Addendum to the Archaeological Assessment of Effects: Awanui Flood Scheme Project

18 August 2020

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Executive Summary

This addendum to the Archaeological Assessment of Effects for the Awanui Flood Scheme Project (2019) presents results from further survey work undertaken within the project area. Sixteen new archaeological sites have been recorded during the survey programme, with six of these to be impacted to varying degrees during the project earthworks. This addendum to the original report discusses these sites, their significance and the impacts of the proposed works on these sites, and should be read in conjunction with the initial report. It recommends that NRC apply for an authority from HNZPT for the remainder of the works and that NRC undertake further lwi consultation as part of the authority application process.

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Contents

1.0 Introduction	1
1.1 Location	1
3.0 Proposed Development	2
4.0 Site Surveys	
4.1 Southern Sites	
4.2 Northern Sites	11
4.3 Archaeological Context Summary	
5.0 Archaeological Effects	
5.1 Archaeological Values	
6.0 Assessment of Effects	
7.0 Conclusion and Recommendations	

Tables

Table 1: Significance assessment table for O04/1091 Pit/Terrace.	37
Table 2: Significance assessment table for O04/1092 Terraces.	37
Table 3: Significance assessment table for O04/1093 Terraces.	38
Table 4: Significance assessment table for O04/1094 Cultivation.	38
Table 5: Significance assessment table for O04/1097 Pit/Terrace	39
Table 6: Significance assessment table for O04/1102 Pa.	39
Table 7: Significance assessment table for 004/1071 has been updated to reflect the wider area of prol features.	

Figures

Figure 1: Location of the project area (dashed line). Source: Google Earth 2019	1
Figure 2: The three sites covered by HNZPT Authority 2020-338	2
Figure 3: New sites recorded in the southern project zone as shown on Archsite	3
Figure 4: New sites recorded in the northern project zone as shown on Archsite	3
Figure 5: Looking south at the top of O04/1091	4
Figure 6: Looking northeast across the top of O04/1091	4
Figure 7: Looking south at the terraces comprising site O04/1092	5
Figure 8: Westerly facing terraces with the remains of foundations on the mid terrace	5
Figure 9: Looking south upslope at the terraces. The terraces also run along the top of the ridgeline and to the bush to the east.	
Figure 10: Looking north down on the terraces on the slope	6
Figure 11: Recent tracking damage across a large terrace	6
Figure 12: SO 4363 (1887) showing area of cultivation in the Tawhati Block	7
Figure 13: ML 9561 (1914) showing land use at that time and location of whares and old house	8
Figure 14: Looking southeast over O04/1094 and the approximate location of the old whare	8
Figure 15: Looking northwest over terraces.	9
Figure 16: Looking northeast across the top platform with a large pit in the foreground	9
Figure 17: Large pit on the top platform of O04/1096 1	0
Figure 18: Looking south from the top of O04/1096 with large terraces to the east 1	0
Figure 19: Terraces and pits on O04/1097 1	1
Figure 20: Looking across the main platform and alignment of large pits 1	2
Figure 21: Looking down at O04/1098 (in front of pines) with the JNL in the background. This photo wa taken from the western edge of pa site O04/10991	
Figure 22: Looking east towards O04/1098 (beyond pines) with spoil heap in front of the site 1	3
Figure 23: View looking east across the pa platform with large terrace to the right 1	3
Figure 24: Looking southwest towards the pa with faint ditch in front of bank 1	4
Figure 25: View form O04/1098 towards pa O04/1099 (top right) 1	4
Figure 26: View from the end of the spur across O04/1100 1	5
Figure 27: Pit depressions on O04/1100. View is looking southwest with pa O04/1099 in the distance (to right)	
Figure 28: Looking southwest across the O04/1101 1	6
Figure 29: View from the site at the dammed spring area 1	
Figure 29. view from the site at the damined spring area	16
Figure 30: Pa O04/1102 viewed from the south. The river is located immediately to the right of the river terrace	er
Figure 30: Pa O04/1102 viewed from the south. The river is located immediately to the right of the river	er 17
Figure 30: Pa O04/1102 viewed from the south. The river is located immediately to the right of the river terrace	er 17 17
 Figure 30: Pa O04/1102 viewed from the south. The river is located immediately to the right of the river terrace. Figure 31: Looking west from the southern end of the pa showing the old munga and possible ditch 1 	er 17 17 18

Figure 35: Canoe landing channels immediately in front of Kevin Matthews
Figure 36: Large haonga (gridstones and anchor stones recovered by Kevin Matthews and placed by fence posts
Figure 37: Deviations in the Whangatane River where significant artefacts have been found 20
Figure 38: View looking southwest across the valley showing location and proximity of newly recorded sites to each other
Figure 39: Aerial view of the new sites recorded in the valley behind the Peterson farmhouse
Figure 40: Overlay of sketch plan by F.H.S Mathews and new archaeological sites showing correlation between the two
Figure 41: New sites recorded near JNL24
Figure 42: New sites recorded north of JNL in close proximity to the Whangatane River
Figure 43: Area of possible early Maori garden drainage system adjacent to the spillway

1.0 Introduction

Northern Regional Council (NRC) are undertaking remedial work to mitigate flooding effects from the Awanui and Whangatane Rivers, known as the Awanui Flood Scheme Project. This report is an addendum to an earlier archaeological assessment of effects (AEE) report¹ that addressed the initial proposal and first year of proposed earthworks and spillway development. That report identified the history of the area and spillway, extent and distribution of existing archaeological sites, and effects that the first season of earthworks would have on these. Subsequently, it was recommended to NRC that they apply for an authority from Heritage New Zealand Pouhere Taonga (HNZPT) to cover the proposed year 1 works. The rationale for this was that a second authority could later be applied for to cover the remainder of the works as the AEE had identified that further archaeological survey was required to investigate and record potential archaeological sites within the project area, and unrecorded sites contiguous with the project area. HNZPT authority 2020-388 was granted in January for the first season of work, with site work commencing on the 25th February at the JNL site.

This addendum addresses the subsequent body of survey work undertaken and updated spillway plans, and makes recommendations pertaining to the archaeology for the remainder of the project.

This assessment addendum uses archaeological techniques to assess archaeological values and does not seek to locate or identify wahi tapu or other places of cultural or spiritual significance to Maori. Such assessments may only be made by Tangata Whenua, who may be approached independently of this report for advice.

Likewise, such an assessment by Tangata Whenua does not constitute an archaeological assessment. Permission to undertake ground disturbing activity on and around archaeological sites and features may only be provided by Heritage New Zealand Pouhere Taonga, and may only be monitored or investigated by a qualified archaeologist approved through the archaeological authority process.

2.0 Location

The Awanui Flood Scheme Project encompasses an area of rivers, creeks and spillways from north of Awanui to the southern end of Kaitaia (Figure 1**Error! Reference source not found.**). Specifically, the flood prevention works will occur along the Awanui River, between Larmer Road and the SH1 (Waikuruki) bridge, and along the Whangatane Spillway, from Donald Lane to the Pairatahi River.



Figure 1: Location of the project area (dashed line). Source: Google Earth 2019.

¹ Gibb 2019

3.0 Proposed Development

The majority of the works will consist of high level spillways designed to reduce overflow into the Tarawhaturoa Stream immediately to the south of Kaitaia; river bank stabilisation (rock spall toe protection); stopbank topping up and stopbank setting back to create a wider floodway. Several amendments have been made to the project plans since the original AAE was issued including more detail regarding fill areas.

The first archaeological authority issued by HNZPT (2020-388) is for work at the JNL, Sports Hub and Allen Bell Park sites (Figure 2). To date, work has only been undertaken at the JNL site, which is 80% complete, with delays to the works programme attributed to the impacts of Covid-19 and associated lockdown periods. The JNL works were archaeologically monitored during the initial stripping of topsoil by machine excavator and with periodic visits during the earthworks also undertaken. Iwi representatives are also in attendance at times during the earthworks. No archaeological material has so far been encountered during the earthworks.

