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**TAMAKI PATH PROJECT,  
AUCKLAND:**

**ARCHAEOLOGICAL SURVEY AND  
ASSESSMENT**

*Prepared for*

***Morphum Environmental Ltd & GHD***

*by*

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*July 2017*

# TAMAKI PATH PROJECT, AUCKLAND: ARCHAEOLOGICAL SURVEY AND ASSESSMENT

## *Introduction*

This archaeological survey and report was carried out at the request of Morphem Environmental Ltd on behalf of GHD in order to determine whether archaeological sites will be affected by the proposed Tamaki Estuary Pathway Project. The project is to construct a pathway from the Omaru Creek to the north to Pamure Wharf to the south (Figure 1). The 3.9km cycle way largely follows the alignment of the existing Pamure Wharf to Omaru Creek path ways (via Mt Wellington War Memorial Reserve, Dunkirk Reserve, Riverside Reserve & Point England Reserve).

<b>Reserve</b>	<b>Hectares</b>	<b>Legal Description</b>
Wai-o-Taiki	6.2603 hectares	Lt 248 DP41242, Lt 253 DP41423 & Lt 296 DP43191
Pt England	45.7741 hectares	Lt 1 DP44920 & Lt 16 DP99635
Riverside	3.212 hectares	Pt Lt 935 DP39859 & Pt Allot 38 District Tamaki
Dunkirk	2.8328 hectares	Lt 528 DP38230
Mt Wellington	12.7221 hectares	Lt 285 DP39428 & Lt 529 DP38231

**Table 1: Legal descriptions and hectares of the effected Reserves (Auckland Council GIS).**

For ease of discussion and understanding the project will be discussed as two sections:  
North – Omaru Creek to Point England Rd.

South – Point England Rd to Kings Rd.

Iwi consultation is being carried out separate to this report.

## **Statutory Requirements**

The statutory requirements relating to the archaeological and other heritage values of the harvest area are outlined below.

Two major Acts govern the management of heritage sites in NZ:

- The Resource Management Act 1991 (RMA)
- The Heritage NZ Pouhere Taonga Act 2014 (HNZPTA)

Under the RMA archaeological and other historic heritage sites are resources that should be sustainably managed by “avoiding, remedying or mitigating any adverse effects of activities on the environment” (Section 5 (2) (c)).

Under Section 6 of the RMA 1991 it is recognised as a matter of national importance that “all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance: (e) relationship of Maori and their culture and traditions with their ancestral lands, water, wahi tapu and other taonga [and] (f) the protection of historic heritage from inappropriate subdivision, use and development”.

The RMA defines historic heritage as “those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities: (i) archaeological; (ii) architectural; (iii) cultural; (iv) historic; (v) scientific; (vi) technological” (RMA Section S2).

Historic heritage includes: (i) historic sites, structures, places and areas; (ii) archaeological sites; (iii) sites of significance to Maori, including wahi tapu; (iv) surroundings associated with the natural and physical resources”.

The archaeological remains within the study area constitute historic heritage as defined under the RMA, and their protection should be recognised and provided for when managing the proposed harvest project.

In addition to the requirements of the RMA (1991), the Heritage NZ Pouhere Taonga Act 2014 (HNZPTA) protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority to modify an archaeological site has been issued by the Heritage NZ Pouhere Taonga (HNZPT).

An archaeological site, as defined by the HNZPTA (2014) is, a place associated with pre-1900 human activity, where there may be evidence relating to the history of New Zealand. A place associated with post-1900 human activity may be declared by gazettal as an archaeological site under the Act. Archaeological sites may not be destroyed damaged or modified except pursuant to an authority granted under the HNZPTA (2014).

Authorities to modify archaeological sites can be applied for under a general authority, in respect to a particular site or sites, or for all sites that may be present within a specific

area. Applications made under a general authority may require approval by the Maori Heritage Council of the HNZPT. The tangata whenua should be consulted regarding applications to modify or destroy archaeological sites which have Maori cultural associations.

Note that 20 or 40 working days should be allowed for the processing of authorities, which include a statutory stand down period of 15 working days before an authority may be exercised.

All archaeological remains and historic places within the project area are protected under the provisions of the HNZPTA and may not be damaged, modified or destroyed without an Authority from HNZPT.

There are no registered wahi tapu within the project area.

Implementation of the RMA in relation to the property is undertaken by:

### **Auckland Unitary Plan Operative in Part (AUP)**

Provisions within the AUP split heritage into: Historic heritage that includes buildings and structures; archaeological sites; historic areas; and a limited number of landscapes, features, parks and gardens. Sites and places of significant value to Mana Whenua (SPS MW) have a separate schedule and provisions that have significant overlaps with archaeology.

There are two high level aims for managing historic heritage in the AUP; a) the identification and protection of significant historic heritage places, b) appropriate ongoing use and management of historic heritage places.

The AUP encourages a 'precautionary approach' to take account of unscheduled, unrecorded or undiscovered historic heritage through the use of accidental discovery protocols. Developments that do not comply with such protocols triggers a discretionary activity and require a resource consent.

Other Legislation:

- Coroners Act 2006, requires that “a person who finds a body in NZ must report that finding to a member of the police as soon as practicable”.

- Burial and Cremation Act 1964, controls the burial, cremation, and exhumation of bodies as well as the management of burial grounds and cemeteries. Conditions of the Act make it an offence to “remove any body or the remains of any body buried in a cemetery, Maori burial ground or other burial ground or place of burial without license under the hand of the Minister [Health]”.
- The Protected Objects Act 1975 is administered by the Ministry for Culture and Heritage and regulates:
  1. Export of protected NZ objects
  2. Illegal export and import of protected NZ and Foreign objects
  3. Sale, trade and ownership of taonga tuturu.

