



Figure~54.~TSF3~and~NRS~design~updates~for~local~borrow~of~materials~for~TSF~Embankment~construction

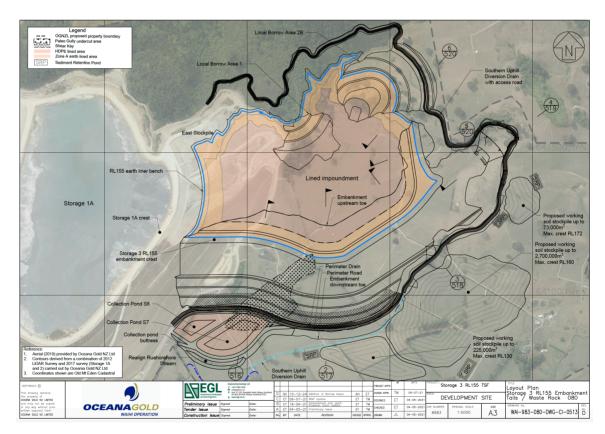


Figure 55. TSF3 topsoil stripping and stockpiling (source: Oceana Gold Mar 2020)



# **Recorded Historic Heritage**

No previously recorded archaeological or other historic heritage sites are located within the proposed footprint of TSF3. However, no previous archaeological survey had been carried out across this area.

An archaeological survey of the proposed area of TSF3 was undertaken in June 2020. The majority of the proposed footprint is currently dairy farm land located between the eastern side of the TSF1A embankment and Trig Road. The majority of this land is flat, low lying pasture, which rises in a number of small knolls and rolling hills, then steeply to a main ridgeline in the north. A series of farm races and drains cross the low flats in the south (Figure 56 – Figure 59). The northern most area of disturbance is located within the existing mapped Significant Natural Area (SNA). No archaeological or other historic heritage sites were identified during the survey.

Archaeological field survey undertaken of TSF1A, located immediately west of TSF3, by Jill Pierce in 1984 (Pierce 1984) identified a number of individual features, grouped into 11 sites. However, subsequent investigations by New Zealand Historic Places Trust (now Heritage New Zealand) in 1986 determined that the majority of these features were not archaeological in origin and were areas of natural slumping (McFadgen 1987, referenced in Barr 1997). This latter conclusion was supported by Cathryn Barr, who surveyed the southern extension part of the area in 1997 and identified no archaeological sites (Barr 1997). These findings are consistent with the topography and lack of any archaeological evidence found within TSF3 immediately adjacent.



Figure 56. Looking from TSF1A access road across the proposed footprint of TSF3 to the hills rising in the north that will form the northern (back) of the proposed tailings storage facility





Figure~57.~Looking~south~east~from~the~top~of~TSF1A~embankment~across~the~farm~flats~within~the~footprint~of~TSF3



Figure 58. Knolls and rocky ground within the footprint of TSF3





Figure 59. Looking east across the farm flats in the southern area of TSF3



# NORTH ROCK STORAGE (NRS)

# The Proposal

Figure 60 shows the location and footprint of the NRS which will be designed to store both PAF & NAF rock. Also shown are the proposed topsoil stockpiles two of which are constructed at the northern extent of the Company owned land and adjacent to Golden Valley Road. The stockpile can contain up to 100,000 cubic metres of material and is constructed to a nominal height of 10m above natural topography. The northern toe of the stockpile is defined by the current alignment of the overhead power lines.

The existing workshop structure, fuel bowser and grease storage facilities will need to be relocated approximately 160m to the south west. Any potentially hydrocarbon contaminated soils underlying and surrounding the structure may need to be removed and disposed of within the embankment constructions.

An indicative uphill clean water diversion / stream diversion and NRS collection drain are shown in Figure 60. The diversion drains include a clean water drain which reports directly to the Ohinemuri River and collects clean run-off and stream flows upstream of the NRS, and a dirty water drain which collects run-off from the NRS and reports to a collection pond. The drains are separated by a 6m wide perimeter road.



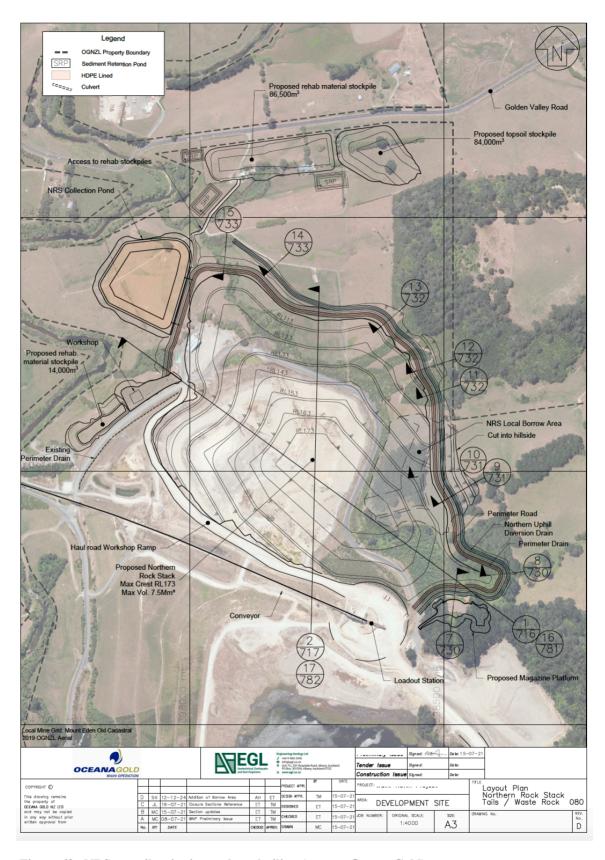


Figure 60. NRS topsoil stripping and stockpiling (source: OceanaGold)



# **Recorded Historic Heritage**

Numerous archaeological surveys have been carried out that cover the area of the proposed NRS. A field survey was undertaken of TSF1A and a wider area by Jill Pierce in 1984 (Pierce 1984), New Zealand Historic Places Trust in 1986 (McFadgen 1987, referenced in Barr 1997) and Ray Hooker in 1997 (Hooker 1997). As discussed previously for TSF3, Pierce identified a number of terraces that were recorded as archaeological, but subsequently determined as not archaeological in origin but areas of natural slumping and natural processes. No archaeological sites are recorded within the NRS project area on the NZAA site record file.

Only one historic site is recorded in the vicinity of the proposed NRS – T13/971 Queen of Waihi Shaft (see Table 5 and Figure 61).

Table 5. Archaeological and other historic heritage sites recorded within the vicinity of the proposed NRS.

NZAA Site No.	District Plan ref	HNZ List ref	Site Type	Location	NZTM Easting	NZTM Northing
T13/971			Queen of Waihi Shaft	Golden Valley Road, Ohinemuri River	1854218	5858435

### T13/971 Queen of Waihi Shaft

A map of the historical shaft locations, tramways and water races within Waihi (<a href="http://www.ohinemuri.org.nz/gis">http://www.ohinemuri.org.nz/gis</a>) shows the Queen of Waihi mining shaft located adjacent to the Ohinemuri River and the northern extent of the proposed NRS (Figure 61). Research suggests that the Queen of Waihi Shaft dates from around 1895-96 and was sunk into the rhyolite to a depth of 150 feet (50m). Waihi companies that went out of existence between 1909 and 1920 included the Queen of Waihi mining company.

Today this shaft is visible as a depression on the ground filled with soil and rubbish that was previously fenced to prevent access but this has since fallen down (Figure 62). Due to its date of construction it is considered to be an archaeological site as defined in the HNZPTA 2014 and has been recorded as T13/971. The proposed footprint of the NRS and associated infrastructure will avoid impacting on the Queen of Waihi Shaft, however, for safety reasons the shaft will need to be backfilled with rock stripped from the adjacent area and capped (see Figure 63).

The map in Figure 61 also shows the Queen Bridge located to the northwest of the NRS project area where Golden Valley Road crosses the Ohinemuri River. This structure is located to the north west of the proposed NRS project area and will not be affected.

The possibility of additional subsurface remains in relation to past mining activities cannot be ruled out and would also be destroyed by the proposal. Any impacts on pre-1900 remains would require mitigation under a under a general Archaeological Authority that could be applied for to extend over the area of the NRS as a precaution.



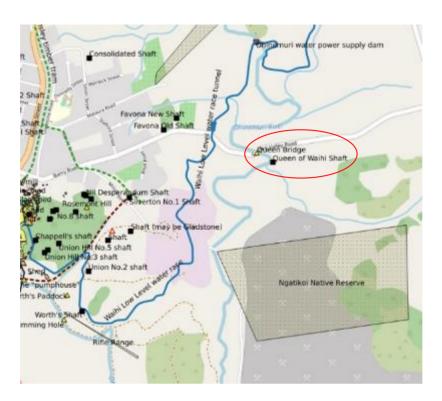


Figure 61. Map showing historical shaft locations, including the Queen of Waihi Shaft and Queen Bridge on the Ohinemuri River (circled) (source: http://www.ohinemuri.org.nz/gis)



Figure 62. The surface evidence of the Queen of Waihi Shaft with a collapsed fence surrounding it (2019)



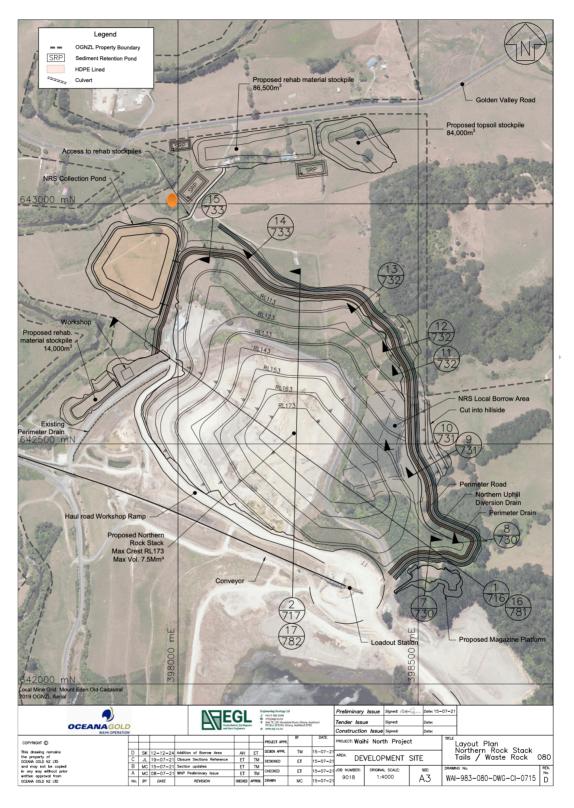


Figure 63. The location of the Queen of Waihi shaft (orange dot) located just outside the proposed construction of facilities and topsoil stockpiles in the northern extent of the NRS



### **SUMMARY OF RESULTS**

# Wharekirauponga Mining Area

Two previously recorded archaeological sites are located within the WUG Project area, which is the Royal Standard Battery and Gold Mining Area (T12/681) and the Royal Standard Gold Mining Tramway (T12/1290) located near the head of the Wharekirauponga Valley and the WUG resource. These sites cover the wider Royal Standard mining area from the 1890s, incorporating the battery and cyanide plant remains, adits and tunnels along with other gold mine workings, tramways and a water race, the site of previous mine buildings, and numerous pieces of machinery and artefacts.

The Royal Standard Battery and Gold Mining Area, Wharekirauponga is also scheduled on the Hauraki District Plan – HAU271 Category B – Heritage Area, Regional or Sub-Regional Significance.

No archaeological features of Māori origin have been identified within the WUG Project area.

A number of surface drilling rigs and a camp have previously been erected at the WUG orebody around and in close proximity to T12/681, but have been located away from known heritage features.

# Willows Farm SFA (WUG)

This assessment report identified three heritage sites within the Project's main infrastructure site (Willows Farm SFA) at the end of Willows Road - the Mataura Water Race T13/961, the Willows Timber Tramline T13/962 and the High-Level Walmsley Timber Tramway T13/963. As part of this assessment these sites were recorded in the NZAA site record file.