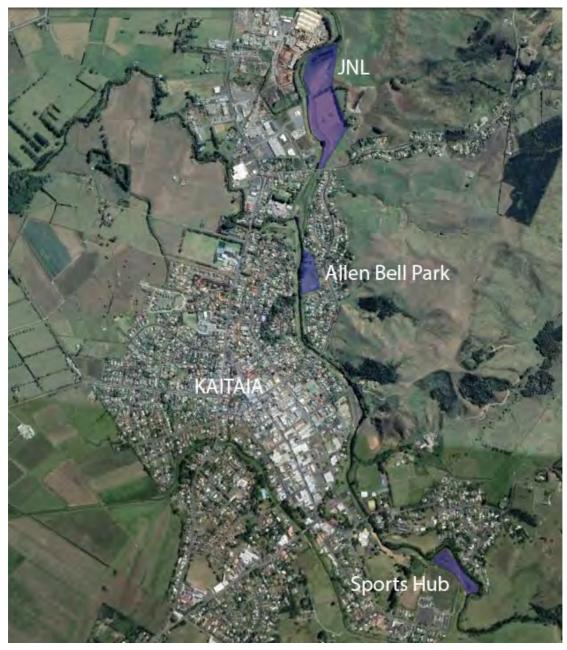


Figure 2: The three sites covered by HNZPT Authority 2020-338.

4.0 Site Surveys

One of the recommendations from the AEE was to undertake more detailed surveys of the wider project area. This included an investigation of potential site locations both within the immediate spillway earthworks area and also slightly further afield, such as the hills surrounding the low-lying flood plains. Field surveys were undertaken by the author and Kevin Matthews over a period of three days in May with a follow-up survey undertaken by the author in June. The surveys resulted in 7 new sites being recorded in the southern part of the project (Figure 3) and 9 in the northern section (Figure 4) and added to the New Zealand Archaeological Association database (ArchSite). Several of these sites were identified as being potentially affected by the proposed spillway works. The new sites are discussed below in Section 4.1.

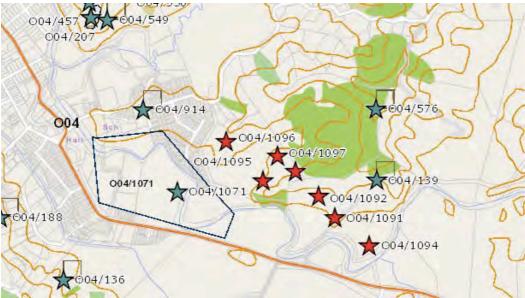


Figure 3: New sites recorded in the southern project zone as shown on Archsite.

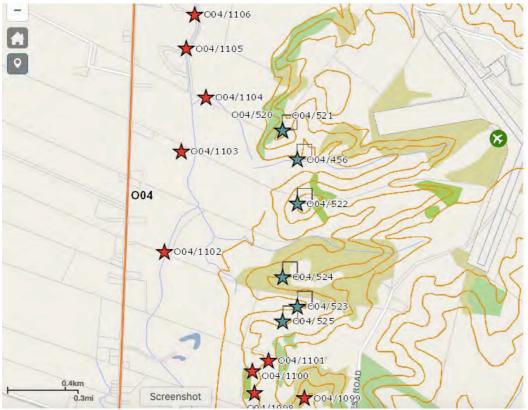


Figure 4: New sites recorded in the northern project zone as shown on Archsite.

4.1 Southern Sites

004/1091

A small ridgeline pit and terrace site located on the flat area of the lower spur immediately north of the farm sheds on the Peterson property (Figure 5 - Figure 6). The site consists of several well defined platforms with pit depressions, which are likely to be whare sites, with some evidence of fire cracked rock and charcoal in stock-disturbed ground on the lower slope of the site. The site is in relatively good condition although there is some historic and recent stock damage. Cattle grazing continues on the site. The site does not continue upslope past the upper platform and there is no sign of defensive features at the site.

This site is possibly where chief Raorao Piripiri resided.² Kevin Mathews attributes the name Kanitatau to this pit/terrace site. The name Kanitatau is shown on OLC 242 further upslope and appears to be a boundary marker name, but could relate to this site too.



Figure 5: Looking south at the top of O04/1091.



Figure 6: Looking northeast across the top of O04/1091.

² Kevin Matthews pers. com. 16/08/20

A number of terraces of varying sizes located on a south facing slope above and to the west of O04/1091 (Figure 7). The terraces are small slightly ephemeral terraces with no observable pit features and are in good condition. Old house or shed foundations are located on one of the lower southerly terraces (Figure 8). These likely relate to an 'old house' annotated on survey plan ML 9561 (1914). An existing track has been cut across the slope between the terraces but does not impact on any of the terraces.

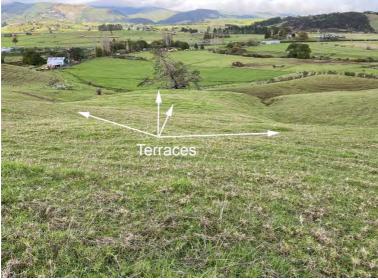


Figure 7: Looking south at the terraces comprising site O04/1092.



Figure 8: Westerly facing terraces with the remains of foundations on the mid terrace.

004/1093

A large number of terraces located on the ridgeline above O04/1093 running down the spur and on the north facing slope overlooking the valley floor to the north (Figure 9 - Figure 10). The terraces on the ridgeline are small but well defined, with the terraces on the slope generally larger in size. The site extends some way into the neighbouring bush-covered property to the north but this area was not surveyed in detail as there was no access permission. It is possible that this site is part of Manurewa Pa (O04/139) located 400m to the east further up the same ridgeline, but this could not be verified without access to the property, nor verified by desktop as the area is covered in dense bush. The terraces are mostly well preserved with some evidence of past vegetation cover on a few terraces and one example of recent damage by tracking from an excavator (Figure 11).



Figure 9: Looking south upslope at the terraces. The terraces also run along the top of the ridgeline and in to the bush to the east.



Figure 10: Looking north down on the terraces on the slope.



Figure 11: Recent tracking damage across a large terrace.

This site is an area of traditional cultivation on what was known as the Tawhati Block, as shown on an 1887 plan SO 4363 (Figure 12), and has been recorded as a site on this basis. A later plan from 1914, ML 9561 (Figure 13), suggests that cultivation in the area had probably ceased by this time as the land is recorded as "rich alluvial flat in grass, willow and scrub." This plan also shows two whare and an old house on the Tawhati Block at the time, which are not shown on the earlier plans. One of these whare is located within the area delineated for O04/1094 (Figure 14). Although cultivations are only shown on SO 4363 on the eastern side below the ridgeline where site O04/1091 is located, it is likely that these extended across the flat paddocks on the western side of the ridge also, and taro was also likely grown on the swampy margins found around the base of the hill.

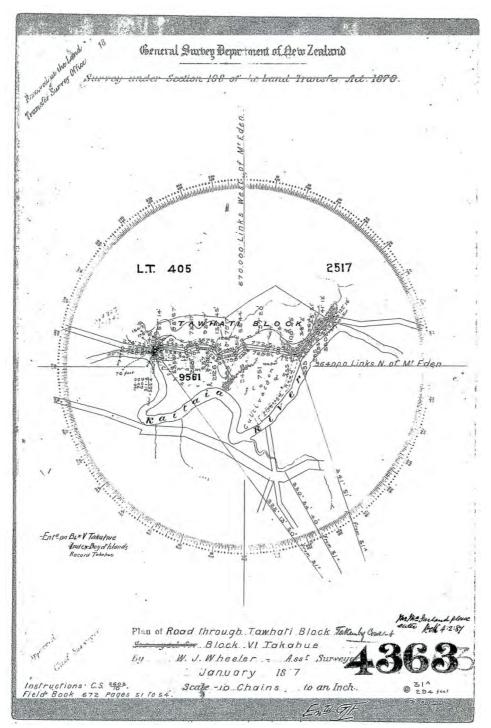


Figure 12: SO 4363 (1887) showing area of cultivation in the Tawhati Block.