Any taonga tuturu (Maori artefacts) discovered must be notified to the Ministry which will determine their custody in consultation with tangata whenua. The Act also covers goods or samples associated with burials.

## *Summary*

It is proposed to construct a 3m wide pathway with two bridge crossings in order to ensure public access and safety. Pinch points will be reduced to 2.5m (e.g. in areas of coastal erosion or tree constraints). All ground disturbance associated with the construction through public reserves to be confined within a construction footprint the will vary along the length of the path, but will be minimised to the extent required to construct a level foot path. Plans indicate that this construction foot print will generally be an average of 5m wide. The Omaru Creek bridge construction will require an 8m wide foot print.

The pathway is essentially aligned along existing walkways and open reserves which are a combination of grass, concrete, gravel and board walks with bridges crossing creeks.

A search of the NZ Archaeological Association’s database (ArchSite) identified 15 previously recorded archaeological sites on or in the general vicinity of the project alignment. The sites are predominantly shell midden (shell midden - deposits of refuse, predominantly shell, generated by food processing and consumption) with two settlement complexes and terraces also identified. No previously unrecorded

archaeological sites or features were identified during the current inspection. However, archaeological features additional to those originally attributed to some sites were identified while, conversely, it was not possible to re-locate a small number of sites. The latter may be attributed to recent erosion and landscape modification post the sites originally recording.

All identified archaeological sites are located on or in the vicinity of the northern section. It appears much of the southern section has been significantly modified with coastal reclamations, retaining walls and re-contouring for sports and recreational fields.

As a result of the current research and field inspection, it is apparent features of archaeological sites R11/1850, R11/1878 and R11/2750 will be impacted by the current proposals. However, due to the nature of ground disturbance it appears that only R11/1878 will be more than partially modified. In addition, it should be noted that R11/1850 appears to have been destroyed by erosion.

An additional five sites, R11/1847, R11/1848, R11/1849, R11/1851 and R11/3063, although not directly impacted, are in the vicinity of the proposed works. Also, the potential remains that ground disturbance associated with the project may encounter undetected subsurface archaeological features.

Based on the results of this assessment it is recommended that a General Authority is sought and obtained from NZHPT under conditions contained within the HNZPT Act (2014) prior to the commencement of work.

## *Constraints and Limitations*

This report is based on a search of the NZAA's digital database (ArchSite) and a visible site inspection with limited subsurface testing. At the time of inspection, the surface visibility varied from good to poor.

It should be noted that the field inspection was limited to a visible examination with, as stipulated within the AUP, sub-surface testing limited to probing.

Archaeological survey and mitigation deals solely with the scientific identification and recovery of the physical evidence of past human habitation. Archaeological methods

cannot necessarily identify the spiritual or cultural values associated with that occupation; this can only be undertaken by the effected tangata whenua.



Figure 1: Overall concept plan (Resillo July 2016).

## *Methodology*

Morphum Environmental Ltd and GHD provided relevant background information including concept maps and plans. The NZ Archaeological Associations Online Digital Site Record File (ArchSite) was searched for archaeological sites recorded on or in the vicinity of the project. A visual inspection was carried out of the proposed alignments. Soil profiles were examined for evidence of earlier modification such as modified soils, storage pits or the presence of shell midden and hangi. It should be recognised that archaeological survey techniques cannot provide evidence for the absence of subsurface archaeological features or deposits.

## *Results*

### **Cultural Setting**

An assessment of the cultural significance can only competently be made by the effected tangata whenua. Since archaeological survey cannot necessarily detect sites

of traditional significance to Maori, or wahi tapu, the effected tangata whenua should be consulted regarding the possible existence of such sites. It should be noted that an assessment of cultural significance might not necessarily correspond with an assessment of archaeological significance.