The remains of the Mataura Water Race alignment T13/961 were identified during the field survey running through the property and the proposed main infrastructure site near its original intake from the Mataura Stream. The race has been significantly modified, retaining literally none of its original profile, having been infilled and levelled so that it appears merely as a gently graded levelled bench running across the stream flats and cut in the slope of the hillsides. In many places it has been widened to form farm tracks and farm races, and in other sections it is no longer visible at all. One small remnant section of the race that retained a modified profile or outer bank (c. 10m long) is located near the intake of the race on the Mataura Stream. This section of the race appears to be within the Crown owned marginal strip along the Mataura Stream.

The previous alignment of the Willows (Waihi Co.) Timber Tramway T13/962 essentially follows what is now Willows Road. At the end of Willows Road and in the vicinity of the main infrastructure site the tramway alignment followed the unformed road reserve and what is now a farm track. In this area there is no surviving evidence of the tramway alignment or associated structural remains such as rails or sleepers. The Willows Timber Tramway is believed to have been constructed c. 1901.

The previous alignment of the High-Level Walmsley Timber Tramway T13/963 was likely constructed at a similar time to the Willows (Waihi Co.) Timber Tramway T13/962 and is visible above and west of the proposed portal and main infrastructure site as a gently graded



levelled bench cut into the slope of the hillside in places. In sections the bench has been widened to form a farm track. No associated structural remains such as rails or sleepers are present today.

No archaeological features of Māori origin have been identified within the proposed Willows Fram SFA project area.

### **Services Trench**

The northern extent of the proposed services trench alignment follows Willows Road from the proposed Willows SFA to SH25. Previously the Willows Timber Tramway (T13/962) followed much of what is now Willows Road; however, there is no visible evidence of the tramline in this area, with it having been removed and modified by road construction.

At its southern extent the alignment of the services trench avoids the Ohinemuri–Waihi Low Level Water Race (T13/817), although it comes within close proximity to the north and south of Golden Valley Road, before entering the Processing Plant, where the water race alignment was previously destroyed. North of the Processing Plant the water race angles sharply east and this is the closest point to the proposed services trench. The services trench alignment at this point is along an existing farm track and will have no effect on the water race.

To the north of the Processing Plant the alignment of the services trench crosses an area of slumping on a slope, which corresponds with the line of a small drive – Feature b) – associated with the Silverton Gold Mining Complex T13/819 on Silverton Hill, and a drive associated with the Favona Mine (T13/306). The services trench is unlikely to be of a scale or depth to have any impact on these subsurface features.

Near this same area a magazine and a 'dam-like' feature possibly associated with T09/819 are recorded in close proximity to the southern extent of the proposed services trench alignment. The features could not be relocated or identified during recent survey, the dam having been destroyed by the previous expansion of the Processing Plant and the magazine by road/farm track construction.

No archaeological features of Māori origin have been identified within the alignment of the proposed Services Trench.

# Gladstone Open Pit (GOP), WUG Portal and Processing Plant areas

The Gladstone Open Pit will affect and remove part of the Winner Hill gold mining complex and pre-1900 historic workings (T13/820) and a substantial part of the Gladstone Hill gold mining complex and pre-1900 historic workings (T13/821). This includes surface mining features, drives and shafts and sub-surface mine workings. The Gladstone Battery and its associated shaft, which is a scheduled Category C Heritage Item in the HDP (HAU245) will be avoided. Much of these two sites have already been affected by modern gold prospecting from the 1970s to 1999. Other, so far unidentified, subsurface remains relating to mining activities are likely to be present and may be exposed as part of the proposed GOP.

A small section of Lower Level Water Race (T13/817) will also be affected and removed by the proposed southern stock pile and Southern Spillway Channel associated with the Gladstone Pit. However, this section, like much the water race section, has been infilled



and is not readily recognisable. Other remaining sections of the race around the southern edge of Winner Hill are in better condition and used as part of a walking track.

Another section of the water race to the southwest of Winner Hill is located within the proposed Western Spillway (see Figure 49) and will be destroyed.

Mature pine trees growing on the southern extent of Winner Hill require removal. This is necessary given the age of the trees irrespective of the proposed mining activity. Harvesting operations could impact on the Low Level Water Race but a harvesting plan developed as part of an Archaeological Authority application will be developed to avoid or minimise any effects.

To the north of the Processing Plant the WUG Portal and the polishing pond stockpile may impact on a 'dam-like' feature possibly associated with the Silverton Gold Mining Complex T13/819.

No archaeological features of Māori origin have been identified on Gladstone Hill or Winner Hill, and within the proposed Gladstone Pit. Traditionally Māori burials are believed to have taken place within a number of caves on Gladstone Hill. However, it is considered unlikely that any such features would have survived within the project area as a result of modern mining and farming activities.

## TSF<sub>3</sub>

The proposed TSF3 will have no direct physical impact on any known archaeological or historic heritage items. It is highly unlikely that old underground workings exist in this area, or any other features associated with historical mining activity.

There are no known pre-European Māori sites within the TSF3.

### NRS

The NRS will not directly impact on the Queen of Waihi Shaft but due to safety reasons, it will require backfilling and capping. Other, so far unidentified, subsurface features relating to mining activities within areas of undergrowth or topsoil, may to be present and exposed as part of the proposed NRS.

There are no known pre-European Māori sites within The TSF3.

### Māori Cultural Values

This is an assessment of effects on archaeological values and does not include an assessment of effects on Māori cultural values. It considers and acknowledges Māori values identified within cultural impact assessments prepared for OceanaGold as they relate to archaeological values and sites. It is noted that an assessment of effects of Māori values should only be made by the tangata whenua. Māori cultural concerns may encompass a wider range of values than those associated with archaeological sites.

The historical association of the general area with the tangata whenua is evident from the recorded sites, traditional histories and known Māori place names. The rich resources of Ohinemuri attracted Māori to the area and occupation can be traced back over centuries; evidenced by the numerous archaeological sites (namely middens, pits, terraces, and pa) and associated place names throughout the district.



Māori cultural values interests and associations with the project area, and the potential impacts of the Waihi North Project on these, have been identified through iwi led Cultural Impact Assessments received by OceanaGold.

OGNZL recognises the special relationship that iwi have with the land and the waterways, and that this relationship is important to spiritual and cultural wellbeing. OGNZL has had a consultation programme in place with iwi for many years covering the operating mine, the mineral exploration programme and new projects, and this is ongoing.

To date, the following iwi groups have been specifically involved in the consultation programme for the Waihi North Project:

- Ngaati Whanaunga
- Ngāti Hako
- Ngāti Maru
- Ngāti Pu
- Ngāti Tamaterā
- Ngāti Tara Tokanui / Ngati Koi

# **Survey Limitations**

It should be noted that archaeological survey techniques (based on visual inspection and minor sub-surface testing) cannot necessarily identify all sub-surface archaeological features, or detect wahi tapu and other sites of traditional significance to Māori, especially where these have no physical remains.

# **Archaeological Value and Significance**

The Waikato Regional Policy Statement (RPS) identifies several qualities for evaluating the significance of historic heritage places. In addition, Heritage NZ has provided guidelines setting out criteria that are specific to archaeological sites (condition, rarity, contextual value, information potential, amenity value and cultural associations) (Heritage NZ 2006: 9-10). Both sets of criteria have been used to assess the value and significance of the historic places below.

The archaeological value of sites relates mainly to their information potential. That is, the extent to which they can provide evidence relating to local, regional and national history using 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. For example, generally pa are more complex sites and have higher information potential than small midden (unless of early date). Archaeological value also includes contextual (heritage landscape) value. Archaeological sites may also have other historic heritage values including historical, architectural, technological, cultural, aesthetic, scientific, social, spiritual, traditional and amenity values.

The Hauraki District Plan (2014) (HDP) contains a Schedule of Historic Heritage Inventory, which is divided into Category A and B Heritage Features; Category C Heritage Items; and, Category A and B Heritage Areas in section 6.1. In Appendix 1 of the HDP



(6.1.6.8) the criteria for assessing heritage significance are grouped under historic, architectural, technological/scientific, archaeological, spiritual/cultural and context.

### Wharekirauponga Underground Mine (WUG)

The Royal Standard Battery site and gold mining area (T12/681 and T12/1290) at the Wharekirauponga Mining Area has been evaluated according to the relevant statutory criteria and has been scheduled for protection on the Hauraki District Plan Royal Standard Battery, Wharekirauponga HAU271 Category B – Heritage Area, Regional or Sub-Regional Significance. It is located within an area of Coromandel Forest Park public conservation land (PCL) at Wharekirauponga. The historic heritage sites associated with 19<sup>th</sup> century mining at Wharekirauponga have been identified as having moderate to high heritage values and have been prioritised in the DOC land management system as an Actively Conserved Heritage Place.

The visible physical remains of the historic mining at Wharekirauponga are extensive although there was little underground mining actually undertaken at the Royal Standard. It is also likely that not all of the evidence of 19<sup>th</sup> century mining activity has been identified to date. The remains are similar to that found at other historic mining sites in the wider Coromandel area. Together this aids in telling the story of 19th century mining through the Coromandel and New Zealand. An interesting aspect to the mining story at Wharekirauponga however is the extent of work to construct facilities that were not completed, to support a mining operation that failed to bring in gold returns of any size.

Within the Project's main infrastructure site (Willows Farm SFA) sites T13/961, T13/962 and T13/963 are considered to have limited archaeological or other historic heritage value based on the criteria discussed.

The Mataura Water Race T13/961 has been significantly modified by levelling and infilling so retains literally none of its original profile and fabric, except in one small section near its intake from the Mataura Stream. Its alignment is all that remains along some sections of the race as a benched track, while in other areas there is no visible surface evidence. Other sections of this long water race have recently been identified by subsequent archaeological survey outside the subject site and are in much better condition (see Appendix 1 NZAA site record T13/961).

The Willows Timber Tramway T13/962 and High-Level Walmsley Timber Tramway T13/963 have also been significantly modified with only a few visible sections of benching along the High-Level Walmsley Timber Tramway alignment. There is no surviving visible evidence of the Willows Timber Tramway alignment. No structural remains such as rails or sleepers are present today on either tramway.

The Mataura Water Race (T13/961), Willows Timber Tramway (T13/962) and High-Level Walmsley Timber Tramway (T13/963) have not been scheduled for protection on the HDP. They are not listed by Heritage NZ in the New Zealand Heritage List/Rārangi Kōrero. An assessment of the archaeological values based on the Heritage NZ criteria (Heritage NZ 2006: 9-10) and the heritage values of the RPS criteria are below.



Table 6. Assessment of the archaeological values of site T13/961 Mataura Water Race based on Heritage NZ criteria (Heritage NZ 2006: 9-10)

Value	Assessment
Condition	No remains of the original Race profile are present within the subject site (one section of very modified profile may survive), having been significantly modified by levelling and filling. All that remains is its original alignment in places, visible as a levelled or benched track. Other sections of this long water race have recently been identified by subsequent archaeological survey outside the subject site and are in much better condition
Rarity	Water races are not uncommon in the Waihi area and there are other recorded races locally associated with historic gold mining.
Contextual value	Part of a late 19th century historic landscape directly associated with gold mining activities at Waihi, that incorporates other surviving elements in the wider region. The race is part of the High-Level Water Race associated with the Waihi Gold Mining Co. and the Waihi Battery mining at Union Hill.
Information potential	The Race has little archaeological value based on information potential because it retains no original fabric, although the alignment of part of the Race dates from the early colonial period. The site is unlikely to provide any further knowledge of New Zealand or Waihi history through archaeological recording and investigation in addition to what is already known.
Amenity value	The water race is located on private land and marginal strip inaccessible to the public.
Cultural associations	The Mataura Water Race is a European archaeological site. Given the long mining legacy and celebration of mining history within Waihi today it is possible that the community does have some association with the site. Given that much of this site is no longer visible on the ground this limits the value of the site in terms of being a physical marker/ source of identity.
Other	The Mataura Water Race has historical, technological values and physical attributes:
	Historical: The place has historical value due to its association with colonial gold mining within the Waihi gold field. Built in the 1890s, it was constructed to supply water to the Waihi Battery on Union Hill. It reflects representative aspects of local history, and is associated with an early period of European industry and exploitation within the western Bay of Plenty and New Zealand.
	Technology: Water races are not uncommon locally. Technologically it has value because part of the Race retains its original alignment, although it is highly modified and no longer a working engineering structure.
	Physical attributes: The site is not a good representative example of an open channel water race as it is highly modified and retains only its alignment in places and none of its original structure and profile.