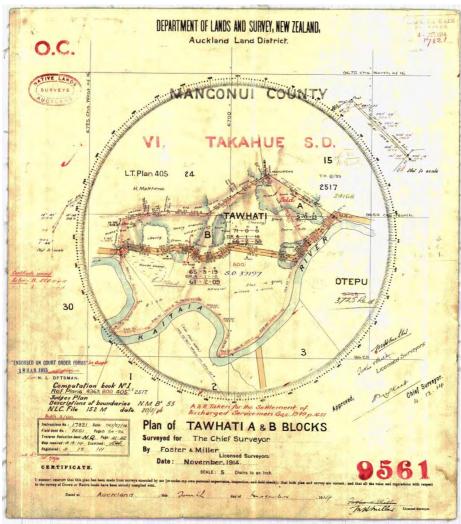


Figure 13: ML 9561 (1914) showing land use at that time and location of whares and old house.



Figure 14: Looking southeast over O04/1094 and the approximate location of the old whare from site O04/1091.

An area of terraces immediately southwest of, and approximately 100m, from the end of O04/1093. The terraces are well defined north facing features located on the slope immediately below the ridgeline (Figure 15).



Figure 15: Looking northwest over terraces.

004/1096

A pit and terrace complex with several well-preserved pits, ephemeral depressions and well defined terraces that flow down a south facing ridgeline. Immediately east of the ridge on the adjoining slope are several large terraces overlooking the valley floor (Figure 16 - Figure 18). This site is in excellent condition and possibly extends further upslope to the top of the ridge where an old house is now located, and which may have utilized terraces that were once part of the site.



Figure 16: Looking northeast across the top platform with a large pit in the foreground.



Figure 17: Large pit on the top platform of O04/1096.

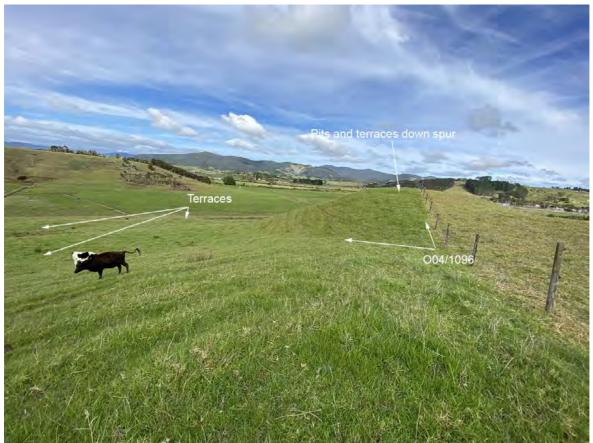


Figure 18: Looking south from the top of O04/1096 with large terraces to the east.

A small set of terraces with some ephemeral pit features located on a low lying westerly facing slope that joins up to the ridgeline where O04/1093 and O04/1095 are located (Figure 19).



Figure 19: Terraces and pits on O04/1097.

4.2 Northern Sites

The northern sites are all located the north of the JNL factory.

004/1098

A large pit/terrace site located on the spur at the end of a west facing ridge, immediately east of the JNL site. The sit consists of seven pits, three of which are large, well defined pits located over two main platforms long the end of the spur (Figure 20 - Figure 21). There is some evidence of terracing along the lower face of the spur. A stand of pines is located at the end of the spur and down the front slope and a farm track is located along the eastern edge of the site, but the site appears to have suffered little damage. Where the bottom of the spur connects to the lower plain there is an area of material (wood byproduct) that has been dumped and leveled by the mill, and the face of the natural scarp slightly modified to accommodate this (Figure 22).



Figure 20: Looking across the main platform and alignment of large pits.

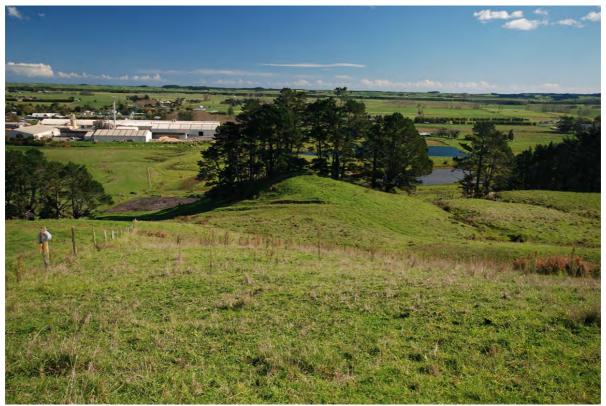


Figure 21: Looking down at O04/1098 (in front of pines) with the JNL in the background. This photo was taken from the western edge of pa site O04/1099.



Figure 22: Looking east towards O04/1098 (beyond pines) with spoil heap in front of the site.

A small rectangular-shaped ring ditch pa with the ditch dug around three sides of the pa and protected on the south-eastern side by a steep east-facing slope (Figure 23 - Figure 24). The ditch has been filled and what remains is a shallow ephemeral ditch in most parts, but with a little more definition on the eastern end of the pa where it cuts towards the steep bank. There are no obvious depressions on the platform of the pa which is a single level platform. Immediately outside of the pa is an area of flat ground that has no obvious features but may have features that are currently obscured by the long grass and previous farming related surface modifications. This site is located further upslope and on the same ridgeline as O04/1098 (Figure 25).



Figure 23: View looking east across the pa platform with large terrace to the right.



Figure 24: Looking southwest towards the pa with the faint ditch visible in front of the bank.



Figure 25: View form O04/1098 towards pa O04/1099 (top right).

A small pit/terrace site on the spur on the ridgeline immediately north of the ridgeline that O04/1098 is located on and about the same elevation. The site consists of two main terraces with possible whare and pit depressions (Figure 26 - Figure 27).



Figure 26: View from the end of the spur across O04/1100



Figure 27: Pit depressions on O04/1100. View is looking southwest with pa O04/1099 in the distance (top right).

A small pit/terrace site consisting of three small terraces and several pit depressions located further upslope and on the same ridgeline as O04/1100 (Figure 28). This site is located immediately above a natural spring that has been dammed to form a farm pond (Figure 29).



Figure 28: Looking southwest across the O04/1101. Site O04/1100 is in the distance by the pine (center right of image).



Figure 29: View from the site at the dammed spring area.

A small riverside pa that was originally protected by a large area of swamp and an old river bend, now a munga. The site runs north-south parallel to the river with the western side protected by a possible ditch and southern end by the old natural river course (Figure 30 - Figure 31). The site is in reasonable condition but has been significantly modified at the northern end where quarrying has occurred (Figure 32).



Figure 30: Pa O04/1102 viewed from the south. The river is located immediately to the right of the river terrace.



Figure 31: Looking west from the southern end of the pa showing the old munga and possible ditch.



Figure 32: Quarried face on northern end of O04/1022.

The remains of a historic homestead once belonging to a descendent of the Matthews family. Formerly the home of Ronald Hayward Matthews (born 1882, died 1975) and Marionetta Euphemia Dinwoodie (born 1897, died 1981).



Figure 33: Looking west from the river's edge at the old Matthews homestead.

This site is the location of a buried waka, canoe landing spots, find spots and a likely occupation area (Figure 34 - Figure 35). The extent of the site is unknown but it likely extends across a flat raised paddock adjacent to a large munga. The buried waka was known to Kevin Matthews grandfather Ronald Hayward Matthew who gave the location. Around this location are several channels cut into the munga which are interpreted as old canoe landings from when the munga was part of the flowing river system. A hoanga was found by Kevin Mathews grandfather and placed by the fence not far from where it originally lay and an anchor stone was later found lying on the edge of the old river bank. Over the years lots of obsidian pieces have been exposed around the area where these 2 stones now lie (K. Matthews pers. Com. 2020) (Figure 36). It is likely that this is an extensive site and there is likely to be in situ evidence of occupation on the large river terrace adjacent to the munga.



Figure 34:Looking northwest across the buried waka channel, located next to the trees.



Figure 35:Canoe landing channels immediately in front of Kevin Matthews.



