mineral railway built in 1905 (Auckland Libraries Heritage Collections Footprints 07933).

5.1.3.1 Farming

The surrounding area of Drury was developed for farming to provide produce to the Auckland market. From the beginning of the 20th century the area was primarily a producer of dairy and wool products, and feed for cattle. A cheese and casein factory were built across the from St John's Church to support the growing dairy production in Drury (within NoR D2). Along with extractive industries, farming played a strong role in the economy and work for people in the area.

5.1.3.2 World War II

In 1942 American troops arrived in New Zealand, as part of the Allied forces Pacific Campaign against the Japanese Empire (Hinton 1993). Thousands of American arrivals were stationed as troops in bases across the Auckland region and Northland. There were two main camp sites at Ōpāheke where American units were based: Ōpāheke East and Ōpāheke West. The CHI points for the Ōpāheke East camp and Ōpāheke West camps fall outside the proposed NoR D5 designation, but it is likely the site extents overlap with the proposed designation footprint of NoR D5. Further research at detailed design can help determine this.

5.1.4 Previous archaeological work near project area

Drury

The area is a poorly recorded archaeological landscape. Many sites present are recorded as part of ad-hoc surveys for development, or a handful of those which are more recently recorded by AC heritage staff including the Drury-Ōpāheke Structure Plan work. A small handful of sites related to the Land Wars were added decades ago but have never been updated or investigated properly. The pre-contact Māori archaeological footprint is barely recorded in the SRS. This is partly due to the difficulty in detecting the physical evidence of these sites from the ground surface during a field survey, and also because there is a general absence of large-scale horticulture due to the soil types along the flat land, meaning storage pits and similar structures are unlikely to have been present in the area. Although survey has been limited in the area, there is still a noticeable lack of archaeological sites within the lowland areas of the Manukau Harbour.

Murdoch (1990) argued that the limited environmental resources of the landscape would not have sustained a large standing population, but rather would have been exploited for wetland resources such as eel and waterfowl, which was reiterated by Tatton (2001). These types of activities are unlikely to provide much of an archaeological footprint, but remnants of eel weirs and small temporary camps and associated cooking areas are likely to still exist in places. It is likely there are remains of archaeological evidence of land use in and around the waterways, especially so at the larger waterways like the Hingaia Stream and Ngakoroa Stream (Ngāti Te Ata Waiohū 2014).

Recent increases in proposed housing developments in the outskirts of Auckland have led to several archaeological surveys in the area (Bickler 2013; Clough 2000; Cruickshank 2014; Cruickshank et al. 2017; Foster 2007, 2014, 2015; Glover 2020; Prince and Clough 2003). Other surveys have included those for infrastructure work (e.g., Clough 1995).

Near NoR D2, the north portions of Jesmond Road were assessed in 2017 by Arden Cruickshank, Danielle Trilford and Jacqueline Craig as part of proposed plan change by Karaka and Drury Ltd (Cruickshank et al. 2017). The assessment undertook limited field survey of properties that were accessible, and determined that while no archaeological deposits are identified in the area, it was possible evidence of both precontact Māori land use and the 1850s–1900s farming may be present within the area. As such a precautionary approach was recommended whenever works were undertaken in the area (Cruickshank et al. 2017). Further east of NoR D3, a proposed shed building at 387 Drury Hills Road was assessed to ensure no archaeological deposits were at risk of damage, and no new sites were found (Cruickshank 2014).

Near the Bremner and Waihoehoe West sections of NoR D2, in 2013, Clough and Associates also monitored works around the pump station on Flanagan Road, Drury, as it was near a recorded site R12/742, where the Drury Railway Station and Yards were situated (Bickler et al. 2013). However, this site refers to the station and yards built in 1918, not the original station, which was located further north, near Waihoehoe Road (R12/1139).

Near the east end of NoR D5, land was surveyed by Russell Foster in 1997 to assess any presence of previously unrecorded archaeological deposits (Foster 1997). Foster did not find any evidence of archaeological deposits during that survey.

Papakura

Similar to Drury, targeted archaeological research in the area has been limited, with no large-scale archaeological survey or significant archaeological investigation in the past few decades. Of the earthworks in the wider area which are reported on, there appears to be several instances of poor adherence to archaeological authority legal requirements and inadequate use of Accidental Discovery Protocols.

In 2005 Simon Best was notified on the discovery of a well around 1.5 km north of the NoR D5 Papakura works. The well was exposed during drainage construction works by Auckland Council; at the stage Best had seen the well, the top two meters had been destroyed by the works. The site was added to the SRS by Best as R12/1095. Best had determined the well was installed between 1860 and 1900 (Best 2005).

As part of the Hingaia Structure Plan, a Cultural Heritage Investigation was undertaken to identify heritage constraints on the future development of the area (Clough et. al 2000). The area was around 1.5 km west of the residential portion of NoR D5, from the coastline to the present-day motorway. The area was surveyed, and new archaeological sites, buildings and trees were recorded, and previous or existing data was updated.

Around 3 km west of NoR D5 a midden (R12/914) was investigated as part of ground disturbance works for a subdivision under authority 2005/169 (Baquié and Clough 2008). Before this, the earthworks began without notifying the archaeologists, and a large amount of works had been completed which had destroyed evidence of sites R12/676, 677, 678 and 929. The investigation of R12/914 did not generate enough data to qualify for additional analysis, and evidence of ploughing and discing from previous land working suggested the midden had been too modified for analysis (Baquié and Clough 2008).

Inland from the proposed NoR D5 works in Papakura, a proposed subdivision was assessed by Matthew Felgate in 1999. The assessment determined the works were at risk of exposing potential unrecorded deposits based on its proximity to other recorded sites and known pre-1900 human settlement of the area (Felgate 1999). There does not appear to be a post-monitoring report available on the HNZPT library to determine if Felgate's recommendations were followed.

Around 6 km north of the NoR D5 Papakura works is site R11/2068, a Church and Cemetery added to the SRS around 2000. The church was built from kauri in 1877 and the associated cemetery on the property was used that same year (Clough and Baquié 2008). An archaeological authority for Vodafone tower works were obtained for proposed works on the curtilage of the church. The legal requirements of the authority were not followed, and works were completed without an archaeologist monitoring.

In 1995 an archaeological survey along the route of the proposed Waikato River Pipeline was carried out by Clough. This route extended from east of Manurewa to south of Tuakau, crossing through the centre of Papakura and Drury. Archaeological sites along the route were relatively limited, and 80% of the proposed route followed roads. However, several historic buildings were identified, including churches, railyards, and schools. Most of the pre-European Māori sites were at a greater distance from the pipeline route, with the majority situated on the Waikato River. No new sites were recorded during the survey (Clough 1995).

5.2 Historic heritage sites

There are currently 39 archaeological, CHI, HHEP, and HNZPT Listed sites within 200 m of the proposed designations (Table 5-1, Figure 5-14). There are no Sites of Significance to Mana Whenua within the proposed designations (or nearby) recorded on the AC GeoMaps. There are no areas identified of Special Character within the proposed designations.

Of the 39 historic heritage sites, 17 of the sites fall within the NoRs (14 within NoR D2, one within NoR D4 and two within NoR D5). Several others may have subsurface features extending into the proposed designation footprint. These sites are discussed below where they apply to each individual notice.

Assessment of Effects on Historic Heritage

Table 5-1. Summary of all historic heritage sites within 200 m of the proposed designation. Sites shaded in light orange are within the proposed designation.

Name or site type	NZAA	CHI	HHEP	NoR	Relationship to NoR	Visited from roadside?	Address	Condition (if known)
Unnamed historic building	R12/1168			D1	Outside designation boundary.	No.		Unknown.
...oa [or..pa] - o - Hawaiki	R12/1167			D1	Outside the designation boundary, possible subsurface deposits may fall into the NoR.	No		Unknown.
Former Runciman Post Office	Site is not in true location.	15892		D1	Outside designation boundary.	No.		Unknown
Ōpāheke	R12/1132			D2	Outside designation boundary.	No.		Unknown.
Runciman's homestead	R12/1131			D2	Inside designation boundary.	Yes.	Drury Sports field, possibly neighbouring properties.	Structure removed; subsurface extents possible.
Commissariat Redoubt and Slippery Creek wharf	R12/756		2173	D2	Part of the site inside designation boundary.	Yes.	ESPLND RES 51 Bremner Road Drury Auckland 2578	Structure removed; subsurface extents possible.
Military redoubt	R12/123			D2	Outside the designation boundary (site location has been updated since 2004 SRS update).	No.		Structure removed; subsurface extents possible.
Terrace and midden	R12/1153			D2	Outside the designation boundary.	No.		Fair.
Pre-1900s Hotel and store	R12/773			D2	Outside the designation boundary.	No		Unknown.

Assessment of Effects on Historic Heritage

Name or site type	NZAA	CHI	HHEP	NoR	Relationship to NoR	Visited from roadside?	Address	Condition (if known)
St Johns Church and Cemetery	R12/1129		707	D2	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structure standing, associated ground evidence of structures and subsurface deposits likely intact.
Aroha cottage		2455	704	D2	Portion of the driveway is within the designation.	Yes	201 Jesmond Road Drury 2578	Structure not in original location
Waka tauranga	Part of R12/1131			D2	Inside the designation boundary	Yes	Drury Sports field, possibly neighbouring properties.	Subsurface evidence possible.
Villa, outbuilding, and cottage (28 Waihoehoe Road)	R12/1142	22280		D2	Outside the designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structure standing; subsurface extents possible.
Historic villa	Possibly a site – more research needed into chronology.	22274		D2	Outside designation boundary.	No		Unknown.
Railway workers residences		22288		D2	Inside designation boundary.	Yes.	18 Waihoehoe Road Drury Auckland 2113	Some buildings removed, others intact.
Drury WWI Memorial		17035		D2	Outside designation boundary.	No		Unknown.
Drury Post Office	Possibly a site – more research needed into chronology.	15880		D2	Inside designation boundary.	Yes	Norrie Road.	Structure removed; subsurface extents possible.

Assessment of Effects on Historic Heritage

Name or site type	NZAA	CHI	HHEP	NoR	Relationship to NoR	Visited from roadside?	Address	Condition (if known)
Drury Railway Station	R12/1139			D2	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structure removed; subsurface extents possible.
Drury tramway/mineral railway	R12/1222			D2	Post-1900 portion of the site inside designation boundary.	Yes	Various.	Structure removed; subsurface extents possible.
Railway hotel	R12/1146			D2	Inside designation boundary.	Yes	232 Great South Road Drury Auckland 2113	Structure removed; subsurface extents possible.
Unnamed historic buildings	R12/1149			D2	Inside the designation boundary	Yes	12 Norrie Road Drury Auckland 2113	Structure removed; subsurface extents possible.
Unnamed historic building	R12/1150			D2	Outside designation boundary.	Yes		Structure removed; subsurface extents possible.
Unnamed historic building	R12/1151			D2	Inside designation boundary	Yes	69 Creek Street Drury Auckland 2113	Structure removed; subsurface extents possible.
Unnamed historic bridge	R12/1152			D2	Inside designation boundary.	Yes	Norrie Road.	Structure removed; subsurface extents possible.

Assessment of Effects on Historic Heritage

Name or site type	NZAA	CHI	HHEP	NoR	Relationship to NoR	Visited from roadside?	Address	Condition (if known)
Farncombe Parade Shop	Possibly a site – more research needed into chronology.	15110		D2	Outside designation boundary.	No		Unknown.
Drury Hall		15107		D2	Outside designation boundary.	No		Unknown.
Norrie Street Drury Presbyterian Church		14374		D2	Outside designation boundary.	No		Unknown.
Former Drury Cheese and Casein Factory	Possibly a site – more research needed into chronology.	15102		D2	Inside designation boundary.	Yes	251 Great South Road Drury Auckland 2579	Structure standing, subsurface deposits likely.
Drury Post Office, Store, Bakehouse, and Residence.	R12/1143			D2	Inside designation boundary.	Yes	251 Great South Road Drury Auckland 2579 and possibly neighbouring properties.	Structure removed; subsurface extents possible.
Drury Commercial Buildings	Possibly a site – more research needed into chronology.	15109		D2	Inside designation boundary.	Yes	236 Great South Road, Drury.	Unknown.
Pre-1900s Villa (174 Ponga Road)	R12/1145	22284		D5	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structure standing; subsurface extents possible.
Pre-1900s Villa (61 Ponga Road)	R12/1144			D5	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structure standing; subsurface extents possible.

Assessment of Effects on Historic Heritage

Name or site type	NZAA	CHI	HHEP	NoR	Relationship to NoR	Visited from roadside?	Address	Condition (if known)
U.S Military Camp – Ōpāheke East Camp		17017		D5	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structures removed; subsurface extents possible.
U.S Military Camp – Ōpāheke West Camp		17016		D5	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structures removed; subsurface extents possible.
Ōpāheke Sale Yards	Possibly a site – more research needed into chronology.	16004		D5	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Yes		Structure removed; subsurface extents possible.
Ōpāheke railway station	R12/1138	17176		D5	Inside designation boundary.	Yes	North Auckland Line, Auckland Region	Structure removed; subsurface extents possible.
Utility building		22281		D4	Inside designation boundary.	Yes.	31 Ponga Road Drury Auckland 2113	Structure standing.
Coutland Brothers tram	Location to be researched before added to SRS			D5	Site location unknown.	Location unknown.		Unknown
Papakura Cemetery - Presbyterian section	R12/1166	16001		D5	Edge of property within designation boundary.	Yes.	298 Great South Road Papakura Auckland 2113	Variable across the site.

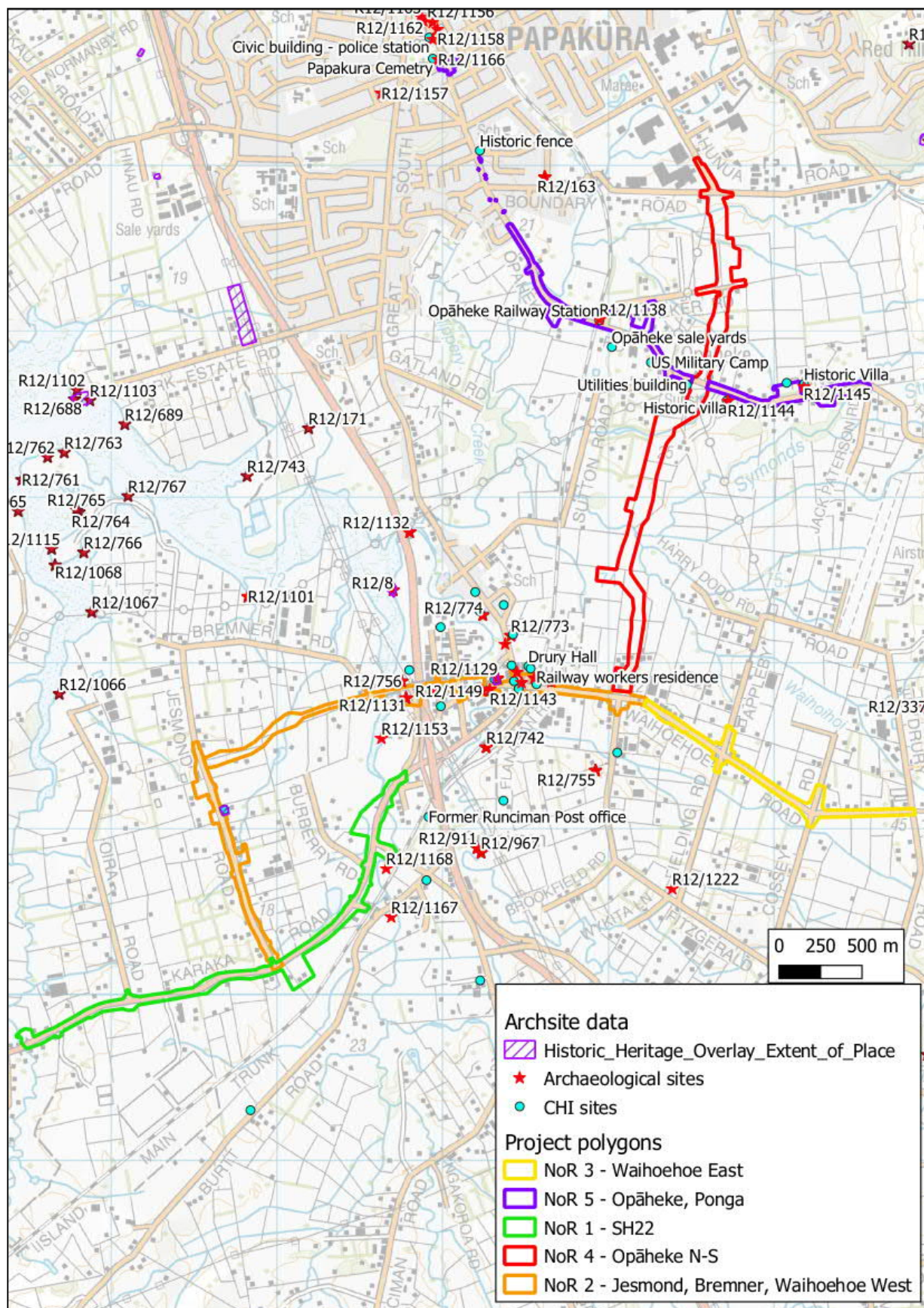


Figure 5-14. Map showing all CHI, SRS, and HHEP within or near the NoRs.

5.3 Field survey

The publicly accessible areas were surveyed by Danielle Trilford of CFG Heritage on 13 March 2020. Some private properties were visited with other project specialists on 17 July 2020. Any heritage sites on private properties which were easily visible from the roadside were observed and general notes taken, but this is not a formal or complete field assessment of those sites. Findings from the field survey are discussed in each section where they apply to each individual notice.

6 NoR D1: Alteration to Designation 6707 - State Highway 22 Upgrade

Chapter Summary

NoR D1 has very few recorded historic heritage features near it, but it flanks the Oira Creek and Ngakoroa Stream and there is a risk of previously unrecorded historic heritage deposits. There are pre-European Māori sites plotted on an 1853 map which are likely settlements near NoR D1, and there is a chance that the subsurface extents of these sites may extend into the proposed designation.

The same map plots a track which follows the same general route as SH22. There could be physical evidence remaining of human activity flanking the track falling within the proposed designation. It is considered appropriate to apply for a precautionary HNZPTA authority so that if any previously unrecorded archaeological deposits are found during the works, these are investigated and managed under provisions of the HNZPT Act. It is recommended a HAMP is prepared at detailed design, before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority.

6.1 Project Description

6.1.1 Project Overview

The State Highway 22 (SH22) Upgrade (NoR D1) consists of the widening of SH22 to a four-lane arterial with separated walking and cycling facilities. The Project extends approximately 3.08km from the State Highway 1 (SH1) Drury Interchange in the east, and the extent of the FUZ between Woodlyn Drive and Oira Road in the west. The intersections at Jesmond Road and Great South Road will be signalised and a roundabout is proposed at Oira Road. An overview of the concept design is provided in Figure 6-1.

As the surrounding area is urbanised over time and alternative routes are implemented (particularly the proposed Pukekohe Expressway), the function of SH22 will change from a rural state highway to provide an appropriate urban arterial connecting the growth areas of Drury West to the wider network and centres, including providing a frequent transport bus network. This is likely to include a reduction in the speed limit to 50kph. SH22 will improve future connectivity to the proposed Drury West train station which currently forms part of the New Zealand Upgrade Programme (NZUP) project.

The indicative alignment has been prepared for assessment purposes, and to indicate what the final design of the Project may look like. The final alignment will be refined and confirmed at the detailed design stage. Key features of the proposed upgrade include the following:

- Widening of SH22 from its current general width of 20m to enable a 30m wide four-lane road with separated walking and cycling facilities
- Localised widening around the existing intersections to accommodate for vehicle stacking and tie-ins and walking and cycling facilities/crossings
- Demolition and reconstruction of the existing Ngakoroa Stream Bridge
- Proposed new and extended culverts
- Three proposed stormwater wetlands

- Batter slopes and retaining to enable widening of the corridor, and associated cut and fill activities
- Vegetation removal along the existing road corridor
- Areas identified for construction related activities including site compounds, construction laydown, bridge works area, the re-grade of driveways and construction traffic manoeuvring



Figure 6-1 Overview of SH 22 Upgrade

6.1.2 Project Features

Features of the project relevant to historic heritage are earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for service relocation,
- site establishment and clearance,
- compound and laydown areas,
- temporary access roads and erosion and sediment controls,
- installation of sediment retention ponds,
- sloping and staging,
- cut and fill batters that include topsoil stripping,
- the lifting of existing road surfaces and utilities,
- stormwater and drainage pipes;
- additional minor works such as signage installation.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites.

6.2 Site Specific Results

6.2.1 Historic heritage sites

Recorded sites

There are no recorded historic heritage sites within NoR D1. A summary of sites on or near NoR D1 are seen in Table 7-1. There is one pre-European Māori site recorded within 200 m of the designation near the Ngakoroa Stream based on a map dating to 1853 SO 865) (Figure 6-2). Near this site is an annotation which has been partly removed as a result of a rip in the map, but which reads "...oa o Hawaiki or ...pa o Hawaiki". The site was added to the SRS by Robert Brassey of the AC Heritage team in July 2020 as R12/1167. The other newly recorded site north of these sites likely represents a pre-1900 European building with right angled sides, which was added to the SRS as R12/1168. There is no visible evidence of these sites from the roadside observations made during the survey, but there is reasonable cause to suspect subsurface deposits or associated sites could extend into the project footprint of NoR D1.

The 1853 map also shows a track spanning up the north east – south west route which overlaps with portions of SH22 (Figure 6-3). While it is possible any physical evidence of the track has been removed by roading activities, the alignment of the track with SH22 means there is a risk for potential previously unrecorded historic heritage sites to be present on the flanks or near the track.

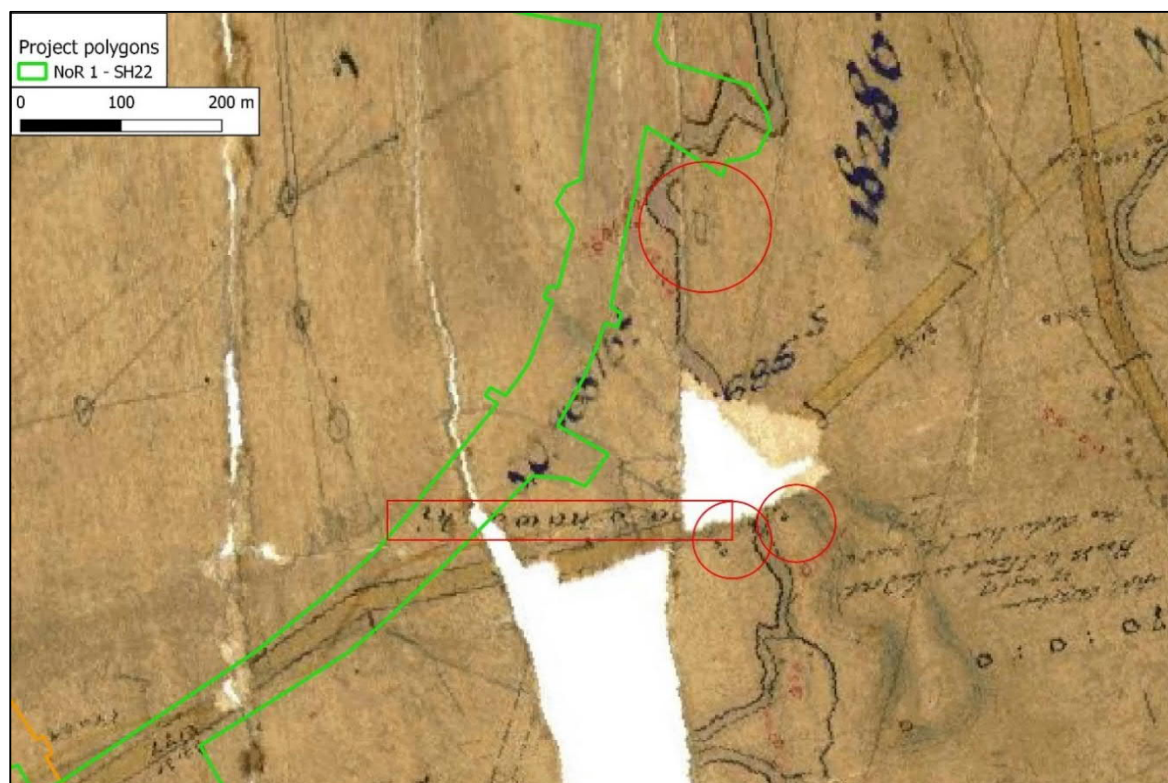


Figure 6-2. SO 685 with settlements circled in red and the annotation in the red rectangle.

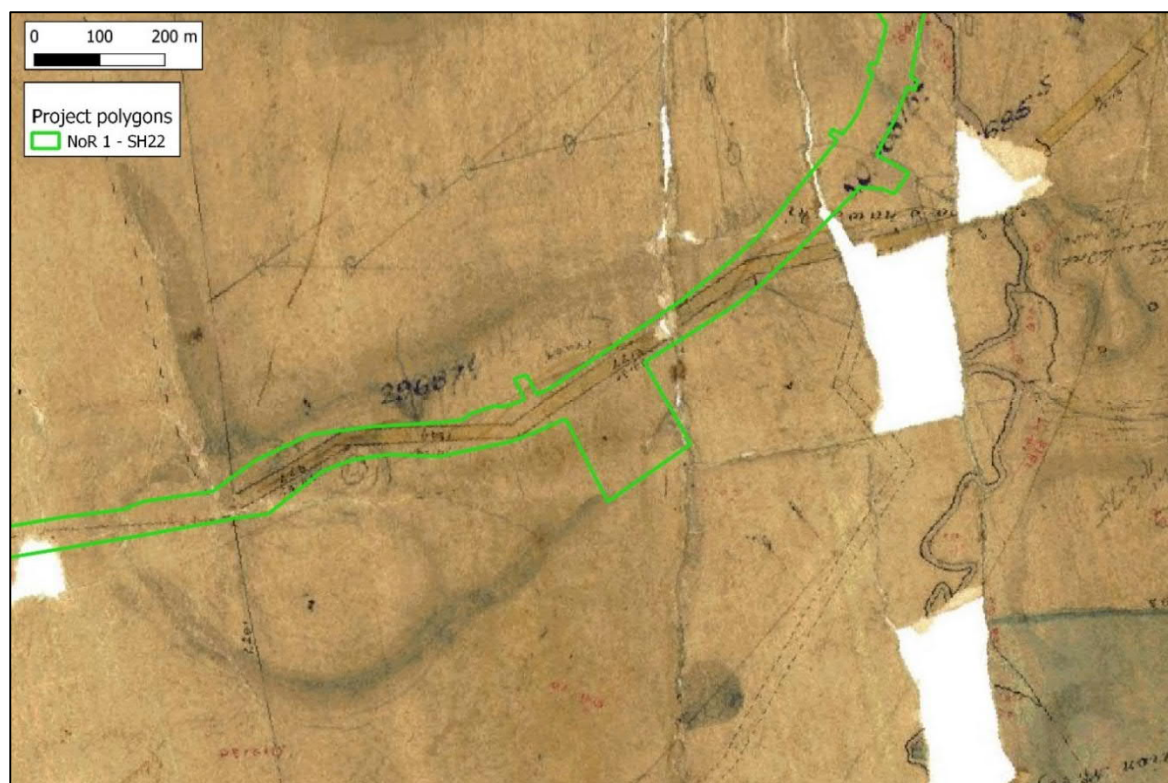


Figure 6-3. SO 865 drawn in 1853 showing the track with part of NoR 1 overlaid

Potential sites

There is a reasonable cause to suspect previously unrecorded historic heritage sites may be present within the footprint of NoR D1. This is primarily based on tributaries such as the Ngakoroa Stream passing within the proposed designation, which is a known pre-1900 European and pre-European Māori transport system. The likelihood of historic heritage deposits further away from waterways and on modified land is lower. The proposed designation also falls near the Oira Creek at the west end, and Ngakoroa Stream at the east end. Land near waterways are commonly regarded as areas of high risk for previously unrecorded historic heritage deposits. All unrecorded archaeological sites are protected under provisions of the HNZPT Act.