Table 7. Assessment of the historic heritage values of T13/961 Mataura Water Race based on the RPS criteria (Section 10A)

Value	Historic Heritage Assessment
Historic Qualities	This site is associated with the wider historical events, people and mining companies that form the rich history of colonial gold mining in Waihi. Built in the 1890s, it was constructed to supply water to the Waihi Battery on Union Hill. It reflects representative aspects of local history, and is associated with an early period of European industry and exploitation within the western Bay of Plenty and New Zealand.
Architectural Qualities	There are no surviving architectural qualities.
Technological/ Scientific Qualities	Water races are only part of what were often very complex hydraulic systems. The technology of their design and construction was introduced from the Californian and Australian gold-fields but the technology developed quickly in New Zealand gold fields and local innovations occurred rapidly. Technologically the race has value because part of it retains its original alignment, although it is highly modified and no longer a working engineering structure. Water races are not uncommon locally.
Archaeological Qualities	The Race has little information potential to expand upon our knowledge through archaeological methods of early mining activities or Waihi history in addition to what is already known because it retains little no original fabric. However, it meets the definition of an archaeological site dating from the early colonial period (pre-1900) and has been recorded as an archaeological site in the NZAA site file. It is a representative example of a site type, feature or activity. It is not a Heritage NZ listed archaeological site, but has been recorded as an archaeological site.
Cultural Qualities	Given the long mining legacy and celebration of mining history within Waihi today it is possible that the community does have some association with the site. Given that this aspect of mining is not publicly accessible or visible, this limits the value of the site in terms of being a physical marker/source of identity.

Table 8. Assessment of the archaeological values of sites T13/962 Willows (Waihi Co.) Timber Tramway, and T13/963 High-Level Walmsley Timber Tramway based on Heritage NZ criteria (Heritage NZ 2006: 9-10)

Value	Assessment
Condition	The condition of both tramways is poor and highly modified. All that remains of their original alignments within the subject site is a few visible sections of benching along the High-Level Walmsley Timber Tramway alignment, which have been incorporated into farm tracks. No structural remains survive.
Rarity	Timber tramways are not uncommon in the Waihi area and there are other recorded races locally associated with historic gold mining in better condition.
Contextual value	Part of an early 20 <sup>th</sup> and possibly late 19th century historic landscape directly associated with gold mining activities at Waihi, that incorporates other surviving elements in the wider region.



Information potential	The tramways have little information potential to expand upon our knowledge through archaeological methods of early timber milling or Waihi history in addition to what is already known because they retain little original fabric. Technically they may not meet the definition of an archaeological site dating from c.1901 (not pre-1900) but have been recorded in the NZAA site file for information purposes. They are a representative example of a site type, feature or activity. They are not Heritage NZ listed sites.
Amenity value	The tramways are located on private land inaccessible to the public.
Cultural associations	The tramways are European historic sites. Given the long mining legacy and celebration of mining history within Waihi today it is possible that the community does have some association with the site. Given that this aspect of mining is not publicly accessible or visible, this limits the value of the site in terms of being a physical marker/ source of identity.
Other	The timber tramways have historical, technological values and physical attributes:
	Historical: The sites are associated with the wider historical events, people and mining companies that form the rich history of colonial gold mining and timber milling in Waihi. Likely built in the early 20 <sup>th</sup> century they reflect representative aspects of local history, and are associated with an earlier period of European industry and exploitation within the western Bay of Plenty and New Zealand.
	Technology: Timber tramways are not uncommon locally. Technologically the High-Level Walmsley Timber Tramway has some value because it retains some original alignment, although highly modified by farm tracks. The tramways are no longer working engineering structures.
	Physical attributes: The sites are not good representative examples of timber tramways as they are highly modified and retain only their alignment in places and none of its original structure and profile.

Table 9. Assessment of the historic heritage values of T13/962 Willows (Waihi Co.) Timber Tramway, and T13/963 High-Level Walmsley Timber Tramway based on the RPS criteria (Section 10A)

Value	Historic Heritage Assessment
Historic Qualities	These sites are associated with the wider historical events, people and mining companies that form the rich history of colonial gold mining and timber milling in Waihi. Likely built in the early 20 <sup>th</sup> century, they were constructed to extract timber from the Walmsley and Mataura Valleys. They reflect representative aspects of local history, and are associated with an earlier period of European industry and exploitation within the western Bay of Plenty and New Zealand.
Architectural Qualities	There are no surviving architectural qualities.
Technological/ Scientific Qualities	Technologically the High-Level Walmsley Timber Tramway has some value because it retains some original alignment, although highly modified by farm tracks. Timber tramways are common locally.
Archaeological Qualities	The tramways have little information potential to expand upon our knowledge through archaeological methods of early timber milling or



Value	Historic Heritage Assessment
	Waihi history in addition to what is already known because it retains little original fabric. They may not meet the definition of an archaeological site dating from the early 20 <sup>th</sup> century (not pre-1900) but have been recorded in the NZAA site file for information purposes.
Cultural Qualities	Given the long mining legacy and celebration of mining history and its associated industries within Waihi today it is possible that the community does have some association with the site. These sites are not publicly accessible or visible, which limits its value in terms of being a physical marker/ source of identity.

## Gladstone Open Pit

The Gladstone Battery and Shaft T13/821 has been evaluated according to the relevant statutory criteria and has been scheduled for protection as a Category C Historic Item on the HDP (HAU245) for its technological significance in a local or neighbourhood significance. The remaining associated Gladstone gold mining complex over Gladstone Hill has not been scheduled for protection on the HDP. It is not listed by Heritage NZ in the New Zealand Heritage List/Rārangi Kōrero.

The Winner Hill gold mining complex (T13/820) has not been scheduled for protection on the HDP. It is not listed by Heritage NZ in the New Zealand Heritage List/Rārangi Kōrero.

Overall, the Winner Hill gold mining complex (T13/820) and the Gladstone gold mining complex (T13/821), are considered to have moderate archaeological value based on the criteria discussed. It is likely that archaeological evidence of early mining activity survives in places, but that much of the pre-1900 workings have now been affected by modern gold prospecting. Any possible surviving remains would be of archaeological interest for their ability to provide information on mining techniques in the 19th century. However, it is noted that such techniques are also very well documented historically, so that archaeological investigation would typically confirm this documented history, rather than provide new information.

An assessment of the archaeological values of T13/820 and T13/821 based on the Heritage NZ criteria (Heritage NZ 2006: 9-10) and the heritage values of the RPS criteria are below.

Table 10. Assessment of the archaeological values of the Winner Hill gold mining complex T13/820 and Gladstone Hill gold mining complex (part of T13/821) based on Heritage NZ criteria (Heritage NZ 2006: 9-10)

Value	Archaeological Assessment
Condition	The remains of drives, shafts, terraces and tailings are evident on the ground surface over a wide area of Winner Hill and Gladstone Hill. It is likely that some of the old underground workings may also survive in places. However, much of the earlier mining remains have been affected by modern gold mining and the development of a pine plantation.
Rarity	The historical mine workings are not rare locally.
Contextual value	The historical Gladstone and Winner Mines have considerable contextual value as one of a number of mining places in a much larger mining landscape in the Waihi area. It is associated with 19th and early 20th century mining in the region and other places operating in New Zealand at



Value	Archaeological Assessment
	this time. The site is not in a listed historic area and the underground workings are not visible to the public, so do not have visual amenity/aesthetic value.
Information potential	The historical workings include remnants of shafts and drives, terraces and tailings, and potentially as artefacts and remnant mining structures. This is of archaeological interest for its ability to provide information on mining techniques in the 19th and early 20th century. However, such techniques are very well documented historically, and these remains are not unique locally.
Amenity value	Some workings are visible on the surface, but they are inaccessible to the public and in private ownership.
Cultural associations	The site has European cultural associations, linked with European mining communities of the late 19th and early 20th century.
Other	These mines have historical value through their association with early mining companies in New Zealand. The mining history is strongly linked to the identity of Waihi so is likely to have public associations. The site has social interest with groups such as local historical societies, museums/education centres and tourist operators. However, the historical mining activities are perhaps better represented by other places/ features that are more accessible and visible in the Waihi area.

Table 11. Assessment of the historic heritage values of the Winner Hill gold mining complex T13/820 and Gladstone Hill gold mining complex (part of T13/821) based on the RPS criteria (Section 10A)

Value	Historic Heritage Assessment
Historic Qualities	The discovery of gold in Waihi in 1878, early on in the New Zealand goldmining industry, is significant. The Gladstone and Winner claims were initially established in the 1880s. During the boom years of Waihi gold mining between 1902–1910 the Waihi-Gladstone Co. erected the Gladstone Battery (T13/821) on the north side of Gladstone Hill and worked the Gladstone claim, extending around Winner Hill throughout the early 1900s. Much prospecting however, bought little success. These sites are associated with the wider historical events, people and mining companies that form the rich history of gold mining in Waihi.
Architectural Qualities	There are no surviving mining buildings or structures at this site. The underground workings, where they survive, would be an example of the various methods of constructions for drives, adits, shafts etc. and their design was imported from England, which has an ancient metal-mining tradition going back thousands of years. However, they are not 'architectural' in the strict sense of the term, which is usually applied to buildings or visible structures, rather than utilitarian tunnels underground.
Technological/ Scientific Qualities	Some of the big innovations and testing of new technology developed in the Waihi mining industry (see Thornton 1982), such as pioneering the use of electricity in gold mining, the development of the gold dredge, and tremendous impact on gold production brought about by the advances in the cyanide process of gold extraction, are better represented at other sites locally, such as Union Hill and Martha Hill.
Archaeological Qualities	These sites have potential to expand upon our knowledge of early mining activities through archaeological methods and meet the definition of an archaeological site for the pre-1900 underground workings. They are a



Value	Historic Heritage Assessment
	representative example of a site type, feature or activity. They are not a Heritage NZ listed archaeological site, but have been recorded as an archaeological site.
Cultural Qualities	Given the long mining legacy and celebration of mining history within Waihi today (such as display and interpretation of the pumphouse, poppet replica head, pit rim walk, interpretation panels and sculptures in the town) it is likely that the community does have some association with the site. Given that this aspect of mining is not publicly accessible or visible, this perhaps will limit the value of the site in terms of being a physical marker/source of identity.

The Ohinemuri Lower Level Water Race (T13/817) has not been scheduled for protection on the HDP. It is not listed by Heritage NZ in the New Zealand Heritage List/Rārangi Kōrero.

Overall, the Low Level Water Race has moderate to low archaeological value based on the criteria discussed. It is likely that archaeological evidence survives in places, but that much of the race has been affected by modern gold mining activities, farming and the planting of pines. Any surviving remains would be of archaeological interest for their ability to provide information on the construction methods of the race but these have already been very well documented historically and confirmed through previous recording and archaeological investigation elsewhere along the race under archaeological Authority during mining activities in 2003-2006. Therefore, any further archaeological investigation would typically reconfirm this documented history and research, rather than provide new information.

An assessment of the archaeological values of T13/817 based on the Heritage NZ criteria (Heritage NZ 2006: 9-10) and the heritage values of the RPS criteria are below.