Figure 36: Large haonga (gridstones and anchor stones recovered by Kevin Matthews and placed by fence posts.

This site is the location where a waka prow was recovered from the swamp by Kevin Matthews uncle, Arthur Hackney Matthews, who found the prow after the second lot of Whangatane River deviation works in 1939. These works are shown on DP 28766 (Figure 37). An anchor stone was also recovered from the area ca. 1990 (K. Matthews pers. Com. 2020)

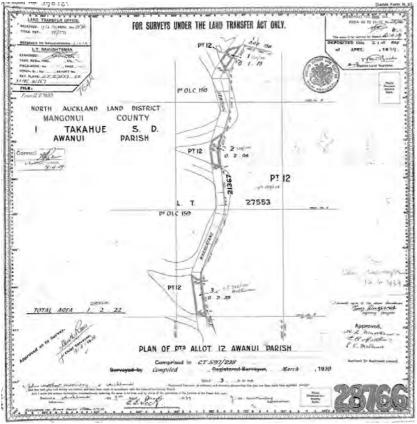


Figure 37: Deviations in the Whangatane River where significant artefacts have been found.

The find location of the Awanui Slab which was discovered by George Evans, dug up in the course of excavations that were made for the diversion of the Awanui River to drain a swamp in 1927. The Awanui Slab is a regionally significant Taonga tuturu.

4.3 Archaeological Context Summary

The newly recorded sites further emphasise the importance of this area in both pre- and post-contact times and clearly illustrate a lack of archaeological survey in the area. Many of the sites that have been recorded as part of this update were previously known by locals and landowners or new sites identified during research, such as those identified by Kevin Matthews in his research, but not recorded in ArchSite. The proximity of these sites to the Whangatane and Awanui Rivers and the variety of site types recorded demonstrates the utilisation of the landscape for occupation and horticulture, with the river system providing a transport conduit between many of the sites and the wider area.

Southern Sites

The new sites that have been recorded here show the density of sites in this area to be greater than previously thought. These sites and the previously recorded sites also demonstrate the importance of the ridgeline and contiguous slopes as an area for occupation and gardening, possibly more so than the lower flood prone paddocks adjacent to the river. New site O04/1091 is likely associated with O04/1094, i.e., gardens maintained by the people living in the small occupation site. Previously the nearest recorded site to this pit/terrace complex was O04/139, Manurewa Pa, located on top of the same ridgeline, some 420 metres away. The new terrace site O04/1091, and terraces used for historic occupation where an old homestead and associated curtilage once existed. Further upslope, new site O04/1093 is a large and extensive terrace complex that may link to the terraces further along this ridgeline recorded as part of Manurewa Pa, although this could not be determined at the time of the survey due to access restrictions.

The new sites recorded on the northern side of Manurewa Pa ridgeline (west of the pa) show the modification (terracing) of the north facing slopes for gardening (O04/1093, O04/1095 and O04/1097) and occupation across to the other side of the valley (O04/1096) (Figure 38 - Figure 39). Pit/terrace site O04/1096 was probably a much larger occupation site that extended upslope towards the top of the hill where a house resides, but this could not be verified due to access issues. No evidence of Maori garden drains or any other archaeological features or material was found in the flat paddocks between the river and the base of the hills.



Figure 38: View looking southwest across the valley showing location and proximity of newly recorded sites to each other.



Figure 39: Aerial view of the new sites recorded in the valley behind the Peterson farmhouse.

There is likely some correlation between site O04/1096 and activity associated with the Church Missionary Station. This CMS site was recorded as O04/1071 by Jonathan Carpenter and a boundary for the site given (refer Figure 3). However, this boundary reflects the core area of the CMS activity but not the extent of features as mapped in a sketch plan by F.H.S Mathews that shows the buildings and associated curtilage at the mission station (built from 1837 to 1863).³ The overall locational precision of the mapped features on this sketch map is impossible to determine and many of the maps annotations may only give indicative locations and extent of features, such as the use of 'Maori Huts' to show the location and a presumptive number of huts in various locations across the station.

An overlay of this plan with the new site data (Figure 40) clearly shows some spatial correlation and it is likely that some of the features in the sketch plan do relate to the surface evidence recorded in the new sites. However, the rationale behind recording these as new sites, and not just extending the boundary of the existing CMS site record to incorporate them, is that it recognizes the remnant physical signature on the landscape and acknowledges that these could have earlier associations, and may not be related to the CMS occupation.

³ For further discussion on the CMS refer pages 10-15 of the AAE.

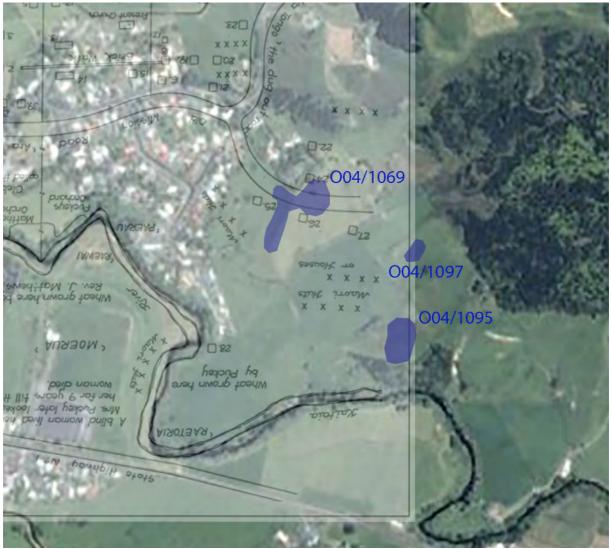


Figure 40: Overlay of sketch plan by F.H.S Mathews and new archaeological sites showing correlation between the two. The small squares annotated on the CMS plan numbered 25-27 are: 25 - Ben Lever's house, 26 - Ford's house, and 27 - Puckey's blacksmith's, which was shifted to this location.

Northern Sites

The new sites recorded in the northern project area consist of both pre- and post contact sites. Four of these are clustered on the slopes east of JNL and include a pa (O04/1099), large pit/terrace ridge site (O04/1098), and two small pit/terrace sites O04/1100 and O04/1101). These sites are all westerly facing and overlook the flat valley floor to the Whangatane River and beyond (Figure 41).

Further north, and closer to the Whangatane River, five more sites have been recorded including a riverside pa (O04/1102), occupation area (O04/1104), two important artefact find locations (O04/1105 and O04/1106), and an historic homestead site (O04/1103) (Figure 42). The proximity of O04/1104, O04/1105 and O04/1106 to each other may be of some significance. O04/1104 appears to be a large occupation area with a buried waka, canoe landing spots, in situ artefactual material and possibly a large kainga site. This is one of many riverside sites that once existed along the Whangatane and Awanui Rivers, some of which were noted in the journals and reports of early European visitors to the area.

The homestead site (O04/1103) has ties to the Matthews family and their lineage back to the early CMS days. Historic sites are clearly underrepresented in the archaeological record in Kaitaia which is an issue that needs to be addressed in the future, although it should be noted it is outside of the scope of this project.



Figure 41: New sites recorded near JNL.

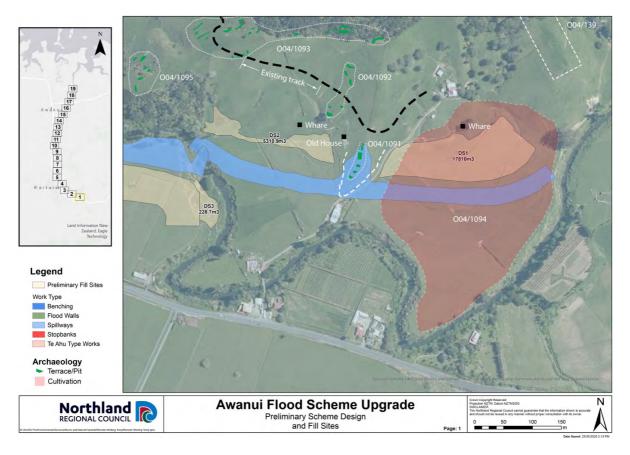


Figure 42: New sites recorded north of JNL in close proximity to the Whangatane River.