6.2.2 Field Survey

No visible historic heritage sites were observed within the survey area. The proposed designation spans over a gently undulating area, and very little of the area appears to have been heavily modified to allow for the SH22 build, for example, by deep cutting. Another area of potential historic heritage risk is land which flanks the Ngakoroa Stream at the north end of the proposed designation. Although, this area is likely to be heavily modified from previous construction of SH22, there were no visible historic heritage deposits at the stream banks (Figure 6-4).



Figure 6-4. Ngakoroa Stream beneath SH22, facing north east

6.3 Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

6.3.1 Assessment of Construction Effects

There are no recorded sites within the footprint of NoR D1. Previously unrecorded historic heritage sites may be present within the proposed designation boundaries, in particular near the banks of the Oira Creek and Ngakoroa Stream. The presence of newly recorded archaeological sites R12/1153, R12/1168 and R12/1167 are examples of the pre-1900 archaeological deposits present in the wider area. Should additional previously unrecorded sites exist, they could be negatively impacted by their damage and/or destruction during the removal of the deposits at the construction phase of the Project.

6.3.2 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

Any potential previously unrecorded archaeological deposits that are exposed during the works can be mitigated under the provisions of a precautionary HNZPTA authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application.

As construction is planned in the future and timing is not yet confirmed, it is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority.

6.3.3 Assessment of Operational Effects

There are no operational effects based on the known historic heritage landscape.

6.3.4 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

No mitigation is required as there are no operational effects.

6.3.5 Summary and Conclusions

There are no known archaeological sites within NoR D1 however there remains a risk of exposing potential previously unrecorded historic heritage deposits, mostly near waterways (Oira Creek and Ngakoroa Streams) and the track plotted on the 1853 map (SO 865). As construction is planned in the future and timing is uncertain, it is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority.

7 NoR D2: Jesmond to Waihoehoe West FTN Upgrade

Chapter Summary

Of the 17 recorded historic heritage sites within the project footprint of NoRs D1 – D5, 14 of these are within NoR D2. NoR D2 is also near the most significant recorded sites, such as the St. Johns Church, a newly recorded tauranga waka, and Runciman's Homestead. It also passes through the centre of the pre-1900 European township, which is heavily under recorded on typical recording systems.

The recorded extents of high-profile sites, like the St. John's Church and the known scheduled extents of the Slippery Creek wharf and Commissariat Redoubt wharf have been avoided. The Former Drury Cheese and Casein Factory and Railway Worker's Residences will be impacted and should be fully assessed by a built heritage specialist to inform mitigation measures.

It is considered appropriate to apply for an HNZPTA authority as a means of mitigation for both recorded and previously unrecorded archaeological deposits that are found during the works, which will be undertaken after a full assessment in the future at the detailed design stage. It is recommended that these measures are conditioned as part of a HAMP.

As the proposed designation moves over both the Ngakoroa Stream (a significant waterway in human settlement) and the pre-1900 European township, the loss to heritage by removal or modification should be seen as a cumulative effect rather than several individual effects. This effect could be partly mitigated by creating opportunities for people to learn about the history of the area (i.e. through information signage), which is generally poorly recognised.

7.1 Project Description

The Jesmond to Waihoehoe West FTN Project (NoR D2) includes, an approximately 4.1km long four-lane FTN arterial route along Jesmond Road, through a new greenfields link between Jesmond Road and the existing Bremner Road, Bremner Road, Norrie Road and Waihoehoe Road West. It primarily involves upgrading and widening existing transport corridors with the exception of the new link between Jesmond Road and the existing Bremner Road and the new bridge connection over Hingaia Stream. The functional intent of the Project is to provide an appropriate urban arterial connecting the growth areas of Drury West to the wider network and centres, including providing a frequent transport bus network. Generally, a 30m wide transport corridor will be provided with two general traffic lanes, two bus lanes and separated walking and cycling facilities on both sides of the road corridor. The urban arterials will have a likely speed limit of 50kph.

For assessment purposes, the Project has been separated into three sections, as shown in Figure 7-1, including:

- Jesmond Road FTN Upgrade;
- Bremner Road FTN Upgrade (including Jesmond to Bremner link through the Auranga Development, Bremner Road and Norrie Road); and
- Waihoehoe Road West FTN Upgrade including the Great South Road intersection.

The indicative alignment has been prepared for assessment purposes, and to indicate what the final design of the Project may look like. The final alignment will be refined and confirmed at the detailed design stage. Key features of the proposed upgrade common to each Project section include the following:

- A typically 30m wide road with four lanes and separated walking and cycling facilities
- Localised widening around the existing intersections to accommodate for vehicle stacking and tie-ins and walking and cycling facilities/crossings
- Batter slopes and retaining to enable widening of the corridor and/or wetland construction, and associated cut and fill activities
- Vegetation removal along the existing road corridor
- Areas identified for construction related activities including site compounds, construction laydown, bridge works area, the re-grade of driveways and construction traffic manoeuvring.

Further details of each Project section are provided below.

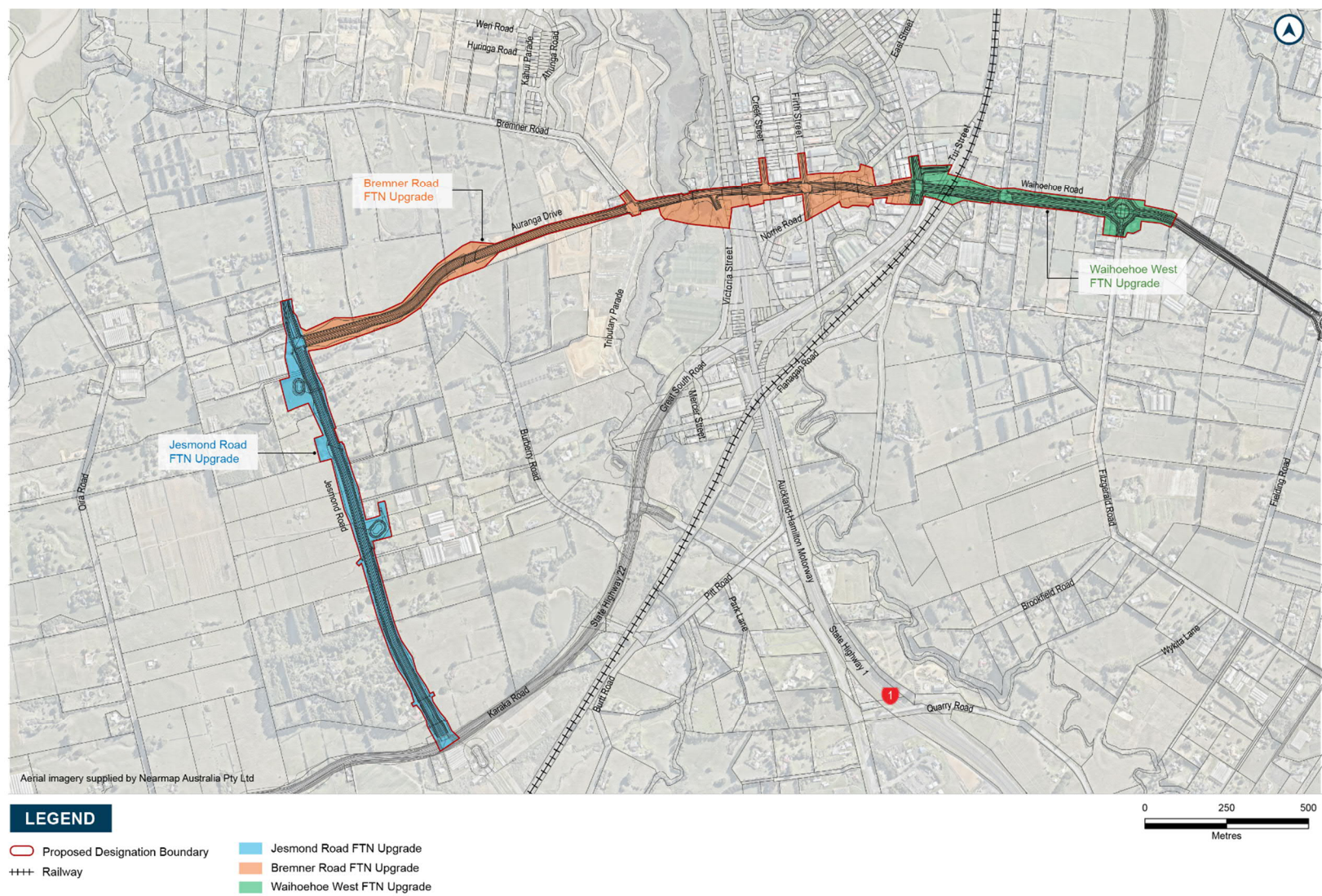


Figure 7-1. Overview of NoR D2

7.1.1 Jesmond Road FTN Upgrade Section

7.1.1.1 Section Overview

The Jesmond Road corridor provides greater accessibility via a north-south link that connects Bremner Road to the proposed Drury West Station and town centre, forming a key public transport and active mode spine through Drury West. An overview of the proposed design is provided in Figure 7-2.

In addition to those listed above, the key features of the Jesmond Road section include:

- Signalised intersections at SH22 and the new Jesmond to Bremner Link
- New and extended pipe culverts for cross drainage
- Two stormwater wetlands.

7.1.1.2 Specific Features of this section

Features of the Project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for service relocation,
- the extension of culverts and construction of three stormwater wetlands,
- access tracks to working areas,
- vegetation removal that involves ground disturbance,
- removal of existing structures at 188, 256, and 281 Jesmond Road,
- site establishment and clearance,
- compound and laydown areas,
- temporary access roads and erosion and sediment controls,
- installation of sediment retention ponds,
- the installation of culverts, sloping and staging,
- cut and fill batters that include topsoil stripping,
- the lifting of existing road surfaces and utilities,
- stormwater and drainage pipes,
- any ground disturbance for new services and poles.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites.

Through the alternatives' assessment of the Project, impacts on known historic heritage have been minimised where possible. For the Jesmond Road section, this includes generally widening to the west of the existing road to minimise impacts on Aroha Cottage on Jesmond Road (704, Aroha Cottage). Only the driveway of this scheduled site is proposed to be designated to enable driveway regrading if required.



Figure 7-2 Overview of Jesmond Road FTN Upgrade Section

7.1.2 Bremner Road FTN Upgrade Section

7.1.2.1 Section Overview

The Bremner Road FTN Upgrade section extends from Jesmond Road in the west, approximately 1.98km to the end of Norrie Road in the east. This section involves the construction of a new road from Jesmond Road to the existing Bremner Road referred to as the “Jesmond to Bremner Link” and widening, and direct connection via a new bridge over Hingaia Stream, of Bremner Road and Norrie Road to enable the four-lane FTN arterial. The functional intent of this section provides greater east-west accessibility that connects Jesmond Road to Great South Road and town centre, forming a key public transport and active mode spine. An overview of the concept design is provided in Figure 7-3.

In addition to those listed above, the key features of the Bremner Road FTN Upgrade section include:

- Signalised intersections on Bremner Road with Auranga Road 1, Creek Street and Firth Street
- Between Jesmond and Bremner Roads (Jesmond to Bremner Link):
 - A new road from Jesmond Road to an unnamed stream at the Auranga Development.
 - Forming of two additional lanes for the FTN within the Auranga “Road 1” from the unnamed stream to Bremner Road)
- A new bridge over an unnamed stream within the Jesmond to Bremner Link
- Widening of the two existing bridges crossing Ngakoroa Stream and SH1. These two bridges are proposed to be reconstructed in the near future as part of the SH1 widening by the Papakura to Bombay Waka Kotahi Project which forms part of the New Zealand Upgrade Programme .
- A new bridge connection from Bremner Road to Norrie Road across Hingaia Stream
- Removal of Norrie Road Bridge and closure of Norrie Road west
- Removal of access to Bremner Road from Creek Street (south).

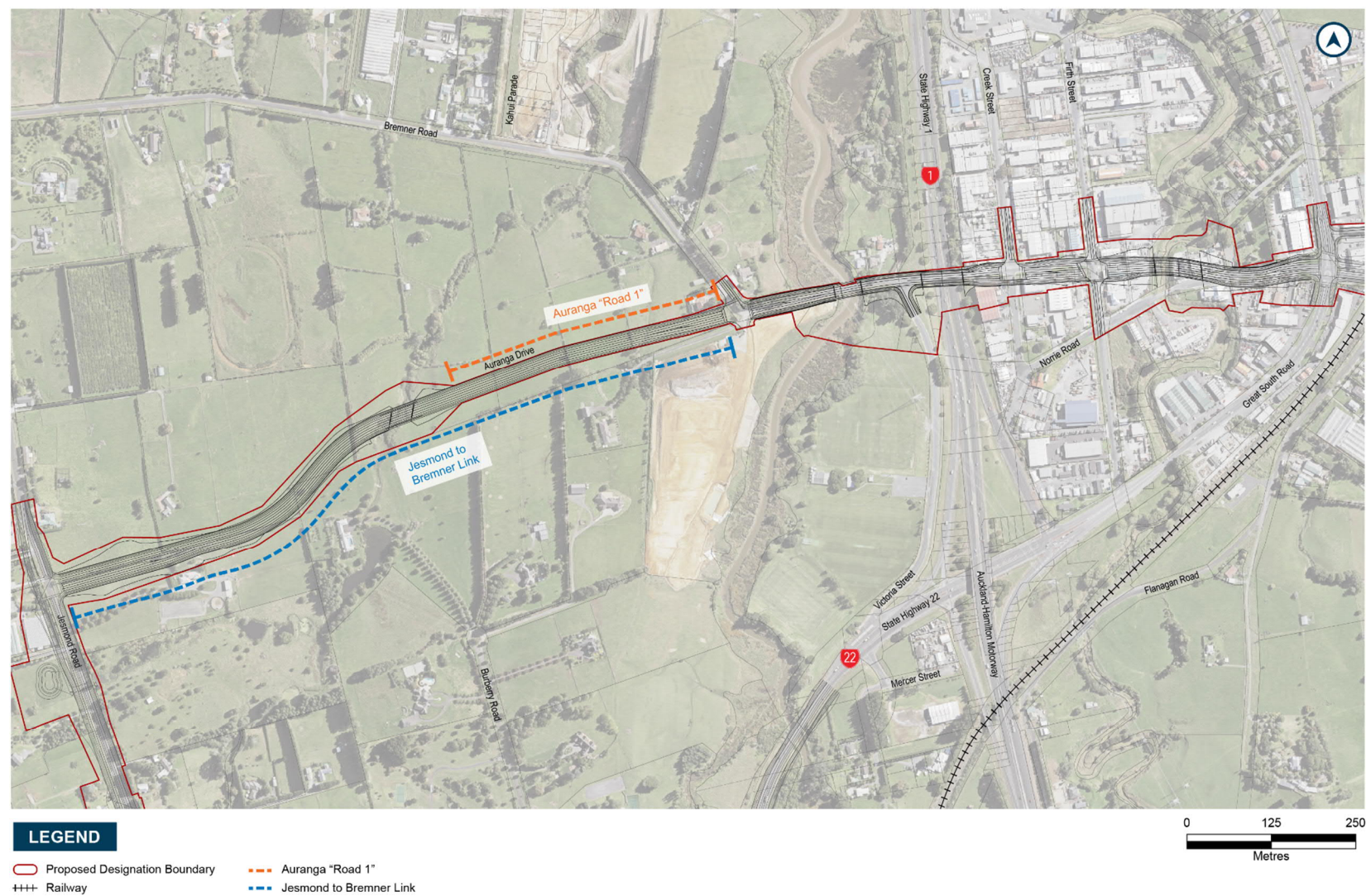


Figure 7-3 Overview of Bremner Road FTN Upgrade Section

7.1.2.2 Specific features of this section

Features of the Project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for service relocation,
- access tracks to working areas,
- bridge works including the deconstruction of the existing bridges,
- temporary crossings and works area,
- vegetation removal that involves ground disturbance,
- removal of existing structures at 12, 13 – 15, 23, 27 – 31 Norrie Road, 46 Bremner Road, and 69 Creek Street,
- site establishment and clearance,
- establishment of the two compound and laydown areas,
- temporary access roads and erosion and sediment controls,
- installation of the sediment retention pond,
- the installation of three new culverts,
- sloping and staging,
- cut and fill batters that include topsoil stripping,
- the lifting of existing road surfaces and utilities,
- stormwater and drainage pipes,
- and any ground disturbance for new services and poles.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites.

Through the alternatives assessment of the Projects, impacts on known historic heritage have been minimised where possible. For the Bremner Road section, this includes generally widening to the south of the existing road to minimise impacts on the Redoubt Wharves (2173, Slippery Creek Wharf/Commissariat Redoubt wharf site R12_756). The designation boundary is outside of the scheduled extent of place. Widening generally to the south of Norrie Road means the proposed designation boundary avoids the scheduled extent of place St Johns Church and Cemetery (707, St John's Church and cemetery).

7.1.3 Waihoehoe Road West FTN Upgrade Section

7.1.3.1 Section Overview

The Waihoehoe Road West FTN Upgrade section extends from Great South Road in the west, approximately 800m east to just past Fitzgerald Road in the east and involves widening the existing two-lane rural road to enable the four-lane FTN arterial. The functional intent for the section provides a strategic east-west link between strategic north-south and east-west corridors (Norrie Road, Great South Road and the Ōpāheke N-S FTN Arterial) that connects Waihoehoe Road to the Drury Central Station (and associated park and ride facilities) and town centre, forming a key public transport and active mode spine through Drury West. An overview of the concept design is provided in Figure 7-4.



Figure 7-4 Overview of Waihoehoe Road West FTN Upgrade Section

In addition to those listed above, the key features of the Waihoehoe Road West FTN Upgrade section include:

- Realignment of Tui Street to Great South Road
- Upgraded and signalised intersection at Great South Road
- Reconstruction of the bridge crossing the NIMT rail line
- Relocation of the Waikato 1 watermain. The point of re-location to be agreed with Watercare at future detailed design.

7.1.3.2 Specific features of this section

Features of the Project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for service relocation,
- access tracks to working areas,
- bridge works over the NIMT including the removal of the existing bridge,
- installation of two site compounds,
- bridge construction areas,
- temporary crossings and works area,
- vegetation removal that involves ground disturbance,
- removal of existing structures,
- site establishment and clearance,
- establishment of the compound and laydown areas,
- temporary access roads and erosion and sediment controls,
- sloping and staging,
- cut and fill batters that include topsoil stripping,
- the lifting of existing road surfaces and utilities,
- stormwater and drainage pipes,
- any ground disturbance for new services and poles.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites.

7.2 Site Specific Results

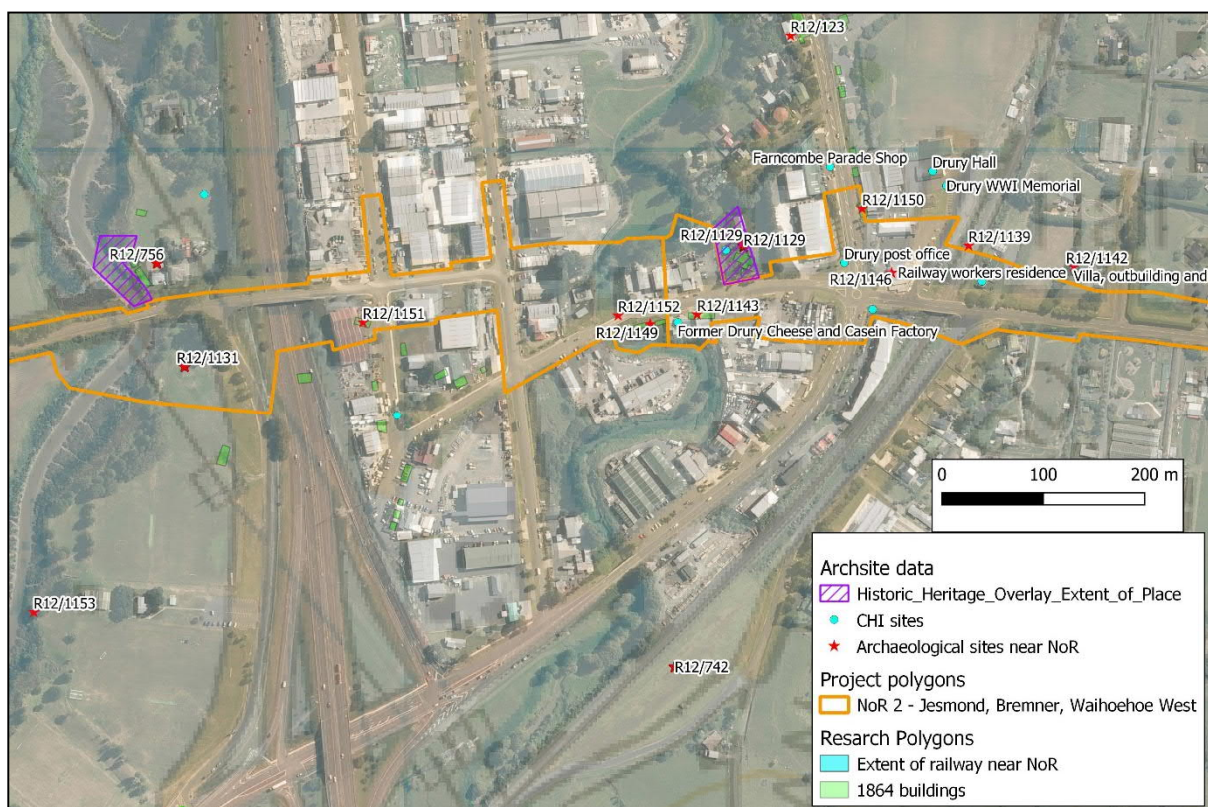


Figure 7-5. Map showing all recorded SRS, CHI, and HHEP sites within or near the Drury township.

7.2.1 Jesmond Road FTN Upgrade Section

7.2.1.1 Field results

A summary of sites on or near NoR D2 are seen in Table 7-1. There is one recorded historic heritage site, Aroha Cottage, that falls within the Jesmond Road section of NoR D2. Aroha Cottage does not extend into the road reserve, but the driveway of this site is proposed to be designated, to enable driveway regrading if required. The building is not at risk of being affected by the works given this limited scope of works. The land spans over a gently undulating rural greenspace which has no visible evidence of historic heritage deposits from the roadside (Figure 7-6).

A villa at the highpoint of 160 Jesmond Road could, on stylistic grounds, have been constructed either in the 19th or early 20th century. This building could not be viewed well from the side of Jesmond Road. The designation footprint is on the frontage of this property but the villa itself is approximately 120 m away from the proposed designation boundary. Previous built heritage assessments by CFG Heritage Ltd along Jesmond Road have determined this villa “...appears to be transitional villa, lacking the adornments and decorative features typical of earlier villas. This architectural form dates to the early 20th century and represents a move away from the Victorian villa toward the bungalow style.” (Maguire 2017: 10). That assessment also determined, “...it has low historic heritage values and probably does not meet the significance threshold to be classified as a Category B Historic Heritage Place.”



Figure 7-6. View of down Jesmond Road, facing south.

7.2.1.2 Historic heritage sites

CHI site 2455, HHEP item 704, and HNZPT Listed site 692, Aroha Cottage / Paymasters House

This HHEP site extent is located within of the proposed designation footprint of NoR D2, however the cottage is not at risk. There is no likelihood of subsurface extents relating to the pre-1900 use of the cottage as the building has been relocated (see description below).

The cottage was built in Papakura for the government forces in 1860-1861 (Heritage New Zealand Pouhere Taonga 1983). It served as a residence for the office for the Army Paymaster. It was cut in two in 1869. One half was relocated to 43 Great South Road, then in 1985 it was relocated again to the current location at 201 Jesmond Road.

The cottage will be avoided during construction of the Project.

The works will occur within the area of a scheduled historic heritage overlay extent (ID 704), the Aroha Cottage. The overlay is a Category B site. The heritage values of the site are A – Historical and F – Physical Attributes. The relevant activities in Table (A7) are maintenance and repair of driveways, parking areas, effluent disposal systems, swimming pools, sports fields, courts and grounds, bridle paths, footpaths, cycle and walking tracks, including the planting of vegetation.

(A7) Activities in a Category B Scheduled Extent of Place are a permitted activity. All permitted activities within a Category B Scheduled Extent of Place must be assessed against the criteria in D17.6.3. Overall, the assessment for permitted activities is that this will have less than minor effects on the HHEP extent.

The permitted activity relates to the potential driveway regrading if need be within the HHEP extent, but no proposed effects to the building. As the works are not impacting the cottage, and instead only within the existing driveway area, this will result in no adverse effects (D17.6.3). The heritage values of the house which are A- historical and F- physical are not compromised by the proposed driveway works. This is because the house has been relocated onto the property and the ground it stands on is not associated to its original context.

D17.6.3(2) states “The maintenance and repair of driveways, parking areas, sports fields, courts and grounds within a scheduled extent of place, excluding features identified as exclusions, or non-contributing sites or features in Historic Heritage Areas, must not result in earthworks that extend more than 300mm below the surface where archaeological controls apply”. No archaeological controls apply to the scheduled area as the ground surrounding the cottage is not associated to the archaeological values of the house, which has been relocated.

Based on the extent of works proposed, construction effects on scheduled heritage as a result of the Project will be no more than minor. The driveway works will not impact on the amenity of the site.

7.2.1.2.1 HNZPT The List / Rārangī Kōrero

The building is a Category 2 HNZPT listed site (list number 692), meaning any works on the property where the listed site stands should be consulted with HNZPT who are in this instance considered an interested party.