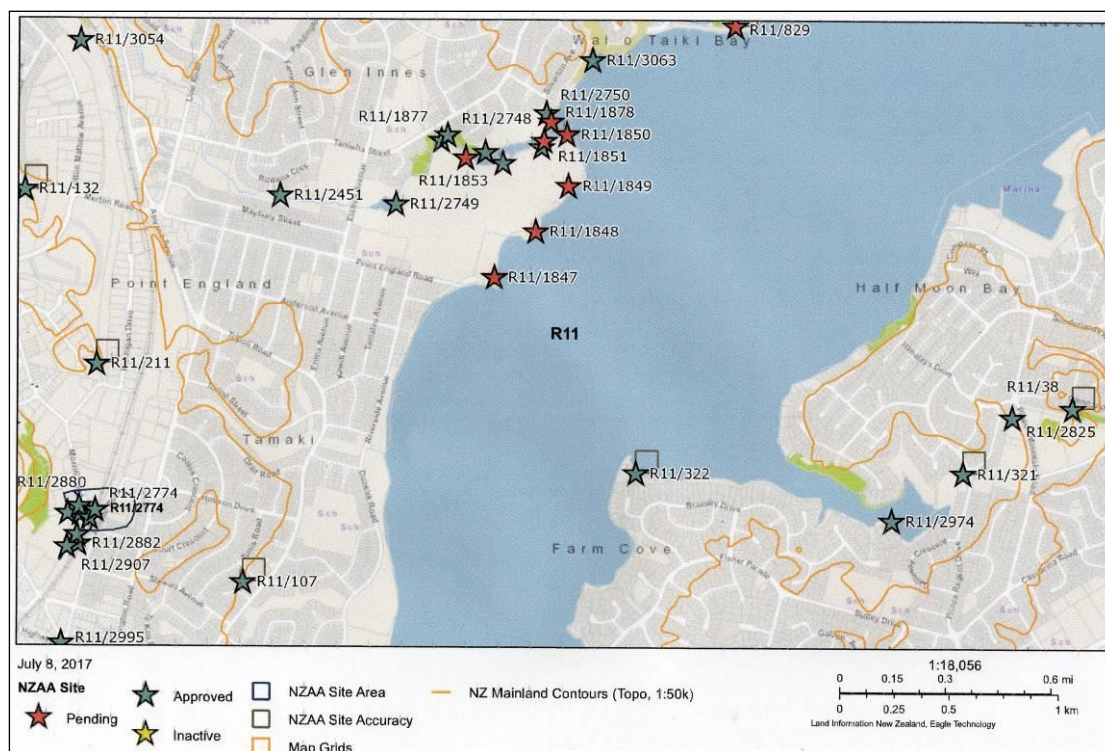
## **Physical Setting**

The soils through which the cycle way travels are derived from three basic formations:

- Wai-O-Taiki, Riverside and Mt Wellington Reserves derive from the South Auckland Volcanic Field a subgroup of the Kerikeri Volcanic Group made up of volcanic ash and lapilli eroding out of the Maungarei (Mt Wellington) and/or Pamure Basin tuff ring (Edbrooke 2001:40-41).
- Coastal Pt England Reserve soils consist of sedimentary East Coast Bays Formation soils a subgroup of the Warkworth Subgroup comprised predominantly of mud and sandstones (Edbrooke 2001:25).
- The majority of Pt England Reserve consists of soils derived from non-marine sediments of the Puketoka Formation which are widespread around the Waitemata Harbour and are comprised of pumiceous sands and silts (Edbrooke 2001:47).

The projects topography is comprised largely of coastal flats terminating in coastal cliffs with areas of reclamation within Mt Wellington Reserve. Post 1900 modifications consist of contouring for sports fields, establishment of public facilities such as toilets, changing room, club rooms and formed walkways. The latter also includes bridges, edge boards and surfacing. Past use of the land includes pastoral farming and market gardening whose affects are difficult to assess but evidence of which is evident from fencing, drainage and stands of mature macrocarpa.

Today maintained grass predominates while the main natural landscape feature, the Omaru Stream, although fringed by weed species maintains its original course draining to the Tamaki River and forming a natural boundary between Pt England Reserve to the south and Wai-O-Taiki Reserve to the north.



**Figure 2: Spatial distribution of recorded archaeological sites (ArchSite July 2017).**

## Previous Archaeological Research

Background research identified 15 previously recorded archaeological site on or in the vicinity of the proposed cycle way (Figure 2 & Table 1). The majority of the sites were recorded in 1996 by Russell Foster during an archaeological assessment of Auckland City Council’s proposed walkway through Wai-O-Taiki and Pt England Reserves.

No previously unrecorded sites were identified during the current inspection. However, features associated with site R11/1878 additional to those originally identified were recorded during the current inspection. While the majority of the identified archaeology will not be affected by current proposal, sites R11/1850 (if any intact features exist), R11/1851, R11/1878 and R11/2750 will be affected while four further sites (R11/1847-1849 and R11/3063) are in the vicinity of works. It should be noted that it is not possible to give an absolute assurance that ground disturbance associated with the project will not encounter undetected subsurface archaeological features.

Identified archaeological types include shell midden, occupation terraces and open settlements associated with pre-European Maori occupation of the Tamaki Estuary.

Site No.	Site Type	NZTM Co-ordinates	Location
R11/1120	Shell midden	E1767165/N5917040*	South bank Omaru Creek
R11/1847	Shell midden	E1766925/N5916410*	Point at end of Pt England Rd
R11/1848	Shell midden	E1767070/N5916620*	Ist point north of Pt England
R11/1849	Shell midden	E1767260/N5916840*	Coast between Pt England & Omaru Creek
R11/1850	Shell midden	E1767250/N5917080*	South headland of Omaru Creek @ cliff base
R11/1851	Shell midden	E1767170/N5917025*	Sth bank of Omaru Creek 1m asl
R11/1852	Shell midden/settlement	E1766960/N5916945*	Headland on sth bank of Omaru Creek
R11/1853	Shell midden	E1766790/N5916970*	Sth bank Omaru Creek
R11/1877	Shell midden	E1766685/N5917050*	Nth side Omaru Creek by footpath
R11/1878	Terrace/midden/settlement	E1767180/N5917080*	Headland nth side Omaru Creek
R11/1879	Shell midden	E1766880/N5916995*	Nth side Omaru Cr behind 18 Kestral Pl
R11/2748	Shell midden	E1766710/N5917060*	Nth side Omaru Cr adjacent to footpath
R11/2749	Shell midden	E1766465/N5916755*	East shore of wetland up Omaru Creek
R11/2750	Shell midden	E1767160/N5917175*	On path south of Omaru Creek
R11/3063	Midden & terrace	E1767370/N5917420*	Wai-o-Taiki Res path cutting

**Table 1: Archaeological sites identified on or in the vicinity of the Tamaki Path project.**

## Field inspection

Don Prince carried out an archaeological field inspection of the project route on June 23 and July 30, 2016.

It is currently proposed to stage the consents for the path with the consent for the south section first. This to be followed by an application for the north section which has more complex design, construction and consenting requirements.

### *North Section*

#### Section A Wai-O-Taiki Reserve

One archaeological site is located within this section – R11/3063 (Figure 3 and Table 1). The site consists of shell midden and terracing but will not be affected.