5.0 Archaeological Effects

The archaeological effects are addressed per the individual Scheme Plan map sheets. These have previously been identified in the AAE (pages 52-73) and are updated here to reflect the new site knowledge and updated scheme plan. As such, any reference to the scheme plans should be to the plans in this document.

Map Sheet 1



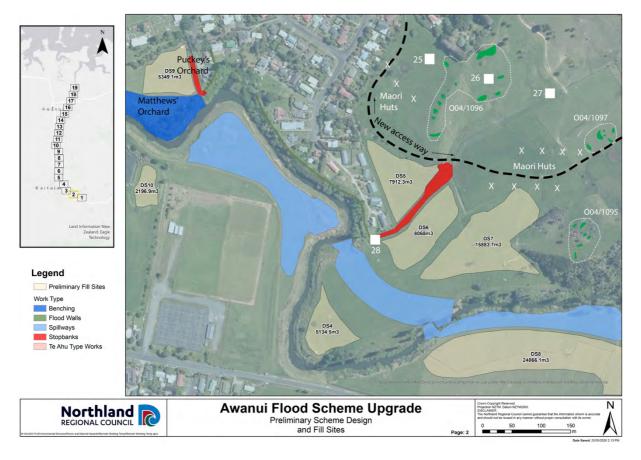
The spillway and fill areas that cross the Peterson property will affect two sites: O04/1091 and O04/1094. Part of the spur at the end of the ridge where O04/1091 is located needs be removed to form a batter on the spur end to enable earthworks for the spillway. This is so the spillway can be formed across the paddock at a suitable distance from the bend in the river to protect the integrity of the new spillway and river bank. This will impact a section of the archaeological features on top of the spur which will require archaeological mitigation prior to the removal of the spur end. The extent of the works on the ridgeline are constrained by a power pole set in the site.

As the spillway passes through the eastern paddock it crosses through the 19th century cultivation area O04/1094 - the use of 'cultivation' on historic maps generally refers to Maori gardens. This area has undergone several changes since the 19th century; gardening appears to have ceased at the site by 1914, although Maori were still living on the property at that stage in at least two whare; and following transition to European ownership and farming practices, the land would have been cleared and utilized for pasture including ploughing of the paddocks. As noted previously, the area of cultivation likely extended across the westerly paddock as well.

The archaeological potential of the garden area is limited due to the subsequent changes that occurred but will still require archaeological mitigation. There may be evidence of Maori gardens under the affected topsoil zone or evidence of other forms of earlier occupation of the site. Similarly, the swampy area at the base of the hill to be covered by fill area DSC1 has archaeological potential and will require archaeological mitigation.

Construction of the new spillway means a new access way to the Peterson farmstead will be required (shown as a black dashed line in the figure above). This access partly follows the path of an existing track cut into the slope leading to the ridgeline above, then passes above the top end of site O04/1091 before turning back towards the house. The access way will pass between but avoid the terraces on O04/1092 before crossing the ridgeline through O04/1093 where two terraces will be impacted on by the access formation.

Map Sheet 2



The new access way connects at the top of O04/1093 in the east, passes north down the slope avoiding the terraces there before turning east past O04/1097 where one terrace may be impacted, continuing east along the flat paddocks through the area where Maori Huts are recorded before veering north, passing through another area of Maori Huts, and finally connecting to the existing access off Church Road. This alignment is designed to minimize the effects on known archaeological features where possible. The areas shown as Maori Huts are derived from F.H.S Mathews sketch map and are unlikely to be exact locations. As discussed above, these are indicative locations and the number of huts and extent of area of occupation is largely unknown. This means that archaeological mitigation will be required throughout this area as the access way and fill area DS7 may uncover evidence of these. Fill area DS5 may also be used by Fulton Hogan as a fill site.

Fill area DS9 and the adjacent benching are within the Kaitaia Primary School grounds and have already undergone previous earthworks. There is written evidence that spoil extracted from the river was used to build up or level the school field but the extent and depth of this fill is not known. This event was described in the 1931 annual Drainage Board report:

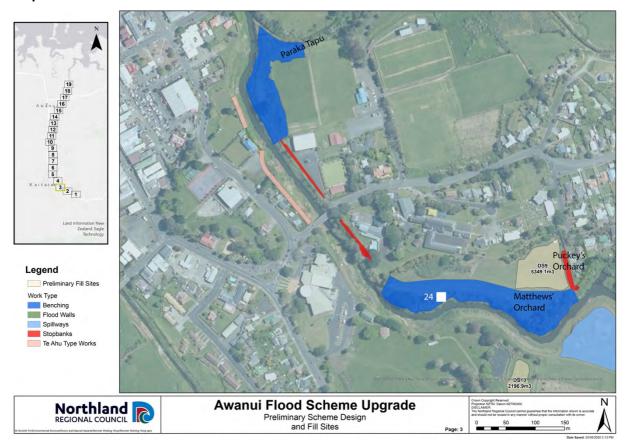
Other works entailed in connection with the cut were the erection of fences and the provision of a new playing-area for the Kaitaia School. This has been drained, cleared, and ploughed, and will be finally worked up and levelled for sowing of grass as soon as the ground is in favorable condition.

The depth and extent of this fill is uncertain so monitoring is recommended during benching. These areas

are also noted as Puckey's and Mathews' Orchards in F.H.S Mathews' plan.

CMS building locations 25-27 will not be affected but the stopbank between fill areas DS5 and 6 may impact in situ remains of building 28. This was Puckey's barn which had sides made of tea-tree and nikau roof and was noted as being not very large by Matthews. There may be some in situ foundation remains from this structure but little is known about the building apart from Matthews' brief description in his sketch index. Taonga tuturu (Maori artefacts) have reportedly been found in the DS6 fill area in the past.

The spillway south of the river is covered by the existing authority. No archaeological features were noted in Fill area DS8.



Map Sheet 3

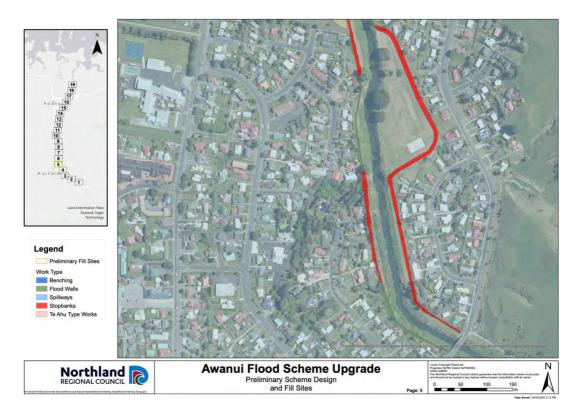
Two benches are proposed: one along the river edge on the school field with a north-south oriented stopbank on the eastern field boundary, and a second bench to the west along the river edge at the Rugby Club. The western bench area currently has a large stopbank over it. Fill area DS9 and benching continue across the school fields where CMS building 24 - John Broughton's house – is recorded. The area at the northern end of the map sheet is known as the Paraka Tapu (Tapu Paddock) on SO 776 (1), but the reason for this naming convention is not known. As noted previously, this area has undergone considerable modification during the 1930s.

Map Sheet 4

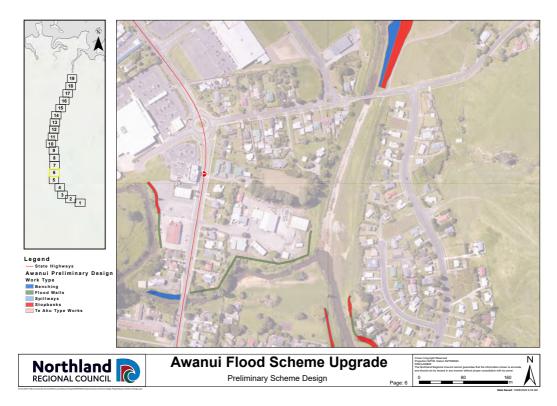


A large stopbank will be formed on an area that has previously benched and had buildings and industrial yard constructed on. These were demolished and the area cleared in 2019. No archaeological issues.