Potential sites

There is a reasonable cause to suspect previously unrecorded historic heritage sites may be present within the footprint of the Jesmond Road Section of NoR D2. This is primarily based on the general proximity of the designation to the Ngakoroa Stream, Oira Stream, the early 1853 track which this road branches from (Figure 6-3), the poorly recorded site record within the area, as well as the presence of the many tributaries of the Ngakoroa Stream which is a known precontact Māori transport channel. Land near waterways are commonly areas of high risk for previously unrecorded historic heritage deposits. All unrecorded sites are protected under provisions of the HNZPT Act.

7.2.2 Bremner Road FTN Upgrade Section

7.2.2.1 Field survey

A summary of sites on or near NoR D2 are seen in Table 7-1. Parts of the proposed NoR extent running east of Jesmond Road toward the Ngakoroa Stream (Jesmond to Bremner Link) were surveyed. The portion of the proposed designation which connects back up to Bremner Road was also surveyed. This area is new roading and partly developed land for subdivisions (Figure 7-7). It is unlikely in situ historic heritage deposits in this section of the works remain, but it cannot be ruled out.

Beneath the bridge which crosses the Ngakoroa Stream are four square-cut wooden posts at the west stream edge (Figure 7-8). It is not clear from the survey alone if these are pre-1900 posts associated with earlier bridges. Additional research at detailed design may confirm if they hold any heritage value.

There is no visible ground evidence of Runciman's Homestead, R12/1132, at the site (in the Drury Sports Complex). There was also no visible evidence of the waka tauranga, but this is to be expected for a site of this type which commonly has little above ground surface features. Evidence of reclamation would suggest the site has been covered by the reclamation fill, which would have also compromised its condition. Associated features may remain in situ below the reclamation.

This area is on the north end of the grassy field, part of the Drury Sports Complex (Figure 7-9 Figure 7-10). During the most recent site visit in mid-July 2020 it was observed that the land which appears to be the reclaimed material had begun to fall away and wash into the stream (Figure 7-11 Figure 7-12). This washing away of the reclamation is not yet visible on aerial photographs.

There was no visible ground evidence of the Commissariat Redoubt, R12/756, extending into the proposed designation footprint on the southern side of Bremner Road. Early maps suggest it extended under the current bridge and to the area near Runciman's Homestead, but there is no surviving visible ground surface evidence of this.

Around 400 m east of the waka tauranga, Runciman's Homestead and the Commissariat Redoubt is a cluster of 19th and early 20th century European sites. One of these is the Former Drury Cheese and Casein Factory, which stands on the south side of Norrie Road (Figure 7-13). Background research indicates there were four 1860s buildings in the same location (R12/1143) (see section titled 5.1.3). There was no visible ground evidence of these demolished buildings from the roadside during the survey (Figure 7-14).

The St. John's Anglican Church was observed from the roadside (Figure 7-15). The property is adjacent to Norrie Road. As expected, there was no visible ground evidence of the Church or associated buildings within the proposed designation footprint. The road reserve could not be probed or test-pitted for evidence of the site extending into the road reserve due to the cement and asphalt cover. The presence of unmarked graves which are noted in some texts about the Church could not be examined during the survey.

The Drury post office is recorded on the CHI as standing on the corner of Great South Road and Norrie Road, but it is no longer standing. No visible ground evidence of the site was observed during the field visit. Again, this is not the same post-office that is recorded across the road as part of the Middlemas buildings.



Figure 7-7. Bremner Road upgrade, facing west.



Figure 7-8. Four wood posts in the west side of the Ngakoroa Stream, facing west.



Figure 7-9. Location of Runciman's homestead, on the east bank of the Ngakoroa Stream from the west bank.



Figure 7-10. Area of Runciman's Homestead and the waka tauranga area, facing north west.



Figure 7-11. View of the area where reclamation occurred in the 1960s as it separates from what is presumably natural land (taken mid-July 2020).



Figure 7-12. View of the area where reclamation occurred in the 1960s as it separates from what is presumably natural land (taken mid-July 2020).



Figure 7-13. Former Drury Cheese and Casein Factory, facing west (St Johns Church and Cemetery is immediately to the right hand side of the photograph).



Figure 7-14. Grassy area between Hingaia Stream and The Former Drury Cheese and Casein Factory, facing south east.



Figure 7-15. St. John's Anglican Church, facing west.

7.2.2.2 Historic heritage sites

R12/756, HHEP 2173, Commissariat Redoubt and Slippery Creek wharf

The scheduled heritage extent for the wharves of this site is outside of the proposed designation boundary on the northern side of Bremner Road. This scheduled extent of place was avoided through the alternatives' assessment process and design.

The true extent of the redoubt extends south of the HHEP extent, passing under the bridge and into the Drury Sports Complex area (Figure 7-16.). The southern extent of the Drury Sports Complex area is within the proposed designation footprint (Figure 5-14).

This site appears to have been visited twice. The first was when the site was first added to the SRS by Vanessa Tanner, Nigel Prickett and Kim Tatton in 2002. There was no ground evidence of the site during that visit. An update of information was made by A Walton in 2004 using old maps. No further updates have been undertaken since.

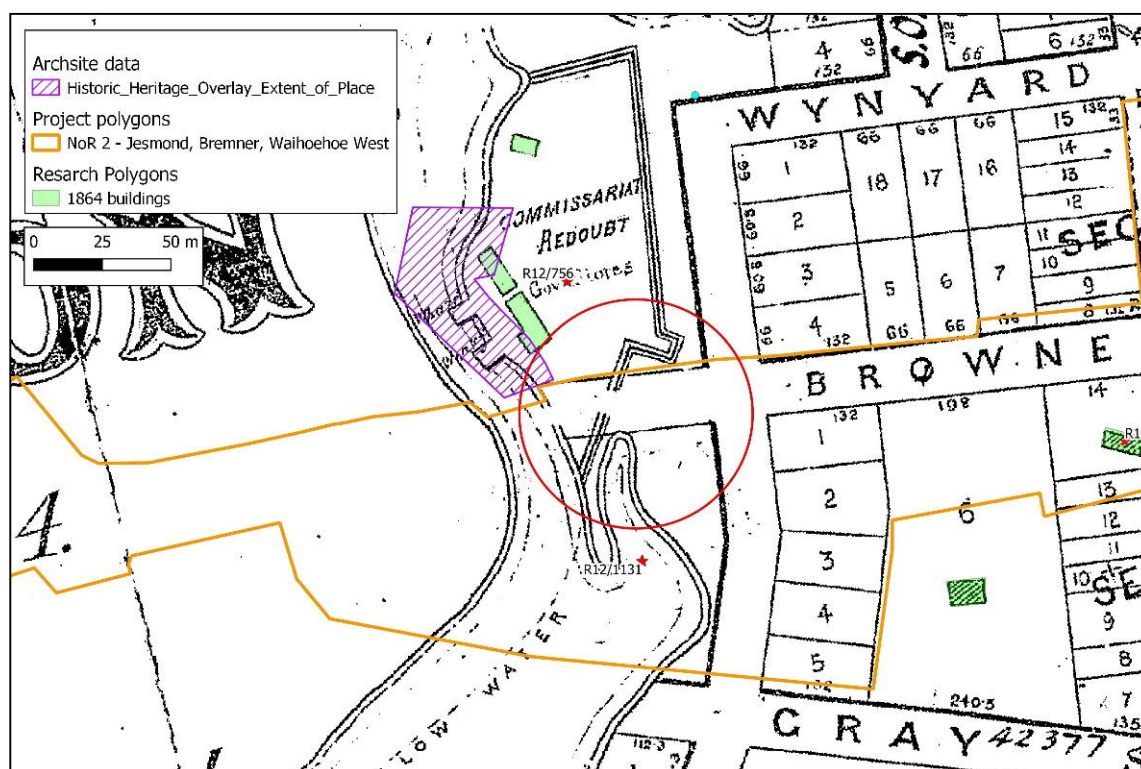


Figure 7-16. Close up of 1864 plan showing redoubt defensive boundary, and NoR D2 outline overlaid. Red circled area shows portion of site within NoR D2.

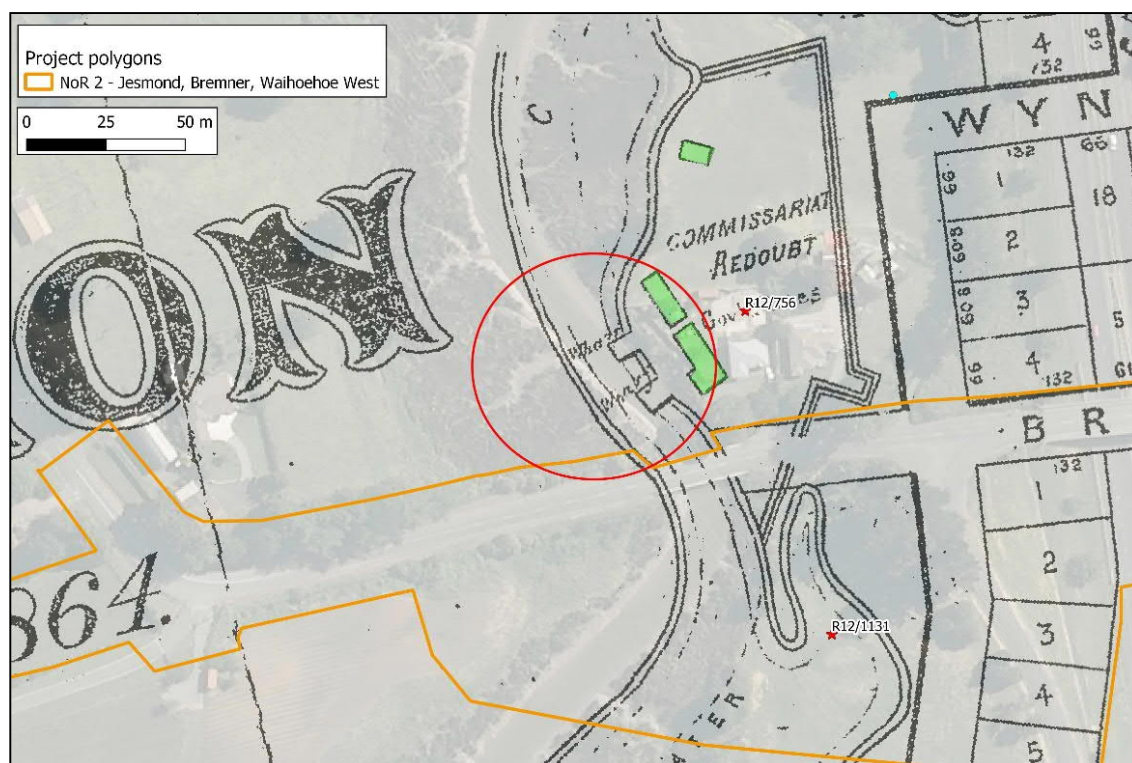


Figure 7-17. Wharves (circled red) near Runciman's property in 1864 with NoR D2 overlaid (Auckland Libraries Heritage Collections Map 4498-15).

Assessment of values of the redoubt against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century land wars phase of human occupation, which is important both regionally and nationally. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the history of the land wars. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the redoubt to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The site is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. While the place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of the 19th century landwards. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge, and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

It should be noted again that most of the site has been avoided during the design of the NoR boundaries, including the HHEP extent.

R12/1131, Runciman's Homestead,

This site is located within the Drury Sports Complex, which is within the proposed designation footprint of NoR D2.

Drury was occupied by Europeans at some stage around the 1850s, and the first family to live in the wider area were the Runcimans (Simms 1999). Thomas and Isabella Runciman had four children and lived in a two-story house with a cattle station on what is now land between the motorway and the Ngakoroa Stream. Old newspaper records show they were living here by 1852 (Simms 1999; *New Zealander*, 22 May 1852: 2). The location of the house is probably somewhere within the footprint of a fenced off boundary in plan SO 865, drawn in 1854 by Fairburn. The drawing shows three structures within a fenced off area on the edge of the bend on the stream (Figure 7-18.).

Old newspaper articles explain that by 1862 the bridge sometimes referred to as "Runciman's Bridge" (*New Zealander* 31 May 1862: 3). An undated plan shows "Ligar's Bridge" at the same area, which is presumably drawn between 1863 (because of the presence of the Commissariat Redoubt), and 1887 (because Young's Hotel remains plotted before it burnt down) (Figure 7-19). Runciman also had a wharf operating by 1857.



Figure 7-18. SO 865 drawn in 1854 showing three structures on the side of the stream (circled in red), with NoR D2 overlaid and the “Tauranga” also annotated.

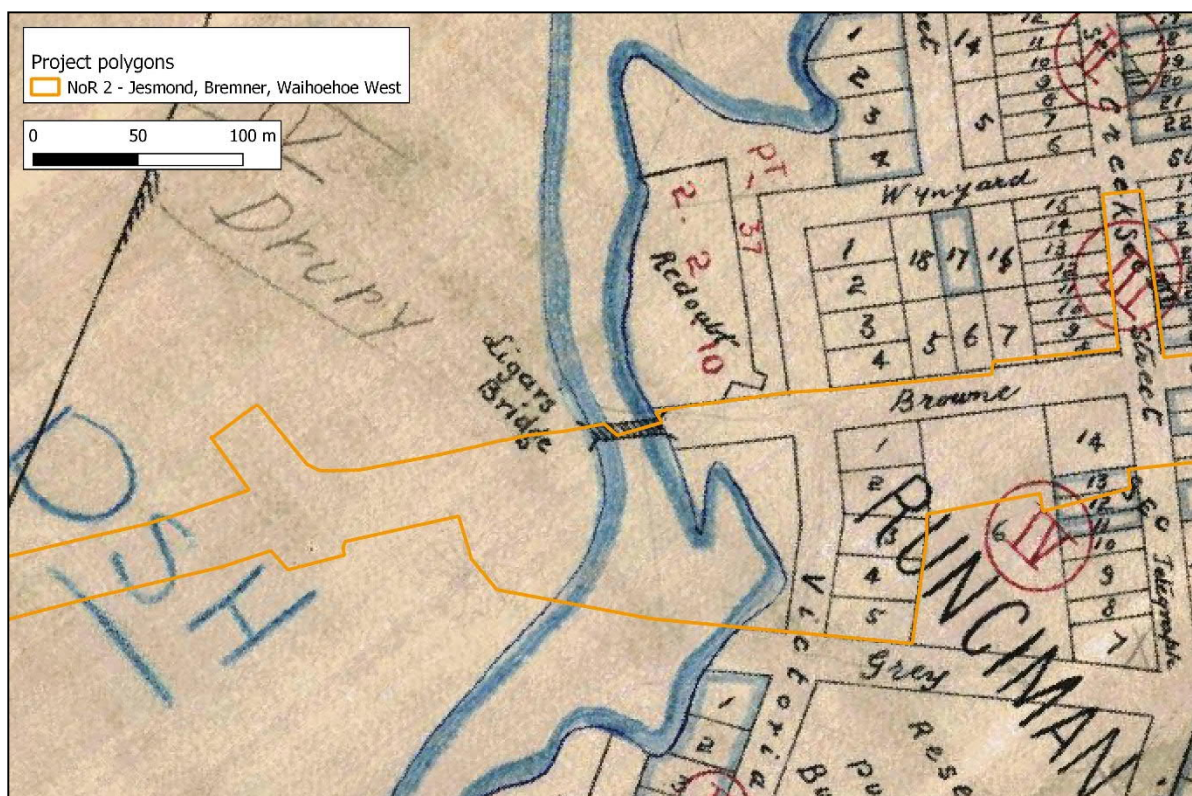


Figure 7-19. Deed 35 probably drawn between 1865 and 1887, showing “Ligar's Bridge” crossing the Ngakoroa Stream.

Assessment of values of Runciman's Homestead against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the first 19th European occupation of the area, which is important both locally and regionally. The site has **moderate** historical value.
- b) Social. The place is recognised locally, with street names named after the family, and the oak trees of the settlement were avoided by the motorway in the past after social pressure. The site has **moderate** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the first European settlement in the area. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the homestead to consider technological values. However, based on what is currently known about the site as the first homestead of the area, the site likely has **moderate** technological value.
- f) Physical attributes. The site is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of the 19th century settlement. The site has **moderate** context value.

While the site is of higher historical value than other pre-1900 buildings within the project areas, scoring the site to the “considerable” rating is not deemed appropriate as per the exclusion factors of the Auckland Council Methodology and guidance for evaluating Auckland's historic heritage. This notes an exclusion factor is, “The place has been adversely changed or altered to such an extent that its historical values are no longer legible” (Auckland Council 2019: 14). This is the case at the Runciman Homestead site where the historical values of the site are no longer legible.

This site has moderate values, based on its highest values which are its context, knowledge and historical, social and possibly its technological values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

Portion of R12/1131, waka tauranga

This site is located within the Drury Sports Complex and is within the proposed designation footprint of NoR D2.

There are no written records explaining the site, but a plan drawn in the 1850s notes a “Tauranga”, approximately under the bridge or a little further south. The site may have been filled over in the 1960s reclamation, which has in recent months been seen to be washing away and separating from the ground. Waka tauranga were used for various tasks, but were mainly seen as a resting place, anchorage, fishing ground, mooring or landing pad.

Assessment of values of the waka tauranga site against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the precontact Māori land use of the area. This aspect of human occupation is not well understood. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. Mana whenua of the area may have a better understanding than the public about the site. Based on the known information, the site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of precontact Māori land use. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the redoubt to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The site is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of precontact Māori land use. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge and historical, values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

R12/1151, Unnamed building

An early plan drawn in 1864 shows several buildings around Runciman (Figure 7-20). One of these is within NoR D2 and has been added to the SRS as R12/1151 during this assessment. The building no longer stands. The record of the building location is at what is now 69 Creek Street.

Assessment of values of the unnamed building against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century settlement of the area. The site has **moderate** historical value.
- b) Social. The place in the past has not been recognised and sites like these are generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the history of 19th century human settlement in Drury. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the site to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.

- f) Physical attributes. Based on aerial photographs the place is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. Based on aerial photographs the place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider 19th century settlement of the area. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge, and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.



Figure 7-20. Close-up of a map of Drury in 1864, with NoR D2 overlaid, and buildings shaded in transparent green. (Auckland Libraries Heritage Collections Map 4498-15).

CHI site 15102, Former Drury Creamery and Casein factory

This site is within NoR D2 and the structure is still present, although looks to have been modified.

There are conflicting reports of the date for the construction of the building, some note the construction was as early as 1899 and others as late as 1907. Should the building predate the 1900s it is protected under provisions of the HNZPT Act.

Research undertaken by Kara Oosterman, provided by Cara Francesco of the AC Heritage Unit, has investigated the history of the site. That research has shown that many newspaper records support the earlier date of construction. One of the newspaper articles dating to 1900 (Auckland Star, 8 November 1900: 2) documents the date of the Drury creamery opening on 22 October 1900 and at that stage already receiving a steady flow of supplies. Oosterman's (n.d) research also notes that:

“It is likely that the Drury Creamery (and many others) were built (funded) by the NZ Dairy Association. In the article... (*Auckland Star*, 30 May 1899) Mr Spragg acknowledged that he was very well satisfied with the results, and thanked suppliers for keeping their promise to him.”

A newspaper article from 1939 which reports on the closure of the factory, states, “...the factory opened in 1899 as a skimming station...” (*Evening Post*, 1 August 1939: 12)

The CHI records explain that the factory was converted to casein manufacturing around 1915 and became part of the N.Z. Co-operative Dairy Company in 1919. The factory was closed in 1939. It re-opened again temporarily for the 1941–1942 season as a cheese factory to supply U.K. wartime needs.

In 1943 it became a permanent cheese factory, having a five-vat operation, and employed seven staff. It received up to 5000 gallons of milk daily and produced up to 700 tons of cheese annually. However, production was variable because Drury milk was frequently diverted to Auckland town sales. The factory closed in 1973.

The site is currently used as a commercial premise (drilling company) and a retail store (leather goods) (Figure 7-21).



Figure 7-21. The Former Drury Creamery and Casein factory

Assessment of values of the former Drury Creamery and Casein factory against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the later 19th century and early 20th century farming and dairy operations, which is important both regionally and nationally. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of establishment of Dairy Processing in Waikato / South Auckland. The site has **moderate** knowledge value.
- e) Technology. Not enough is known about the construction and operations at the factory to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. Not enough is known about the factory to consider the physical attributes. However, based on what is currently known about the site, the site has **moderate** physical value.
- g) Aesthetic. The site is standing but no evidence of the factory is easily identifiable. The site has **little** aesthetic value.
- h) Context. The place is associated with the establishment of dairy processing and farming in Waikato and South Auckland. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge, historical, and technological values. It is likely that this building cannot be avoided (to reduce impacts on the scheduled St John's Church and cemetery on the opposite side of the road) and because of the above stated values, it is recommended that a built heritage assessment be undertaken of this site in the future to inform detailed design and mitigation.

Unnamed bridge, R12/1152

This site is within the footprint of NoR D2.

Early plans from around 1865 show a bridge crossing the Hingaia Stream, and while the bridge was not visible during the field survey, it is possible subsurface extents and deposits within the steam bed are present. The site was added to the SRS during this assessment. Old newspaper records in 1863 document a bridge in what is likely to be the same area being damaged, which matches records on old plans.

Assessment of values of the unnamed bridge against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century transport and logistics in Drury. The site has **little** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.

- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the history of 19th century transport in the area. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the site to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The place is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of the 19th human settlement of Drury. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context and knowledge values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

Drury Post Office, Store, Bakehouse, Residence buildings, R12/1143

This site is within the designation footprint of NoR D2 and the buildings have been demolished.

During this assessment, records of a store, post-office, bakehouse and residence were added to the SRS as R12/1143. The location of the site is based on records of old newspapers, maps, and old photographs found. It is likely the site was established as early as 1862 based on old plans, but the complex of four buildings can be confidently dated to at least 1866 based on an old photograph. One record states the post-office building was opened in 1857 (Morris 1965). The buildings appear to sit on the same site as the Former Drury Cheese and Casein Factory.

Old newspaper articles document that by 1897 Mr. Hodge owned the store and post-office (*Auckland Star*, 2 January 1897: 5). The article states that:

when the buildings used by Mr Hodge as a dwelling-house and store, and a detached building, formerly an old bakery, but latterly used as a gum store, were all burnt to the ground... active exertions of the neighbours some of the articles of furniture and gum were saved. The Anglican Church, on the opposite side of the road, caught fire twice, but was saved from real damage, as was also Mr Prince's dwelling, towards which the sparks were carried by the wind. No one was in the building when the fire broke out...

The timing of the fire means should the Drury Cheese and Casein Factory have been built in 1899, the land would have been be clear for the build (see section for the Former Drury Cheese and Casein Factory above).

Assessment of values of the Drury Post Office, Store, Bakehouse, Residence buildings against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century settlements in Drury. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the history of 19th century occupation of Drury. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the site to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The place is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of the 19th human settlement of Drury. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge, and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

Unnamed historic buildings, R12/1149

These sites are located within the designation footprint of NoR D2 and have been demolished.

Early plans drawn in 1862 or 1865 shows two buildings between the Drury Post Office and the Hingaia Stream (Figure 7-22.). These were added to the SRS during this assessment. The buildings are located at 12 and 14 Norrie Road. Further research into land ownership may confirm other details about the site.

Assessment of values of the unnamed buildings against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century human settlement in Drury. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the history of 19th century human occupation of Drury. The site has **moderate** knowledge value.

- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the buildings to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The place is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of the 19th human settlement of Drury. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge, and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

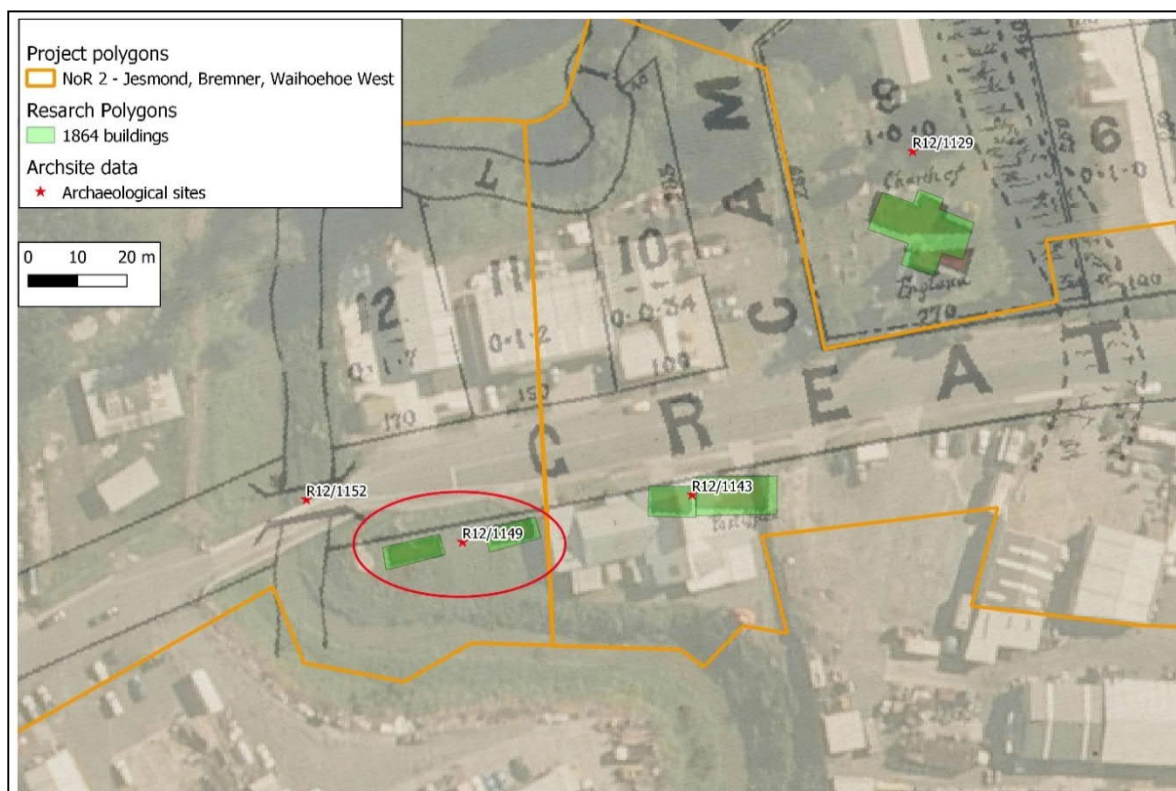


Figure 7-22. Close-up of Drury in 1865 overlaid on modern aerial with NoR2 overlaid and buildings shaded in transparent green and R12/1149 circled in red (NZ Map 4498-16).

Military Redoubt, R12/123

This site is located outside of the proposed designation footprint of NoR D2. The site location was updated during this assessment on the SRS, but other systems such as GeoMaps will probably not reflect this update yet.