It is currently proposed to place this section on hold (July 2017).



**Figure 3: Aerial of northern section showing approximate location of recorded archaeology (Auckland Council).**

*Section B Wai-o-Taiki Reserve to Point England Reserve*

This section runs from to the north of Omaru Creek through Pt England Reserve to Pt England Rd (Figure 1). The route essentially follows the existing formed walkway that follows the coastline from Omaru Creek with a new bridge crossing proposed for the creek (Figure 4). The current proposal includes constructing a 3m (2.5m in pinch points) shell path and new bridge crossing of Omaru Creek.

Background research identified seven previously recorded archaeological sites within the section (Figure 3 and Table 1). The sites contain shell midden while one is described as a settlement site with midden and terraces recorded.

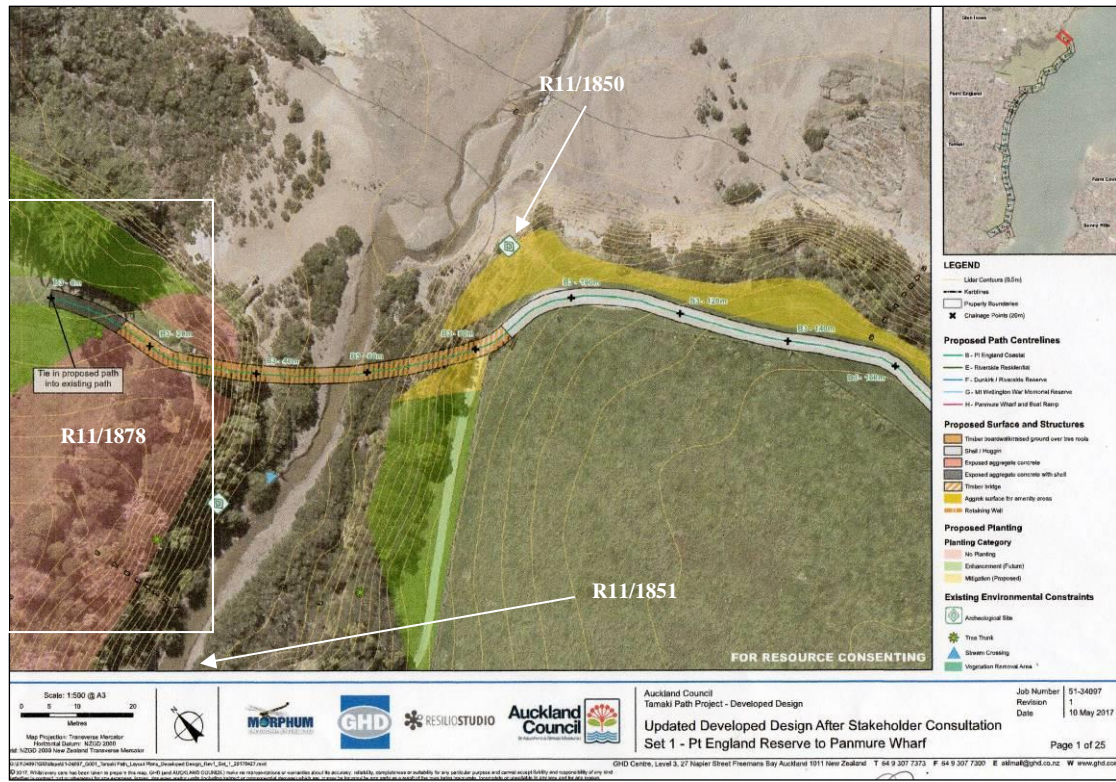


Figure 4: Omaru Creek crossing design proposal (GHD May 2017).

### R11/1847 Shell midden

When recorded in 1996 by Foster this site was described as midden eroding from the edge of the foreshore escarpment while the surrounding landscape had been landscaped and post WWII the area was a market garden and unlikely that any associated archaeology would survived (Foster 1996 SRF R11/1847). During the current inspection, it was not possible to locate the eroding midden although minor surface scatters of shell could be seen on the small headland.

It appears highly unlikely that ground disturbance associated with the project will encounter intact archaeology.



Figure 5: Walkway route and location of archaeological site R11/1847 (GHD May 2017).

Site	Value	Assessment
Pits	Condition	Poor appears to be totally eroded.
	Rarity/uniqueness	Number of similar sites in area many with intact remains.
	Contextual value	Site has contextual value as a component of pre-1900 Maori occupation
	Information potential	Very limited potential for archaeological investigation and analysis and to be avoided.
	Amenity value	Little amenity value
	Cultural association	Pre-1900 Maori

Table 2: R11/1847 value assessment.

### R11/1848 Shell midden

Foster described this site in 1996 as “very sparse scatter of shell midden eroding from coastal cliff [and] a thin scatter is also present on top of the headland” (Foster 1996 SRF R11/1848). Foster also noted, as with R11/1847, the area was market garden post WWII and that anecdotal evidence suggested the areas middens related to the gardens.

Among tree roots at the edge of the coastal cliffs (Figure 6) can be seen minor scatters of shell but it was not possible to identify any intact midden or related features.

The project route is located c.20m inland and poses no threat to the sites integrity.