Table 12. Assessment of the archaeological values of the Lower Level Water Race (T13/817) based on Heritage NZ criteria (Heritage NZ 2006: 9-10)

Value	Archaeological Assessment
Condition	Much of the route of the race is in farmland and already modified or affected by modern gold mining, tracking and the planting of pines around Winner Hill. To the north, sections of the race have been destroyed in the past to construct the Processing Plant and a rock stockpile area. Intact sections of the race can be seen as an earth channel in places running southwest around Winner Hill.
Rarity	Water races are not uncommon in the Waihi area and there are other recorded races locally associated with historic gold mining. The Ohinemuri-Waihi Low Level Water Race is considered to be of local importance.
Contextual value	Part of a late 19th century historic landscape directly associated with gold mining activities at Waihi, that incorporates other surviving elements in the wider region. The race is associated with the Waihi Gold Mining Co. and the Waihi Battery mining at Union Hill.
Information potential	The Race has some archaeological value based on information potential where it retains original fabric and the alignment of the Race dates from the early colonial period. The site is unlikely to provide significant further



Archaeological Assessment	
knowledge of New Zealand or Waihi history through archaeological recording and investigation in addition to what is already known from previous archival research, recording and archaeological investigation on other sections of the race.	
The section of the race that will be affected by the Gladstone Pit has been mostly infilled and obscured by farming activities so appears only as a depression c.2m wide across the open paddock. Therefore, it is considered to have low amenity values. Other remaining sections of the race that will not be affected around the southern edge of Winner Hill are in better condition as a visible earth channel used as part of a walking track on publicly accessible land.	
The Low Level Water Race is a European archaeological site. Given the long mining legacy and celebration of late 19th and early 20th century mining history within Waihi today it is possible that the community does have some association with the site. Only part of the race is publicly accessible along a walking track around Winner Hill.	
The Low Level Water Race has historical, technological values and physical attributes:  Historical: The place has historical value due to its association with colonial gold mining within the Waihi gold field. Associated with the Martha Mine it was constructed in 1889-1890 to supply water from the Ohinemuri River to the new Waihi battery at the base of Union Hill. The race operated until 1913. It reflects representative aspects of local history, and is associated with an early period of European industry and exploitation within the western Bay of Plenty and New Zealand.  Technology: Water races are not uncommon locally. Technologically it has value because it retains much of its original alignment, although it is highly modified in places and no longer a working engineering structure.  Physical attributes: The site is a fair representative example of an open channel water race. Its condition varies from sections that have been destroyed, to highly modified sections visible only as an infilled depression,	

Table 13. Assessment of the historic heritage values of the Lower Level Water Race T13/817 based on the RPS criteria (Section 10A)

Value	Historic Heritage Assessment
Historic Qualities	This site is associated with the wider historical events, people and mining companies that form the rich history of colonial gold mining in Waihi. Built in 1889-1890, it was constructed to supply water to the Waihi Battery on Union Hill. It reflects representative aspects of local history, and is associated with an early period of European industry and exploitation within the western Bay of Plenty and New Zealand.
Architectural Qualities	There are no surviving architectural qualities.
Technological/ Scientific Qualities	Water races are part of what were often very complex hydraulic systems.  The technology of their design and construction was introduced from the Californian and Australian gold-fields but the technology developed quickly in New Zealand gold fields and local innovations occurred rapidly. Technologically the race has value because part of it retains its original



Value	Historic Heritage Assessment
	alignment, although it is highly modified in places and no longer a working engineering structure. Water races are not uncommon locally.
Archaeological Qualities	The Race has little information potential to expand upon our knowledge through archaeological methods of early mining activities or Waihi history in addition to what is already known through archival research, and previous recording and archaeological investigations. However, it meets the definition of an archaeological site dating from the early colonial period (pre-1900) and has been recorded as an archaeological site in the NZAA site file. It is a representative example of a site type, feature or activity. It is not a Heritage NZ listed archaeological site, but has been recorded as an archaeological site.
Cultural Qualities	Given the long mining legacy and celebration of mining history within Waihi today it is possible that the community does have some association with the site. Only part of the race is publicly accessible along a walking track around Winner Hill, while the remainder of the race alignment is within private property.



# ASSESSMENT OF HISTORIC HERITAGE EFFECTS AND MITIGATION

The nature and significance of the historic heritage places within the project area have been assessed above. The potential impact of the proposal on the identified places is now considered, particularly in relation to direct physical impacts, as well as setting and context either through their district plan scheduling or using the HNZ criteria or RPS qualities.

The proposed WNP is a continuation of mining activities for over 100 years, which are now strongly associated with the historical identity of Waihi. Overall, the adverse effects on archaeological and other historic heritage sites as a result of the WNP are primarily confined to the WUG main infrastructure site and the Gladstone Pit.

The likely adverse effects on historic heritage as a result of each part of the WNP and associated infrastructure, and recommended mitigation measures, are outlined below followed by an assessment of the overall effects on historic heritage of the WUG Mine project.

# Wharekirauponga Underground Mine (WUG)

Future additional WKP exploratory activities will include eight exploration drill sites within the WUG requiring 150m2 ground clearance each (total 600m2); four surface geotechnical exploration drill sites above the WUG Dual Tunnel alignment requiring 150m2 ground clearance each (total 600m2); four exploratory drill sites with larger pads (up to 900m2 ground clearance) for hydrogeological pump test investigations and ventilation construction, plus additional camps, messing facilities and heli-pads.

Minimal earthworks are required for the ground clearance at drill sites. Drill sites are chosen with flat terrain and wooden decks are constructed over the ground on bearers. Some soil may require removal to level the site, up to 6m3, and this is hand dug. Drill sites also have a small sump within the footprint requiring ground disturbance of up to 1m3. Additional camps / messing facilities are located on drill sites.

An estimate of up to a 500m3 cut maximum will be required for a vent/pump site depending on the footprint and topography experienced, with steeper topography requiring a greater cut. Figure 64 is an example diagram of a smaller pad resulting in 800m2 of clearance. All efforts will be to reduce this as much as possible for both effects and total effort. With respect to the ventilation shaft construction it is anticipated that at least a 6-8m diameter wide shaft will be excavated after initial topsoil stripping.

The likely adverse effects on historic heritage as a result of the WUG Mine and associated infrastructure and recommended mitigation measures are set out in Table 14. Any positive effects on historic heritage are also outlined below, followed by an assessment of the overall effects on historic heritage of the WUG project.



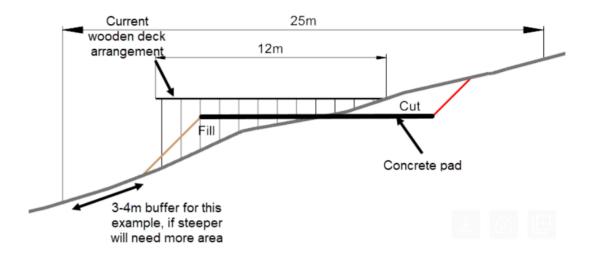


Figure 64. Diagram of a smaller pad for vent/pump site and the predicted cut and fill

Table 14. Adverse effects for WUG Mine and proposed mitigation

Potential Adverse Effect	Nature of effects	Proposed Specific Mitigation Measures	Overall Effects (after mitigation)
Royal Standard Battery and Mining Area T12/681 and Tramway T12/1290	Current WKP exploratory drilling activities at the Wharekirauponga Mine Area have been located away from known heritage features.  The effects on heritage values from any future additional WKP exploratory drill sites, vent shafts and the four larger drill sites for hydrogeological purposes within proximity of the identified heritage features of T12/681 Royal Standard Battery and gold mining area and the Royal Standard Gold Mining Tramway (T12/1290) and/or the scheduled Heritage Area - Royal Standard Battery, Wharekirauponga HAU271 Category B, will need to be assessed individually as they are currently indicative only.  The proposed dewatering at the historic mining shaft will involve the placement of a submersible pump in the shaft and placing a generator beside the shaft on the terrace. This activity is unlikely to impact on the historic shaft but efforts should be made to not dislodge	Engagement of a qualified archaeologist to assess if there are any known or unidentified historic heritage within 500m of the shortlisted future additional investigative drill sites, vent shafts and four larger drill sites for hydrogeological purposes under the Site Selection Protocol for the Location of Investigative Drill Sites and Ventilation Shafts to guide site location decision-making. The intention is to avoid impacting on any heritage features if at all possible.  As a precaution a general Archaeological Authority is being applied for under the Fast Track process to cover the WUG prior to any works that may affect this site. Archaeological monitoring, recording and investigation of any archaeological features and remains associated with T12/681 / T12/1290 that may be affected within the Project area, and any other archaeological remains uncovered during earthworks.  Placement and removal of any equipment at the proposed	Minor Adverse Effect (Permanent, Future)



	any timbers by the placement of the pump.  A Blasting and Vibration Assessment (Heilig & Partners Pty. Ltd Feb 2025) determined that blasting for the WUG will produce varying levels of vibration on the surface. The identified historic heritage features will therefore, receive vibration levels that vary up to 15mm/s when blasting occurs in the upper levels of the central lode WUG orebody. Based on monitoring of sensitive heritage infrastructure near to previous Favona and Trio mining projects, (including the Union Hill kilns and tanks) historic heritage features at Wharekirauponga will not be subjected to any greater level of vibration than has shown previously to be protective of their condition.	dewatering at the historic shaft under archaeological supervision.  There are no sensitive heritage infrastructure (i.e. standing building structure) at the Royal Standard Mining Area. Whilst the level of vibration at the old workings may be capable of dislodging loosely or precariously positioned rocks, the energy within the vibration pulse will be incapable of creating new and intersecting fractures that could result in larger scale failure and significant increase in the void size.  Regular archaeological monitoring of the state and condition of historic heritage features at the Royal Standard Mining Area to assess any unlikely effects of vibration.  Opportunities for future public interpretation at the Royal Standard Battery and gold mining area T12/681 and T12/1290.	
Mataura Water Race T13/961	The proposed development of the main infrastructure site will affect and remove part of the T13/961 Mataura Water Race near its intake in the Mataura Stream. Approximately 600m of the race alignment crosses the proposed infrastructure site but the length of the race actually affected will depend on the overall scale of earthworks required.  The one small remnant section of the race that retained a highly modified profile or outer bank near the intake of the race (c.10m long) appears to be outside the proposed infrastructure footprint and could possibly be avoided. However, a spillway for the collection pond may need to be constructed through this area. This section of the race appears to be within the Crown owned	OGNZL has already made an application and been granted an archaeological Authority (No. 2025/359) for the WUG Willows Farm SFA, which will impact on part of site T13/961 Mataura Water Race.  Archaeological recording and investigation of all archaeological features and remains associated with T13/961 within the Project area, and any other archaeological remains uncovered during earthworks.	Minor Adverse Effect (Permanent, Future)



High Lavel	marginal strip beside the Mataura Stream.  The Mataura Water Race through the Willows Road property is considered to have limited archaeological or other historic heritage values overall and the proposed activity will impact on only a small, already heavily modified section of the Race. Other sections of this water race have recently been identified by subsequent archaeological survey outside the subject site and are in much better condition (see Appendix 1 NZAA site record T13/961).	Any conthivorks that will affect the	Loss Then Minor
High-Level Walmsley Timber Tramway T13/963	The proposed development of the rock stack and helipad at the SFA will affect and remove one, possibly two, of the branches of the High-Level Walmsley Tramway T13/963.  This tramway was constructed in the early 20 <sup>th</sup> century and is not an archaeological site (pre-1900). Overall, site T13/963 is considered to have limited historic heritage value. The tramway has been modified so retains only its original alignment visible as a benched track incorporated into a farm track. No structural remains such as rails or sleepers are present today.	Any earthworks that will affect the High-Level Walmsley Tramway should be archaeologically monitored to record any remains associated with the tramway.	Less Than Minor Adverse Effect (permanent, Future)
Willows Timber Tramway T13/962	A small part of the previous Willows Timber Tramway alignment T13/962 may be affected by the proposed activity where access to the main infrastructure site will be along Willows Road and a small detention pond is proposed east of Willows Road.  Overall, site T13/962 is considered to have limited historic heritage value as within the subject site there is no confirmed evidence of the tramway alignment or associated structural remains such as rails or sleepers. This tramway was likely constructed c. 1901.	Any earthworks that will affect the Willows Timber Tramway should be archaeologically monitored to record any remains associated with the tramway.	Less Than Minor Adverse Effect (permanent, Future)

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### Positive effects for WUG

The proposed WUG works are a continuation of mining activities for over 100 years, which are now strongly associated with the historical identity of Waihi.

During works affected remains of the Mataura Water Race T13/961, High-Level Timber Tramway T13/963 and Willows Timber Tramway T13/963 will be archaeologically investigated and recorded under Authority (No. 2025/359). Any information gained will aid our understanding of these early mining and timber extraction structures. New research results can also be used for the people of Waihi or visitors to the area (e.g. Martha Mine education centre, Gold Discovery centre/ Waihi Visitor centre, Waihi Gold Mine tours and Waihi Arts Centre and Museum).

