

JANUARY 2019

NGATI TAMAOHO NGATI TE ATA

CULTURAL VALUES ASSESSMENT



*“look after the land and the land will look after you
titiro i muri i te whenua, a ka titiro te whenua i muri i a koutou”*

Prepared For:

McPherson Resources Limited

Format of Report

1. Introduction

- Proposal
- Purpose of Report
- Keri Momo Takawai – Mining and Quarrying

2. Ngati Tamaoho CVA Report

3. Ngati Te Ata (Waiohua) CVA Report

Please note: The cva reports (original form) from both iwi have been included in this manner to ensure that each iwi's cultural narratives and relationship to the area, and cultural preferences regarding environmental management and best practice - upholds the mana and cultural integrity of each iwi. You will note the similarities both iwi share when it comes to the environment.

4. Conclusions and Recommendations

INTRODUCTION

The Proposal

As explained to us during our onsite meeting we now understand that the proposal seeks to undertake the following;

McPherson Resources Limited (McPherson) seeks approval for the operations (existing and future) at the McPherson Quarry, being a weathered greywacke quarry located on McPhersons Road off State Highway 2, in the vicinity of Pokeno. McPherson are applying for resource consents to carry on with its existing operations as well as to support a future expansion of the quarry activities.

As stated above, the resource consent application is for the continuation of their existing and future quarry operations for weathered greywacke rock. The quarry has operating under existing use rights in the past, but in recent times with the increase in tonnages these exiting use rights have become harder to rely on.

The existing resource consents relating to water extraction and discharge have been applied to be renewed.

The 78.89ha site will be broken up into 3 stages. The total cut topsoil/overburden volumes for each of the three stages have been estimated with Stage 1 being approx. 5,327,680m³. This will be located within the current operations area.

The Stage 2 volume is approx. 3,787,609m³. Which is located to the north and west of stage 1.

Stage 3 volume will be approx. 9,668,730m³. Stage 3 is located to the west of the existing operational area.

There will be several of stormwater ponds required to manage water within the site. Clean water diversion drains will be constructed at the beginning of each stage and removed at the end of that stage.

Consents sought for the continuation of the quarrying activity are:

- Mineral extraction and processing
- Earthworks
- Vegetation clearance [some in a high erosion risk area]
- Overburden disposal
- Clean fill disposal
- Surface water take
- Discharge stormwater to water
- Clean and dirty water diversion



Figure 3 below shows the proposed staging.