Site	Value	Assessment
Pits	Condition	Poor condition, largely modified by erosion, market gardening and landscaping.
	Rarity/uniqueness	Number of similar sites in area, many in better state.
	Contextual value	Site has contextual value as a component of pre-1900 Maori occupation
	Information potential	Limited potential for archaeological investigation and analysis to recover information but avoided.
	Amenity value	Little amenity value
	Cultural association	Pre-1900 Maori

**Table 3: R11/1848 value assessment.**



**Figure 6: Walkway route and location and approximate extent of archaeological site R11/1848 (GHD May 2017).**

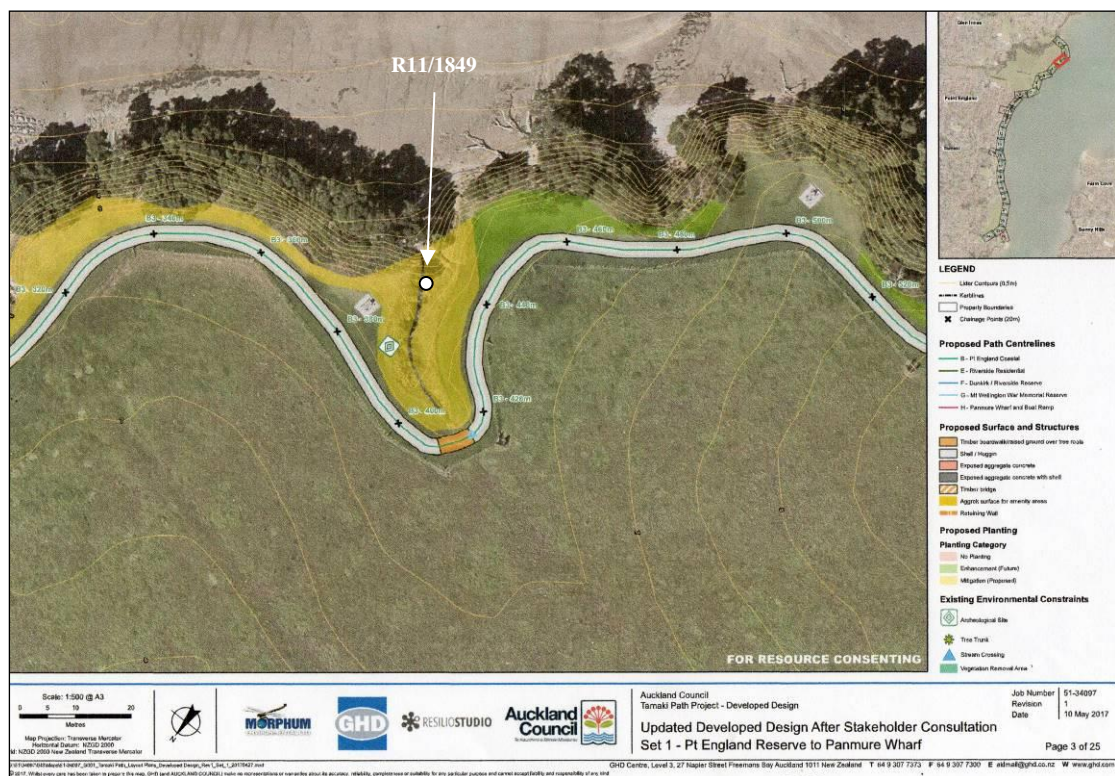
### R11/1849 Shell midden

Currently this site consists as the remnant of a shell midden eroding out of coastal edge of a small drainage gully (Figure 7) as recorded by Foster in 1996. Limited subsurface testing failed to detect any related archaeological features and as noted by Foster, the surrounding landscape has been significantly modified by market gardening and landscaping. The site is c.20m from the proposed path and not affected.

Coastal riparian planting is proposed for the ephemeral watercourse adjacent to Pt England Reserve that includes the location of R11/1849. Although little of the midden remains there is a possibility that planting and tree roots will impact on the site. Therefore, in mitigation it is proposed to investigate the site through archaeological investigation under conditions contained in a General Authority to be sought and obtained from HNZPT prior to the commencement of works.

Site	Value	Assessment
Shell midden	Condition	Poor, largely eroded.
	Rarity/uniqueness	A number of similar sites in area most in similar state some better.
	Contextual value	Site has contextual value as a component of pre-1900 Maori occupation
	Information potential	Limited potential for archaeological investigation and analysis to recover information but to be avoided.
	Amenity value	Little amenity value
	Cultural association	Pre-1900 Maori

**Table 4: R11/1849 value assessment.**



**Figure 7: Walkway route and location of archaeological site R11/1849 (GHD May 2017).**

### **R11/1850 Shell midden**

In 1996 Foster recorded a small patch of midden at the base of the cliff on the southern entrance to the Omaru Creek (Figure 3). Contained in slumped topsoil the site should be considered a secondary deposition and as it was not relocated during the current inspection it appears to have been washed away.

The area where Foster recorded the site is well removed from the proposed works and therefore not affected.

<b>Site</b>	<b>Value</b>	<b>Assessment</b>
Pits	Condition	Not relocated, considered destroyed.
	Rarity/uniqueness	One of a number recorded in area.
	Contextual value	Site has contextual value as a component of pre-1900 Maori occupation
	Information potential	No potential archaeological investigation and analysis to recover information.
	Amenity value	No amenity value
	Cultural association	Pre-1900 Maori

**Table 5: R11/1850 value assessment.**

### **R11/1851 Shell midden**

Remains of this site (a thin lens of shell) can be seen eroding out for 1m of the south bank of Omaru Creek on the inland side of existing bridge (Figure 3).

The current proposal is to divert the path east (Figure 3) thus avoiding the site and the future of the existing path and bridge is unknown. If its decommissioning requires ground disturbance a process of mitigation should be in place prior to their commencement.