This record represents the second military redoubt built in Drury for the Land Wars. The record was added to the SRS in 1979 by Sue Bulmer, and the location information on the SRS has not been

updated since. The record is within the CINZAS format, meaning the gird coordinate conversion in the SRS likely skewed the location.

The original site record was plotted at the corner of Waihoehoe Road and Great South Road, but this has been updated to between the Hingaia Stream and Great South Road (SRS). Old newspaper records and a report by Brown and Brown (2017: 23) explain it “was built alongside Great South Road in Drury, on land owned by A B Abraham (present day site 217-219 Great South Road, opposite the Jolly Farmer Inn)”. A newspaper article from 1865 explains “on the bend of the road, about midway between the Farmers and Raven’s, stands an old redoubt... going to fast decay...” (*New Zealander* 8 August 1865: 3). Old photographs of the camps show the size of the redoubt. An article in the *New Zealander* (1 December 1860: 6) documents plans to build the redoubt and comments the size should be, “80 feet square...”. It also notes that all costs could not be met by the crown, and locals were expected to contribute material and labour to build the redoubt.

While the surface evidence of the site has been destroyed, it cannot be ruled out that subsurface extents do not remain. However, it is not likely that the site extends into the footprint of NoR D2.

St. John’s Anglican Church, R12/1129

This site and the scheduled historic extent of place is outside the footprint of NoR D2, but there is reasonable cause to suspect subsurface deposits associated with the site may extend into the footprint of the designation.

The church was built in 1862/63 from the timber of a single kauri. Records note that during the Land Wars, women and children would take shelter at the church (Simms 1999: 9). There are records of upgrades to the building in 1957 which may have disturbed some subsurface historic heritage evidence. Simms (1999: 10) and Bishop (2012) notes that there are unmarked graves of Roman Catholic soldiers from the Land Wars buried on the church grounds. The locations of these graves are unknown.

There is a record that by 1863 there was a three-room cottage for ministers travelling through the area. This cottage is no longer standing. Some ministers named this a parsonage, while later generations refer to this as Bishop Selwyn’s “mission house” (Bishop 2012: 72). An 1865 journal entry documents that the church held over 50 people in some services (cited in Bishop 2012). Records note that the interior was only completed in 1866. In 1883 it was renovated, including the addition of a bell, two layers of paint, and renewal of the fence and windows. In the 1890s the church became more popular, and by 1897 another new bell and stained-glass windows were installed and the road to the church was upgraded (Bishop 2012: 74). It is documented that some of the plants which were present in 2012 were those planted in the 1890s upgrades.

There is also a monument, “Erected by officers and men of 1st Waikato Regiment in memory of their comrades who fell fighting against the rebel natives at Mauku 23rd October 1863”. The church was added to the SRS in 2019 by Myfanway Eaves.

There is reasonable cause to suspect subsurface portions of the church, including but not limited to unmarked graves, may extend into the existing road reserve and proposed designation footprint.

Potential sites

There is a reasonable cause to suspect potential previously unrecorded historic heritage sites may be present within the footprint of NoR D2 Bremner Road Section. This is primarily based on the density of pre-1900 European sites recorded for the Drury township, the poor existing record of sites within

the township, as well as the presence of the Hingaia Stream which is a known pre-contact Māori transport channel. Land near waterways are commonly areas of high risk for previously unrecorded historic heritage deposits. All unrecorded sites are protected under provisions of the HNZPT Act.

7.2.3 Waihoehoe West FTN Upgrade Section

7.2.3.1 Field survey

A summary of sites on or near NoR D2 are seen in Table 7-1. The original location of the 1887 Railway Hotel (R12/1146) now has a small complex of shops and an associated carpark. The asphalt and cement cover meant no probing could be undertaken. The topography of the ground does not suggest a large amount of cutting or reprofiling, suggesting the site and associated deposits could be present below the ground surface. The same applies to the original location of unnamed historic building R12/1150.

The Drury tramway/mineral railway, R12/1222, is seen to be within the proposed designation footprint of NoR D2 around 44 Waihoehoe Road. The site was not visible from the road reserve as the visibility is hindered by dense vegetation running between the road and property boundary.

7.2.3.2 Historic heritage sites

Unnamed historic building, R12/1150

This site is outside of the footprint of NoR D2 and the building has been demolished.

Early plans drawn in 1862 or 1865 show a building on the east side of Great South Road (

Figure 7-23). The site was added to the SRS during this assessment. The building was at what is now 222 Great South Road, where the current Mobil petrol station stands. Further research into land ownership may confirm other details about the site.

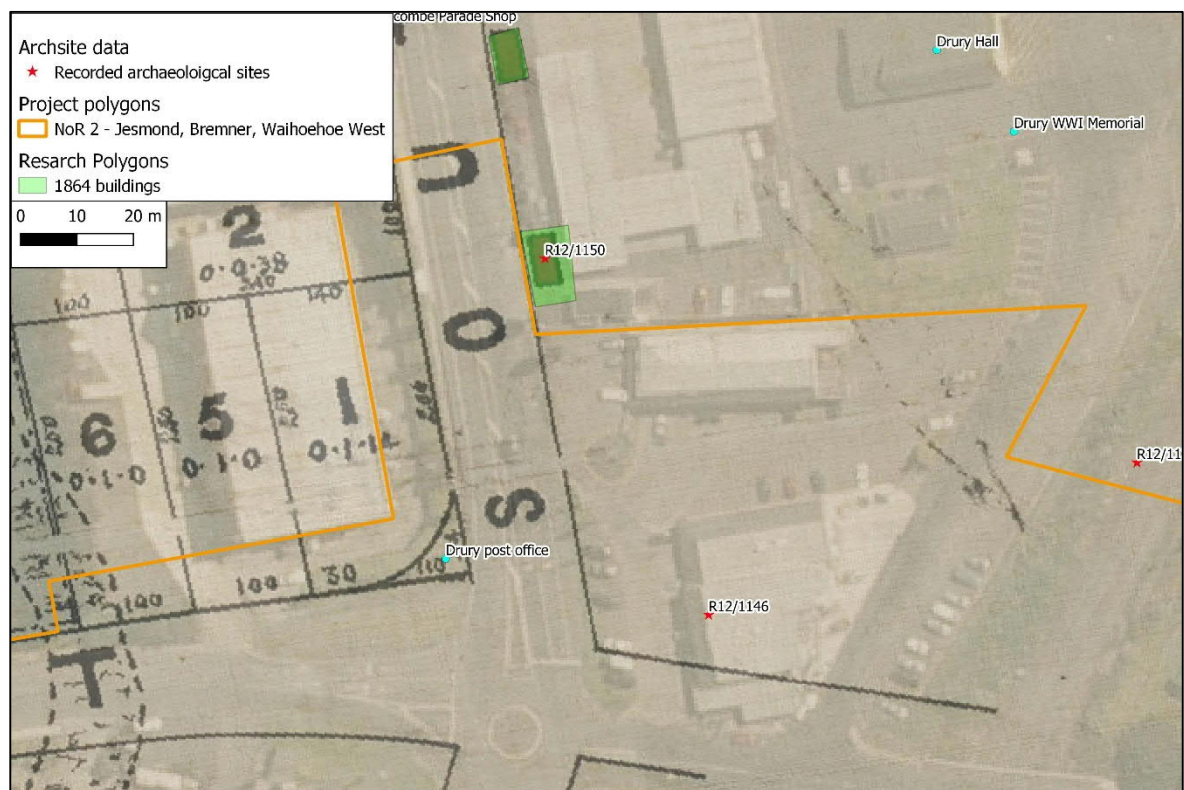


Figure 7-23. Close-up of Drury in 1865 (but probably 1862) overlaid on modern aerial with NoR D2 overlaid and building (R12/1150) shaded in transparent green (NZ Map 4498-16).

Railway hotel, R12/1146.

This site is within NoR D2 and the building has been demolished.

George Godkin also ran the Farmer's Hotel, until it burnt down in 1887. The CHI explains that after the fire, he rebuilt another hotel on his Great South Road property, this time a brick hotel which the CHI record notes as "close to the gates to the railway station, at the corner of Great South and Waihoehoe Roads, appropriately named the Railway Hotel."

Old newspaper articles document Godkin applying for a renewal of licence at the Railway Hotel (Figure 7-24.). The article describes the hotel to have 17 rooms (*Auckland Star*, 10 May 1889: 1). The brick "railway hotel" was not recorded on the SRS until this assessment. Plan DP 2885 drawn in 1902 shows the "hotel" plotted on the corner of Waihoehoe and Great South Roads, this is presumably the Railway Hotel and was added to the SRS during this assessment (Figure 7-25.).

Assessment of values of the Railway Hotel against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century human settlement in Drury. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the history of 19th century human occupation of Drury. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the hotel to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The place is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of the 19th century human settlement of Drury. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

NOTICE OF APPLICATION FOR A PUBLICAN'S LICENSE.—I, THOMAS GODKIN, of Thames, Hotelkeeper, do hereby give notice that I desire to obtain, and will at the next licensing meeting to be holden at Papakura R.M. Court-house, on the third day of June, 1889, apply for a certificate authorising the renewal of a publican's license for a house situate at Drury, and known by the sign of the Railway Hotel, containing 17 rooms, exclusive of those required for the use of the family. George Godkin, name of owner. Dated the 8th day of May, 1889.—THOMAS GODKIN.

NOTICE OF APPLICATION FOR TRANSFER OF LICENSE.—I, GEORGE GODKIN, of Drury, being the holder of a Publican's License in respect of the house and premises situate at Drury, do hereby give notice that I desire to obtain, and will, at the next licensing meeting to be holden at Railway Station, Drury, on the 3rd day of June, apply for a transfer of the said license from myself to Thomas Godkin, my appointee. Dated the 8th day of May, 1889.—GEO. GODKIN.

Figure 7-24. Portion of *Auckland Star*, 10 May 1889:1, noting the Railway Hotel ran by Godkin.

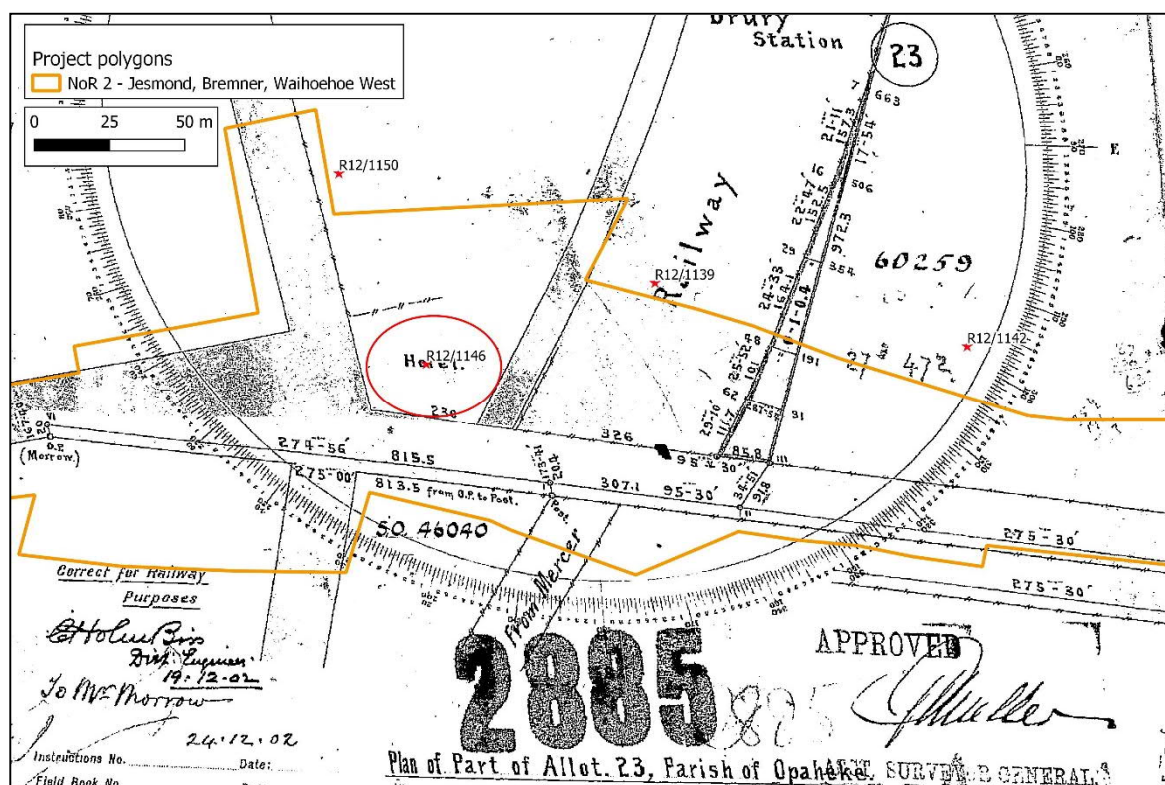


Figure 7-25. Survey plan DP 2885 drawn in 1902 showing "hotel" (R12/1146) at the corner of Waihoehoe and Great South Road and proposed NoR overlaid.

CHI item 15109, Drury Commercial Buildings

The site is within the footprint of NoR D2 and the buildings have been demolished.

There is very little recorded on the CHI about this site. The record notes that it is located on the “corner of South East intersection of Waihoehoe Road and Great South Road.” It explains the buildings are now demolished. There is no record of the chronology of the site.

Assessment of values against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The chronology of the site is not known. Based on what is known about the site, it is of the site has **little** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of commercial operations in Drury. Based on what is known about the site, it has **little** knowledge value.
- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the site to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The place is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider human settlement in Drury. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

R12/1222, Drury tramway/mineral railway,

A portion of the railway is within the proposed designation footprint of NoR D2, visible in 1940s aerials. The tramway / railway passes over several areas within Drury from the coal mines to either Abraham's Point or the Drury Railway Station.

Since the 1850s, coal was being mined and exported from the Drury Hills. The material was usually exported using purpose-built tram or railways over several routes at different phases. Research by Robert Brassey has determined five phases of the tram/railways (Brassey 2020). The earliest phase of the tramway build appears to be the earliest tramway in New Zealand. The tramway is recorded on the SRS as R12/1222, however the single point at 230 Fitzgerald Road is easily misinterpreted as a smaller site which in fact spans many properties toward both the Drury Station and Slippery Creek. One of the portions of the tramway is within the NoR D2 proposed designation footprint over 44 Waihoehoe Road (Figure 7-5). This section appears to have been built around 1906, and while it has

some informative value as to the construction of the purpose-built railway, it is not protected under legal provisions of the HNZPT Act. However, it cannot be ruled out that the tramway isn't located within other portions of the proposed designation boundaries.

Assessment of values against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the logistics associated to the mineral extractive industries in Drury in the 19th century and 20th century, which is important locally. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the history of the construction of logistics and transport network systems in Drury. The site has **moderate** knowledge value.
- e) Technology. The site is no longer visible above the ground surface. Some records of construction noted in other research reports suggest this is the first tramway in New Zealand. The portion which intersects with NoR D2 is not of that period of construction. However, based on what is currently known about this portion of the site, the site has **little** technological value.
- f) Physical attributes. The place is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the wider historical context of the mineral extractive industries in Drury. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

It should be reiterated here that most of the known portions of the tramway are avoided, and the section which intersects with NoR D2 dates to the post-1900 period.

CHI site 22288, Railway worker's residences

This site is within the designation footprint of NoR D2.

There is very little written record of the residences and their chronology. The site is recorded at 18 Waihoehoe Road, Drury. The CHI record explains there were originally four buildings as workers residences on the "wider site". Three of these were removed in 1974, and the fourth is the "bungalow situated next to the Main Trunk Railway Line". These are visible in 1940s aerials (Figure 7-26.). A photograph of the railway station taken in 1905 (Figure 5-13) does not show these buildings, indicating they were installed between 1905 and 1940. More can be learnt about the built heritage values of the structures through a built heritage assessment at detailed design.

Assessment of values against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the residences of the Drury Railway Station and is part of the transport network in South Auckland. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has potential to provide information which will improve the understanding of the use and lifeways of those who stayed at the residences. The site has **little** knowledge value.
- e) Technology. The site is no longer visible on the ground surface and not enough is known about the residences to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. Some of the buildings are now removed, some still stand. The site has **little** physical value.
- g) Aesthetic. Three of the buildings were removed, only one still stands. The site has **little** aesthetic value.
- h) Context. The place is associated to the wider railway systems in New Zealand. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context and historical values.

It is recommended that a built heritage assessment be undertaken of this site in the future to inform detailed design and mitigation.

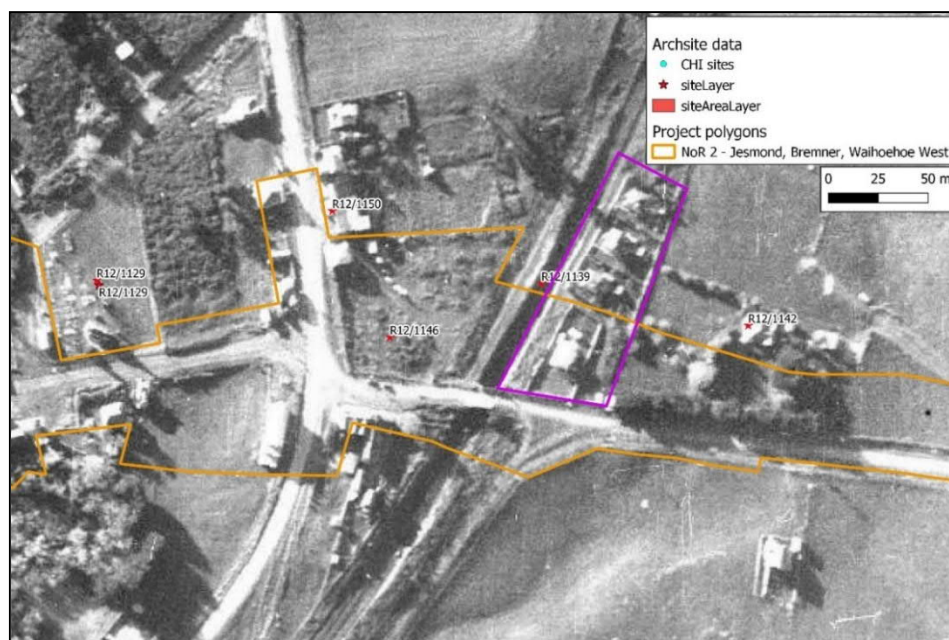


Figure 7-26. Railway workers residences in 1942 outlined in purple with NoR D2 overlaid (aerial taken from Retrolens.nz, SN192_274_18).

R12/1139, Drury Railway Station

This site is located outside of the proposed designation footprint of NoR D2, but there is reasonable cause to suspect subsurface deposits may extend into the project footprint.

This site was added to the SRS as site R12/1139. The record is for the Drury Railway Station which was officially opened on 20 May 1875 as part of the opening of the Auckland to Mercer Line, although it had been carrying passengers from October 1874. The station closed 8 December 1918 (Scoble 2010). As of 1884 there was a station building, passenger platform, cart approach, goods shed, loading bank, water service, coal accommodation and stationmaster's house, with fixed signals added by 1896 (Scoble n.d). The original station was replaced in 1918 by a new building further south (recorded as R12/742).

The boundaries of land allocated for the station are shown in drawing SO 19059, which shows that the station captures current lots Railway Land SO 318130, Lot 10 DP 135804, Lot 1 DP 132670, and Road Parcel (I.D: 5220839).

The buildings have been demolished but foundations and subsurface evidence may remain.

Villa, outbuilding, and cottage (CHI site 22280, SRS site R12/1142)

This recorded site point is located outside of the proposed designation footprint of NoR D2, but there is reasonable cause to suspect subsurface deposits may extend within the proposed designation footprint.

The site is located at 28 Waihoehoe Road. A villa with associated outbuildings and cottage is recorded on the CHI, with construction dated as 1894. While the construction is not confidently dated to 1894, according to the CHI the land was being subdivided and sold, and an advertisement for 72 acres ultimately purchased in 1894 by T H Brooks made no reference to a house already in existence on the property, describing it simply as a paddock. The building presumably dates to Brooks' ownership. The site was added to the SRS during this assessment as site R12/1142.

The land was subdivided in 1968, but the house appears to have remained in family ownership until 1986 when it was briefly transferred to the Crown for railway purposes, then returned to Kathleen Alice Henry (née Brooks). It finally left family ownership in 2003. The extent of modifications to the villa is unknown.

Subsurface deposits which may fall into the NoR footprint include fence lines, pathways, rubbish pits, and similar features found at pre-1900 villas.

Potential sites

There is a reasonable cause to suspect previously unrecorded historic heritage sites may be present within the footprint of NoR D2 Waihoehoe Road West Section. This is primarily based on the density of pre-1900 European sites recorded for the Drury township and the poor existing record of sites within the township. All unrecorded sites are protected under provisions of the HNZPT Act.

7.3 Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

7.3.1 Jesmond Road FTN Upgrade section

7.3.1.1 Assessment of Construction Effects

There are no adverse effects on known historic heritage sites.

Aroha Cottage is a scheduled HHEP, running adjacent to the proposed designation on 201 Jesmond Road. The house has been relocated into its current position and, while the AUP Extent of Place covers the property, only the building itself is protected by the provisions of the HNZPT Act. The site and surrounds are scheduled in the AUPOIP. Most of the site has been avoided through the design and the proposed designation footprint for NoR D2, and only a small portion will extend into the Historic Heritage Extent of Place. It is not expected that any significant impact to heritage will occur because the 1863 cottage is not in its original location.

There is reasonable cause to suspect pre-1900 historic heritage deposits could be present with the NoR footprint. These sites would be adversely affected by their damage/destruction during the removal of the sites during the construction phase of the Project. Section 7.1.1.2 notes the construction works which may have an adverse effect on potential previously unrecorded historic heritage sites.

7.3.1.2 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

It is recommended that the proposed design within the designation remains unchanged near Aroha Cottage given that the alignment currently avoids most of this site. Destruction or damage to any potential previously unrecorded historic heritage deposits that are exposed during driveway regrading can be mitigated under the provisions of an HNZPTA authority, and the means of mitigation detailed in an Archaeological Management Plan which is required as part of an HNZPTA authority application.

Before earthworks commence, all sites should be visited by an archaeologist as part of a field survey to update the sites. Site visits are a part of the requirements of a full assessment of effects for an HNZPTA authority application.

A precautionary approach is recommended, and an HNZPTA authority is recommended to be applied for before works begin. Any potential pre-1900 previously unrecorded sites that are exposed during the works will be managed within this authority, and specifically within the Archaeological Management Plan.

As the timing of construction works is planned in the future and timing is uncertain, it is recommended that a HAMP is prepared prior to the start of construction works to capture the measures described above. This should include an updated record of sites to establish if there are any previously unknown historic heritage sites identified within the designation boundary since the writing of this report. For example, should an interim upgrade of Jesmond Road be constructed first (for example, by a developer) the results of any archaeological surveys should feed into the HAMP and the need for an authority reassessed at the time. The HAMP should:

- Set out the methods for the identification and assessment of historic heritage within the designation to inform detailed design

- Identify the known and potential historic heritage sites within the designation
- Set out the HNZPTA authority requirements for any pre-1900 sites identified for a precautionary authority.

In preparing the HAMP, HNZPT should be consulted with as stakeholders for the modification of the property where Aroha Cottage stands.

7.3.1.3 Assessment of Operational Effects

There are no operational effects to either known or unknown historic heritage deposits.

7.3.1.4 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

As there are no operational effects, no mitigation is required.

7.3.2 Bremner Road FTN section

7.3.2.1 Positive Effects

The assessment has created research opportunities which have discovered several new previously unrecorded archaeological sites, which improves the historic heritage record. While it is positive that there is a better recorded archaeological landscape of the area, these positive effects are outweighed by the proposed damage and modification that may occur to some sites during the construction phase. This is addressed further below.

7.3.2.2 Assessment of Construction Effects

This portion of the proposed designation intersects with several recorded historic heritage sites. These include:

- Southern portion of Commissariat Redoubt R12/756 (no surface evidence);
- Wharves and Bridges and potential subsurface extents associated to Runciman's Homestead R12/1131 (no visible evidence);
- Waka tauranga in the same vicinity as R12/1131 (no surface evidence);
- Unnamed building R12/1151 (no surface evidence);
- Unnamed bridge R12/1152 (no surface evidence);
- Unnamed buildings R12/1149 (no surface evidence);
- Unnamed buildings at R12/1143 (no surface evidence);
- Former Drury Cheese and Casein Factory (standing);
- Drury Post Office (no surface evidence);

There is also a high likelihood that previously unrecorded historic heritage deposits are found within the footprint, many of which are likely to be from the 19th century township occupation, although it cannot be ruled out if precontact Māori period sites are also present. The works which could impact these sites are described in Section 7.1.2.2.

The scheduled extent of St. John's Church has been avoided. There is reasonable cause to suspect subsurface extents of the site may extend into the proposed designation, and it is not unreasonable to assume that the road may have been slightly widened since the original build. Further research under the HAMP can assist this possibility. Deposits may include fence lines, paths, foundations of other structures. While there is reasonable cause to suspect that unmarked graves will be associated with the church and cemetery, these are highly unlikely to extend into the road reserve and proposed designation footprint.

It can be assumed that any sites which fall within any proposed ground disturbance areas will be damaged and/or destroyed during the construction phase of the works. The specific effects of the construction works to known sites are set out in the following sections.

Southern extent of Commissariat Redoubt R12/756 Wharves and Bridges (not scheduled)

It should be reiterated that the scheduled portion of the wharves is not at risk of damage from the works, and a large portion of the known extent of the redoubt has been avoided during options assessment and design phase.

However, based on old plan drawings of the site extent, it is believed that the site extends further to the south, on the southern side of Bremner Road within the Drury Sports Complex. Widening of the existing road and bridge spanning the Ngakoroa Stream and associated construction works may encounter unrecorded evidence such as rubbish pits, tent footprints, drains, infilled latrines, and similar deposits that have been found at other redoubts. The overall values of the site are moderate, and the original ground surface is not visible, so that the condition of these potential deposits cannot be assessed. There is some potential for adverse effects on unidentified subsurface archaeological remains exposed during construction.

Works to upgrade the bridge crossing the Ngakoroa Stream adjacent to the stream banks may also uncover unrecorded evidence. The Ngakoroa Stream has been used for shipping associated with the land wars, coal mining and domestic trade and had an early bridge and wharves, and the recorded waka tauranga. There may also be structural remains of the pre-1900 bridge. The condition of these deposits is unknown, but it is likely there are subsurface deposits intact. The Papakura to Bombay Waka Kotahi (New Zealand Upgrade Programme) project is proposing to reconstruct the bridge over the Ngakoroa Stream in the near future (once statutory approvals have been granted). It is likely that some of this area either side of the Bremner Road in this location will be disturbed prior to works being undertaken for NoR D2. However, at the time of writing this report, the extent of works is unknown.