Map Sheet 5

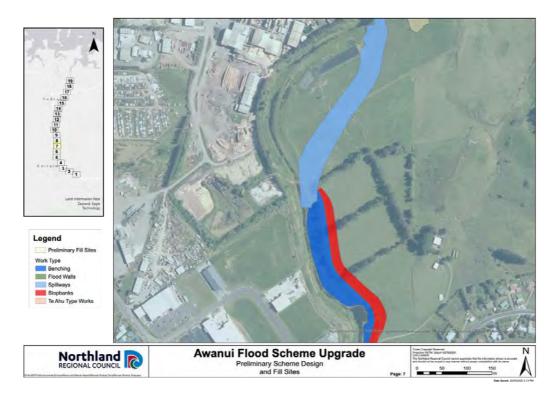


Covered by the existing authority.

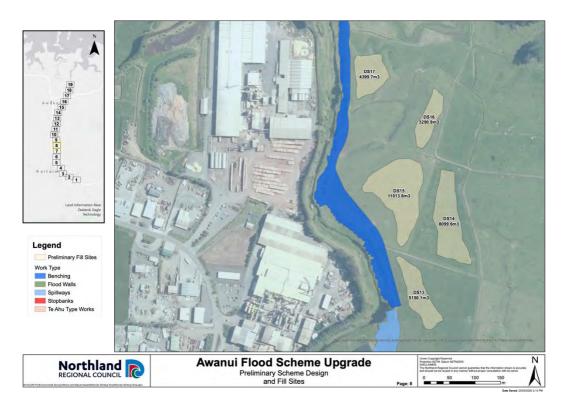


The works on the east bank are covered by the existing authority. NRC have added minor woks to the arm of the Awanui on the west bank in cluding a flood wall, small bench and stopbank. There are no known issues here but monitoring of initial topsoil stripping is recommended.

Map Sheet 7

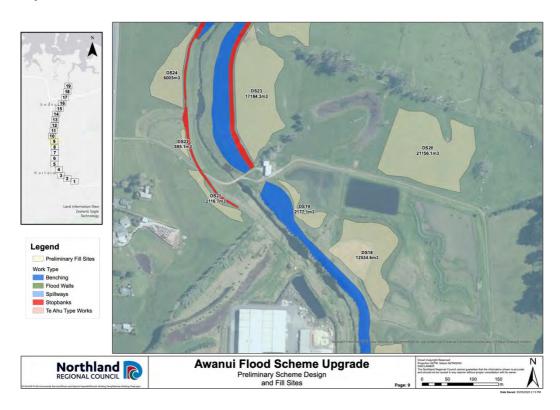


Covered by the existing authority.

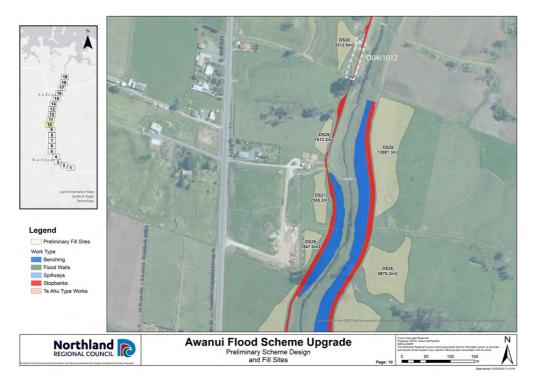


Covered by the existing authority.

Map Sheet 9

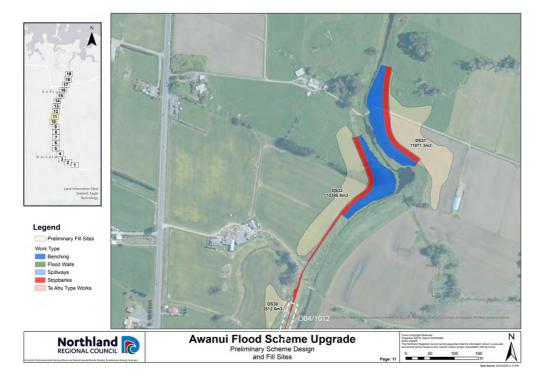


Covered by the existing authority.



The area has a continuation of the benching from the JNL site with benching and stopbank development along both banks and fill areas on either side of the river. New site O04/1102 is located at the northern end of this area. The stopbank is to be built on the river terrace between the pa and the river and may impact the edge of the pa where previous quarrying has removed a large amount of material from the site. Fill area DS30 is immediately west of the pa and will partially fill the old munga that once flowed around the south of the pa. This fill site should be moved slightly south away from the edge of the pa. Material deposited for the stopbank construction will likely abut the pa site and construction should be monitored.

Map Sheet 11



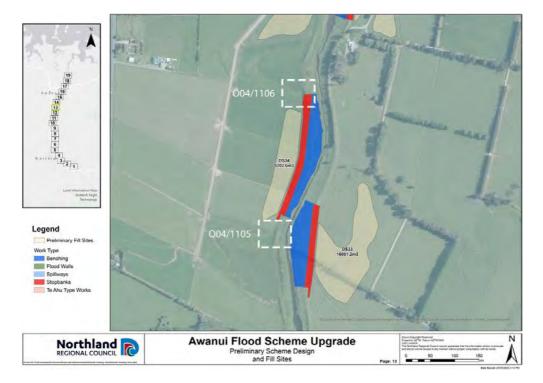
A continuation of the benching from the south and stopbank development along both banks on a large bend of the river. The proximity to pa site O04/1102 to the south and large occupation area O04/1104 to the north, along with the old Whangatane River channel, suggest a high level of archaeological risk and this area should be monitored.

Map Sheet 12



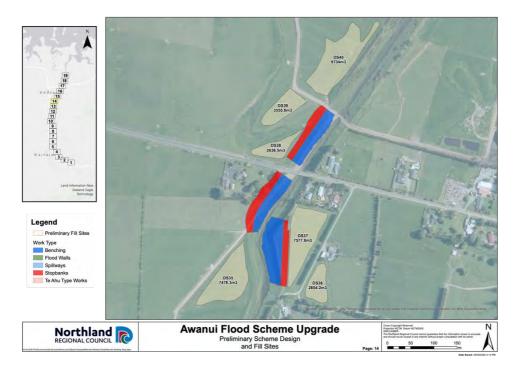
No construction.

Map Sheet 13



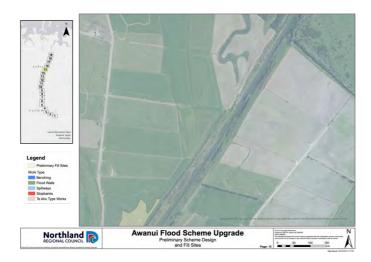
Benching, stopbank construction and fill areas on both sides of the spillway in an area where historic deviations have been undertaken and significant artefacts discovered. This is the area where the Awanui Slab (O04/1106) and a carved canoe prow (O04/1105) were discovered during separate drain digging episodes in the1920s and 30s. The slab was found near the northern deviation and the canoe prow near the southern deviation. The old Whangatane River channel branched off south of here to the east towards the hills where a number of sites are located. The bend from this old channel formed a bend around a high terrace where site O04/1104 is recorded and which has the potential to be a significant occupation site. This is an area with a high risk of archaeological discovery and will require monitoring.

Map Sheet 14



Benching, stopbank construction and fill areas on both sides of the river. Given the close proximity to the artefact find areas immediately south, and similar old-channel river environment, this is area with a medium-risk of archaeological discovery. There is also a possible unrecorded pa named Parekahariki Pa to the north (not yet surveyed), identified from historic map SO 776. This area requires monitoring.

Map Sheet 15



No construction.

<complex-block> Image: Content of the content of t

Map Sheet 16

Benching, stopbanking and a fill area o to be constructed along the west bank of the spillway, with a small section of stopbank on the east bank. This area of spillway passes through an area with a number archaeological sites located to the east including two pa sites - 004/134 and 004/155 Pungaungau Pa - in close proximity to the works. A possible unrecorded garden drainage site lies on the west bank immediately to the west of fill site DS41 (Figure 43) and may be impacted on by the fill site. This site will require survey and possible investigation prior to the establishment of the fill site.