<b>Site</b>	<b>Value</b>	<b>Assessment</b>
Pits	Condition	Poor, small remnant of midden remains with continuing erosion.
	Rarity/uniqueness	Number of similar sites in area.
	Contextual value	Site has contextual value as a component of pre-1900 Maori occupation
	Information potential	Limited potential for archaeological investigation and analysis to recover information.
	Amenity value	Little amenity value
	Cultural association	Pre-1900 Maori

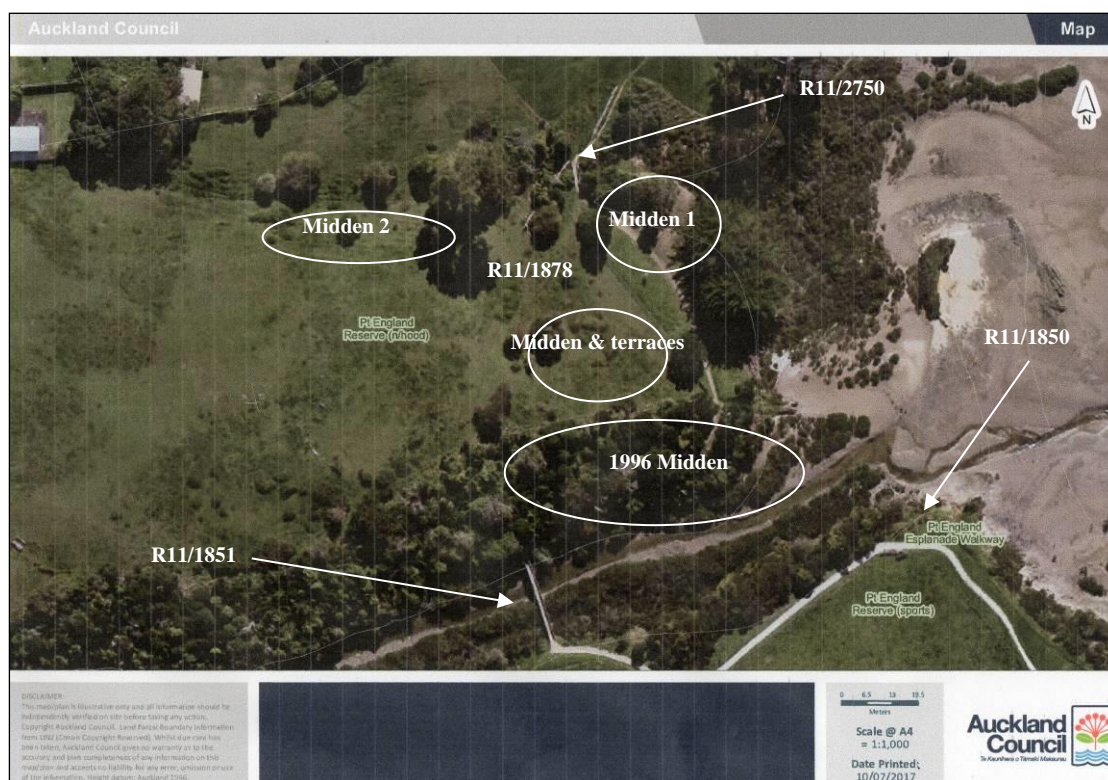
**Table 6: R11/1851 value assessment.**

### **R11/1878 Settlement – shell midden and terracing**

When originally recorded in 1996 by Foster the site was described as “a number of exposures of midden over headland and around cliff edges...[with] a terrace present on the northern side of the site, 16m x 4m... location of midden exposures suggests this whole headland is a settlement site” (Foster 1996 SRF R11/1878).

During the current inspection, a number of archaeological features additional to those noted by Foster were identified. These included two large shell midden and terracing. On the north side of the headland probing detected an extensive intact midden (Midden 1 Figure 8) spreading inland for 20m across the existing path and for 15m around the headland with some disturbance by earthworks associated with the path. A second large midden (Midden 2 Figure 8) was detected by probe on the north falling slope above the small watercourse a short distance inland. Indistinct terracing with midden (Midden & terraces Figure 8) were also noted on the east slope inland and above the existing path. These features, combined with those identified by Foster in 1996, indicate the northern Omaru Creek headland was extensively utilised by Maori.

It is also evident that ground disturbance associated with the current proposal (including bridge and path construction, machinery movements and storage areas) will impact on some features. The development of the design for the Omaru Creek bridge for the Tamaki Path has considered the presence of these features and targeted avoidance. Therefore, the original proposal to widen the existing alignment traversing up the southern extent of the site were abandoned in favour of a bridge and path alignment that minimises the foot print of disturbance through this area in order to reduce the likelihood of impacts. It is still evident that the ground disturbance associated with the current proposals (including machinery movements, bridge and path construction and storage areas) will impact on some features. In addition, the potential remains that undetected subsurface features will be encountered. Therefore, it is recommended that an authority to modify archaeological features is sought and obtained from HNZPT prior to the commencement of works.



**Figure 8: Archaeological features Omaru Creek mouth (GHD May 2017).**

Site	Value	Assessment
Midden & terraces	Condition	Although modified by path construction and stock trampling a number of intact features are present and despite surface damage in good condition
	Rarity/uniqueness	Similar features identified in the area but the extent, location and variety of features are rare.
	Contextual value	Site has significant contextual value as a component of pre-1900 Maori occupation
	Information potential	Significant potential for archaeological investigation and analysis to recover information.
	Amenity value	Within recreational reserve but nature of features suggest amenity value is moderate
	Cultural association	Pre-1900 Maori

**Table 7: R11/1878 value assessment.**

### **R11/2750 Shell midden**

Recorded by Foster in 2012 this site consists of surface scatters of shell either side of boxed steps leading down slope to a small inlet on the north bank at the Omaru Creek mouth. It appears that a midden was disturbed during the box steps construction however, minor subsurface testing found small remnants of the site exist either side of

the steps. Therefore, prior to the commencement of works an authority should be sought and obtained from HNZPT in order to put in place a process of mitigation in the event the site cannot be avoided.