Runciman's Homestead R12/1131, the waka Tauranga in the same vicinity as R12/1131

The likely location of the site is within the proposed designation footprint. The true extent of the homestead and its associated deposits are unknown. However, from research it is thought that the site is located further to the east than recorded. This site is impacted because the scheduled wharves and bridges site on the northern side of Bremner Road, described above, was avoided.

The fill works, road widening, bridge and construction compound and work zone, abutment wall, vegetation removal and retaining wall, as well as any ground disturbance on or near the site could expose deposits typically found at homesteads, like rubbish deposits, structural evidence, fence lines, paths, and outhouses. Any machinery or fill laying will compact and damage the deposits.

As noted above, the Papakura to Bombay Waka Kotahi (New Zealand Upgrade Programme) project is proposing to reconstruct the bridge over the Ngakoroa Stream in the near future (once statutory approvals have been granted). It is likely that some of this area either side of the Bremner Road in this location will be disturbed prior to works being undertaken for NoR D2. However, at the time of writing this report, the extent of works is unknown.

Unnamed building R12/1151

The known location of the former building is within the designation footprint. The building has been removed and the condition of subsurface deposits is unknown. The true extent of the building and its associated deposits are unknown. The overall values of the site are considered to be moderate. There may be subsurface extents of the site which are located within the fill batter zone and road widening area. Deposits exposed may include rubbish deposits, structural evidence, and similar deposits seen in 19th century buildings.

Unnamed bridge R12/1152

The existing Norrie Road bridge will be removed once the new bridge crossing the Hingaia Stream further north is operational. The overall values of the site are considered to be moderate. The surface evidence of the original pre-1900s bridge has been removed and the condition of any potential subsurface deposits associated to the original bridge is unknown. It is possible that evidence of the former bridge remains adjacent to and within the stream. It could also include some pre-1900 material dropped from the bridge.

Unnamed building R12/1149

The known location of this former building is within the designation footprint. The building has been removed and the condition of subsurface deposits is unknown. The true extent of the associated deposits is unknown. The overall values of the site are considered to be moderate. There may be subsurface extents of the site which are located within road widening areas and cut works and bridge construction zones, and there may be some subsurface extents that are exposed during works. Deposits exposed may include rubbish deposits, structural evidence and similar deposits seen in other 19th century buildings. Because the Extent of Place of St. John's Church, which has high heritage value, has been avoided, impact on this site is unavoidable. There is potential for adverse effects on unidentified subsurface archaeological remains exposed during construction.

Unnamed buildings at R12/1143

The site of this now demolished building is within the proposed designation footprint, including road widening and cut works. There may be some subsurface extents that are exposed during works. The true extent of the associated deposits is unknown. The overall values of the site are considered to be moderate. Because the Extent of Place St. John's Church, which has high heritage value, has been avoided, impact on this site is unavoidable. There is potential for adverse effects on unidentified subsurface archaeological remains exposed during construction. The deposits could include rubbish pits, paths, structural foundations, and other similar deposits seen at these site types.

The Former Drury Cheese and Casein Factory

This site is within the proposed designation footprint. Impact to this site is likely unavoidable because part of this site is required to utilise the existing road, while still avoiding St. John's Church, which has high heritage values (as described elsewhere in this report).

The building is very likely to be required to be removed/demolished to provide for widening of the road (on the southern side). The true extent of the subsurface deposits of the site are unknown.

Subsurface deposits could include rubbish pits, structural foundations of any potential out-houses, and other similar deposits seen on these site types. The overall values of the site are considered to be moderate. There is some potential for adverse effects on unidentified subsurface historic heritage remains exposed during construction.

Drury Post Office

This site is within the proposed designation footprint. The true extent and location of the site and its associated deposits are unknown, but the building has been demolished and it is unknown what the condition of any subsurface remains are. The overall values of the site are considered to be moderate. There is potential for adverse effects to potential previously unidentified subsurface deposits associated with the post-office which are exposed during construction.

7.3.2.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

7.3.2.3.1 General recommendations:

- Wherever possible, known sites should be avoided.
- Where sites are suspected of extending into the works area, further research including non-invasive techniques and possible Section 56 authority investigations under the HNZPT Act should be undertaken to clarify site extents and effects of construction.
- Any temporary construction works areas, such as lay downs, silt fencing, water bunds and spoil heaps, should avoid known site extents if there are alternative locations available.
- Known site extents adjacent to construction areas should be protected through fencing.
- Any areas of known site extents that will be used for construction laydown, but not otherwise earth worked, should be isolated with geotechnical cloth and 250 mm of GAP 25 or similar
- Vegetation removal in known site extents should be cut to stump and avoid ripping the roots out as a means to protect site deposits.
- Before earthworks commence, all sites should be visited by an archaeologist as part of a field survey to update the sites. Site visits are a part of the requirements of a full assessment of effects for an HNZPTA authority application.
- An archaeological authority should be obtained prior to works commencing.

The measures described above should form part of a HAMP which should be prepared at detailed design before construction commences.

Whenever sites cannot be avoided, the site-specific recommendations set out below should be considered through the HAMP.

Commissariat Redoubt R12/756 Wharves and Bridges south of the road

Before works commence, the final footprint of works should be assessed by an archaeologist as part of the requirements for applying for an HNZPTA authority. Any works within the area will be monitored by a suitably qualified archaeologist and the management of the monitoring will be within an HNZPT Archaeological Management Plan.

A systematic investigation of any known extents of the site should be undertaken under an HNZPTA authority.

The removal of the existing bridge crossing the Ngakoroa Stream should be undertaken in a controlled fashion, and any ground disturbance to the riverbed or river edges should be undertaken using methods pre-approved by HNZPT and AC. This will be subject to a separate regional resource consent process in the future. Any material cultural or structural evidence of pre-1900 structures should only be removed and investigated under an HNZPTA authority.

Sites and areas of sites that will be avoided (such as any northern extent of the redoubt) should be temporarily fenced off during construction to protect them from accidental damage from heavy machinery.

Any information gained during all pre and post construction works near the sites should be presented to the community, such as in an information board from the path side, or in the Papakura Museum exhibitions which showcases local history, or similar. Any information shared for public interpretation must be at the discretion of mana whenua.

Runciman's Homestead R12/1131, and the waka tauranga in the same vicinity

If it is not possible to entirely avoid the known extent of this site during construction, the following mitigation options should be considered:

- Non-invasive investigation techniques such as ground penetrating radar and /or magnetometer survey should be undertaken before construction works to identify if there are any surviving subsurface features
- Final construction and design should, as much as reasonable, avoid any features identified by non-invasive investigation
- An exploratory investigation authority may be obtained from HNZPT under section 56 of the HNZPT Act to assist detailed design and avoidance
- Any areas of the site that will be used for construction laydown, but not otherwise earth worked, should be isolated with geotechnical cloth and 250 mm of GAP 25 or similar
- An authority should be obtained from HNZPT to destroy or damage those parts of the site that cannot be avoided by construction under section 44 of the HNZPT Act to enable the systematic investigation of the area which includes excavation, recording, mapping, sampling, and detailed research
- Any information learnt will be reported and information may be shared with the public for interpretation with involvement from the mandated mana whenua

Unnamed buildings R12/1151, R12/1149 and R12/1143.

Access to the site for a survey and assessment should be undertaken before works commence. Before works commence, the final footprint of works should be assessed by an archaeologist as part of the requirements for applying for an HNZPTA authority. Any works within the area will be monitored by a suitably qualified archaeologist and the management of the monitoring will be within an HNZPT Archaeological Management Plan.

Unnamed bridge R12/1152

Before works commence, the final footprint of works should be assessed by an archaeologist as part of the requirements for applying for an HNZPTA authority. Any works (including those requiring monitoring) will be confirmed by a suitably qualified archaeologist and the management of the monitoring will be within an HNZPT Archaeological Management Plan.

The removal of the current bridge should be undertaken in a controlled fashion, and any ground disturbance to the riverbed or river edges should be undertaken using methods preapproved by HNZPT and AC. This will be subject to a separate regional resource consent process in the future. Any modification or removal of material cultural or structural evidence of pre-1900 structures should be done under an HNZPTA authority.

The Former Drury Cheese and Casein Factory

Access to the site for a survey and built heritage assessment should be undertaken before works commence. It is recommended that detailed recording and heritage assessments of the building be carried out by a built heritage specialist to determine the level of heritage significance and current condition.

If the factory is assessed as being of significant heritage value, and if its condition permits, it should be relocated on the property or elsewhere within the Drury area prior to the start of works.

Should relocation not be achievable, the deconstruction of the building should be undertaken with a buildings archaeologist on site to record and investigate the building. This should be undertaken regardless of its construction date. Any materials could be reused if they are of heritage value.

Any information gained during all pre- and post-construction works of the factory should be presented to the community, such as in an information board from the path side, or in the Papakura Museum exhibitions which showcase local history or similar.

Former Drury Post Office

Research should be undertaken into the chronology and location of the site to examine if the site is pre-1900, and its likelihood of intact subsurface extents. Access to the site for a survey and assessment should be undertaken before works commence. Before works commence, the final footprint of works should be assessed by an archaeologist as part of the requirements of applying for an HNZPT authority, and if the site is determined to predate the 1900s, any proposed modification or removal of the site should be assessed as part of that application. Any works within the area will be monitored by a suitably qualified archaeologist and the management of the monitoring will be within an HNZPT Archaeological Management Plan.

7.3.2.4 Assessment of Operational Effects and Recommended Measures

It is possible the operation of the transport network could have an adverse effect on the information, heritage, and context of some sites by modifying the wider landscape they belong to. This has a risk of diminishing the understanding of the heritage of what is already a poorly recorded and understood area.

7.3.2.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

Should the information, heritage, and context values of sites be compromised by the operation of the transport network, these are best minimised by avoiding sites if practicable in the first instance. Those sites which cannot be avoided could have the effects partly mitigated by marking the locations of sites and providing information on the sites, for example an information board along a walking or cycle route. Any information shared, if at all, must be at the discretion of mana whenua.

7.3.3 Waihoehoe Road West FTN Upgrade section

7.3.3.1 Assessment of Construction Effects

This section of the proposed designation intersects with several recorded sites. These include:

- The Railway Hotel R12/1146 (no surface evidence);
- The Drury coal tram/railway R12/1222 (no surface evidence);
- Drury commercial buildings (no surface evidence);
- Railway Worker's Residences (one standing, three have been removed);

Attention to minimising ground disturbance should be paid to any work at the Drury township. While many sites across the wider NoR are being avoided, the cumulative negative effects of the Project on many sites along Norrie Road (previously Old South Road), land near the NIMT on Great South Road, and Waihoehoe Road include a cumulative negative effect on the historic heritage landscape of Drury's pre-1900 European land use. If the sites cannot be avoided, other efforts should be made to record the loss of heritage along the area, including systematic archaeological investigations and opportunities for interpretation.

The Drury Railway Station, R12/1139, may have subsurface deposits which extend into the project footprint. Should these be present, they will be negatively impacted by their removal during the earthworks phase of the project.

All proposed works will have an adverse effect to these sites by damaging or destroying the deposits. A full assessment of these effects will be made once the construction footprint and all associated ground disturbance is finalised, and will be included in the HAMP prior to construction before ground disturbance for construction of the project begins.

There is also a high likelihood that previously unrecorded historic heritage deposits may be found within the footprint, many of which are likely to be from the 19th century township occupation, although the presence of precontact Māori period sites cannot be ruled out. The works which may impact these sites are described in Section 7.1.3.2. Site specific effects are as follows:

R12/1222, Drury tramway/mineral railway

Some of this site is within the designation footprint. There is some potential for adverse effects on unidentified subsurface archaeological remains exposed during construction. The works which will negatively impact the site include road widening, preparation for fill batter, vegetation removal and any similar works in that area. These works will damage this portion of the site by removing these deposits. The overall values of the site are moderate, and any remaining intact deposits of the site in this portion of the roading are subsurface.

CHI item 15109, Drury Commercial Buildings

The construction footprint overlaps with the known location of some of this site. The true extent of these buildings and their associated deposits are unknown to assess if the whole site will be damaged. The condition of the site remains subsurface and the overall value is moderate. The works to impact the site include road widening and preparation for fill batter. These works will damage and/or destroy any parts of the site which overlap the designation by removing these deposits.

CHI site 22288, Railway worker's residences

The construction footprint overlaps with the last standing house of the railway worker's residences. The true subsurface extent of the residences and its associated deposits are unknown to assess if the whole site will be damaged. Some of the site is intact and the removal of building is likely required. The overall value of the site is moderate. The road widening, bridge construction, and bridge construction works area will damage features of this site by removing subsurface deposits and the residence.

The removal of the remaining structure should be assessed by a built heritage specialist. The built heritage assessment can determine the appropriate level of mitigation based on those findings.

Railway Hotel, R12/1146

The construction footprint overlaps with the known location of the hotel. The building is no longer standing. The true extent of the hotel and its associated deposits are unknown to assess if the whole site will be damaged. As the building has been removed, any intact deposits will be subsurface. The overall value of the site is moderate. The site compound, bridge construction area, road widening, and similar works will negatively impact the site by removing these deposits during the earthworks.

7.3.3.2 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

7.3.3.2.1 General recommendations

- Wherever possible, known sites should be avoided.
- Where sites are suspected of extending into the works area, further research including non-invasive techniques and possible Section 56 authority investigations under the HNZPT Act should be undertaken to clarify site extents and effects of construction.
- Any temporary construction works areas, such as lay downs, silt fencing, water bunds and spoil heaps, should avoid known site extents if there are alternative locations available.
- Known site extents adjacent to construction areas should be protected through fencing.
- Any areas of known site extents that will be used for construction laydown, but not otherwise earth worked, should be isolated with geotechnical cloth and 250 mm of GAP 25 or similar.
- Vegetation removal in known site extents should be cut to stump and avoid ripping the roots out as a means to protect site deposits.
- Before earthworks commence, all sites should be visited by an archaeologist as part of a field survey to update the sites. Site visits are a part of the requirements of a full assessment of effects for an HNZPTA authority application. Should an interim upgrade of Waihoehoe Road

West be constructed first (for example, by a developer) the results of any archaeological surveys should feed into the HAMP and the need for an authority reassessed at the time.

- An archaeological authority should be obtained for each designation prior to works commencing.

The measures described above should form part of a HAMP which should be prepared before construction commences.

Whenever sites cannot be avoided, site-specific recommendations set out below should be considered through the HAMP.

R12/1222, Drury tramway/mineral railway

This section of the tramway is not protected under the HNZPT Act as it was built after 1900.

Access to the site for a survey and assessment should be undertaken before works commence.

While the site is not protected by the HNZPT Act, the site holds some heritage value, and there is likely to be value in the works being monitored by a suitably qualified archaeologist to sample any exposed material of the tramway. New information would contribute to understanding the site, which has not been sampled thus far.

CHI item 15109, Drury Commercial Buildings

The site should be further researched further to examine its chronology. If the site predates the 1900s, it should be added to the SRS.

If the site is determined as being pre-1900, before works commence the final footprint of works should be assessed by an archaeologist as part of the requirements for applying for an HNZPTA authority. Any works within the area will be monitored by a suitably qualified archaeologist and management of the monitoring will be within an HNZPT Archaeological Management Plan.

CHI site 22288, Railway worker's residences

The site is post-1900 and it is not protected by provisions of the HNZPT Act.

Access to the site for a survey and assessment should be undertaken before works commence.

While the site is not protected by the HNZPT Act, the site holds some heritage value, and there could be some value in a suitably qualified archaeologist monitoring the works to sample any material exposed deposits of the residences.

The buildings that are being removed should be assessed by a built heritage specialist, who can determine the values of the site and the appropriate level of mitigation for any adverse effects on these values.

Railway hotel, R12/1146

Before works commence, the final footprint of works should be assessed by an archaeologist as part of the requirements for applying for an HNZPTA authority. Any works within the area will be monitored by a suitably qualified archaeologist and the management of the monitoring will be within an HNZPT Archaeological Management Plan.

7.3.3.3 Assessment of Operational Effects and Recommended Measures

It is possible the operation of the transport network could have adverse effects on the information, heritage, and context of some sites by modifying the wider landscape they belong to. This has a risk of diminishing the understanding of the heritage of what is already a poorly recorded and understood area.

7.3.3.4 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

Should the information, heritage and context values of sites be compromised by the operation of the transport network, these are best minimised by avoiding sites in the first instance. Those sites which cannot be avoided could have the effects partly mitigated by marking the locations of sites and providing information on the sites, for example an information board along a walking or cycle route. Any information shared, if at all, must be at the discretion of mana whenua.

Otherwise, based on the current understanding of the Project, there are no operational effects to mitigate.

7.4 Conclusions

The proposed NoR D2 designation will impact on known and potential sites during the construction and operational phases of the works. Bremner Road section has the potential to affect both known heritage sites and potential previously unrecorded subsurface archaeological remains that may be exposed during construction. The Waihoehoe Road West Section also has several sites at the west end.

It is recommended that an HNZPTA authority is applied for to manage the damage to pre-1900 sites. Post-1900 sites which still hold some heritage value should be managed with research and opportunities for interpretation to the public. Further desktop and field research will help determine the appropriate forms of mitigation, undertaken as a requirement of the HAMP, which should be prepared to inform detailed design before construction commences.

Since archaeological survey cannot always detect sites of traditional significance to Māori, or wāhi tapu, the appropriate mana whenua authorities should be consulted regarding the possible existence of such sites, and the recommendations in this report.

As the timing of construction works is planned in the future and timing is uncertain, it is recommended that a HAMP is prepared prior to the start of construction works. This should include an updated record of sites to establish if there are any previously unknown historic heritage sites identified within the designation boundary since the writing of this report. The HAMP should:

- Set out the methods for the identification and assessment historic heritage within the designation to inform detailed design, such as further research and surveys needed;
- Identify the known and potential historic heritage sites within the designation;
- Identify which areas should be considered to work under an HNZPTA authority, after a full assessment of effects of the proposed ground disturbance.

Specific mitigation measures are recommended for Runciman's Homestead (R12/1131), the Former Drury Cheese and Casein Factory and the railway worker's residences, as set out below.

Runciman's Homestead (R12/1131)

If it is not possible to entirely avoid the known extent of the site during construction, the following mitigation options should be considered:

- Non-invasive investigation techniques such as ground penetrating radar and /or magnetometer survey should be undertaken before construction works to identify if there are any surviving subsurface features
- Final construction and design should, as much as reasonable, avoid any features identified by non-invasive investigation
- An exploratory investigation authority may be obtained from HNZPT under section 56 of the HNZPT Act to assist detailed design and avoidance
- Any areas of the site that will be used for construction laydown, but not otherwise earth worked, should be isolated with geotechnical cloth and 250 mm of GAP 25 or similar
- An authority should be obtained from HNZPT to destroy or damage those parts of the site that cannot be avoided by construction under section 44 of the HNZPT Act to enable the systematic investigation of the area which includes excavation, recording, mapping, sampling, and detailed research
- Any information learnt will be reported and information may be shared with the public for interpretation with involvement from the mandated mana whenua

Former Drury Cheese and Casein Factory

- Access to the site for a survey and built heritage assessment should be undertaken before works commence. It is recommended that detailed recording and heritage assessments of the building should be carried out by a built heritage specialist to determine the level of heritage significance and current condition.
- If the factory is assessed as being of significant heritage value, and if its condition permits, it should be relocated on the property or elsewhere within the Drury area prior to the start of works.
- Should relocation not be achievable, the deconstruction of the building should be undertaken with a buildings archaeologist on site to record and investigate the building. This should be undertaken regardless of its construction date. Any materials could be reused if they are of heritage value.
- Any information gained during all pre- and post-construction works of the factory should be presented to the community, such as in an information board from the path side, or in the Papakura Museum exhibitions which showcase local history or similar.

Railway worker's residences (CHI site 22288)

- Access to the site for a survey and built heritage assessment should be undertaken before works commence. It is recommended that detailed recording and heritage assessments of the building should be carried out by a built heritage specialist to determine the level of heritage significance and current condition.

A HNZPTA authority should be applied for wherever sites cannot be avoided. Additionally, some social and community level engagement for some sites are recommended.

Table 7-1. Summary of sites, values, effects, and mitigation (sites shaded orange are within the designation).

Name or site type	NZAA	NoR and Section	Relationship to designation	Condition (if known)	Overall value (if within designation)	Effects	Mitigation
Jesmond Road FTN Upgrade Section							
Aroha cottage		Jesmond, D2.	Scheduled extent within designation boundary (part of driveway only).	Structure not in original location.	N/A	None.	Consult with HNZPT for engagement for Cat. B. site 692.
Bremner Road FTN Upgrade Section							
Runciman's homestead	R12/1131	Bremner, D2.	Inside designation boundary.	Structure removed; subsurface extents possible.	Moderate	Potential damage at construction, to be determined once final design complete during HAMP.	Avoidance if achievable during laydown design, investigate possible site extents using non-invasive techniques, fully assess after detailed design, apply for an HNZPTA authority and archaeological management plan, excavate and monitor.
St Johns Church and Cemetery	R12/1129	Bremner, D2.	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Structure standing, associated ground evidence of structures and subsurface deposits likely intact.	N/A	Potential for site to extend into NoR. To be determined at final design complete.	Assess at detailed design, if necessary, apply for an HNZPTA authority and archaeological management plan, excavate and monitor.
Former Drury Creamery and Casein factory (12 Norrie Road)	Possibly a site – more research needed into chronology.	Bremner, D2.	Inside designation boundary.	Structure standing, subsurface deposits likely.	Moderate	Removal of structure and any subsurface deposits during construction of road.	Fully assess at detailed design by a built heritage specialist, subsequent mitigation determined from here. Likely relocation within Drury if possible.
Tauranga / waka haulage site.	Part of R12/1131	Bremner, D2.	Inside the designation boundary	Subsurface evidence possible.	Moderate	Potential damage at construction, to be determined at detailed design.	Fully assess after detailed design, if necessary, apply for an HNZPTA authority and archaeological management plan, excavate and monitor.
Commissariat Redoubt and Slippery Creek wharf	R12/756	Bremner, D2.	Part of the site (unscheduled) inside designation boundary.	Structure removed; subsurface extents possible.	Moderate	Potential damage at construction, to be determined once final design complete during HAMP.	

Name or site type	NZAA	NoR and Section	Relationship to designation	Condition (if known)	Overall value (if within designation)	Effects	Mitigation
Drury Post Office	Possibly a site – more research needed into chronology.	Bremner, D2.	Inside designation boundary.	Structure removed; subsurface extents possible.	Moderate/	Removal of deposits during construction of road, to be confirmed at detailed design.	
Unnamed historic buildings	R12/1149	Bremner, D2.	Inside the designation boundary.	Structure removed; subsurface extents possible.	Moderate	Potential removal of deposits during construction of road, to be confirmed at detailed design.	
Unnamed historic building	R12/1151	Bremner, D2.	Inside designation boundary	Structure removed; subsurface extents possible.	Moderate	Potential removal of deposits during construction of road, to be confirmed at detailed design.	
Unnamed historic bridge	R12/1152	Bremner, D2.	Inside designation boundary.	Structure removed; subsurface extents possible.	Moderate	Potential removal of deposits during construction of road, to be confirmed at detailed design.	
Drury Post Office, Store, Bakehouse, and Residence.	R12/1143	Bremner, D2.	Inside designation boundary.	Structure removed; subsurface extents possible.	Moderate	Potential removal of any subsurface deposits during construction of road.	
Waihoehoe West FTN Upgrade Section							
Drury tramway/mineral railway	R12/1222	Waihoehoe West, D2.	Post-1900 portion of the site inside designation boundary.	Structure removed; subsurface extents possible.	Moderate	Potential removal of deposits during construction of road, to be confirmed at detailed design.	Fully assess after detailed design, archaeological monitoring for information value (regardless of the post-1900 date), report on findings.
Drury Commercial Buildings	Possibly a site – more research needed into chronology.	Waihoehoe West, D2.	Inside designation boundary.	Unknown.	Moderate	Removal of deposits during construction of road, to be confirmed at detailed design.	Fully assess at detailed design, if necessary, apply for an HNZPTA authority and archaeological management plan, excavate and monitor.

Name or site type	NZAA	NoR and Section	Relationship to designation	Condition (if known)	Overall value (if within designation)	Effects	Mitigation
Railway hotel	R12/1146	Waihoehoe West, D2.	Inside designation boundary.	Structure removed; subsurface extents possible.	Moderate	Potential removal of deposits during construction of road, to be confirmed at detailed design.	
Unnamed historic building	R12/1150	Bremner, D2.	Outside designation boundary.	Structure removed; subsurface extents possible.	N/A	Potential removal of deposits during construction of road, to be confirmed at detailed design.	
Drury Railway Station	R12/1139	Waihoehoe West, D2.	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Structure removed; subsurface extents possible.	N/A	Potential for site to extend into NoR. To be determined once final design complete.	
Villa, outbuilding, and cottage (28 Waihoehoe Road)	R12/1142	Waihoehoe West, D2.	Outside the designation boundary, possible subsurface deposits may fall into the NoR.	Structure standing; subsurface extents possible.	N/A	Potential damage at construction, to be determined at detailed design.	
Railway workers residences (18 Waihoehoe Road)		Waihoehoe West, D2.	Inside designation boundary.	Some buildings removed, others intact.	Moderate	Potential for site to extend into NoR. To be determined once final design complete.	Built heritage assessment. Fully assess after detailed design, archaeological monitoring for information value (regardless of the post-1900 date), report on findings.

8 NoR D3: Waihoehoe Road East Upgrade

Chapter Summary

There are no recorded historic heritage sites within the NoR D3 boundaries. There is reasonable cause to suspect there could be both pre-European Māori and pre-1900 European deposits within the proposed designation. This is primarily based on the presence of waterways near the sites and historic deposits in the wider area. It is considered appropriate to apply for a precautionary HNZPTA authority to manage the loss or modification of any potential previously unrecorded archaeological deposits that are found during the works. This application will be sought after a full assessment of effects is completed during the detailed design stage, as part of the requirements of the HAMP.

8.1 Project Description

8.1.1 Project Overview

The Waihoehoe Road East Upgrade (NoR D3) consists of the widening of Waihoehoe Road to a two-lane arterial with walking and cycling facilities from the proposed intersection with Ōpāheke North-South Arterial in the east, to Drury Hills Road in the east. The functional intent of the Project is to provide strategic east-west connectivity between the strategic north-south corridors (Great South Road, the Ōpāheke N-S FTN Upgrade (NoR D4) and Mill Road), providing multi-modal access to the wider network for the planned growth area as well as providing access to the existing Drury township and proposed rail station (an NZUP project).

The eastern extent of the Project will tie into the future Mill Road corridor which forms a separate NZUP project. The intersection with Ōpāheke North-South is proposed to be signalised, but this work forms part of NoR D2. Roundabouts are proposed at the intersections with Appleby Road and Cossey Road. The road will be an urban arterial with a likely reduced speed limit of 50kph. An overview of the proposed design is provided in Figure 8-1.