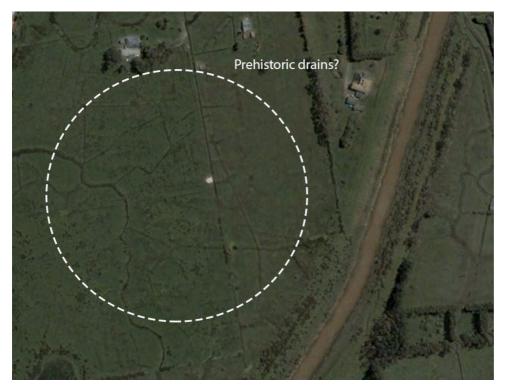
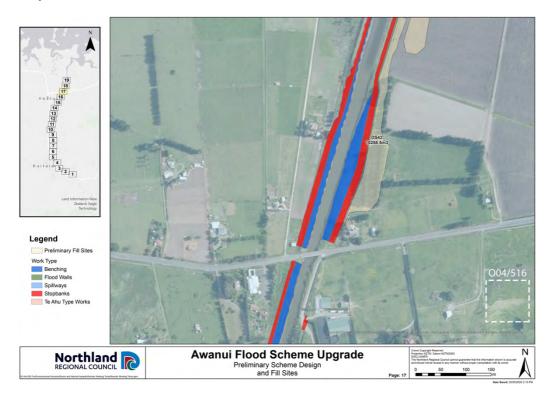
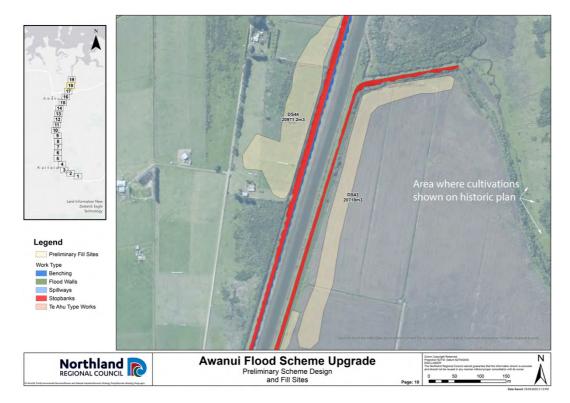


Figure 43: Area of possible early Maori garden drainage system adjacent to the spillway.



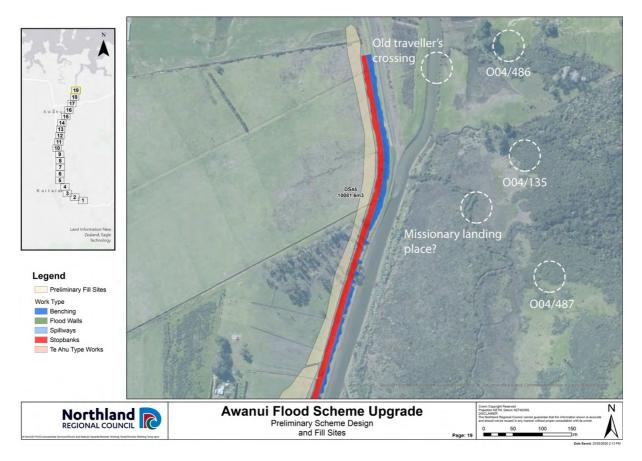
Benching and stopbanks will be constructed along both sides of the spillway north and south of SH10 with one fill area on the northeast bank. This area of spillway passes through an area with many archaeological sites to the east and north and possible unrecorded sites to the west, as well as large cultivation areas to the east shown on historic maps. It is an area where drainage sites are historically known but not recorded. A small terrace site O04/516 is located about 300m east of the spillway.

Map Sheet 18



Extensive stopbanks and two fill areas to be constructed along each side of the spillway. This area of spillway passes through an area with many archaeological sites to the east and north including large cultivation areas to the east shown on historic maps. It is an area where drainage sites are historically known (but not recorded) and also where the Whangatane Spillway connects to the Pairatahi River – an important waterway used by both Maori and early European settlers.

Map Sheet 19



Benching and stopbank construction on the west bank of the Whangatane Spillway/Pairatahi River. The eastern area has a high density of recorded and unrecorded sites, and the connection to the river here was an important landing place for both Maori and Europeans, both via river travel and overland. This is an area where early missionaries landed before travelling overland and also the location of a possible old traveler's crossing where the hard limestone base permitted easy crossing. Both these sites are unrecorded and should be investigated but will not be affected by the spillway works. The recorded sites to the east of the spillway include O04/135 Pairatahi Pa, O04/486 Matako Pa, and terrace site O04/487. This is the northern extent of the spillway project works.

5.1 Archaeological Values

HNZPT has provided guidelines setting out criteria that are specific to archaeological sites (HNZPT 2006:9-10). The archaeological values of sites relate mainly to their information potential, that is, the extent to which they can provide evidence relating to local, regional and national history through the use of archaeological investigation techniques, and the research questions to which the site could contribute. The surviving extent, complexity and condition of sites are the main factors in their ability to provide information through archaeological investigation.

The values of the archaeological sites that will be affected are assessed below:

Table 1: Significance assessment table for O04/1091 Pit/Terrace.

Value	Assessment
Condition and Integrity	The site is in good condition with some minor
	damage from stock movement. The surface
	features are well-preserved and undisturbed sub-
	surface archaeological material is likely to remain.
Rarity/Uniqueness	Ridgeline pit/terrace sites are a common in the
	archaeological record.
Contextual Value	The site sits within an area surrounded by a
	number of large pa and terrace and agricultural
	sites. Several larger pit/terrace sites are located
	within this area.
Information Potential	The site has high potential for revealing
	information through archaeological investigation.
	Information that may be gathered through
	archaeological excavation includes analysis and
	interpretation of whare and pits features, artefact
	discovery and material dating. It is unclear what
	the antiquity of the site is, or its possible
	association with the CMS.
Amenity Value	The location is on private property and has very
	little amenity value.
Cultural Associations	The site was possibly the home of chief Raorao
	Piripiri.

Table 2: Significance assessment table for O04/1092 Terraces.

Value	Assessment
Condition and Integrity	The site is in good condition reasonably well
	defined terraces.
Rarity/Uniqueness	Terrace sites such as this are very common in the
	area and in the archaeological record.
Contextual Value	The site sits within an area surrounded by a
	number of large pa and terrace and agricultural
	sites. Several larger pit/terrace sites are located
	within this area.
Information Potential	The site has limited potential for revealing
	information through archaeological investigation.
	Information that may be gathered through
	archaeological excavation includes analysis and
	interpretation of use of the terraces, artefact
	discovery and material dating.
Amenity Value	The location is on private property and has very
	little amenity value.
Cultural Associations	There are no known cultural associations.

Value	Assessment
Condition and Integrity	The site is in good condition reasonably well
	defined and extensive terracing.
Rarity/Uniqueness	Terrace sites such as this are very common in the
	area and in the archaeological record.
Contextual Value	The site sits within an area surrounded by a
	number of large pa and terrace and agricultural
	sites. This site may be connected to Manurewa
	Pa O04/139, located to the east.
Information Potential	The site has limited potential for revealing
	information through archaeological investigation
	due to the limited nature of investigation as only
	one or two terraces will be affected.
	Information that may be gathered through
	archaeological excavation includes analysis and
	interpretation of use of the terraces, artefact
	discovery and material dating.
Amenity Value	The location is on private property and has very
	little amenity value.
Cultural Associations	There are no known cultural associations.

Table 3: Significance assessment table for O04/1093 Terraces.

Table 4: Significance assessment table for O04/1094 Cultivation.