### **General Mitigation of Heritage Effects**

It is recommended that the following historic heritage mitigation measures are adopted for the WUG component of the project:

- As a precaution a general Archaeological Authority is being applied for under the Fast Track process to cover the WUG prior to any works. While the intention is to avoid impacting on any heritage features if at all possible, archaeological monitoring, recording and investigation will be undertaken of any archaeological features and remains associated with T12/681 / T12/1290 that may be affected within the Project area, and any other archaeological remains uncovered during earthworks. An Archaeological Management Plan (AMP) will be submitted with the Authority application that will provide general protocols for the exposure of archaeological remains, including remains of Māori origin, koiwi tangata (human remains) or taonga (Māori artefacts).
- Archaeological monitoring, investigation and recording of any archaeological remains affected and uncovered during earthworks for the proposed SFA under archaeological Authority (No. 2025/359);
- Consideration should be given during final construction planning to avoid the one small remnant section of the Mataura Water Race T13/961 that retains a highly modified profile or outer bank near the intake of the race that is located within the Crown owned marginal strip along the Mataura Stream;
- Protection measures should be put in place so that additional archaeological remains/features associated with T13/961, 962 and 963 are not inadvertently impacted upon elsewhere. For example, their locations marked on development plans and temporary fencing installed around the sites in the vicinity of construction works;
- Protection measures should be put in place so that identified archaeological remains/features associated with the Royal Standard Battery and gold mining area T12/681 / T12/1290 are not inadvertently impacted upon by having their locations marked on project plans;
- New research results should be disseminated to the public and deposited with local archives/ heritage groups (e.g. Waihi Heritage Vision, Waihi Arts Centre and Museum, Ohinemuri website) and organisations (e.g. Martha Mine education centre, Gold Discovery centre/ Waihi Visitor centre and Waihi Gold Mine tours);



- The archaeological monitoring report for the WUG project will be provided to Heritage New Zealand and Hauraki District Council (Cultural Heritage Inventory);
- Look for future opportunities for public access and interpretation at the archaeological remains of historical gold mining features associated with the Royal Standard Mine (T12/681 / T12/1290).

### Overall effects of the WUG

The modification of a small section of the Mataura Water Race (T13/961), High-Level Timber Tramway (T13/963) and Willows Timber Tramway (T13/962) and the unlikely destruction of other subsurface archaeological remains is a minor adverse effect that will not cause significant, unacceptable adverse impacts on historic heritage if appropriately mitigated through archaeological investigation and recording. The sites are considered to have limited historic heritage value and have been modified so retain only their original alignments visible as a benched track in places. No structural remains associated with these sites are present today.

A number of surface drilling rigs and a camp have previously been erected at the WUG orebody around and in close proximity to T12/681 and T12/1290, but have been located away from known heritage features.

The effects on heritage values from any future additional WKP exploratory drill sites, vent shafts and the four larger drill sites for hydrogeological purposes within proximity of the identified heritage features of site T12/681 Royal Standard Battery and gold mining area and the Royal Standard Gold Mining Tramway (T12/1290) and/or the scheduled Heritage Area - Royal Standard Battery, Wharekirauponga HAU271 Category B, will need to be assessed individually as they are currently indicative only. The intention is to avoid impacting on any heritage features if at all possible. However, if this is not possible archaeological monitoring, recording and investigation will be undertaken of any archaeological features and remains associated with T12/681 / T12/1290 that may be affected within the Project area, and any other archaeological remains uncovered during earthworks.

Overall the effects on historic heritage after recommended mitigation are likely to be minor in relation to the proposed WUG.

### **GOP**

Establishment works within the footprint of the GOP will require earthworks to remove overburden. Topsoil will first be stripped to a depth of approximately 300mm over 18.67 hectares (375m wide and 625m long), which will be temporarily stored in a stockpile covering 0.91 hectares (Figure 65). After topsoil stripping the depth of earthworks will vary, as this is not just a linear project. Ultimately the GOP Pit excavation will total 9,329,118 cubic metres (95m deep), the majority of which will be subsequently backfilled with tailings and waste rock, topsoiled and planted. The associated Polishing Pond Portal will require similar excavation over 2.32 hectares totalling 153,000 cubic metres.



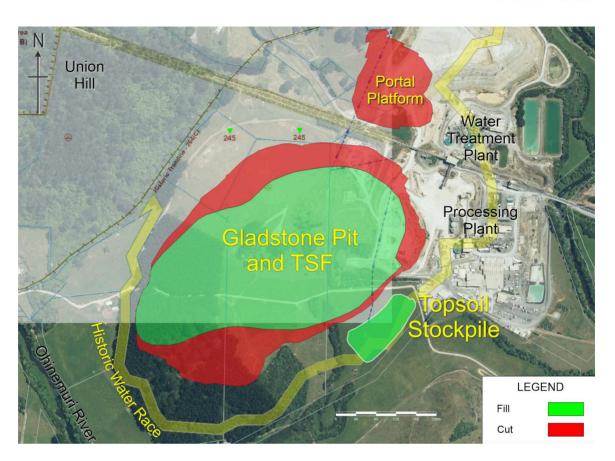


Figure 65. GOP and Polishing Pond Portal earthworks cut and fill plan (source: Oceana Gold)

The likely adverse effects on historic heritage as a result of the GOP and associated infrastructure and recommended mitigation measures are set out in Table 15. Any positive effects on historic heritage are also outlined below, followed by an assessment of the overall effects on historic heritage of the GOP.

Table 15. Adverse effects for Gladstone Pit project and proposed mitigation

Potential Adverse Effect	Nature of effects	Proposed Specific Mitigation Measures	Overall Effects (after mitigation)
The Gladstone gold mining complex (NZAA ref T13/821)	Open pit mining will remove the majority of Gladstone Hill and a substantial part of the Gladstone gold mining complex T13/821 - Feature a), an isolated prospecting drive located near the summit with an area of tailings radiating out from the now blocked drive entrance; and Feature b), a fenced off shaft. Much of this site has already been affected by modern gold prospect drilling.  The Gladstone Battery and its associated shaft, Feature c) (HAU245 Cat C), are located outside the footprint of the	A general Archaeological Authority is being applied for under the Fast Track process to cover the entire Gladstone Pit project. Archaeological monitoring, recording and investigation of all recorded archaeological features associated with T13/821 within the Project area, and any other archaeological remains uncovered during earthworks for the pit expansion and pit infrastructure.  The Gladstone Battery and its associated shaft, Feature c) (HAU245 Cat C), are located in close proximity to the GOP and measures (i.e. fencing) should be put in place to ensure they	Minor Adverse Effect (Permanent, Future)



	proposed Gladstone pit and should not be affected. However, they are located in close proximity and measures (i.e. fencing) should be put in place to ensure they are protected from inadvertent damage.  The possibility of additional subsurface remains in relation to past mining activities cannot be ruled out and would also be destroyed by the proposal.	are protected from inadvertent damage.  OGNZL will fund and undertake the following urgent remedial work on significant sites and features associated with the Union Hill mining complex (within OGNZL's property/Union Hill (Waihi Battery) Historic Area) immediately adjacent to Gladstone Hill:  a) the removal of the large trees (mainly pines) growing on the battery foundation and ore kilns. This remedial work would be guided by the Union Hill (Waihi) Heritage Landscape Management Plan (Macready and Clough Jan 2016) (see Appendix 3); and,  b) commission an engineering report to guide future conservation/restoration/stabilisation of significant heritage features, notably the battery, ore kilns and cyanide tanks. This report will form a basis for funding applications to complete other recommended remedial works in the Management Plan.	
The Low Level Water Race (T13/817)	Two sections of Lower Level Water Race (T13/817) will be affected and removed by the proposed South East Stockpile, Southern Spillway Channel and Western Spillway and Drainage Channel associated with the Gladstone Pit. Approximately 250m of the original 3.854km water race will be affected and removed.	A general Archaeological Authority is being applied under the Fast Track process to cover the entire Gladstone Pit project. Archaeological monitoring will be undertaken to identify, investigate and record all archaeological remains associated with T13/817 that are affected within the Project area, and any other archaeological remains uncovered during earthworks for the pit expansion and pit infrastructure.	Less Than Minor Adverse Effect (permanent, Future)
	The section of the race affected by the South East Stockpile and Southern Spillway Channel has already been affected and obscured by farming activities (including a road), so the overall effects on the water race here is reduced.  Harvesting of mature pine trees on the southern extent of Winner Hill could impact on part of the Low Level Water Race.	Development of a harvesting plan as part of the Archaeological Authority to avoid or minimise effects to archaeological remains associated with T13/817 during harvesting of pine trees on Winner Hill.  Opportunities for public access and interpretation of the route of the Low Level Water Race T13/817 (outside the Project area), and at any surviving archaeological remains of historical gold mining features associated with Winner Hill (T13/820)	



Winner Hill (NZAA ref T13/820).	Historical gold mining features associated with Winner Hill (T13/820) are recorded as lying predominately outside of the project area, although feature b), an area of spoil near the summit of the hill relating to the entrance of two marked drives; and e), a drive with an exposed entrance and mining debris in the streambed below, appear to be located within the area of the proposed South East Stockpile. The possibility of additional subsurface remains in relation to past mining activities cannot be ruled out and would also be destroyed by the proposal.	A general Archaeological Authority is being applied for under the Fast Track process to cover the entire Gladstone Pit project. Archaeological recording and investigation of all recorded archaeological features associated with T13/820 within the Project area, and any other archaeological remains uncovered during earthworks for the pit expansion and pit infrastructure.  Opportunities for public access and interpretation on/near the route of the Low Level Water Race T13/817, and at any surviving archaeological remains of historical gold mining features associated with Winner Hill (T13/820).  OGNZL will continue its promotion and funding of the ongoing remedial and maintenance work of the remaining significant sites and features associated with the Union Hill mining complex (within OGNZL's property/Union Hill (Waihi Battery) Historic Area) immediately to the west of Gladstone Hill. This work would be guided by the Union Hill (Waihi) Heritage Landscape Management Plan (Macready and Clough Jan 2016). It would include removing immediate threats to and developing an appropriate management and maintenance programme for the remains (eg. removal of the pines off the kilns, repair of kiln walls, roof built over the battery), promoting improved public access and appreciation of the historic heritage, developing on-site interpretation, and opportunities for community involvement, and ensuring future development of the place is compatible with its historic heritage significance.	Minor Adverse Effects (Permanent, Future)
(not recorded)	has historically been reported as an urupa (Phillips 2010). However, during the 2000 field survey Phillips did not identify any archaeological features of Māori origin, but concluded that there was potential for such features to survive on unmodified areas	The same with th	



	on the high points of Union Hill, Winner Hill and Gladstone Hill. Again recent archaeological survey for the previously proposed Project Quattro did not identify any archaeological features of Māori origin on Gladstone Hill and within the proposed Gladstone Pit.		
	These areas have clearly been affected by modern gold prospecting, particularly over Gladstone Hill. Any archaeological features of Māori origin are unlikely to have survived.		
	If such features survive, they would be affected by the lateral mine expansion.		
Effects on the setting and views of key historic heritage places or heritage landscapes	Currently the identified historic heritage features have little or no surface visibility, other than some sections of the Low Level Water Race T13/817 outside the project area.	Pit closure plan to partially reinstate Gladstone Hill and Winner Hill by using the pit as a tailings disposal facility that will eventually have a dry cap over them. However, the resulting hill with be a materially lower RL with a flat top.	
	The proposal will have some adverse effects on the setting of historic heritage due to the loss of Gladstone Hill and Winner Hill, known areas of historic mining. Although this hill is to be partially reinstated, this will not be able to replicate the existing hill exactly and rocky outcrops.		

### Positive effects for Gladstone Open Pit

The proposed open pit mining works on Gladstone Hill and Winner Hill are a continuation of mining activities for over 100 years, which are now strongly associated with the historical identity of Waihi.

It is still likely that some of the historic underground mine workings may survive in places on both Gladstone Hill and Winner Hill. During works it may be possible to archaeologically investigate and record these remains. Any information gained will aid our understanding of these early mining activities at Gladstone Hill and could be included at on-site heritage interpretation as part of the Heritage and Archaeological Management Plan. New research results can also be used for the people of Waihi or visitors to the area (e.g. Martha Mine education centre, Gold Discovery centre/ Waihi Visitor centre and Waihi Gold Mine tours).