The indicative alignment has been prepared for assessment purposes, and to indicate what the final design of the Project may look like. The final alignment will be refined and confirmed at the detailed design stage. Key features of the proposed upgrade include the following:

- Widening of Waihoehoe Road from its current general width of 20m to enable a 24m wide two-lane cross-section including separated walking and cycling facilities
- Localised widening around the existing intersections to accommodate for the two proposed roundabouts
- Batter slopes to enable widening of the corridor, and associated cut and fill activities.
- Vegetation removal along the existing road corridor
- Areas identified for construction related activities including site compounds, construction laydown, the re-grade of driveways and construction traffic manoeuvring.

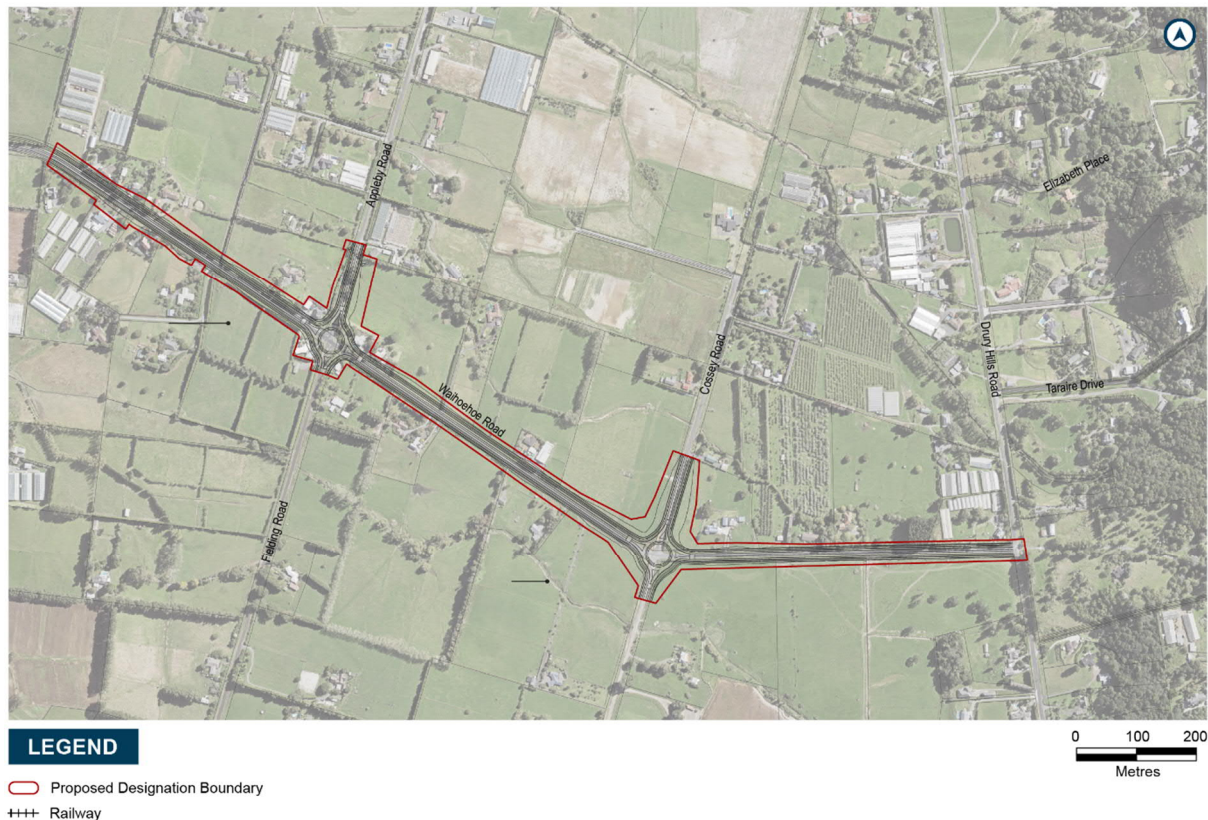


Figure 8-1 Overview of Waihoehoe Road East Upgrade

8.1.2 Project Features

Features of the project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for service relocation,
- site establishment and clearance,
- compound and laydown areas,
- temporary access roads and erosion and sediment controls,
- installation of sediment retention ponds,
- sloping and staging,
- cut and fill batters that include topsoil stripping,
- the lifting of existing road surfaces and utilities,
- stormwater and drainage pipes.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites.

8.2 Site Specific Results

8.2.1 Historic Heritage Sites

Recorded sites

There are no recorded sites within 200 m of the proposed extent of NoR D3.

Potential sites

There is reasonable cause to suspect previously unrecorded historic heritage sites may be present within the footprint of NoR D3. This is primarily based on streams and waterways present both north and south of the designation footprint which are areas of higher risk for both pre-European Māori and pre-1900 European historic heritage deposits in the wider area. It is likely this is the route that the pre-1900 bullock drawn coal was transported.

8.2.2 Field Survey

The proposed designation footprint for NoR D3 had no visible evidence of historic heritage deposits. There were no previously recorded historic heritage sites to check from the roadside. The road shows very little evidence of deep cutting which indicates historic heritage deposits may remain in situ should they be present (Figure 8-2).



Figure 8-2. Waihoehoe Road, facing east.

8.3 Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

8.3.1 Positive Effects

There are no positive effects on historic heritage as a result of NoR D3.

8.3.2 Assessment of Construction Effects

There are no recorded sites within NoR D3. There is a possibility that previously unrecorded historic heritage deposits could be found within the footprint, many of which are likely to be from the 19th century occupation, although it cannot be ruled out that pre-European Māori period sites could also be present.

All proposed works could have an adverse effect to these potential sites by damaging or destroying deposits. Potential previously unrecorded archaeological deposits may be negatively impacted by removal of these deposits within the earthworks footprint.

8.3.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

- It is recommended a HAMP is prepared at detailed design, before construction commences. Further research should be undertaken under the HAMP, to further examine the presence of any previously unrecorded historic heritage deposits;
- Should the further research find records of these deposits, these should be added to the appropriate recording system, and any specific mitigation methods for the site(s) be determined at that stage depending on the AUP RPS criterion values assessment, the site type, context, and similar attributes;
- Any sites should be visited by an archaeologist as part of a field survey to update the sites. Site visits are a part of the requirements of a full assessment of effects for an HNZPTA authority application;
- Should there remain an absence of recorded historic heritage sites after research, there still remains a reasonable cause to suspect potential previously unrecorded historic heritage deposits, so an HNZPTA authority should be applied for.

As construction is planned in the future and timing is uncertain, it is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority.

8.3.4 Assessment of Operational Effects

There are no operational effects to either known or unknown historic heritage deposits.

8.3.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

There are no operational effects to mitigate.

8.3.6 Summary and Conclusions

There is reasonable cause to suspect the proposed works could expose potential previously unrecorded historic heritage deposits. As construction is planned in the future and timing is uncertain, it is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority

Since archaeological survey cannot always detect sites of traditional significance to Māori, or wāhi tapu, the appropriate mana whenua authorities should be consulted regarding the possible existence of such sites, and the recommendations in this report.

9 NoR D4: Ōpāheke North-South FTN Arterial

Chapter Summary

There is one recorded historic heritage site within the proposed designation footprint of NoR D4, the Brick Utility building, which is recorded on the CHI. The assessment of this site against the AUP RCP criterion indicates it has little value. The building should be assessed by a built heritage specialist to determine appropriate mitigation options.

While portions of the proposed designation have not been surveyed by an archaeologist, there was no surface evidence of previously unrecorded sites at the portions which have been surveyed.

Nonetheless there remains a potential for previously unrecorded sites to be found. It is recommended a HAMP is prepared at detailed design before construction commences. Under the HAMP, additional research and survey should be undertaken and this should include a complete survey of all remaining properties within the proposed designation footprint. While there are no recorded pre-1900 sites within the designation footprint, it is considered appropriate to apply for a precautionary HNZPTA authority because there remains reasonable cause to suspect previously unrecorded archaeological deposits may be found during the works. This is based on the historic roads and structures near the waterways, which are recognised as transport channels for pre-European Māori.

9.1 Project Description

9.1.1 Project Overview

The Ōpāheke North-South FTN Arterial is a new 30m four-lane FTN arterial with separated walking and cycling facilities between Hunua Road in the north and Waihoehoe Road in the south. The road will be an urban arterial with a likely speed limit of 50kph. The functional intent of the Project from a transport perspective is to increase connectivity and provide for good people-movement and public transport function through the FUZ. The Project will also support SH1, Great South Road and the proposed Mill Road corridor by providing a new corridor which will cater more to local north-south trips in Drury.

The road traverses greenfields zoned FUZ, crossing approximately seven streams (or tributaries of streams) and areas of flood plain, providing a new north-south connection between Drury and Papakura. The intersection with Hunua/Boundary Roads will be signalised, and roundabouts are proposed at Ōpāheke Road / Ponga Road, Walker Road and Waihoehoe Road. The intersection at Waihoehoe Road is not included in this project extent (it is included within NoR D2). An overview of the proposed design is provided in Figure 9-1.

The indicative alignment has been prepared for assessment purposes, and to indicate what the final design of the Project may look like. The final alignment will be refined and confirmed at the detailed design stage. Key features of the proposal include the following:

- A new road to enable a 30m wide four-lane cross section including bus lanes and separate walking and cycling facilities

- Localised widening around intersections with existing roads to accommodate for vehicle stacking and tie-ins and walking and cycling facilities/crossings
- Proposed new culverts
- Four proposed stormwater wetlands
- Two proposed bridges over Waipokapū Stream (approximately 120m) and Waihoehoe Stream and floodplain (approximately 265m)
- Batter slopes and retaining to enable construction of the corridor, and associated cut and fill activities
- Vegetation removal
- Areas identified for construction related activities including site compounds, construction laydown, bridge works area, the re-grade of driveways and construction traffic manoeuvring

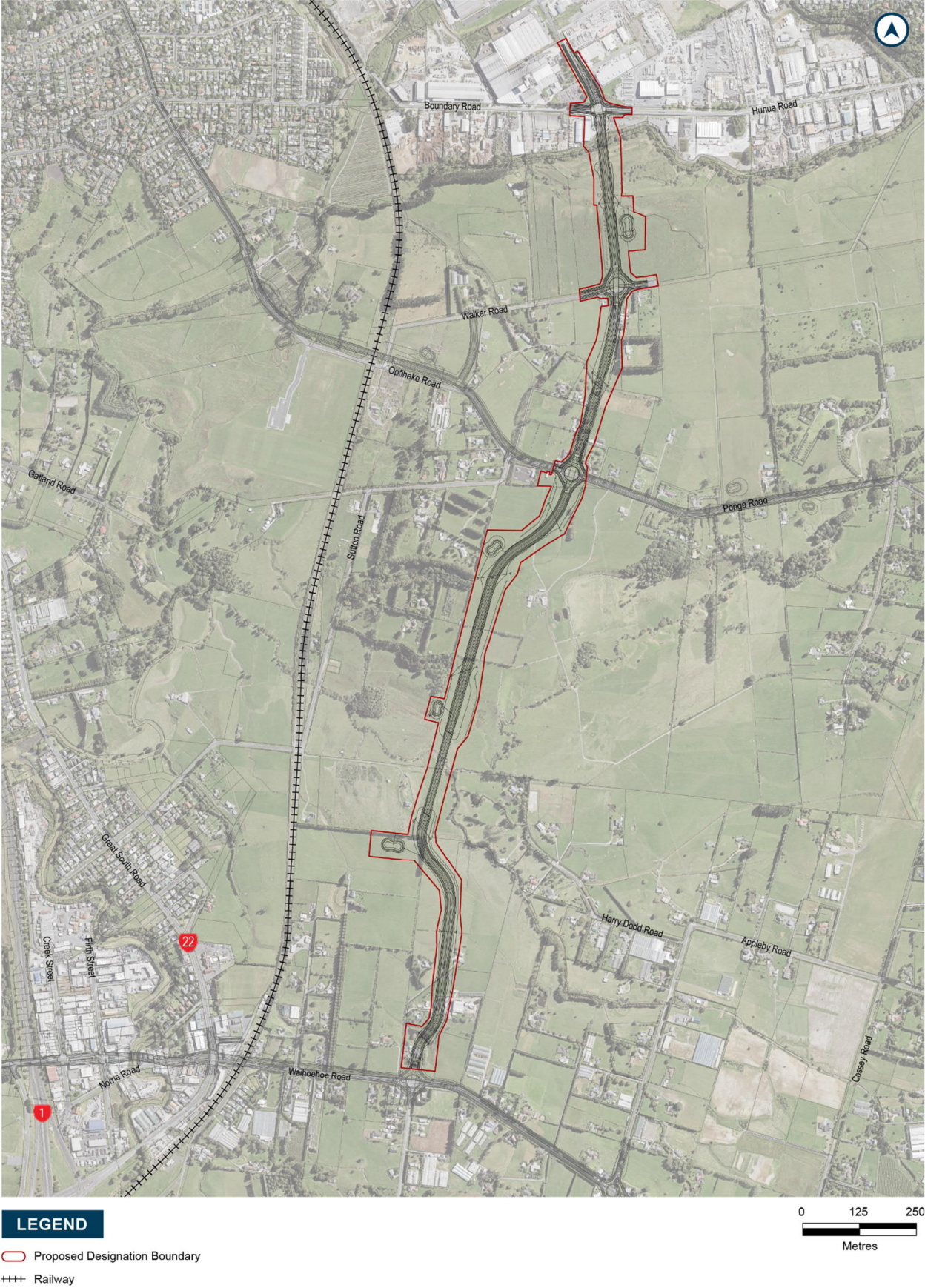


Figure 9-1 Overview of Ōpāheke N-S FTN Arterial

9.1.2 Project Features

Features of the project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for service relocation,
- site establishment and clearance,
- eight new culverts,
- three new bridges,
- compound and laydown areas for five site compounds,
- ground preparation for haul roads,
- any new proposed wetlands,
- vegetation clearance that involves ground disturbance,
- temporary access roads and erosion and sediment controls,
- the removal of structures,
- installation of sediment retention ponds,
- sloping and staging,
- cut and fill batters that include topsoil stripping,
- the lifting of existing road surfaces and utilities and paths,
- stormwater and drainage pipes.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites.

9.2 Site Specific Results

9.2.1 Historic Heritage Sites

A summary of sites on or near NoR D4 are seen in Table 7-1.

Utility Building, CHI item 22281.

This site is within the footprint of NoR D4.

At 31 Ponga Road, a brick building stands near the roadside. Both the field survey from this assessment and the CHI record estimates that the building dates to the 1940s. It was used as a substation. The record explains that the building contains concrete floor and shows a drop in floor level where equipment would have been. It includes an ablution facility, with more contemporary aluminum joinery and side door. An unusual feature of the building is the full height vertical timber door and the windows on the upper portion of the side elevations.

Assessment of values against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the mid-20th century industrial development in the area. The site has **little** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.

- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has the potential to provide limited information which will improve the understanding of the history of mid-20th century industrial development in the area. The site has **little** knowledge value.
- e) Technology. Not enough is known about the building to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. Not enough is known about the building to consider physical attributes. However, based on what is currently known about the site, the site has **little** physical value.
- g) Aesthetic. The site stands on the side of Ponga Road. The site has **little** aesthetic value.
- h) Context. The place is associated to the industrial expansion of Drury. The site has **little** context value.

Based on the above attributes, the site has little value. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

A built heritage assessment should be undertaken to determine any other mitigation options.

Potential sites

There is a reasonable cause to suspect previously unrecorded historic heritage sites may be present within the footprint of NoR D4. This is primarily based on the density of pre-1900 European sites recorded for the Drury township, coupled with the presence of the many tributaries of the Ngakoroa Stream which is a known pre-European Māori transport channel. Land near waterways are commonly areas of high risk for previously unrecorded historic heritage deposits. All unrecorded archaeological sites are protected under provisions of the HNZPT Act.

9.2.2 Field Survey

Some portions of the proposed designation were not surveyed in the assessment but those which were surveyed did not show any surface evidence of previously unrecorded sites (Figure 9-4). Also, some portions of the designation were observed from the roadside and were visually checked (Figure 9-2). There were no visible signs of additional historic heritage sites other within the areas observed.

CHI item (22281) is a brick utility building which falls within the designation. There are no significant aesthetics about the building or surrounds to suggest there are pre-1900 features at the site.



Figure 9-2. Part of the NoR D4 area facing south from Ponga Road.



Figure 9-3. The 1940s Utility building, facing west.



Figure 9-4. View of land facing north as part of NoR D4 with Waihoehoe Stream running through it.

9.3 Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

9.3.1 Positive Effects

There are no positive effects on historic heritage as a result of NoR D4.

9.3.2 Assessment of Construction Effects

The Brick Utility Building, CHI site 22281, is within the footprint of NoR D4 and discussion on reuse/relocation of the building to suitable local site following built heritage assessment and advice will determine the effects. .

It is possible that previously unrecorded historic heritage deposits are within the footprint, which could include deposits from 19th century domestic occupation or farming, although it cannot be ruled out that precontact Māori period sites are also present. These sites will be damaged and/or destroyed by the works by removing the portions which fall within the earthworks and ground disturbance footprint.

Utility Building, CHI item 22281.

This site will be impacted and removed for construction purposes. The building is standing; however, it has little value based on the AUP RPS values assessment. It is not protected by provisions of the HNZPT Act.

9.3.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

9.3.3.1 General recommendations

- It is recommended a HAMP is prepared at detailed design before construction commences. Further research should be undertaken under the HAMP to further examine the presence of any previously unrecorded historic heritage deposits;
- Should the further research find records of these deposits, these should be added to the appropriate recording system, and any specific mitigation methods for the site(s) be determined at that stage depending on the AUP RPS criterion values assessment, the site type, context, and similar attributes;
- Any sites should be visited by an archaeologist as part of a field survey to update the sites. Site visits are a part of the requirements of a full assessment of effects for an HNZPTA authority application;
- Should there remain an absence of recorded historic heritage sites after research, there still remains reasonable cause to suspect potential previously unrecorded historic heritage deposits, and an HNZPTA authority should be applied for.

As construction is planned in the future and timing is uncertain, it is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority. For example, should an interim upgrade of Ōpāheke North South Arterial be constructed first (for example, by a developer) the results of any archaeological surveys should feed into the HAMP and the need for an authority reassessed at the time.

CHI site 22281, brick utility building (31 Ponga Road)

While the site is not protected by provisions of the HNZPT Act, the discussion on reuse/relocation of the building to suitable local site following built heritage assessment and advice should be undertaken. The proposed methodology for investigating and recording the site should be a requirement of the HAMP.

9.3.4 Assessment of Operational Effects

There are no operational effects to either known or unknown historic heritage deposits.

9.3.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

There are no operational effects to mitigate.

9.3.6 Summary and Conclusions

There is reasonable cause to suspect the proposed works will unearth previously unrecorded deposits. As construction is planned in the future and timing is uncertain, it is recommended that a HAMP is prepared at detailed design before construction commences. As part of the HAMP, further research and survey should be undertaken to support a precautionary HNZPTA authority.

The CHI site, the brick utility building, has limited heritage value, however the building should have an built heritage assessment undertaken. The proposed methodology for investigating and recording the site should be a requirement of the HAMP.

Since archaeological survey cannot always detect sites of traditional significance to Māori, or wāhi tapu, the appropriate mana whenua authorities should be consulted regarding the possible existence of such sites, and the recommendations in this report.

10 NoR D5: Ponga and Ōpāheke Road Upgrade

Chapter Summary

There are two historic heritage sites within the Ōpāheke section of NoR D5, and none on the Ponga Road section. The two sites are the Ōpāheke Railway Station and the edge of the newly recorded Presbyterian section of the Papakura Cemetery. There are recorded historic heritage sites near both sections of the proposed designation which may have subsurface extents into the proposed designation, including the WWII Ōpāheke west and east camps, the Ōpāheke sale yards, and two pre-1900 villas.

The presence of the Ōtūwairoa Stream and Mangapū Stream as well as the recorded sites, indicates there is reasonable cause to suspect potential previously unrecorded pre-European Māori and pre-1900 European sites are within the proposed designation. Ponga Road was a pre-1900s route known as “Hill’s Route”, so pre-1900 human land use near the road could be in situ. It is considered appropriate to apply for an HNZPTA authority for both recorded and previously unrecorded archaeological deposits that are found during the works, which will be undertaken after a full assessment once the detailed design is complete at a later stage under the HAMP.

10.1 Project Description

As the Drury-Ōpāheke area is urbanised it is proposed to upgrade a 4.15km section of Ponga Road and Ōpāheke Road, from Great South Road in the north, to Jack Paterson Road and the future Mill Road corridor (which forms a separate NZUP project) in the southeast, to a two-lane arterial with separated walking and cycling facilities. The functional intent of the Project is a multimodal corridor that provides access to the proposed Mill Road corridor, FUZ in Papakura and employment areas to the north. The Project has been separated into three sections as shown in Figure 10-1:

- Ponga Road Upgrade: from Ōpāheke Road to Jack Paterson Road
- Ōpāheke Road Rural Upgrade: from the northern extent of the FUZ to Ponga Road
- Ōpāheke Road Urban Upgrade: north of the FUZ
 - While the overall plan for the urban area of Ōpāheke Road is to upgrade the walking and cycling facilities from Ōpāheke Road Rural Upgrade in the south to Great South Road, Papakura in the north, generally, the upgrade can fit within the existing road reserve, therefore only the areas affecting land outside the existing road reserve are proposed to be designated.

For the Ponga Road and the Ōpāheke Road Rural upgrade sections it is proposed to widen the existing roads to 24m two-lane urban arterials with separated walking and cycling facilities. As the Ōpāheke Road urban section is an existing and constrained urban environment, it is proposed to upgrade the existing road to a 20m two-lane urban arterial with separated walking and cycling facilities.

The indicative alignment has been prepared for assessment purposes, and to indicate what the final design of the Project may look like. The final alignment will be refined and confirmed at the detailed design stage. Key features of the proposed upgrade common to each Project section include the following:

- A typically 24m or 20m wide road with two lanes and separated walking and cycling facilities
- Likely posted speed of 50kph
- Localised widening around the existing intersections to accommodate for vehicle stacking and tie-ins and walking and cycling facilities/crossings
- Batter slopes and retaining to enable widening of the corridor and/or wetland construction, and associated cut and fill activities
- Vegetation removal along the existing road corridor
- Areas identified for construction related activities including site compounds, construction laydown, bridge works area, the re-grade of driveways and construction traffic manoeuvring

Further details of each Project section are provided below.

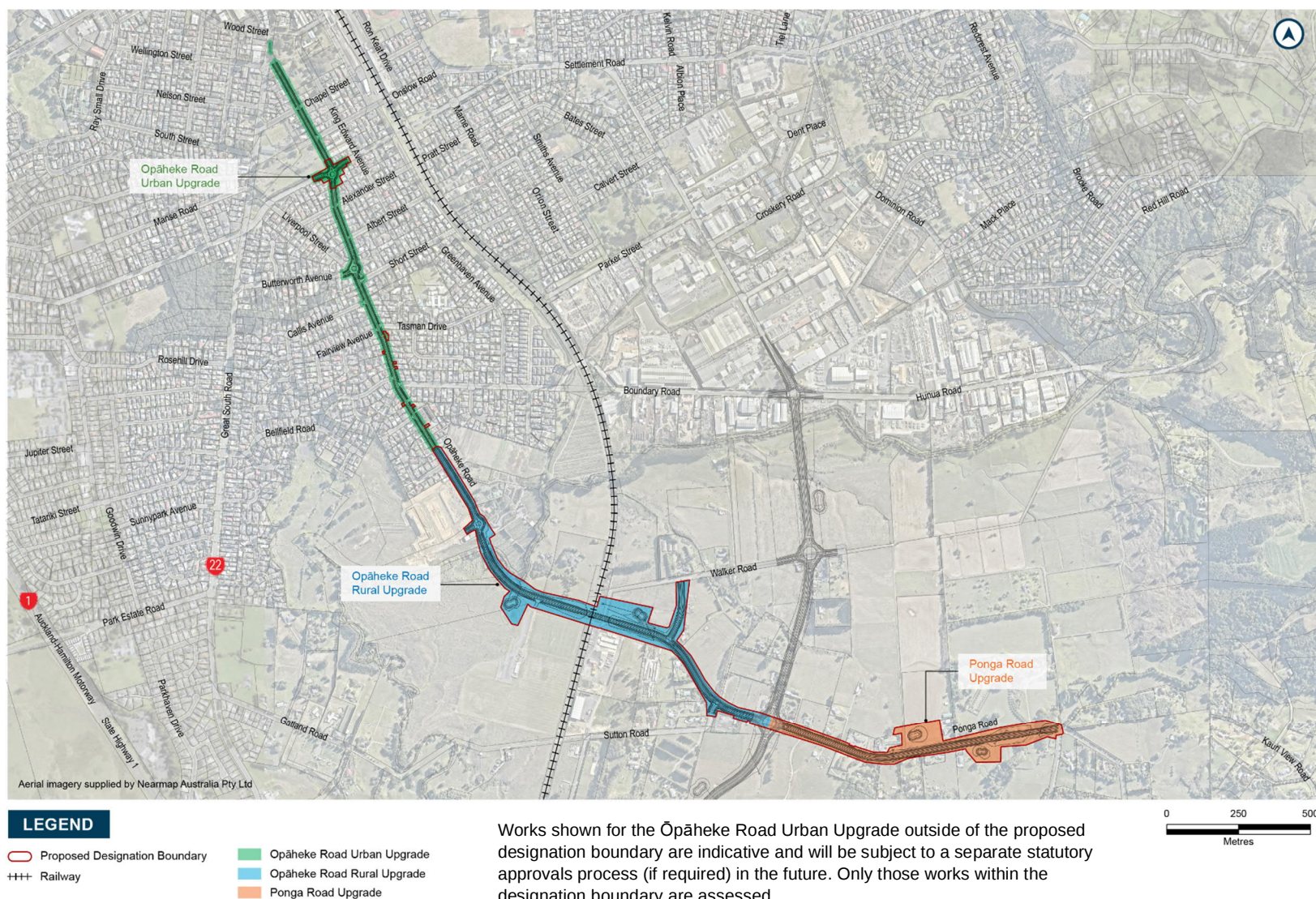


Figure 10-1. Overview of NoR D5

10.1.1 Ponga Road Upgrade Section

10.1.1.1 Section Overview

The Ponga Road Upgrade section is a 1km long upgrade extending from the proposed intersection with Ōpāheke North-South FTN Arterial in the west, to Jack Paterson Road in the east. In the future Ponga Road will tie into the proposed Mill Road corridor which forms a separate NZUP project. An overview of the concept design is provided in Figure 10-2.