Site	Value	Assessment
Shell midden	Condition	Largely destroyed
	Rarity/uniqueness	Shell midden are common around the Tamaki Estuary
	Contextual value	Site has contextual value as a component of pre-1900 Maori occupation
	Information potential	Limited potential for archaeological investigation and analysis to recover information
	Amenity value	No amenity value
	Cultural association	Pre-1900 Maori

**Table 8: R11/2750 value assessment.**

### ***South Section***

#### *Section E: Point England Reserve (Riki Rd) to Riverside Avenue*

The predominant portion of this section is to be routed along the narrow grass reserve bounded by residential properties to the west and coastal escarpment to the east (Figure 1). The current proposal is to construct a 3m wide concrete path along this section.

Background research failed to identify any previously recorded archaeological sites within the section and no archaeological surface features or evidence that subsurface features exist were detected during the current inspection.

#### *Section F: Riverside and Dunkirk Reserves*

It is proposed to construct a 3m wide concrete pathway through Riverside and Dunkirk Reserves with a bridge crossing the small watercourse within Dunkirk Reserve and a culverted boardwalk between the coastal cliffs and sports complex at the north end of Mt Wellington Reserve (Figure 1).

Research failed to identify any previously recorded sites within or in the vicinity of the routes and the current inspection failed to detect any archaeological features or evidence that subsurface archaeological features exist.

No previously recorded archaeological sites have been identified within the section and the current inspection failed to detect any archaeological features or evidence that subsurface features exist.

### Section G: Mt Wellington War Memorial Reserve to Dunkirk Rd

Confined to Mt Wellington War Memorial Reserve it is proposed to construct a 3m wide concrete pathway south along the foreshore from the sports complex to the Reserve's south end where it will cross west to Dunkirk Rd (Figure 1). The majority of the route is within a landscape significantly modified as sports fields with some reclamation.

Background research failed to identify any previously recorded sites on or in the vicinity of the routes and the current inspection did not identify any archaeological features or evidence that undetected subsurface features exist.

### Section H Pamure Wharf Reserve to Kings Rd

This section comprises a short 3m wide concrete path from the south end of Mt Wellington Memorial Reserve through Pamure Wharf Reserve to Kings Rd (Figure 1). It appears to be largely confined to foreshore reclamation and a landscape modified as recreational reserve.

Research failed to identify any previously recorded archaeological sites on or in the vicinity of the routes. Likewise, the current inspection failed to identify any surface features or evidence that undetected subsurface features exist.

## **Archaeological Significance**

A number of criteria have been identified for evaluating the significance of heritage sites. These criteria are provided in the Auckland Councils Unitary Plan and HNZPT guidelines specific to archaeological sites. The combined criteria of the HNZPT and AUP have been used to evaluate the value and significance of the archaeological sites on or in the immediate vicinity of the proposed Tamaki Path Project (Table 9).

The visible archaeological features identified form part of a wider cultural/archaeological landscape that extends around the Tamaki Estuary. Those archaeological features including pa, occupation terraces, crop storage pits and shell midden are evidence of human occupation. This occupation predominantly comprised of undefended living with storage complexes and associated cultivations on and in the immediate vicinity of the visible archaeological features.

Archaeology identified within the paths proximity is typical of short-term occupation exploiting the abundant and easily accessible local marine resources that characterises

pre-European Maori activity of the area. The archaeological resources within the proximity have, due to their general poor state and condition, limited potential through archaeological investigation techniques to provide information regarding the antiquity and occupation cycles of the area. However, R11/1878 comprised of terraces and shell midden appears largely intact and its extent and strategic location elevate its potential to extend our understanding of pre-1900 Maori settlement of the Tamaki Estuary foreshore.

Sites may have other values such as landscape, setting, amenity and educational. It should be noted that as an assessment of cultural values can only be competently be made by the effected tangata whenua, this report does not address cultural values.

Criteria	Comment	Significance
Historical: the place reflects important or representative aspects of national, regional or local history, or is associated with an important event, person, group or idea or early period of settlement within NZ, the region or locality	The sites form part of a wider cultural/archaeological landscape but have no known associations to historical events or persons	Moderate
Social: the place has a strong or special association with or is held in high esteem by a particular community or cultural group for its symbolic, spiritual, commemorative, traditional or other cultural value	The sites have association to previous Maori occupation – this to be determined by the effected tangata whenua	
Mana whenua: the place has a strong or special association with or is held in high esteem by mana whenua for its symbolic, spiritual, commemorative, traditional or other cultural value	This to be determined by the effected tangata whenua	
Knowledge: the place has potential to provide knowledge through scientific or scholarly study or to contribute to an understanding of the cultural or national history of NZ, the region or locality	Site R11/1878 has potential to provide knowledge through excavation, analysis and RC dating of intact features. The remaining sites have limited potential.	High
Technology: the place demonstrates technical accomplishment, innovation or achievement in its structure, construction, components or use of materials	Although R11/1878 has suffered some surface damage it does show in its structure and construction technical accomplishment.	Moderate
Physical attributes: the place is notable or representative example of its type, design or style, method of construction, craftsmanship or use of materials or the work of a notable architect, designer, engineer or builder	The range and condition of the surface features of R11/1878 are a representative example of its type.	Moderate
Aesthetic: the place is notable or distinctive for its aesthetic, visual or landmark qualities	Features of R11/1878 has limited visible qualities.	Moderate
Context: the place contributes to or is associated with a wider historic or cultural context, streetscape, townscape, landscape or setting	The site contributes to a wider pre-1900 settlement landscape comprised predominantly of midden.	Moderate