### **General Mitigation of Heritage Effects**

It is recommended that the following historic heritage mitigation measures are adopted for GOP:

- Since the proposal will involve the destruction of archaeological remains at sites T13/820, T13/821 and T13/817 an archaeological Authority is required as part of the Fast Track process prior to the start of any works that could impact on pre-1900 subsurface remains. An Archaeological Management Plan (AMP) will be submitted with the Authority application that will provide general protocols for the exposure of archaeological remains, including remains of Māori origin, koiwi tangata (human remains) or taonga (Māori artefacts).
- Development of a harvesting plan to avoid or minimise any effects on the Low Level Water Race (T13/817) during the harvesting of pine trees on Winner Hill;
- Archaeological investigation and recording of any archaeological remains affected and uncovered during earthworks for the pit expansion;
- New research results should be disseminated to the public and deposited with local archives/ heritage groups (e.g. Waihi Arts Centre and Museum, Waihi Heritage Vision, Ohinemuri website) and organisations (e.g. Martha Mine education centre, Gold Discovery centre/ Waihi Visitor centre and Waihi Gold Mine tours)
- The archaeological monitoring report for the GOP will be provided to Heritage New Zealand and Hauraki District Council (Cultural Heritage Inventory); and,
- Opportunities for public access and interpretation along the route of the Low Level Water Race T13/817, and at any surviving archaeological remains of historical gold mining features associated with Winner Hill (T13/820);
- Incorporate any surviving mining features and heritage interpretation panels as part of the Heritage and Archaeology Management Plan;
- Continue the promotion and funding of ongoing remedial and maintenance work of the remaining significant sites and features associated with the Union Hill mining complex immediately to the west of Gladstone Hill. This work would be guided by the Union Hill (Waihi) Heritage Landscape Management Plan (Macready and Clough Jan 2016).

### Overall Effects of the Gladstone Open Pit

A substantial part of both the Gladstone Hill gold mining complex (T13/821), part of the Winner Hill gold mining complex (T13/820) and part of the Lower Level Water Race (T13/817) will be affected by the proposed GOP. Also, the possibility of additional subsurface remains in relation to past mining activities cannot be ruled out and would also be destroyed by the proposal. However, much of the sites have already been affected by modern gold prospecting and farming and there are only minimal visible remains of this complex.

Those areas which are impacted can be effectively mitigated through archaeological recording and investigation, and the dissemination of research results. There are possible opportunities for public access and interpretation along the route of the Low Level Water Race T13/817, and at any surviving archaeological remains of historical gold mining



features associated with Winner Hill (T13/820). There will be significant alteration to the existing topography of the site. However, there will be positive outcomes in terms of new information on early mining activities, interpretation, education and outreach.

Part of the proposed mitigation is to expand the promotion and funding of ongoing remedial and maintenance work on significant sites and features associated with the Union Hill mining complex within OGNZL's property immediately to the west of Gladstone Hill. This work would be guided by the Union Hill (Waihi) Heritage Landscape Management Plan (Macready and Clough Jan 2016) promoting improved public access and appreciation of the historic heritage, and opportunities for community involvement, and ensuring future development of the place is compatible with its historic heritage significance.

Overall the effects on historic heritage after recommended mitigation are likely to be minor in relation to the proposed GOP.

## TSF<sub>3</sub>

Establishment works within the footprint of the TSF3 will require initial earthworks to remove overburden. Topsoil will first be stripped to a depth of approximately 300mm over a total footprint, including the extent of stockpile and uphill diversion drain, of approximately 120 hectares. Of this area 20 hectares is already part of the existing footprint of Storage 1A and the Eastern Stockpile. After topsoil stripping the depth of earthworks will vary, as this is not just a linear project.

The likely adverse effects on historic heritage as a result of TSF3 and recommended mitigation measures are set out in Table 16. Any positive effects on historic heritage are also outlined below, followed by an assessment of the overall effects on historic heritage of TSF3.

Table 16. Adverse effects of TSF3 and proposed mitigation

Potential Adverse Effect	Nature of effects	Proposed Specific Mitigation Measures	Overall Effects (after mitigation)
Direct physical effects on historic heritage items	There are no known historic heritage items in the project area		Nil – Less Than Minor Effects
Effects on archaeological potential arising from land disturbance	It is highly unlikely that old underground workings survive in this area, or any other features associated with historical mining activity.  There are no known pre-European Māori sites within The TSF3	To avoid any delays should unidentified subsurface features be exposed by the proposed works, a general Archaeological Authority should be applied for under the Fast Track process to cover all works undertaken for TSF3, as a precaution. This should be obtained before any earthworks are carried out. This approach would have the advantage of allowing any archaeology uncovered during the development of the property to be dealt with immediately, avoiding delays while an	Nil – Less Than Minor Effects



Authority is applied for and processed.	
Archaeological survey, recording and investigation of any subsurface archaeological features uncovered during earthworks for the development. The feasibility of this would need to be on a case by case basis.	

## **General Mitigation of Heritage Effects**

It is recommended that the following historic heritage mitigation measures are adopted for TSF3:

• To avoid any delays should unidentified subsurface features be exposed by the proposed works, a general Archaeological Authority is being applied for under the Fast Track process to cover all works undertaken for TSF3, as a precaution. An Archaeological Management Plan (AMP) will be submitted with the Authority application that will provide general protocols for the exposure of archaeological remains, including remains of Māori origin, koiwi tangata (human remains) or taonga (Māori artefacts).

### **Overall Effects**

There are no known historic heritage items in the TSF3 project area. However, the possibility of subsurface archaeological remains cannot be ruled out and would also be destroyed by the proposal. If any remains exposed are potentially archaeological features general protocols within the AMP will be implemented and effects can be effectively mitigated through archaeological recording and investigation, and the dissemination of research results.

Therefore, the overall effects on historic heritage after recommended mitigation are likely to be nil or less than minor in relation to the TSF3 facility.

### **NRS**

Establishment works within the footprint of the NRS and associated stockpiles and infrastructure will require initial earthworks to remove overburden. Topsoil will first be stripped to a depth of approximately 300mm over a total footprint of approximately 40 hectares (1,030m x 560m at its furthest extents). Of this area 16 hectares (400m x 460m) is already part of the existing stockpile and workshop area. After topsoil stripping the depth of earthworks will vary, as this is not just a linear project.

The likely adverse effects on historic heritage as a result of the NRS project and recommended mitigation measures are set out in Table 17. Any positive effects on historic heritage are also outlined below, followed by an assessment of the overall effects on historic heritage of the NRS project.



Table 17. Adverse effects for the NRS and proposed mitigation

Potential Adverse Effect	Nature of effects	Proposed Specific Mitigation Measures	Overall Effects (after mitigation)
Queen of Waihi Shaft	The shaft is located in close proximity to the proposed NRS infrastructure and will not be directly affected, however it will require the shaft to be infilled and capped.	Detailed recording of the visible remains of this mining structure. The location of the shaft will be clearly marked on the ground so as to avoid accidental damage during the NRS project and future activities	Nil to Minor Effects (Permanent, Future)
Effects on archaeological potential arising from land disturbance	It is unlikely that old mine workings survive in this area, or any other features associated with historical mining activity. However, the possibility of additional subsurface remains in relation to past mining activities cannot be ruled out and would also be destroyed by the proposal.  There are no known pre-European Māori sites within the NRS	To avoid any delays should unidentified subsurface features be exposed by the proposed works, a general Archaeological Authority should be applied for under the Fast Track process to cover all works undertaken for NRS, as a precaution. This should be obtained before any earthworks are carried out. This approach would have the advantage of allowing any archaeology uncovered during the development of the property to be dealt with immediately, avoiding delays while an Authority is applied for and processed.  Archaeological survey, recording and investigation of any subsurface archaeological features uncovered during earthworks for the NRS and related infrastructure. The feasibility of this would need to be on a case by case basis.	Nil – Less Than Minor Effects

### Positive effects for the NRS project

Any information gained through archaeological investigation and recording of any subsurface archaeological features will potentially aid our understanding of the history of the area.

### **General Mitigation of Heritage Effects**

It is recommended that the following historic heritage mitigation measures are adopted for NRS:

 To avoid any delays should previously unidentified subsurface archaeological features be exposed by the proposed works, a general Archaeological Authority is being applied for under the Fast Track process to cover all works undertaken for



NRS, as a precaution. An Archaeological Management Plan (AMP) will be submitted with the Authority application that will provide general protocols for the exposure of archaeological remains, including remains of Māori origin, koiwi tangata (human remains) or taonga (Māori artefacts).

#### **Overall Effects**

The capping / infilling of the Queen of Waihi Shaft and the unlikely destruction of subsurface remains associated with early mining workings is a minor adverse effect but will not cause significant, unacceptable adverse impacts on historic heritage if appropriately mitigated through archaeological recording.

The possibility of other previously unrecorded subsurface archaeological remains cannot be ruled out and would also be destroyed by the proposal. If any remains exposed are potentially archaeological features general protocols within the AMP will be implemented and effects can be effectively mitigated through archaeological recording and investigation, and the dissemination of research results.

Overall the effects on historic heritage after recommended mitigation are likely to be less than minor in relation to the proposed NRS.



# STATUTORY CONSIDERATIONS

Whilst the application is made under the Fast-track Approvals Act, the provisions of the RMA and HNZPTA remain relevant in consideration of the proposal.

# **Resource Management Act 1991**

Relevant to this assessment, Section 6 of the RMA identifies the following as matters of national importance: 'the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga' (S6(e)); and 'the protection of historic heritage from inappropriate subdivision, use, and development' (S6(f)).

All persons exercising functions and powers under the RMA are required under Section 6 to recognise and provide for these matters of national importance when 'managing the use, development and protection of natural and physical resources'. There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (S17), including on historic heritage.

Historic heritage is defined (S2) 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'. 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.

Regional Policy Statements, Regional Plans and District and Plans prepared under the provisions of the RMA help to identify, protect and manage archaeological and other heritage sites. The Hauraki District Plan (2014) (HDP) and Waikato Regional Policy Statement (RPS) are relevant to the proposed activity. This assessment addresses historic heritage objectives and policies of the RPS through the archaeological survey and research of the project area, to determine whether significant historic heritage places, or previously unidentified historic heritage, is affected by the proposal.

Regional, district and local plans contain sections that help to identify, protect and manage archaeological and other heritage sites. The plans are prepared under the rules of the RMA. The Waikato Regional Policy Statement (2016), Hauraki District Plan (2014) and Waikato Regional Plan (2012) are relevant to the proposed activity.

# Waikato Regional Policy Statement (RPS)

Chapter 3 (objectives) of the Waikato RPS states that 'Sites, structures, landscapes, areas or places of historic and cultural heritage are protected, maintained or enhanced in order to retain the identity and integrity of the Waikato region's and New Zealand's history and culture' (3.18 Historic and cultural heritage).

Policy 4.4 (on regionally significant industry and primary production, such as mining) aims to ensure:

'The management of natural and physical resources provides for the continued operation and development of regionally significant industry and primary production activities by:

- c) ensuring the adverse effects of regionally significant industry and primary production are avoided, remedied or mitigated;
- g) promoting positive environmental outcomes.'



Policy 6.1 (on the built environment) states that 'Subdivision, use and development of the built environment, including transport, occurs in a planned and co-ordinated manner which:

a) has regard to the principles in section 6A'

The General development principles in section 6A outline that

'New development should:

j) maintain or enhance landscape values and provide for the protection of historic and cultural heritage;

The other policies in the RPS that are of most relevance to heritage and archaeology include:

- Policy 10.1 Managing historic and cultural heritage. Provide for the collaborative, consistent and integrated management of historic and cultural heritage resources. Improve understanding, information sharing and cooperative planning to manage or protect heritage resources across the region;
- Policy 10.2 Relationship of Māori to taonga. Recognise and provide for the relationship of tāngata whenua and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga;
- Policy 10.3 Effects of development on historic and cultural heritage. Manage subdivision, use and development to give recognition to historic and cultural heritage and to integrate it with development where appropriate; and,
- Policy 12.3 Maintain and enhance areas of amenity value. Areas of amenity value are identified, and those values are maintained and enhanced. These may include:... b) ... historic areas;

This assessment addresses objective 3.18 of the Waikato Regional Policy Statement and the above policies through the archaeological survey and research of the project area, to determine whether significant historic heritage places, or previously unidentified historic heritage, are affected by the proposal.