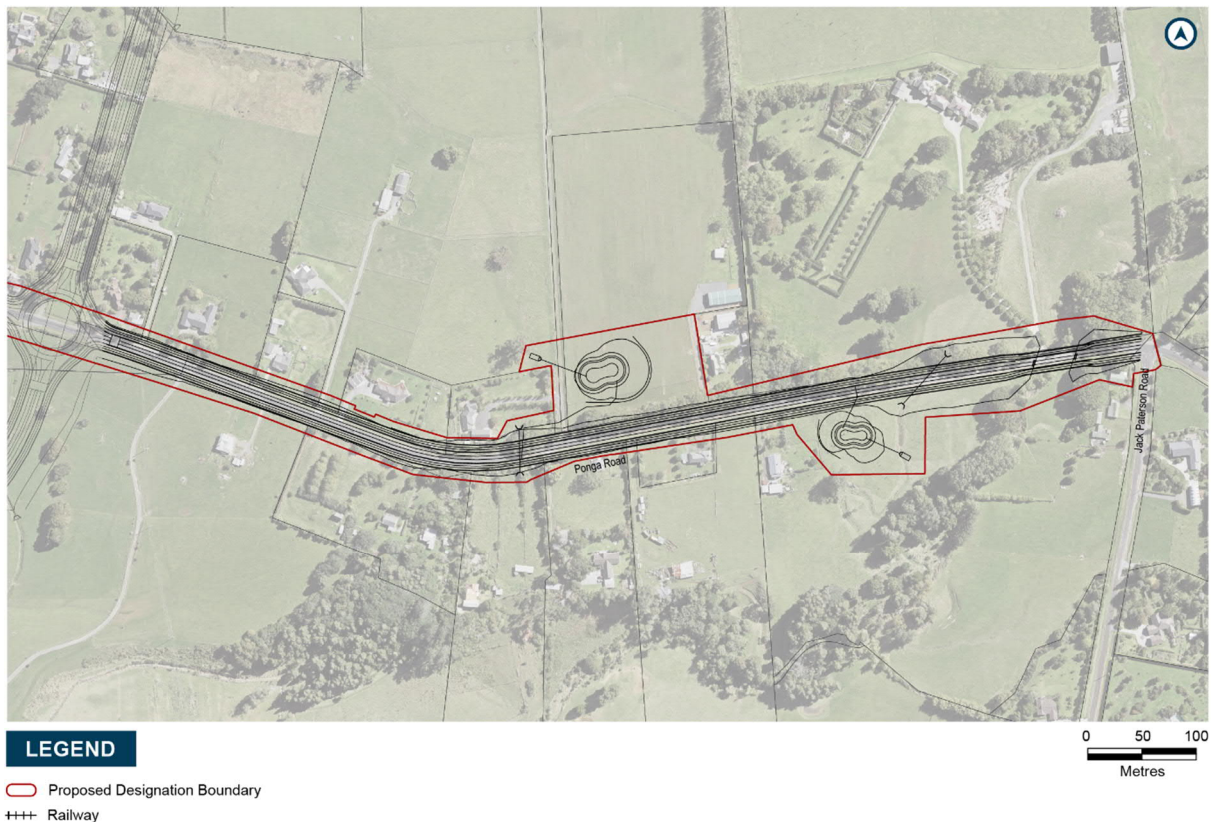


Figure 10-2 Overview of Ponga Road Upgrade Section

In addition to those listed above, the key features of the Ponga Road Upgrade section include:

- Roundabout tying into the proposed Ōpāheke N-S FTN Arterial (NoR D4) and Ōpāheke Road Rural Upgrade section
- A bridge over Mangapū Stream
- Extension of existing pipe culverts
- Two stormwater wetlands.

10.1.1.2 Specific Features of this section

Features of the project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

-
- ground disturbance for service relocation,
 - site establishment and clearance,
 - extension of two culverts,
 - the installation of two stormwater wetlands,
 - establishment for one site compound,
 - the works associated to any roadside laydowns,
 - areas vegetation clearance which involves ground disturbance,
 - temporary access roads and erosion and sediment controls,
 - installation of sediment retention ponds,
 - sloping and staging,
 - cut and fill batters that include topsoil stripping,
 - the lifting of existing road surfaces and utilities and paths,
 - stormwater and drainage pipes.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites. For the Ponga Road section of NoR D5, general widening to the south of the existing road will minimise impacts on 174 Ponga Road, listed in the CHI.

10.1.2 Ōpāheke Road Rural Upgrade section

10.1.2.1 Section Overview

It is proposed to widen, and realign a portion of, the existing road within the Ōpāheke Road Rural Upgrade section to a 24m urban arterial. The Ōpāheke Road Rural Upgrade section extends 1.6km from the extent of the FUZ in the north to Ponga Road in the south. An overview of the concept design is provided in Figure 10-3.

In addition to those listed above, the key features of the Ōpāheke Road Rural Upgrade section include:

- Roundabouts at Bellfield Estate and Ōpāheke N-S FTN Arterial / Ponga Road
- Realignment of a section of Ōpāheke Road and grade separation of the NIMT to avoid the Waikato 1 watermain and Ōpāheke Sports Fields and to allow the bridge to be constructed offline
- New road connection to Walker Road (and closure of a section of the existing Ōpāheke Road – replaced by the new NIMT bridge)
- Two walking and cycling bridges adjoining each side of the existing Ōtūwairoa Stream road bridge
- Two stormwater wetlands. One is an extension of an existing wetland located within Ōpāheke Reserve.



Figure 10-3 Overview of Ōpāheke Road Rural Section

10.1.2.2 Specific Features of this section

Features of the Project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for service relocation,
- site establishment and clearance,
- one new culvert and the extension of an existing culvert,
- two new bridges,
- establishment works for one site compound,
- two new stormwater wetlands,
- vegetation clearance that involves ground disturbance,
- possible retaining structures,
- ground preparations for the two bridge construction areas,
- temporary access roads and erosion and sediment controls,
- the removal of structures,
- installation of possible sediment retention ponds,
- sloping and staging,

- cut and fill batters that include topsoil stripping,
- the lifting of existing road surfaces and utilities and paths, and stormwater and drainage pipes.

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the aesthetic and landscape impacts to any historic heritage sites.

Through the alternatives assessment of the Project, impacts on known historic heritage have been minimised where possible. For the Ōpāheke Road Rural Section, this includes generally widening to the northeast of the existing road to minimise impacts on the former Ōpāheke stock yards listed in the AC CHI.

10.1.3 Ōpāheke Road Urban Upgrade section

10.1.3.1 Section Overview

While the overall plan for the urban area of Ōpāheke Road is to upgrade the walking and cycling facilities from Ōpāheke Road Rural Upgrade in the south to Great South Road, Papakura in the north, only the areas affecting land outside the existing road reserve are proposed to be designated and assessed as part of this assessment. The Ōpāheke Road Urban Upgrade section of NoR D5 includes the regrading of nine driveways along Ōpāheke Road and the upgrade of the Ōpāheke Road / Settlement Road intersection to a roundabout. An overview of the proposed designation areas is provided in Figure 10-4.

The key features of the Ōpāheke Road Urban Upgrade section include:

- Upgrade of the Ōpāheke Road / Settlement Road intersection to a roundabout to provide for separated walking and cycling facilities, including crossing facilities
- Re-grade of nine driveways.



Figure 10-4. Overview of Ōpāheke Road Urban Section

10.1.3.2 Specific Features of this section

Features of the Project relevant to historic heritage include earthworks and all ground preparation during the construction phase.

This includes earthworks not only relating to road widening, but also:

- ground disturbance for any service relocation and new storm water pipe(s),
- site establishment and clearance,
- fill battering,
- surface preparation for a cycle way, footpath, and berms,
- possible driveway preparation works,
- possible retaining structures,
- sloping and staging,

Project features relevant to historic heritage also include any compaction to the subsurface deposits from machinery, and the impacts to any historic heritage sites.

Through the alternatives assessment of the Project, impacts on the Papakura Cemetery (R12/1166) have been minimised where possible.

10.2 Site Specific Results

10.2.1 Historic Heritage Sites

A summary of sites on or near NoR D5 are seen in Table 7-1.

There are two historic heritage site within the Ōpāheke section of NoR D5. There are no recorded sites within the Ponga Road section of NoR D5. There are several Historic Heritage sites which flank the proposed designation, and subsurface extents of these sites may extend into the project.

Ōpāheke railway station, R12/1138, CHI 17176

This site is within the proposed designation boundary of the Ōpāheke section of NoR D5.

The site was added to the SRS in March 2020. The site is the location of Ōpāheke Railway Station, also known as Hunua Station, which was located opposite the Ōpāheke sale yards on Ōpāheke Road. The station officially opened on 6 April 1879, but was in use in some capacity prior to this, and closed 13 November 1955 (Scoble 2010). The station was on Hay's Farm, and was initially a very small sixth class station, being not much more than a sheltered shed (SRS record).

By 1884 there was a passenger platform with cart approach, and a loading bank, and in 1894 there was a petition for a goods shed to be built. In 1891 the Coultland Brother's obtained permission to lay a tramway from the station (Scoble n.d.). The station has been demolished, and according to the Auckland CHI (#17176) almost no surface evidence remains.

The CHI record explains that, "a light tramway (Bush type) ran from the Mill-Joinery factory to the Ōpāheke Station. a former Mayor of Papakura, Mr. Ike Mack used to push wagons loaded with joinery to Ōpāheke Station, unload then push the unloaded wagons back to the mill."

There is no visible evidence of the 1894 tramway feeding to the station on current aerials. Further research will likely determine the location of portions of the railway, and these should be added to the SRS.

The boundaries of the land allocated for the station are shown in SO 18286, from 1914. The land allocated for the station captures current lots: Railway Land SO 325057 and Section 31 SO 325057.

Assessment of values against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century transport systems in Auckland. The site has **moderate** historical value.
- b) Social. The place is poorly recognised and generally not well understood by the community. The site has **little** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has the potential to provide information which will improve the understanding of the 19th century transport systems in the area. The site has **moderate** knowledge value.

- e) Technology. The site is no longer visible ground the ground surface and not enough is known about the station to consider technological values. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The site is no longer visible from the ground surface. The site has **no** physical value.
- g) Aesthetic. The place is no longer visible from the ground surface. The site has **no** aesthetic value.
- h) Context. The place is associated to the transport systems in Waikato and South Auckland. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.



Figure 10-5. Section of SO 18286, showing the Ōpāheke Railway Station, drawn in 1914 (R12/1138).

Papakura Cemetery – Presbyterian Section, R12/1166, CHI item 16001.

The CHI recorded for the site explains that, “each of the major religious denominations owned their own block of land in this cemetery... The Presbyterian section fits exactly the romantic image of an early Cemetery and was used for burials from before 1860. Many early settlers buried in this section. Noted from the cemetery plans that there are three graves of unknown soldiers. In itself, the Presbyterian section is a monument to the work of Rev. Thomas Norrie, first Presbyterian Minister.”

Survey map taken from the Auckland Libraries Heritage Collections Map 9324 drawn in January 1886 shows the Presbyterian section plotted (Figure 10-6). The section covers legal appellation Allot 20 Sec 10 VILL OF Papakura.

Old aerials of the site have been examined and it appears there are no marked graves immediately near the proposed designation boundary until after 1960, where all early marked graves lie to the northern half of the parcel (Figure 10-7). While this reduces the likelihood of graves being exposed, this does not eliminate the likelihood of unmarked graves being exposed.

Assessment of values against the Section B5.2.2 AUP RPS criterion:

- a) Historical. The place reflects the 19th century burial and religious processes in 19th century South Auckland. The site has **moderate** historical value.
- b) Social. The place is used today for burials and widely recognised by the community. The site has **moderate** social value.
- c) Mana Whenua. Only mana whenua can make a statement of the sites value to them.
- d) Knowledge. The place has the potential to provide information which will improve the understanding of the 19th century burial and religious systems in the area. The site has **moderate** knowledge value.
- e) Technology. Little is known about the technologies of the burial processes for this cemetery. However, based on what is currently known about the site, the site has **little** technological value.
- f) Physical attributes. The site is visible from the ground surface. The site has **moderate** physical value.
- g) Aesthetic. The place is visible from the ground surface and easily recognised from the two roads which run adjacent to it. The site has **moderate** aesthetic value.
- h) Context. The place is associated to the 19th century settlement of South Auckland. The site has **moderate** context value.

This site has moderate values, based on its highest values which are its context, knowledge social, aesthetic, and historical values. Retention of these values is desirable, but it does not warrant any special protections and any loss of heritage values can be mitigated.

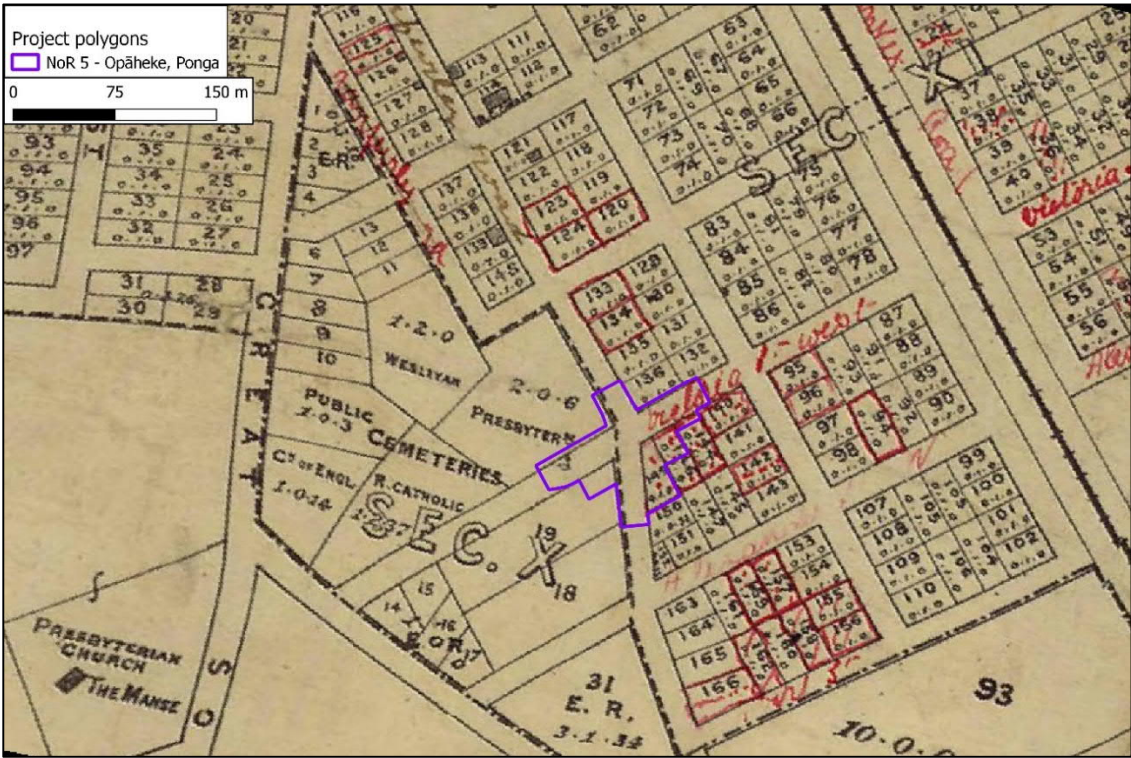


Figure 10-6. Map of the Papakura township drawn in Jan 1886 showing the Presbyterian Section of the Papakura Cemetery (Auckland Libraries Heritage Collections Map 9324) with part of the NoR D5 designation overlaid.



Figure 10-7. Aerial taken in 1960 showing the cemetery use for earlier graves clustered to the northern half of the property with proposed NoR D5 designation (taken from Retrolens.nz).

10.2.1.1 Potential sites

There is a reasonable cause to suspect previously unrecorded historic heritage sites may be present within the footprint of NoR D5. This is primarily based on streams and waterways present either side of the road which are areas of higher risk for historic heritage deposits. Additionally, the presence of historic villas near the footprint of NoR D5 suggests other historic structures may be found, such as bridges crossing the Mangapū Stream and the Ngakoroa Stream. All unrecorded sites which predate the 1900s are protected under provisions of the HNZPT Act.

10.2.1.2 Recorded sites near the designation

10.2.1.2.1 Ponga Road Upgrade Section

US Military Camp, Ōpāheke East Camp, CHI site 17017

The recorded site point is outside NoR D5, but there is reasonable cause to suspect subsurface deposits of the site may extend into the designation.

This site is recorded on 154 Ponga Road (adjacent to the Ponga Road section of NoR D5) on the CHI. The site is marked with a stone and plaque within the road reserve. The site marks the 1942 Ōpāheke East Camp of the US Military. These camps played a brief but important role in the defense of New Zealand and the Pacific during World War II. The site cannot be currently visited because it is on private property but, based on aerial photographs, little evidence of the camp is apparent today. While the site is not protected by any legal provisions, it has heritage value and any damage to potential subsurface extents of the site should be mitigated by additional research under the HAMP, sampling and investigation of deposits during earthworks phase, and creating opportunities for public interpretation post works.

The stone with a plaque marking the WWII east camp is on the road reserve, and its removal, storage, and relocation should be built into the HAMP requirements

Historic Villa (22282), R12/1144

The recorded point for this site is outside NoR D5 (adjacent to Ponga Road section of NoR D5), but there is reasonable cause to suspect subsurface deposits of the site may extend into the designation.

Located at 61 Ponga Road, this area is part of the 225-acre Allotment 21, Parish of Ōpāheke, originally purchased by Crown Grant in 1853 by Commander Byron Drury of the HMS *Pandora*, after whom the area previously known as Slippery Creek was renamed. Later 152 acres of this was transferred to Frederick Cossey in 1885. The site was added to the SRS during this assessment as R12/1144.

The CHI record for the site explains that “Not much further is known about Frederick Cossey (1847-1935), but he is the likely originator of the house. In 1920, he transferred the Ponga Road property to farmer Norman Ker, who in turn transferred it to Frederick Sparkes Norman Bingley that year, then the property was transferred in 1925 to his sons Douglas Alfred Bingley and Stanley Norman Bingley. The brothers co-owned the property until 1939.” The CHI record suggests that the house was built at some stage after 1885.

Further research may determine the true chronology and extent of the home and land use, which should be undertaken as part of the HAMP.

Historic villa, CHI 22284, R12/1145

The recorded point for this site is outside NoR D5 (adjacent to the Ponga Road section of NoR D5), but there is reasonable cause to suspect subsurface deposits of the site may extend into the designation.

The CHI record for the site is at 174 Ponga Road, and it is suspected the villa was built around 1894, but it could have been earlier. The site is part of Allotment 18 Parish of Ōpāheke. It was originally purchased under Crown Grant in 1853, and subsequently subdivided in 1868. Thirteen acres of this subdivision was granted to Lawrence Roy. Lawrence had a son named Peter who obtained the title which includes 174 Ponga Road around 1894. It is possible that it was around this time when the villa was built, but it could be earlier. The CHI record notes that the fence, gates, and mature plants may also be contemporaneous with the villa construction.

10.2.1.2.2 Ōpāheke Road Rural Upgrade Section

US Military Camp, Ōpāheke East Camp, CHI site 17016

The recorded site point is outside the footprint of NoR D5, but there is reasonable cause to suspect subsurface deposits of the site may extend into the designation.

The site is recorded at 231 and 211 Ōpāheke Road on the CHI (adjacent to the Opaheke section of NoR D5). The site marks the 1942 Ōpāheke West Camp of the US Military. These camps played a brief but important role in the defence of New Zealand and the Pacific during World War II. The site cannot be currently visited because it is on private property but, based on aerial photographs, little evidence of the camp is apparent today. While the site is not protected by any legal provisions, it has heritage value and any damage to potential subsurface extents of the site should be mitigated by additional research under the HAMP, sampling and investigation of deposits during earthworks phase, and through opportunities for public interpretation post construction works.

Ōpāheke Sale Yards, CHI item 16004

The recorded point for this site is outside NoR D5 (adjacent to the Ōpāheke section of NoR D5), but there is reasonable cause to suspect subsurface deposits of the site may extend into the designation.

The site is described on the CHI as, "Former stock sale yards... Date of closure unknown." The record notes that they were still in use in the early 1970s. When the record was updated in 2004, it noted that the office and cafeteria complex appeared to be occupied as a dwelling. Further research may determine the chronology of the yards, and any extent of the site.

10.2.2 Field Survey

The proposed designation footprint for NoR D5 spans over what is mostly a rural residential space. The proposed designation spans over Waipokapū / Hays Stream at the west end / Ōpāheke Road section.

Historic villa, CHI item (22282), is still standing at 61 Ponga Road (Figure 10-8). It is evident from the roadside there has been modifications to the land on the property, some of which is fairly recent. There is no record of these modifications being undertaken under an HNZPTA authority.

CHI item (22284) is still standing at 174 Ponga Road (Figure 10-9). There is a long line of large oak trees on the south boundary of the property which may date to the pre-1900 use of the property. There was no visible ground evidence of the villa extending into the road reserve from the survey.

Around 20 m east of 174 Ponga Road is a stone with a plaque marking the US Military Ōpāheke East Camp (CH item: 17017) within the road reserve (Figure 10-10, Figure 10-11). The plaque reads “CAMP OPAHEKE-EAST, 1942 – 1944, ON THIS SITE STOOD A MAJOR CAMP FOR THE FORCES OF THE UNITED STATES OF AMERICA ENGAGED IN THE PACIFIC DURING THE SECOND WORLD WAR”. There was no visible ground evidence of the camp within the road reserve.

The Ōpāheke sale yards are recorded under CHI item 16004 (Figure 10-12). There is now a storage facility where the yards once operated. There was no visible evidence of the yards within the road reserve or from the roadside toward the private property.

Land flanking the east side of Waipōkapu / Hays Stream appears to be less modified than that on the west side which is near the subdivision which is currently underway. There was no visible ground evidence of archaeological deposits in the area.

For the Ōpāheke Road Urban Upgrade Section the proposed round-about at the intersection of Ōpāheke Road and Settlement Road intersects with private properties, apart from the edge of the Presbyterian Section of the Papakura Cemetery. There is no visible evidence of archaeological features within this section of the property (Figure 10-14).



Figure 10-8. Pre-1900s villa (CHI site 22282, R12/1144) facing south (the building is outside of the proposed designation footprint).



Figure 10-9. Pre-1900s villa (CHI site 22284, R12/1145) facing north (the building is outside of the designation footprint).



Figure 10-10. Rock marking Ōpāheke WWII Military Camp, facing east.



Figure 10-11. Rock with plaque describing the Ōpāheke WWII military camp.



Figure 10-12. View of the Road Reserve and the Ōpāheke Sale Yards area, facing east (the CHI point for the site is outside of the proposed designation footprint).



Figure 10-13. Bridge crossing Waipokapū / Hays Stream, facing north



Figure 10-14. View of the Papakura Cemetery facing north, the pavement up the left of the image is where the intersection upgrade is proposed.

10.3 Assessment of Historic Heritage Effects and Measures to Avoid, Remedy or Mitigate Actual or Potential Adverse Effects

10.3.1 Ponga Road Upgrade section

10.3.1.1 Positive Effects

There are no positive effects on historic heritage as a result of NoR D5.

10.3.1.2 Assessment of Construction Effects

There are no recorded historic heritage sites within this section of NoR D5.

It is also possible previously unrecorded historic heritage deposits are found within the footprint, many of which are likely to be from the 19th century domestic occupation, although it cannot be ruled out pre-contact Māori period sites are also present. As noted in the historic background, Ponga Road was known as Hill's Route and was a pre-1900 transport route (Spring-Rice 1984: 43).

Nearby recorded sites may have potential subsurface extents extending into the proposed construction footprint; this includes the front yards of pre-1900 villas R12/1144 and R12/1145, and the Ōpāheke East WWII Military Camp. These deposits could be unearthed during construction works and negatively impacted by damage / destruction of the deposits. The works are described in Section 10.1.1.2. These may include pathways, fence lines, rubbish pits, external structures and outhouses, and in the instance of the US WWII camp, tent locations, subsurface extents of structures and shared social spaces.

While the recorded CHI point of the WWII site - Ōpāheke East is not within the proposed designation footprint, the stone which marks the World War II camp will be negatively impacted as it falls within the road widening route.

10.3.1.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

- Wherever possible, known sites should be avoided.
- Where sites are suspected of extending into the works area, further research including non-invasive techniques and possible Section 56 authority investigations under the HNZPT Act should be undertaken to clarify site extents and effects of construction.
- Any temporary construction works areas, such as lay downs, silt fencing, water bunds, spoil heaps, should avoid known site extents if there are alternative locations available.
- Known site extents adjacent to construction areas should be protected through fencing.
- Any areas of known site extents that will be used for construction laydown, but not otherwise earth worked, should be isolated with geotechnical cloth and 250 mm of GAP 25 or similar
- Vegetation removal in known site extents should be cut to stump and avoid ripping the roots out as a means to protect site deposits.
- Before earthworks commence, all sites should be visited by an archaeologist as part of a field survey to update the sites. Site visits are a part of the requirements of a full assessment of effects for an HNZPTA authority application.

-
- An archaeological authority should be obtained for the designation prior to works commencing.

The measures described above should form part of a HAMP which should be prepared before construction commences.

The following site-specific recommendations should be considered through the HAMP:

- It is possible the works could also extend into subsurface extents of the Ōpāheke East Camp. The likelihood should be investigated further during development of the HAMP. This work should include visiting the National Archives of New Zealand to inspect maps of the US Military Camps. Any deposits that will be affected by construction should be managed in the HAMP, followed by an opportunity for public interpretation of the area.
- The stone marking the World War II Ōpāheke East Camp should be removed off site by a suitable professional, stored under agreed conditions established in the HAMP, and relocated to a suitable location once works are complete as part of a means for public engagement. Further details regarding this work can be established as part of the HAMP.

10.3.1.4 Assessment of Operational Effects

There are no operational effects to either known or unknown historic heritage deposits.

10.3.1.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

Based on the current understanding of the Project, there are no operational effects requiring mitigation.

10.3.2 Ōpāheke Road (Rural and Urban) Upgrade section

10.3.2.1 Positive Effects

There are no positive effects on historic heritage as a result of NoR D5.

10.3.2.2 Assessment of Construction Effects

Ōpāheke Railway Station

The proposed works may have adverse effects to the subsurface deposits of the Ōpāheke Railway Station. The recorded point of the Ōpāheke Railway Station is within the footprint of NoR D5. The bridge works may impact on subsurface extents of the site by removing deposits of the site. The overall values of the site are moderate. The above ground structures of the site have been removed, so any intact deposits will be subsurface, if present.

Papakura Cemetery

The proposed works will extend into the legal boundary of the Presbyterian Section of the Papakura Cemetery, site R12/1166, although there is no physical evidence that archaeological deposits could be exposed as a result of this work. Similar to other parts of the Project, any potential subsurface features associated with R12/1166 could be identified using non-invasive methods such as Ground Penetrating Radar, which will better determine if deposits are at risk of damage.