Value	Assessment
Condition and Integrity	The condition of the site is unknown but thought
	to have some areas of intact gardening features.
Rarity/Uniqueness	Cultivation areas such as this are common in the
	area but few are recorded in the archaeological
	record.
Contextual Value	The site sits within an area surrounded by a
	number of large pa and terrace and agricultural
	sites. It may have been the gardening area for site
	O04/1091.
Information Potential	The site has limited potential for revealing
	information through archaeological investigation
	due to the level of modification to the area
	through modern farming practice. Information that
	may be gathered through archaeological
	excavation includes analysis of microfossil
	samples, artefact discovery and material dating.
Amenity Value	The location is on private property and has very
	little amenity value.
Cultural Associations	There are no known cultural associations.

Value Assessment The site is in fair condition with poorly defined Condition and Integrity terraces and pit features. Rarity/Uniqueness Pit/terrace sites such as this are very common in the area and in the archaeological record. Contextual Value The site sits within an area surrounded by a number of large pa and terrace and agricultural sites. Information Potential The site has limited potential for revealing information through archaeological investigation due to the limited nature of investigation as only one terraces will be slightly affected by the development of a new accessway. Information that may be gathered through archaeological excavation includes analysis and interpretation of use of the terraces, artefact discovery and material dating. Amenity Value The location is on private property and has very little amenity value. There are no known cultural associations. **Cultural Associations**

Table 5: Significance assessment table for O04/1097 Pit/Terrace.

Table 6: Significance assessment table for O04/1102 Pa.

Value	Assessment
Condition and Integrity	The condition of the site is poor due to previous
	quarrying and the presence of pine on the site
Rarity/Uniqueness	Cultivation areas such as this are common in the
	area but few are recorded in the archaeological
	record.
Contextual Value	The site sits within an area surrounded by a
	number of large pa and terrace and agricultural
	sites. It may have been the gardening area for site
	O04/1091.
Information Potential	The site has limited potential for revealing
	information through archaeological investigation
	due to the level of modification to the area
	through modern farming practice. Information that
	may be gathered through archaeological
	excavation includes analysis of microfossil
	samples, artefact discovery and material dating.
Amenity Value	The location is on private property and has very
	little amenity value.
Cultural Associations	There are no known cultural associations.

Table 7: Significance assessment table for 004/1071 has been updated to reflect the wider area of probable features.

Value	Assessment
Condition and Integrity	Much of the site is in poor condition having been
	developed into sports fields, residential areas, car
	parks, spillways and school grounds. Very little
	original sub-surface archaeological material is
	thought to remain in areas where this
	development has taken place. The undeveloped
	farmland on the east bank and south of the
	primary school has high archaeological potential
	and there is likely to be undisturbed in situ
	features within this area.
Rarity/Uniqueness	The site is quite rare due to its northern location,
	size and history of expansion, and fairly unique
	given its size at its peak.
Contextual Value	The Mission Station was one of several early
	European religious missions from competing
	denominations established in the Far North in the
	1800s. It was an important link between early
	European settlers, Government and local Maori.
Information Potential	The western (developed) part of the CMS site
	offers limited information potential from an
	archaeological perspective having been
	significantly modified and now largely devoid of
	any original buildings. The undeveloped southern
	area has high information potential Information
	that may be gathered through archaeological
	excavation and includes analysis and
	interpretation of ceramics and other historic
	artefacts, historical mission structures, and Maori
	settlement areas and artefacts and datable
	material.
Amenity Value	The developed areas of the site are mainly in the
	public domain but currently has very little amenity
	value as this area has been urbanised. The
	undeveloped southern is private property and has
	no amenity value.
Cultural Associations	The Whangatane River is associated with
	NgaiTakoto, Te Rawara and Ngati Kahu and their
	traditional use of the waterway for transport and
	mahinga kai.

6.0 Assessment of Effects

The Awanui Flood Scheme programme will be staggered over several years and be largely undertaken during the drier summer months. Some areas signalled for flood prevention work will require significant earthworks and several archaeological sites will be effected. There is also a high probability that unrecorded archaeological material may be encountered during earthworks. The earthworks required for the project will essentially be excavation for spillways and benches, construction of stopbanks using excavated material, and redepositing of excess material in designated fill areas.

Given the density of sites near the waterways, history of archaeological finds associated with drains, and general historical use of the waterways as transportation conduits, the probability of encountering archaeological material is assessed as quite high, regardless of previous modification - especially when considering that research has shown there to be a large number of unrecorded sites in the area. The likelihood of further wetland agricultural systems being encountered outside of the areas of known archaeological features is also likely given the presence of these as shown in the historic maps. Areas of old unmodified stream channel or mungas also have the potential for the discovery of buried wooden artefacts, especially near areas where these have previously been discovered.

The sheer scale of the works on areas of largely unmodified pastoral ground between the waterways and the eastern hills, where the densest prehistoric occupation occurred in the area, supports a hypothesis of archaeological discovery during the works programme.

Archaeological monitoring of all initial earthworks will be required and archaeological investigation of any features discovered during this process. To permit the required archaeological mitigation of the affected known sites, and as cover in case of discovery of hitherto unrecorded archaeological sites, NRC will require an authority from HNZPT to cover all the properties within the project boundary that may be effected by earthworks.

Six newly recorded sites will be affected to varying degrees by the proposed works. Three of these – terrace sites O04/1092, O04/1093, and pit/terrace site O04/1097 – will have very minor effects as a new access way is constructed from Church Road to the Peterson farmhouse that will pass through or near to these sites. This access way has been designed to minimise the effects on these sites, which is limited to the modification of 1-2 terraces per site as the access way passes over the main ridge to the north of the farmhouse.

Pit/terrace site O04/1091 will be significantly impacted and will require partial excavation prior to spillway earthworks commencing in the immediate area. Due to the river alignment, there is no alternative route around the end of the spur this site is located on it will need to archaeologically investigated in advance of earthworks.

Agricultural site O04/1094 will be effected by spillway development but has limited archaeological potential due to long term modification.

Riverside pa site O04/1102 will have minimal effects, limited to the construction of a stopbank on a narrow river terrace between the pa and the river. There is some potential for archaeological discovery within the CMS area and given the limited accuracy of the CMS map, this area should be carefully monitored.

The CMS site, although already included in the exiting authority (2020-388), shall be included in the new authority application to account for the wider extent of the site and properties affected,

The general program of works will require that initial earthworks (topsoil stripping) for the spillway cuts and the spoil dumping areas will be monitored by an archaeologist working under authority from HNZPT, with appointed kaitiaki undertaking cultural monitoring as per agreement with NRC.

7.0 Conclusion and Recommendations

In 2019 Geometria Ltd. were commissioned by Joseph Camuso from Northland Regional Council to undertake an archaeological assessment of the proposed Awanui Flood Scheme Project. The site works extend from south of Kaiataia township to north of Awanui and SH10. Following this assessment, an authority was sought and granted by HNZPT to enable work to commence on three sites during the first stage of works for the project.

It was recommended that NRC undertake further survey to investigate unrecorded sites identified during the assessment and permit further planning and consultation to be undertaken before applying for a second authority to cover the remainder of the works programme. Subsequently, sixteen new sites were recorded during the survey programme, with six of these to be impacted during the project earthworks. This addendum to the original report discusses these sites, their significance, the potential impacts of the proposed works on these sites and required archaeological mitigation, and should be read in conjunction with the initial report.

The following recommendations are made to the client with respect to the proposed development as detailed in this assessment:

- An application is to be made to Heritage New Zealand Pouhere Taonga under section 44(a) of the NZHPTA to cover the rest of the Awanui Flood Scheme Project. This is a legal requirement. The legal description of all properties that may be affected by the project shall be included in this application.
- 2. NRC, or their appointed representative, should continue engagement with Te Rawara, Ngati Kahuu and NgaiTakoto as part of their consultation towards a HNZ authority application and be provided with this addendum to facilitate this.
- 3. An updated archaeological management plan will be required to guide the archaeological mitigation process for the Awanui Flood Scheme Project for the 2020 season onwards. This is not required prior to the issuing of an authority but must be submitted and signed off by HNZPT prior to the commencement of works. This plan will detail the mitigation for the affected sites and protocols for addressing unrecorded sites.