# Hauraki District Plan (HDP)

Section 6.1 of the HDP on Historic Heritage is relevant to all aspects and locations within the project area. Key objectives, policies and assessment criteria for the proposal are provided in the table below (Figure 46. Hauraki District Plan Section 6.1 – Historic Heritage). There are no controlled or prohibited activities in Section 6.1.

The HDP contains a Schedule of Historic Heritage Inventory, which is divided into Category A and B Heritage Features; Category C Heritage Items; and, Category A and B Heritage Areas. There are also identified Areas of Significance of Māori, which are not covered by this report.

Under the exceptions (6.1.5.1) of the Historic Heritage provisions are archaeological sites (1). This states that (a)

'There are no rules applying in the District Plan with particular respect to archaeological sites. Where an archaeological site is included in the schedule of Historic Heritage Inventory as an Area of Significance to Māori, the rules in Sections 6.1.5.2 - 6.1.5.8 apply.



All other known archaeological sites are shown on the planning maps for information purposes only.'

The Advice Note to this exception states that:

- '(i) The Heritage New Zealand Pouhere Taonga Act 2014 provides for the recording, protection and preservation of archaeological sites whether registered or not.
- (ii) If any land use activity (such as earthworks, fencing or the erection or removal of structures) is likely to damage, modify or destroy any pre-1900 archaeological site (whether recorded or unrecorded), an 'authority' consent from Heritage New Zealand must be obtained for the work to lawfully proceed. This applies to all sites, regardless of whether Building or Resource Consents have been granted or not. Heritage New Zealand should be contacted for further information on this requirement.'

The historic heritage provisions therefore relate to those places on the Schedule of Historic Heritage Inventory, with archaeological sites being managed though the Heritage New Zealand Pouhere Taonga Act 2014. Policy A (iv) does provide for including (where appropriate) accidental discovery protocols, as a condition of resource consent and/or as advice notes with resource consents, advising developers and property owners of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.

Figure 46. Hauraki District Plan Section 6.1 – Historic Heritage

# 6.1.3 – Objectives and Policies

# (1) OBJECTIVE 1

To protect a range of heritage items that reflect the past history of the Hauraki District from the adverse environmental effects of other activities.

# (a) Policies

Objective 1 will be achieved by the implementation of the following policies:

- (i) Identify and afford protection to a representative range of historic heritage items of value to the community and the nation, recognising that it is not sustainable to protect all built heritage in the District and that some items have greater heritage value and deserve a higher level of protection than others.
- (ii) Minimise the effects of activities, subdivision and development which could damage or destroy the historic heritage values associated with scheduled historic items.
- (iii) Ensure the heritage and amenity values of the built heritage resource are not adversely affected by a change in context or physical location.
- (iv) Encourage the design of new buildings and structures and external alterations or additions to building facades to be compatible with the scale, detailing, style, materials and heritage character of the Waihi and Paeroa Town Centre pedestrian frontage areas. Note: The rules and guidelines are set out in section 5.11 Town Centre Zone.
- (v) Liaise with and seek advice from Heritage New Zealand on heritage planning generally and on all matters relating to sites listed by Heritage New Zealand, and consult with and seek advice from recognised local heritage groups on local heritage



#### matters.

- (vi) Consult with and seek advice from the tangata whenua on all matters relating to identified waahi tapu sites, areas, and other features of significance to them.
- (vii) Draw to the attention of developers the requirements of the Heritage New Zealand Pouhere Taonga Act 2014, where the Council is of the view a proposed development may involve the destruction, or modification, of any archaeological site.
- (viii) Where it is appropriate to require them, have regard to cultural values assessments and/or cultural impact assessments, heritage assessments and conservation management plans.

# (2) OBJECTIVE 2

To protect significant archaeological sites which contribute to the District's heritage, knowledge and appreciation of the past.

# (a) Policies

Objective 2 will be achieved by the implementation of the following policies:

- (i) Identification and scheduling of archaeological sites with significant historic, cultural, scientific, heritage or visual amenity value.
- (ii) Ensure that subdivision, land use and development does not result in inappropriate damage or destruction of scheduled archaeological sites and their surrounds.
- (iii) Draw the attention of developers and property owners to the requirements of the Heritage New Zealand Pouhere Taonga Act 2014 where a proposed subdivision, land use or development may involve the destruction or modification of any archaeological site.
- (iv) Include where appropriate accidental discovery protocols, as a condition of resource consent and/or as advice notes with resource consents, advising developers and property owners of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.

# (3) OBJECTIVE 3

To recognise and protect sites of significance to Māori.

#### (a) Policies

Objective 3 will be achieved by the implementation of the following policies:

- (i) Identification and protection, in consultation and partnership with local iwi, of sites of significance to Māori.
- (ii) Avoid a reduction of historical, cultural and spiritual values associated with sites of significance to Māori.
- (iii) Avoid, remedy or mitigate the adverse effects of subdivision, land use and development on identified Areas of Significance to Māori.
- (iv) Ensure that local iwi are consulted over the use, development or protection of sites of significance to Māori.

# (5) OBJECTIVE 5



Sustainable management of the built heritage resource by encouraging and promoting adaptive reuse of the built heritage features resource.

(a) Policies

Objective 5 will be achieved by the implementation of the following policies:

- (i) Encourage the continued use or adaptive reuse of scheduled heritage buildings, provided any adverse effects of the activity on the heritage values can be avoided, remedied or mitigated.
- (ii) Relaxation or waiving of parking requirements or bulk and location rules where this would encourage sustainable reuse and protection of heritage values.

# 6.1.5.9 ASSESSMENT CRITERIA FOR DISCRETIONARY ACTIVITIES

- (1) The following criteria will be used to assess any application for a Discretionary Activity:
- (a) Reasons for inclusion of the Heritage Item, and its significance, in the schedule of Historic Heritage Inventory.
- (b) The extent to which the heritage values are likely to be retained, protected and/or enhanced.
- (c) The reasons why the works are necessary and whether there are other means of achieving the same or similar ends with less adverse effects on the Heritage Item.
- (d) Degree of modification or alteration that will be caused to the Heritage Item, whether the modification is reversible and whether it will have cumulative adverse effects on the Heritage Item.
- (e) Design, materials and finish of proposed alterations or additions to the Heritage Item.
- (f) Impact on the cultural landscape or streetscape values from an amenity and heritage perspective.
- (g) Whether the relevant iwi have been consulted (for any Heritage Item which is significant to them) and whether the consultation supports the application.
- (h) The extent to which the works may adversely affect cultural and spiritual values.
- (i) Whether the proposal is consistent with the objectives of any current iwi management plan, current conservation management plan or heritage assessment relating to the Heritage Item, and more particularly the stated conservation policies and strategies they identify for the item.
- (j) Whether Heritage New Zealand has been consulted and whether the consultation supports the application.
- (k) Whether the conservation principles contained within the ICOMOS NZ Charter for the Conservation of Places of Cultural Heritage Value are applicable, and where applicable, have they been substantially adhered to.
- (1) The costs and technical feasibility of remediation and restoration.
- (m) In relation to an application for alteration or addition to a Heritage Building not in



conformity with the zone development standards and/or the District wide performance standards:

- (i) whether conformity with the zone development standards would change the intrinsic value and character of the Heritage Building;
- (ii) whether the purpose of the addition or alteration is to accommodate an activity that will positively encourage the protection and preservation of the Heritage Building.
- (n) In relation to an application for the removal and relocation of a Heritage Feature:
- (i) The appropriateness of the proposed site, where relocation is proposed.
- (ii) The ability of the feature to withstand relocation from a structural perspective.
- (iii) The importance (if any) of the land or street setting surrounding the Heritage Feature in its present location.
- (iv) The extent to which the historical, cultural and community associations with the building will be reduced by the relocation.

# Place/ Zone specific provisions

In addition to the objectives and policies above, there are a number of place or zone specific policies within the HDP which are also relevant to historic heritage.

Waihi Objective 1 seeks 'To enable the people and community of Waihi to provide for its service town role to the surrounding rural area, as well as its role in the mining and tourist industries, at the same time as maintaining an attractive residential environment' (5.6.4). Objective 1 will be achieved by implementation of the following policies (a):

- '(ii) Recognise the significance of mining and the ongoing associated developments to the social and economic wellbeing of the residents of Waihi, subject to maintaining the amenity values of Waihi.
- (iii) Recognise and protect the Goldfields Steam Train complex, protect buildings and sites for their historic importance, and seek to retain and enhance other heritage features (eg. group of historic "Miners Cottages").'

Waihi Objective 2 seeks "To enable and encourage development that responds to and enhances the distinctive natural and built character of Waihi" (5.6.4). Objective 2 will be achieved by implementation of the following policies (a):

- (i) Enhance the mainstreet historic mining character of the central area in respect of the form, scale, bulk, location, heritage and architecture of buildings and infrastructure.
- (ii) Respect the existing townscape character of Waihi (street layout, existing residential character, cottages) in new development and encourage visual and physical linkages to local features such as the Pumphouse, Waitete Stream, Ohinemuri River, and hills of the Coromandel Range (to the north of Waihi).
- (iii) Enhance the presence of town centre heritage/character buildings and local landmarks through streetscape design and any redevelopment/development initiatives that may affect the viewing quality and appreciation of these buildings/features...



(vi) Maintain and enhance the amenity of the residential environment in the Residential and Low Density Residential Zones.

The loss of historical features can be mitigated to an acceptable level, through archaeological recording. Any information gained could 'provide for cultural well-being', through public interpretation or any remains uncovered, and through making technical heritage reports accessible to the general public.

# Waikato Regional Plan (Waikato RP)

The Waikato Regional Plan primarily considers matters of cultural heritage where they are identified as matters of significance to Māori. Most relevant to this project is Section 5 of the regional plan ('the Land and Soil Module'). This section contains policies on the management of soil erosion, and Section 5.1.3 Policy 1 contains the following statement with regard to sites of importance to Tangata Whenua, including archaeological sites of Māori origin:

'Policy 1: Managing Activities that Cause or Have the Potential to Cause Accelerated Erosion and Encouraging Appropriate Land Management Practices. Through permitted activities and non-regulatory methods manage activities that cause or have the potential to cause accelerated erosion, with particular regard to:

e) the potential to adversely affect waahi tapu and archaeological sites or other identified sites of importance to tangata whenua as Kaitiaki.'

It should be noted that although no archaeological features of Māori origin have been identified in the project area, there are archaeological sites of Māori origin recorded elsewhere in the region of Waihi. The rich resources of Ohinemuri attracted Māori to the area and occupation can be traced back over centuries; evidenced by the numerous archaeological sites (namely middens, pits, terraces, and pa) and associated place names throughout the district. Many pa were located on prominent sites across the Hauraki and Ohinemuri areas, including at Waihi where the ridge pa known as Motu Keho was constructed on what is now Black Hill (NZAA T13/815). A pa may have also stood near the base of Pukewa (now Martha Mine).

In 2000 Phillips was informed that traditionally burials were placed in caves on Gladstone Hill. However, no archaeological features of Māori origin were identified by Phillips in 2000, although she concluded that there was potential for such features to survive on unmodified areas on the high points of Union Hill, Winner Hill and Gladstone Hill. However, further recent archaeological survey on Gladstone Hill and within the proposed Gladstone Open Pit did not identify any archaeological features of Māori origin. These areas clearly having been affected by numerous drill hole collar shafts excavated as part of modern gold prospecting, particularly over Gladstone Hill. It is therefore considered unlikely that any such features would have survived on Gladstone and Winner Hill as a result of historic and modern mining, and farming activities. Accidental discovery protocols should therefore be followed should any previously unidentified archaeological sites be revealed as a result of the proposed works. For any sites pre-dating 1900 this is a legal requirement under the HNZPTA 2014 (discussed in more detail in the following section).

The assessment has determined that the Waihi North Project will not affect any scheduled item in the HDP.



Summary of Historic Heritage Requirements under the RMA

• Any consent granted should include accidental discovery protocols, as a condition of resource consent, advising OGNZL of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.

The Royal Standard Battery site and associated mining remains (T12/681) located at the WUG source is scheduled on the HDP – Royal Standard Battery, Wharekirauponga HAU271 Category B – Heritage Area, Regional or Sub-Regional Significance (see Appendix.1). A number of surface drilling rigs and a camp have previously been erected at the WUG orebody within the scheduled heritage area but have avoided known heritage features.