Coutland Brother's tramway

The location of this site is unknown, meaning the impact to the site as a result of NoR D5 cannot be assessed. Further research and survey should be undertaken under the HAMP before construction commences. The overall values of the site are unknown as little is known about the site. The above ground structures of the site have been removed, so any intact deposits will be subsurface if present.

Other potential sites

Nearby recorded sites may have potential subsurface extents extending into the proposed construction footprint. This includes the Ōpāheke Sale Yards and the Ōpāheke West US WWII Military Camp. Potential subsurface extents of these sites could be unearthed if they extend into the construction footprint during the ground disturbance. These may include pathways, fence lines, rubbish pits, and in the instance of the US WWII camp, tent locations, shared social spaces, and similar deposits.

It is also possible that other previously unrecorded historic heritage deposits are exposed within the footprint, many of which are likely to be from the 19th century domestic occupation, although the presence of pre-European Māori period sites cannot be ruled out. All proposed works could have an adverse effect to these sites by damaging or destroying potential deposits. These works are described in Section 10.1.2.2 and 10.1.3.2.

The presence of Waipokapū / Hays Stream can also indicate potential of both precontact Māori sites, as well as the potential of pre-1900s European bridges. Any works near the waterways may have a negative impact on previously unrecorded sites by removing these sites. The ground disturbance works near Waipokapū / Hays Stream may negatively impact previously unrecorded historic heritage sites by removing the deposits.

10.3.2.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

10.3.2.3.1 General recommendations:

- Wherever possible, known sites should be avoided.
- Where sites are suspected of extending into the works area, further research including non-invasive techniques and possible Section 56 authority investigations under the HNZPT Act should be undertaken to clarify site extents and effects of construction.
- Any temporary construction works areas, such as lay downs, silt fencing, water bunds, spoil heaps, should avoid known site extents if there are alternative locations available.
- Known site extents adjacent to construction areas should be protected through fencing.
- Any areas of known site extents that will be used for construction laydown, but not otherwise earth worked, should be isolated with geotechnical cloth and 250 mm of GAP 25 or similar.
- Vegetation removal in known site extents should be cut to stump and avoid ripping the roots out as a means to protect site deposits.
- Before earthworks commence, all sites should be visited by an archaeologist as part of a field survey to update the sites. Site visits are a part of the requirements of a full assessment of effects for an HNZPTA authority application.

-
- An archaeological authority should be obtained for each designation prior to works commencing. Whenever sites cannot be avoided, the following site-specific recommendations for mitigation should include the measures set out below and captured in the HAMP:

Ōpāheke Railway

Before works commence, the final footprint of works should be assessed by an archaeologist as part of the requirements for applying for an HNZPTA authority. Any works within the area will be monitored by a suitably qualified archaeologist and the management of the monitoring will be within an HNZPT Archaeological Management Plan.

Papakura Cemetery – Presbyterian Section

Before works commence, the final footprint of works should be assessed by an archaeologist as part of the requirements for applying for an HNZPTA authority. The identification of any subsurface features should be examined using GPR or other non-invasive identification techniques. Any works within the area will be monitored by a suitably qualified archaeologist and the management of the monitoring will be within an HNZPT Archaeological Management Plan.

Coutland Brother's tramway

Before any works commence, the site should be further investigated to examine the locations of the tramway and its connection to the Ōpāheke Railway station. Should the site be within the footprint of the NoR, the site should be visited and assessed by an archaeologist, and an HNZPTA authority applied for regarding any damage proposed to the site.

10.3.2.4 Assessment of Operational Effects

It is possible the operation of the transport network could have an adverse effect to the knowledge, historic, and context values of some sites by modifying the wider landscape they belong to. This has a risk of diminishing the understanding of the heritage of what is already a poorly recorded and understood area.

10.3.2.5 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects

Should the information, heritage, and context values of sites be compromised by the operation of the transport network, these are best minimised by avoiding sites if practicable in the first instance. Those sites which cannot be avoided could have the effects partly mitigated by marking the locations of sites and providing information on the sites, for example an information board along a walking or cycle route. Any information shared, if at all, must be at the discretion of mana whenua.

10.3.2.6 Summary and Conclusions

The Ōpāheke Railway Station and the Presbyterian Section of the Papakura Cemetery will be effected by the works. Subsurface extents of the Ōpāheke West WWII Camp and the Ōpāheke Sale Yard may also be impacted. Further research into the sites, and an HNZPTA authority is a suitable measure to mitigate the loss to heritage whenever sites cannot be avoided.

There is reasonable cause to suspect the proposed works will damage previously unrecorded deposits. A precautionary approach is recommended and an authority from the HNZPT should be sought.

Since archaeological survey cannot always detect sites of traditional significance to Māori, or wāhi tapu, the appropriate mana whenua authorities should be consulted regarding the possible existence of such sites, and the recommendations in this report.

10.4 Conclusions

The works proposed as part of NoR D5 will impact on known and potential sites during construction phase of the works. It is recommended that an HNZPTA authority is applied for to manage the damage to known and potential pre-1900 deposits. Post-1900 sites which still hold some heritage value should be managed with research and opportunities for interpretation to the public. Further desktop and field research will help determine the appropriate forms of mitigation, undertaken as a requirement of the HAMP.

Since archaeological survey cannot always detect sites of traditional significance to Māori, or wāhi tapu, the appropriate mana whenua authorities should be consulted regarding the possible existence of such sites, and the recommendations in this report.

Table 10-1: Summary of sites within NoR D5, including effects and mitigation.

Name or site type	NZAA	NoR and Section	Relationship to designation	Condition (if known)	Overall value (if within designation)	Effects	Mitigation
Pre-1900s Villa (174 Ponga Road)	R12/1145	Ponga Road, D5.	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Structure standing; subsurface extents possible.	N/A	Potential damage at construction, to be determined once final design complete during HAMP.	Fully assess at detailed design, if necessary, apply for an HNZPTA authority and archaeological management plan, excavate and monitor.
Pre-1900s Villa (61 Ponga Road)	R12/1144	Ponga Road, D5.	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Structure standing; subsurface extents possible.	N/A	Potential damage at construction, to be determined once final design complete during HAMP.	
U.S Military Camp – Ōpāheke East Camp		Ponga Road, D5.	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Structures removed; subsurface extents possible.	N/A	Potential damage at construction, to be determined once final design complete during HAMP.	Further research under HAMP phase of works, assessment, monitor earthworks.
U.S Military Camp – Ōpāheke West Camp		Ōpāheke Road, D5.	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Structures removed; subsurface extents possible.	N/A	Potential damage at construction, to be determined once final design complete during HAMP.	
Ōpāheke Sale Yards	Possibly a site – more research needed into chronology.	Ōpāheke Road, D5.	Outside designation boundary, possible subsurface deposits may fall into the NoR.	Structure removed; subsurface extents possible.	N/A	Potential damage at construction, to be determined once final design complete during HAMP.	Further research under HAMP phase of works, assessment, monitor earthworks. If the site is pre-1900, then HNZPTA authority if necessary.
Ōpāheke railway station	R12/1138	Ōpāheke Road, D5.	Inside designation boundary.	Structure removed; subsurface extents possible.	Moderate	Site removal during construction and bridge work.	Fully assess after detailed design, HNZPTA authority and archaeological management plan, excavate and monitor.

Name or site type	NZAA	NoR and Section	Relationship to designation	Condition (if known)	Overall value (if within designation)	Effects	Mitigation
Coutland Brothers tram	Location to be researched before added to SRS	Ōpāheke Road, D5.	Site location unknown.	Unknown	N/A	Possible.	Further research under HAMP phase of works, assessment, HNZPT application, monitor.
Presbyterian Section of Papakura Cemetery	R12/1166	Ōpāheke Road, D5	Edge of parcel overlaps into designation	Unknown	Moderate	Potential damage during construction, to be determined once final design complete during HAMP.	Fully assess after detailed design, HNZPTA authority and archaeological management plan, excavate and monitor.

11 Conclusions

The proposed works will have a varying impact on recorded and potential historic heritage sites. These are summarised below. The works within NoR D2 will have the largest impact to recorded historic heritage sites. This is because the works run directly through the pre-1900 European township, and the presence of many waterways within NoR D2 which are high-risk areas for exposing pre-European Māori archaeological sites.

The absence of recorded pre-European Māori sites is notable, and it is likely this may not be a true reflection of previous land use in the area. There are other areas within the proposed NoR sections where there is a noticeable absence of sites, which could either be an accurate reflection of the heritage landscape or a result of the lack of previous focus on the area.

As the NoR areas have not been fully surveyed, and the general area is poorly recorded, it is recommended that a HAMP is prepared for each Project at detailed design before construction commences and that surveys and records are updated under the HAMP. This should involve a field survey, further research, and assessment as part of the partial requirements for an HNZPTA authority application.

Since archaeological survey cannot always detect sites of traditional significance to Māori, or wāhi tapu, the appropriate mana whenua authorities should be consulted regarding the possible existence of such sites, and the recommendations in this report. A precautionary approach is recommended even when historic heritage sites are not present, and an HNZPTA authority should be applied for when the proposed NoR works are finalised and fully assessed.

The following sections of this chapter summarise the sites present within each NoR section, and if those sites have specific recommendations for mitigation they are mentioned. Otherwise, the project should generally follow the method of:

1. Additional updates and work undertaken under the HAMP, including a complete field survey and additional research,
2. Followed by a full assessment of effects of the proposed works to both known and potential deposits at the detailed design stage which is to supplement the partial requirements of an HNZPTA authority application under section 44 of the HNZPT Act.

11.1 NoR D1: Alteration to Designation 6707: State Highway 22 Upgrade

There are no recorded historic heritage sites within this proposed designation. Two newly recorded sites near the Ngakoroa Stream support the likelihood that works near the waterways may expose potential previously unrecorded historic heritage sites. There is evidence on historic maps that the route was the same general route for a track which was used as early as 1853. There could be archaeological deposits relating to the human activity flanking the track. There is also reasonable cause to suspect previously unrecorded historic heritage deposits within the footprint of NoR D1, possibly pre-1900 European farming and domestic evidence and pre-European Māori land use, especially near waterways like Oira Creek and Ngakoroa Stream.

11.2 NoR D2: Jesmond to Waihoehoe West FTN Upgrade

11.2.1 Jesmond Road FTN Upgrade section

There are no recorded historic heritage sites within this section of NoR D2. While the proposed works overlap with the Aroha Cottage HHEP, the works proposed within the HHEP are a permitted activity under the AUPOIP D.17 table. As Aroha Cottage is a HNZPT Listed site, HNZPT should be consulted with for any works on the property. There is reasonable cause to suspect previously unrecorded historic heritage deposits within the footprint, possibly pre-1900 European farming and domestic evidence and pre-European Māori land use.

11.2.2 Bremner Road FTN Upgrade section

There are several recorded historic heritage sites within this section of NoR D2. Two scheduled heritage sites were avoided, meaning a few sites south of the road most likely cannot be avoided.

Construction yards (proposed laydown area) should avoid the Runciman Homestead site where possible. To determine which areas should be avoided, non-intrusive investigation methods should be undertaken. Where avoidance is not possible, all attempts to minimise ground disturbance should be made. Any ground disturbance will require a systematic archaeological investigation, specified at the HAMP. Opportunities for public engagement and education should be provided when works are complete.

The discussion on reuse/ relocation of the Former Drury Cheese and Casein factory to suitable local site following built heritage assessment and advice should be assessed by a Built Heritage Specialist to help determine the effects of the likely removal, at which stage the appropriate level of mitigation can be determined.

There is also reasonable cause to suspect previously unrecorded historic heritage deposits within the footprint, such pre-1900 European settlement, commercial buildings, domestic structures, and pre-European Māori sites. The presence of the Ngakoroa and Hingaia waterways indicate there is an increased risk of exposing potential previously unrecorded deposits, because they were useful and commonly used transport channels for both pre-European Māori and pre-1900 Europeans.

As the area has a significant amount of heritage sites there could be a cumulative loss of heritage record in the area. It would be appropriate to consider increasing public awareness of the history of Drury, perhaps by signage or otherwise. Any information relating to pre-European Māori sites should be shared at the discretion of mana whenua.

11.2.3 Waihoehoe Road West FTN Upgrade section

There are several recorded historic heritage sites and listed CHI sites within this section of the NoR. There is also reasonable cause to suspect previously unrecorded historic heritage deposits are within the footprint, possibly those relating to the pre-1900 European township, commercial buildings, domestic structures. So far, the only recorded sites are pre-1900 European sites, but it is reasonable to assume that potential previously unrecorded pre-European Māori deposits could be present and could be destroyed or modified by the proposed works in this section of the project.

The discussion on reuse/relocation of the Railway Worker's Residences to suitable local site following built heritage assessment and advice should be assessed by a Built Heritage Specialist to help determine the effects of the likely removal, at which stage the level of mitigation can be determined.

As the area has a significant amount of heritage sites there could be a cumulative loss of heritage record in the area. It would be appropriate to consider increasing public awareness of the history of Drury, perhaps by signage or otherwise. Any information shared should be at the discretion of mana whenua.

11.3 NoR D3: Waihoehoe Road East Upgrade

There are no recorded historic heritage sites within this NoR. There is reasonable cause to suspect previously unrecorded historic heritage deposits within the footprint, possibly pre-1900 European farming and domestic evidence and pre-European Māori land use. It is probable the pre-1900 bullock track which transported coal followed the same general route as Waihoehoe East Road, and there could be physical evidence of this use and associated deposits within and flanking that track.

11.4 NoR D4: Ōpāheke North-South FTN Arterial

There is one recorded historic heritage site within this portion of the proposed NoR, this is the CHI recorded 1940s brick utility building. The building has little value when assessed under the RPS criterion, and the mitigation of the site is managed by the monitoring of its removal. A built heritage assessment of the brick utility building will help guide the discussion on reuse/relocation of the site following built heritage assessment and advice.

There is also reasonable cause to suspect previously unrecorded historic heritage deposits within the footprint, likely to be either pre-1900 European domestic structures or pre-European Māori land use.

Importantly, while most of the designation has been surveyed some have not, and the general area is poorly recorded, these recommendations may require updating under the HAMP at detailed design. This should involve a field survey, further research, and assessment.

11.5 NoR D5: Ponga Road and Ōpāheke Road Upgrade

11.5.1 Ponga Road Upgrade section

There is reasonable cause to suspect previously unrecorded historic heritage deposits within the footprint, possibly pre-1900 European structures and pre-European Māori sites. The presence of several waterways indicate there is an increased likelihood for exposing potential previously unrecorded historic heritage deposits.

A WWII camp nearby may extend into the project footprint. If so, works at the WWII camp should be monitored and their public awareness raised by signage or similar methods.

A stone with a plaque marking the WWII east camp is on the road reserve, and its removal, storage, and relocation should be built into the HAMP requirements.

Additional research undertaken at the HAMP phase will help determine the likelihood of the site being impacted by the proposed designation.

11.5.2 Ōpāheke Road (Rural and Urban) Upgrade sections

Two recorded historic heritage sites are in this portion of the proposed designation. One is the Ōpāheke Railway Station, and the other is a portion of the Presbyterian Section of the Papakura Cemetery. Similar to other parts of the Project, any potential subsurface features associated with the Papakura Cemetery could be identified using non-invasive methods such as Ground Penetrating Radar, which will better determine if deposits are at risk of damage.

There is also reasonable cause to suspect previously unrecorded historic heritage deposits within the footprint, possibly pre-1900 European structures and pre-European Māori sites.

The Ōpāheke west WWII camp nearby may extend into the project footprint. If so, works at the WWII camp should be monitored and the public awareness raised by signage or similar methods. Additional research undertaken at the HAMP phase will help determine the likelihood of the site being impacted by the proposed designation.

12 References

- Auckland Council, 2019. Methodology and guidance for evaluating Auckland's historic heritage. Version 2. Unpublished Auckland Council Report.
- Baquié, B. and R. Clough. 2008. Ross Block, Hingaia: Final report on archaeological investigation of site R12/914 (midden). In Fulfilment of NZHPT Authority No. 2005/169. Unpublished report prepared for Harrison Grierson Consultants Ltd
- Best, S. 2005. A well at no 1 Artillery Drive, Papakura. Unpublished archaeological assessment for Papakura District Council.
- Bishop, R. 2012. The Anglican Church in the Papakura District 1862 – 2012. *150 Years of the Anglican Missionary*. Papakura Anglican Parish, Papakura.
- Brassey, R. 2020. The Drury industrial tramway. A review of management options. Unpublished Auckland Council report for Auckland Council.
- Brown, J. and A. Brown. 2017. Historic Heritage Topic Report - Drury Structure Plan. Unpublished report for Auckland Council.
- Clarke, E. 1982. Chalk, cheese and chimney pots: A history of the Drury School and districts, 1857-1982. Drury School 125th Jubilee Committee 1982: Drury.
- Clarke, A. 1983. The Manukau Lowlands: site distribution pattern. In S. Bulmer, R.G. Law and D.G. Sutton (eds) *A Lot Of Spadework To Be Done*. New Zealand Archaeological Association, 14. New Zealand Archaeological Association, Auckland.
- Clough, R. 1995. Waikato Source Project: Archaeological Survey of the Proposed Pipeline Route. Unpublished report for Watercare.
- Clough, R. and B. Baquié 2000. Takanini Structure Plan Areas 6A and 6B: archaeological assessment. Unpublished Clough and Associates Ltd report to Hosken and Associates Ltd.
- Clough, R. and B. Baquié. 2008. Alfriston site, 1444 Alfriston Rd, Papakura, Auckland: Archaeological Monitoring in fulfilment of NZHPT Authority No. 2008/76. Unpublished report Prepared for Vodafone New Zealand Ltd and NZHPT.
- Clough, R., D. Prince, and B. Baquié. 2000. Cultural heritage investigation for the Hingaia Structure plan, Papakura. Unpublished report prepared for the Papakura District Council.
- Craig, E. 1982. *Break Water Against the Tide: A History of Papakura City and Districts*. Papakura and Districts Historical Society.
- Cruickshank, A. 2014. 387 Drury Hills Road: archaeological assessment. Unpublished CFG Heritage report for Karl and Leanne Todd.
- Cruickshank, A., D. Trilford, J. Craig. 2017. Auranga B1: archaeological assessment. Unpublished CFG Heritage Ltd report to Karaka and Drury Ltd.
- Edbrooke, S.W. 2001. *Geology of the Auckland Area*. Institute of Geological and Nuclear Sciences Ltd., Levin.

- Felgate, M. 1999. An Archaeological Inspection of the Ardmore Heights Site, Heard and Papakura-Clevedon Roads, Papakura. Unpublished report for Wood and Partners Consultants Ltd.
- Foster, R. 1997. Proposed development site, Mt. Wellington Nurseries Ltd, Hunua Road, Papakura. Archaeological assessment. Unpublished report.
- Foster, R. 2007. Karaka Properties Development, McRobbie Road, Kingseat: archaeological assessment. Unpublished Russell Foster and Associates Ltd report to Karaka Properties Ltd.
- Foster, R. 2014. Park Estate Road, Hingaia: Proposed Plan Change – archaeological assessment. Unpublished Russell Foster and Associates Ltd report to Hugh Green Ltd.
- Foster, R. 2015. 279 Park Estate Road, Hingaia: archaeological assessment. Unpublished Russell Foster and Associates Ltd report to Lakewood Estate Company Ltd.
- Glover, H. 2020. Karaka North Village: archaeological assessment. Unpublished report to Karaka North Village.
- Hinton, J. 1993. The Friendly Invasion of New Zealand by American Armed Forces, June 1942-October 1944: Commemorative Booklet. Minister of Internal Affairs, Wellington.
- Hertiage New Zealand Pouhere Taonga. (1983). Paymaster's House. Retrieved 15 March, 2020, from <https://www.heritage.org.nz/the-list/details/692>.
- Hooker, B. 1997. Portages of early Auckland - to and from the Waitemata Harbour: The hub of an ancient communications network. *Auckland-Waikato Historical Journal*, 70:39-40.
- Kelly, S. 2008. Environmental condition and values of Manukau Harbour. Unpublished Coast and Catchment Ltd. Report for Auckland Regional Council.
- Lennard, M. 1986. *The Road to War: The 1863 Redoubts of South Auckland*. Whakatane & District Historical Society.
- Maguire, W. 2017. Auranga B1: built heritage assessment. Unpublished CFG Heritage Ltd report for Karaka and Drury Ltd.
- Mitchell, C., and W. Seffern. 1866. *Mitchell and Seffern's Directory of the City and Suburbs of Auckland, for 1866-7*. Mitchell and Seffern, Wayte and Batger. Auckland, 64-67.
- Morris, N. 1965. *Early Days in Franklin*. Franklin County Council, Pukekohe, Tuakau, Waiuku Borough Councils, Auckland.
- Mosen, J. 1993. Cultural Heritage Inventory: A base inventory for the Franklin District. Unpublished report for the Auckland Regional Council.
- Murdoch, Graeme. 1990. A brief history of the human occupation of The Slippery Creek catchment. Prepared for the Regional Water Board. Planning Department of the Resource Management Division, Auckland Regional Council.
- Ngāti Te Ata Waiohua. 2014. Wesley New Town, Paerata. Proposed Residential Development. Unpublished cultural values assessment.

O'Malley, V. 2010. *The New Zealand Land Wars, Ngā Pakanga o Aotearoa*. Bridget Williams Books, New Zealand.

Ooster, K. n.d. Local history, Drury Creamery. From Skimming Station to Cheese Factory. Unpublished document.

Prince, D. and R. Clough 2003. Proposed subdivisions, Ballantyne properties, Runciman Road, Ramarama, Franklin District: preliminary archaeological survey. Unpublished Clough and Associates report to Heather Ballantyne.

Scoble, J. 2010. Names & Opening & Closing Dates of Railway Stations in New Zealand, written for the Rail Heritage Trust of New Zealand.

Simms, A. 1999. Drury Reflections 1950 – 2020. W.J Deed Printing, Waiuku.

Springer-Rice, W. 1984. Franklin County crown-controlled reserves. Archaeological and historical report. Department of Lands and Survey, Auckland, Archaeological and Historical Reports, Number 12.

Tatton, K. 2001. Cultural Heritage in the Auckland Region: Priority areas for survey and assessment. Unpublished report for Auckland Regional Council.

Te Roopu Kaitiaki o Papakura. 2010. Cultural Heritage Assessment: Drury South Business Project. Unpublished report for Auckland Council

Tonson, A. 1966. *Old Manukau*. Tonson Publishing House, Onehunga.

Willis, A. 1932. Early Papakura. Unpublished report.

“ Whenua Māori Visualisation Tool, n.d)” *Visualizing Māori Land - A Tool for Accessing Environmental Information about Māori Land*, Te Pūni Kokori - Ministry of Māori Development, whenuaviz.landcareresearch.co.nz/. Accessed 15 March 2020.

13 Historic heritage sites within 200 m of proposed designations but not at risk of damage

Former Runciman Post Office, (CHI site 15892)

This site is not within the extent of the proposed designation footprints for NoR D1. The Runciman Post Office was built in 1920 and relocated to the current location around the 1960s. The building is understood to have been partly demolished (CHI record 15892). The site is not protected by provisions of the HNZPT Act (2014).

R12/1132, Ōpāheke

This recorded site extent over 200m from the proposed designation footprint of NoR D2.

In 2019 this site was added to the SRS as a pā by Arden Cruickshank. The record from the update explains, *“Opaheke has been identified by mana whenua as a site or place of significance in a recent plan change (PC22). This is based on the area being a known kainga and pa, where several battles took place. The extent of Opaheke includes a previously recorded archaeological site (R12/8), which is also listed in the CHI as item 6860 and HHEP 692. R12/8, which is called ‘Abrahams Point’ on the SRF, is also recorded as a pa, but this has led to some confusion about its origins. This site was initially recorded in 1963 by the Papakura Historical Society prior to the initial construction of the Southern Motorway. Although it was recorded as a pa (assumedly at the behest of the landowner), there were no pre-European archaeological features identified at the site. Prior to the motorway and associated Slippery Creek Bridge being constructed, there is a clear ditch across the headland visible in aerial photography. The area has been subject to heavy modification... and it is likely that any subtle surface features would have been obscured through ploughing and discing of the surface.”*

A subsequent record update by Robert Brassey in January 2020 notes, *“The feature identified as a defensive ditch is shown as a tramway route on an 1860s map (see NZ Map 4498-16 [inset], Auckland Libraries), and aligns with the route of the tramway to the east, where this is visible in early aerial imagery (see attachments). If this was indeed a pā it would have been large in size (10,000 plus m2) and with weak natural defences. No pa or kainga was noted in this location by early travellers on the route between Papakura and Tuimata, who crossed the Slippery Creek ford immediately to the northeast. Ōpāheke is shown as being located further to the north on 1860s maps”.*

Determining whether the site is a pā or not is beyond the scope of this report. However, it does show that the land between Ngakoroa and Hingaia Streams were likely utilised by both Pākehā and Māori at several phases of human occupation.

The Drury Village, R12/773, CHI item 14087.

Outside of the proposed designation footprint.

Written records of the Drury Village note that in 1862 the town consisted of “a hotel and eight or nine settler’s houses” (Lennard 1986:4). There are photographs of the original hotel taken in 1859 (CHI records). The original hotel and store were located where the current hotel now stands. The hotel was built by Young, who named it the “Farmers Inn” (CHI record: 14087).

Drury WWI Memorial (CHI site 17035)

Outside the designation.

The CHI record for the site explains that Prime Minister W.F. Massey unveiled the Drury-Runciman War Memorial on 25 April 1922. It lists the names of 19 local men who died during World War I. After World War II, a further eight names were added. On 8 August 1969, the memorial was relocated from its original island site on Great South Road, Drury to a new site next to the Drury Hall on Tui Street. In 1993, an inscription was added to commemorate service in Korea, Malaya, Borneo and Vietnam. The monument has commemorative value to the settlements of Drury and Runciman.

Drury Hall (CHI site 15107)

Outside of the proposed designation footprint.

The CHI record explains the hall is located at 8R Tui Street / 214-230 Great South Road. This is because the Drury Hall was relocated from the Great South Road in Drury to its present Tui Street location in 1958. There is no further information on the CHI. Further research may determine the chronology of the site.

Farncombe Parade Shops, CHI site 15110

Outside of the proposed designation footprint.

The CHI record notes very little about the site, but describes, a “Shop, now demolished and replaced with a new row of shops known as Farncombe Parade.”. Further research will likely determine the chronology of the site.

Historic villa, CHI item 22274.

Outside of the proposed designation footprint.

The recorded point for this site is outside the NoR D3.

The villa is recorded at 60 Fitzgerald Road. The CHI provides limited information about the site, and more research is needed before it can be determined if the site is pre-1900. The property was originally part of the Chamberlin estate that was subdivided in the late 19th century. Most of the allotments were leased to the Drury Coal Company (later the Drury Fireclay Brick and Potteries Ltd). The CHI explains the building “retains its form but has been unsympathetically re-roofed and has a rear addition”.