**Table 9: Assessment of historic heritage significance and/or value of the recorded archaeological sites with emphasis on R11/1878 as per the Auckland Council criteria.**

## **Accidental Discovery of New Archaeological or Cultural Heritage Sites**

If any new archaeological or cultural heritage sites are exposed during works then the following procedures should apply:

1. Immediately it becomes apparent that an archaeological or traditional site has been exposed all works in the vicinity should cease.
2. The contractor must shut down all machinery, secure the area and advise the site manager.
3. If the site is of Maori origin the site manager must notify the appropriate iwi groups to determine what further actions are appropriate that ensure that any artefacts or remains are untouched and the owner must immediately arrange a site inspection by Mana Whenua and their advisors and HNZPT.
4. The project supervisor shall notify Heritage NZ Pouhere Taonga, Auckland Council heritage manager and project archaeologist that an archaeological site or traditional site has been exposed and so that appropriate action can be taken.
5. If the remains include human remains the NZ Police should be contacted immediately.
6. Further work at the site must be suspended, should Mana Whenua wish to carry out their procedures and tikanga for the site and the nature of the discovery.
7. Site inspection will determine whether the discovery is likely to be extensive and whether a thorough site investigation is required.
8. Mana Whenua will determine the tikanga for appropriate preservation, management and handling of the koiwi, archaeology or artefacts of Maori origin from the site by Mana Whenua or preservation within the site.
9. Preservation of the koiwi, archaeology or artefacts of Maori origin that are uncovered may require amendments to the sites works to avoid adverse effects on sites of significance to Mana Whenua and Maori values.
10. Work affecting the archaeological site must not recommence on the site until HNZPT gives approval.

## *Identification and Assessment of Effects*

This archaeological inspection involved a visual assessment of the Tamaki Estuary Pathway. The examination identified that the current proposals will partially modify archaeological sites R11/1850, R11/1878 and R11/2750. The sites all have shell midden as a component with R11/1878 consisting of a complex of midden and terracing spread over the northern headland at the entrance to Omaru Creek.

The preservation and protection of archaeological sites should be primary in any proposals related to the pathway development. The selection of alignment options has included a constraints and opportunities assessment process that considered archaeological sites and has avoided impacts by minimizing disturbance of known sites where possible. However, it appears that it is not possible to avoid partial impact of R11/1878 and R11/2750 and, if there are any undetected intact remains, also R11/1850.

Any ground disturbance within or in the vicinity of Omaru Creek has the potential to encounter/damage archaeological features. Therefore, earthworks in the vicinity requires a programme of mitigation to be established prior to the commencement of earthworks. This includes the seeking and obtaining of a General Authority from Heritage NZ Pouhere Taonga under conditions contained within the Heritage NZ Pouhere Taonga Act (2014).

Archaeological survey and mitigation deals solely with the identification and recovery of the physical evidence of past human habitation. Archaeological methods cannot necessarily identify the spiritual or cultural values associated with that occupation.

It should be noted that the Heritage NZ Pouhere Taonga Act (2014) provides initial protection for all archaeological sites, as defined by the Act, whether recorded or not, and they cannot be damaged, modified or destroyed unless an Authority has been issued by Heritage New Zealand.

## *Recommendations*

The following recommendations for avoidance or mitigation are provided as points of discussion between the applicant, statutory agencies and tangata whenua.

- That protection and preservation of archaeological evidence within the proximity of the proposed Tamaki Path should be paramount in the planning.
- That the current proposal should be accepted.
- That prior to any ground disturbance a General Authority should be sought and obtained from the HNZ under conditions contained in the HNZ Act (2014).
- That a condition of the authority should be that all ground disturbance within the vicinity of Omaru Creek and Pt England Reserves should be monitored by a suitably qualified archaeologist in order to determine whether undetected subsurface features exist.
- That prior to the commencement of work R11/1878 should be mapped to scale and areas of the site and landscape in its vicinity affected by earthworks associated with the project clearly identified and, if it is unable to avoid, investigated as per current archaeological practice.
- That prior to the commencement of coastal riparian planting R11/1849 should be investigated as per current archaeological practice.
- That prior to the final coastal riparian planting of the Omaru Creek banks a suitably qualified archaeologist is consulted in order to avoid archaeological features and the use of appropriate plant species.
- That all contractors working on the project are briefed on the possibility of encountering archaeological evidence and the contractors responsibility with regard to notification of any discovery of archaeological evidence.
- Where possible, significant archaeological material encountered should be preserved and protected in situ.

- That if unidentified archaeological sites are encountered during ground disturbance associated with the development all work should cease in the immediate vicinity and the HNZPT, project archaeologist and tangata whenua contacted.
- That if koiwi (human remains) should be exposed during development, work should cease in the immediate vicinity and the tangata whenua and HNZPT should be contacted so that appropriate arrangements can be made.
- That since archaeological survey cannot always detect wahi tapu and sites of traditional significance to Maori, the tangata whenua should be consulted regarding the Maori values of this area and the recommendations in this report.

## *References*

Edbrooke, S. W. (compiler) 2001. Geology of the Auckland Area. Institute of Geological and Nuclear Sciences Ltd, Lower Hutt.