The effects on heritage values from any future additional WKP exploratory drill sites within proximity of the identified heritage features of site T12/681 Royal Standard Battery and Gold Mining Area and/or within the scheduled Heritage Area - Royal Standard Battery, Wharekirauponga HAU271 Category B, would need to be assessed individually.

# Heritage New Zealand Pouhere Taonga Act 2014

In addition to any requirements under the RMA, the 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 (Section 42).

An archaeological site is defined by the HNZPTA Section 6 as follows:

'archaeological site means, subject to section 42(3), –

- (a) any place in New Zealand, including any building or structure (or part of a building or structure) that –
- (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
- (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
- (b) includes a site for which a declaration is made under section 43(1).

Under Section 42(3) an Authority is not required to permit work on a pre-1900 building unless the building is to be demolished. Under Section 43(1) a place post-dating 1900 (including the site of a wreck that occurred after 1900) that could provide 'significant evidence relating to the historical and cultural heritage of New Zealand' can be declared by Heritage NZ to be an archaeological site.

Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (Section 44(a)), or to modify a specific archaeological site where the effects will be no more than minor (Section 44(b)), or for the purpose of conducting a scientific investigation (Section 44(c)). Applications that relate to sites of Māori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapu and are subject to the recommendations of the Māori Heritage Council of Heritage NZ. In addition, an application may be made to carry out an exploratory investigation of any site or locality under Section 56, to confirm the presence, extent and nature of a site or suspected site.



Under Section 52 of the Act, Heritage NZ may impose an Authority condition requiring that an archaeological investigation is carried out, if this is 'likely to provide significant information in relation to the historical and cultural heritage of New Zealand'. This provision allows the information contained within a site affected by development (and any associated artefacts) to be recorded and preserved, in mitigation of the modification of the site.

Summary of Historic Heritage Requirements under the HNZPTA:

The WNP will affect a number of recorded archaeological sites and therefore an Authority is being applied for to carry out work that may affect these sites. Other, so far unidentified, subsurface or near surface features relating to mining activities and the early history of Waihi township could also be exposed, therefore, all works undertaken for this project should be included in the Authority application. The conditions of the Authority are proposed to include the archaeological recording/investigation of any remains affected. No archaeological features of Māori origin have been identified in the project area and will be affected.

# **Conservation Act 1987**

The Conservation Act 1987 was developed to promote the conservation of New Zealand's natural and historic resources. The Act established the Department of Conservation, bringing together under one department the conservation functions formerly managed by five different government agencies. The functions of the Department as they relate to historic heritage are set out in Section 6 of the Act and include:

- '(a) to manage for conservation purposes, all land, and all other natural and historic resources, for the time being held under this Act, and all other land and natural and historic resources whose owner agrees with the Minister that they should be managed by the Department: ...
- (b) to advocate the conservation of natural and historic resources generally:
- (c) to promote the benefits to present and future generations of—
- (i) the conservation of natural and historic resources generally and the natural and historic resources of New Zealand in particular; and
- (ii) the conservation of the natural and historic resources of New Zealand's sub-antarctic islands and, consistently with all relevant international agreements, of the Ross Dependency and Antarctica generally; and
- (iii) international co-operation on matters relating to conservation:
- (d) to prepare, provide, disseminate, promote, and publicise educational and promotional material relating to conservation:
- (e) to the extent that the use of any natural or historic resource for recreation or tourism is not inconsistent with its conservation, to foster the use of natural and historic resources for recreation, and to allow their use for tourism: ....'

Section 4 requires that the Act is interpreted and administered so as to give effect to the principles of the Treaty of Waitangi.

The Department of Conservation manages several categories of conservation area including conservation parks, amenity areas and stewardship areas managed for the



protection of their natural and historic resources and to facilitate public appreciation and enjoyment; wilderness, ecological, sanctuary and wildlife management areas managed for the protection of their natural/biodiversity values; and marginal strips adjoining the sea, lakes or rivers.



# **CONCLUSIONS**

The WNP will result in a number of historic heritage effects, primarily associated with the WUG SFA and the proposed Gladstone Open Pit.

The WUG mine main infrastructure site will impact on part of sites T13/961 Mataura Water Race, T13/962 Willows Timber Tramway and T13/963 High-Level Walmsley Timber Tramway.

The Gladstone Open Pit will impact on a substantial part of the Gladstone gold mining complex (T13/821), part of the Winner Hill gold mining complex (T13/820); and two sections of the Lower Level Water Race (T13/817). Other sections of T13/817 may be impacted upon by the harvesting of pine trees around the southern extent of Winner Hill.

The NRS will impact on the Queen of Waihi Shaft (T13/971), which will be infilled and capped.

The proposed TSF3 will have no direct physical impact on any known historic heritage items.

The effects on heritage values from any future additional WKP exploratory drill sites within proximity of the identified heritage features of site T12/681 Royal Standard Battery and Gold Mining Area and/or within the scheduled Heritage Area - Royal Standard Battery, Wharekirauponga HAU271 Category B, would need to be assessed individually through a Site Selection Protocol, which aims to avoid impacting on any known and previously unrecorded historic features and sites of significance to iwi.

The WNP will also affect a number of recorded archaeological sites and therefore, Authority is being applied for to carry out work that may affect these sites. Other, so far unidentified, subsurface or near surface features relating to mining activities and the early history of Waihi township could also be exposed, therefore, all works undertaken for this project should be included in the Authority application. The conditions of the Authority are proposed to include the archaeological recording/investigation of any remains affected.

Any consent granted should, as a condition of resource consent, include accidental discovery protocols and an advice note advising OGNZL of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.



# RECOMMENDATIONS

#### WUG

• Any future additional WKP activities (i.e exploratory drill sites, vent sites) proposed within proximity of site T12/681 Royal Standard Battery and Gold Mining Area, Royal Standard Gold Mining Tramway (T12/1290) and/or within the scheduled Heritage Area - Royal Standard Battery, Wharekirauponga HAU271, the effects on heritage values would need to be assessed as they are currently indicative only. The location of these will be determined / confirmed following the undertaking of a Site Selection Protocol that will evaluate potential drill and vent sites against ecological, freshwater, landscape, heritage and recreational criteria. The intention is to avoid impacting on any heritage features if at all possible.

Resource consent would be required if historic heritage items within the scheduled Heritage Area - Royal Standard Battery, Wharekirauponga HAU271 Category B, are affected by the proposal.

- Protection measures should be put in place so that identified archaeological remains/features associated with the Royal Standard Battery and gold mining area T12/681 / T12/1290 are not inadvertently impacted upon by having their locations marked on project plans.
- An archaeological Authority is required before any work associated with proposed WUG can be carried out that may affect the site T13/961 Mataura Water Race (*Note that this is a legal requirement*). OGNZL has already made an application and been granted such an Authority (No. 2025/359).
- As a precaution a general Archaeological Authority will be applied for to cover the WUG prior to any works that may affect site T12/681 / T12/1290. Archaeological monitoring, recording and investigation of any archaeological features and remains associated with this site that may be affected within the Project area, and any other archaeological remains uncovered during earthworks.
- Include accidental discovery protocols, as a condition of resource consent, advising OGNZL of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.
- Protection measures should be put in place so that additional archaeological remains/features associated with T13/961 and the locations and extents of the recorded archaeological sites T13/962 Willows Timber Tramway and T13/963 High Level Walmsley Tramway are not inadvertently impacted upon elsewhere. For example, their locations marked on development plans and temporary fencing installed around the sites during construction works;

# **GOP**

- No resource consents will be required for historic heritage as no scheduled historic heritage items are affected by the proposal.
- As the proposed development will affect recorded archaeological sites T13/820, T13/821 and T13/817 and there is the potential for previously unrecorded



subsurface pre-1900 remains to be uncovered, a general Archaeological Authority will be applied for to cover the entire Gladstone Open Pit project before any work can be carried out that may affect these sites. The conditions of the authority are likely to include the archaeological recording/investigation of any remains affected (*Note that this is a legal requirement*).

- Due to the possibility that other pre-1900 archaeological remains may be exposed during earthworks, the Archaeological Authority application should include any additional sites that may be discovered within the entire Project area. This is a precaution to reduce potential delays should any archaeological remains be exposed during construction.
- A harvesting plan should be developed as part of the Archaeological Authority application to avoid or minimise any effects on the Low Level Water Race (T13/817) around the southern extent of Winner Hill.
- A general condition of any resource consent relating to the accidental discovery of archaeological remains should be included, requiring that if any archaeological remains are exposed during development, work should cease in the immediate vicinity and Hauraki District Council and Heritage NZ should be informed.

# TSF<sub>3</sub>

- No resource consents will be required for historic heritage as no scheduled historic heritage items are affected by the proposal.
- Include accidental discovery protocols, as a condition of resource consent, advising OGNZL of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.
- To avoid any delays should unidentified subsurface features be exposed by the proposed works, a general Archaeological Authority will be applied for to cover all works undertaken for TSF3, as a precaution. This should be obtained before any earthworks are carried out. This approach would have the advantage of allowing any archaeology uncovered during the development of the property to be dealt with immediately, avoiding delays while an Authority is applied for and processed.

# **NRS**

- No resource consents will be required for historic heritage as no scheduled historic heritage items are affected by the proposal.
- Include accidental discovery protocols, as a condition of resource consent, advising OGNZL of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.
- To avoid any delays should unidentified subsurface features be exposed by the proposed works, a general Archaeological Authority will be applied for to cover all works undertaken for NRS, as a precaution. This should be obtained before any earthworks are carried out. This approach would have the advantage of allowing any archaeology uncovered during the development of the property to be dealt with immediately, avoiding delays while an Authority is applied for and processed.



• The recorded archaeological site Queen of Waihi Shaft (T13/971) will not be affected by the proposed works but will require infilling and capping. It is considered a low possibility that unidentified subsurface archaeological remains may be exposed during development.

# **General Recommendations**

- Adoption by OGNZL of the Proposed Specific Mitigation Measures for the mitigation of effects of historic heritage values as a result of the WNP.
- Any consent granted should, as a condition of resource consent, include accidental
  discovery protocols and an advice note advising OGNZL of their obligations under
  the Heritage New Zealand Pouhere Taonga Act 2014 with regards to archaeology.
- Since the proposal may involve the destruction of archaeological remains an Archaeological Authority will be applied for prior to the start of any works that will affect the building or could impact on pre-1900 subsurface remains. (*Note that this is a legal requirement*).
- The Authority should include all earthworks within the WNP area as a precaution so that potential delays can be avoided should other sites be exposed.
- Detailed recommendations for archaeological investigation and recording should be set out in the Archaeological Management Plan (AMP) that will accompany the application for an Authority to modify an archaeological site.
- Any archaeological remains exposed during Project works should be archaeologically investigated and recorded in accordance with the conditions of the Archaeological Authority, and the construction management plan should allow sufficient time for the investigation and recording of any remains that may be exposed.
- The conditions of the authority should include remote investigation and research using modern survey techniques to recover information about the underground mining workings.
- In the event of koiwi tangata (human remains) being uncovered, work should cease immediately in the vicinity of the remains and tangata whenua, Heritage NZ, the NZ Police and Hauraki District Council should be contacted so that appropriate arrangements can be made.
- Since archaeological survey cannot always detect sites of traditional significance to Māori, such as wahi tapu, tangata whenua should be consulted regarding the possible existence of such sites in the area.
- Information on the history of the site and any outcomes from the archaeological investigations should be made available to the public, including on the Oceana Gold website.



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# **APPENDIX 1: NZAA SITE RECORD FORMS**

(provided in a separate appendices document)

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# APPENDIX 2: HAURAKI DISTRICT PLAN HISTORIC HERITAGE INVENTORY

(provided in a separate appendices document)



# APPENDIX 3: RECORDED HERITAGE FEATURES AT T12/681 / T12/1290 ROYAL STANDARD BATTERY, GOLD MINING AREA AND TRAMWAY

(provided as a separate appendices document)



# APPENDIX 4: UNION HILL (WAIHI) HERITAGE LANDSCAPE MANAGEMENT PLAN (MACREADY AND CLOUGH JAN 2016)

(provided as a separate document)



# APPENDIX 5: OCEANA GOLD PROJECT MARTHA, WAIHI: PART 1 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND (BROWN ET AL. 2018)

(provided as a separate document)