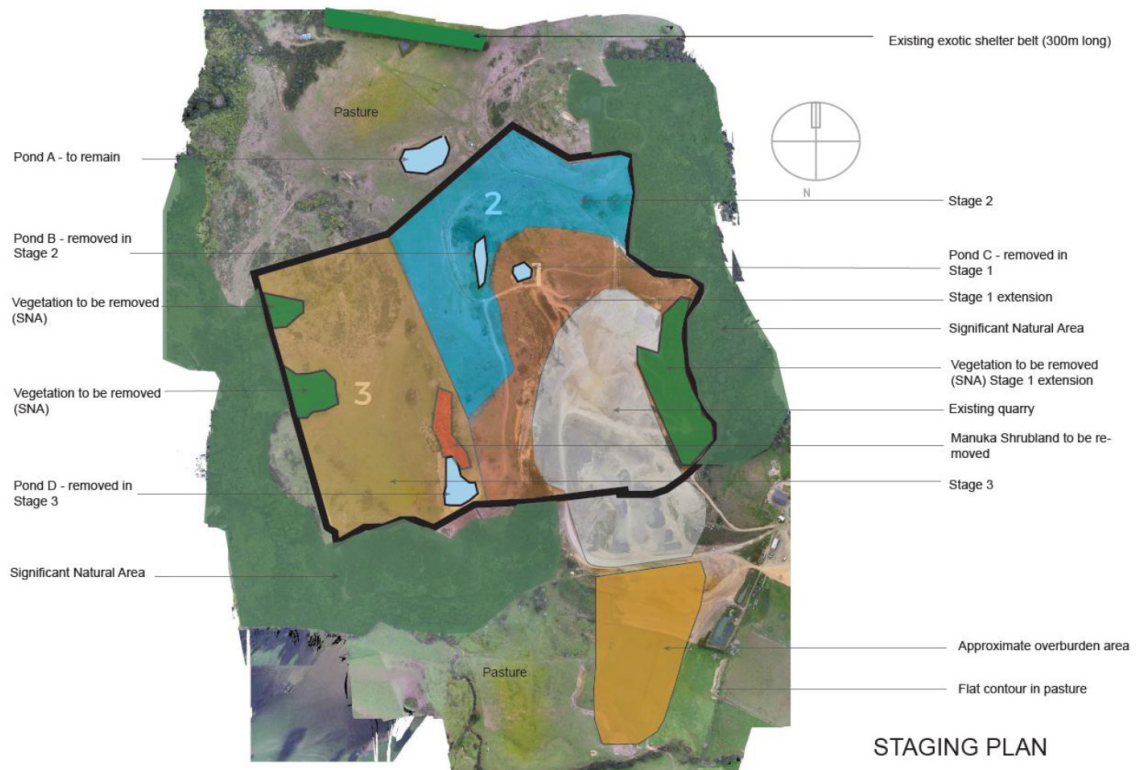


Figure 3. Staging Plan

Purpose of Report

1. To reassert our historical heritage and traditional associations that relate to the project site and wider surrounds.
2. To identify any issues, concerns and any effects of the proposed development regarding our environmental, social and cultural interests and values, including on the wider surrounding environment.
3. To assist with the identification, formulation of methods and to make recommendations to avoid, remedy or mitigate adverse effects regarding our cultural and environmental interests, preferences and values.
4. This cultural values assessment represents only a starting point for initial engagement and will require further consultation (resource consent process) and engagement between Ngati Tamaoho, Ngati Te Ata, McPherson Resources Ltd, and the Waikato Councils. Further discussion will be needed around the implications of the proposed development to identify information gaps in our thinking, raise issues or opportunities we had not foreseen, and clarify and reach agreement of those issues as identified in this assessment.
5. It is intended that this assessment will assist with ongoing decision making from all relevant parties involved and ensure that iwi issues, concerns, interests and values are provided for. The ultimate goal for iwi being the protection, preservation and appropriate management of natural and cultural resources, including landscapes, in a manner that recognises and provides for our interests and values, and enables positive environmental outcomes.

Keri Momo Takawai – Mining and Quarrying

Introduction

This section considers the mining of hydrocarbons (such as oil, coal seam gas, natural gas, and coal), minerals, and other material that is extracted from Papatuanuku, both onshore and offshore. This includes the quarrying of rock aggregate, gravel, sand, and soil for use in other applications. For the sake of simplicity these activities are collectively referred to as ‘mining’ and the material extracted collectively referred to as ‘minerals’. As technology advances it may become viable to mine currently more difficult to reach minerals or to mine minerals that are not currently mined.

Ngati Tamaoho and Ngati Te Ata recognises that the effective and efficient availability and security of supply of minerals is critical to the region’s and the nation’s survival and prosperity. However, we are concerned to ensure that this prosperity includes the environmental, social, cultural, and economic prosperity of our people, as well as of the region and the nation.

Mining is hardly sustainable, in human life-span terms, as extracted minerals are generally not replenished (Though one may argue, for example, that today’s organic waste could be tomorrow’s hydrocarbon). In mining minerals, Iwi resources and interests are often put at risk or compromised. The infrastructure required for mining may have significant impact on Iwi resources (cultural and natural). Mining, particularly open cast mining forever alters our cultural landscape.

Issues

Mining and the effects of mining have contributed to the pollution and deterioration of the health of the environment including the Waikato River, its surrounding environment, and has impacted on the fisheries and plant life of the river. Landscapes may be forever altered, particularly in the case of open cast mining. There is concern that arguably ‘low-impact’ mining may result in unintended or unanticipated long-term effects. For example, if the removal of iron sand or limestone from an area altered the ecosystem characteristics so the ecosystem’s capacity or capability to support certain flora and fauna changed. This could be a positive or negative effect on an ecosystem’s life supporting capacity and capability. Waahi tapu and sites of significance may be intentionally or accidentally altered or destroyed. Mining activity is often relatively long life and mine operators have an ongoing part to play in mitigating the effects of their operations. It is not sufficient to wait until consents expire; there needs to be an ongoing effort to investigate ways to minimise the adverse effects of mining.

NGATI TAMAOHO

CULTURAL VALUES ASSESSMENT
REPORT

The McPherson Quarry



*“Kaua te tau e pokea,
Kaua te tau e rewanatia,
Koia hoki te tuturutanga I heke iho nei I o tatou tupuna”*

*“Let us not be greedy,
Let the land remain whole as handed down by our ancestors*

Part 1. Historic Association (to the area)

Ngati Tamaoho have an ancient connection to the whole of the Waikato region, and the Waikato river that connects it. This stems from their descent from the original inhabitants of the lower parts of the river valley from about Rangariri down the river to its mouth into Te-Tai-o-Rēhua (Tasman Sea). Their tupuna lived along its banks and drew life, identity, and mana from its waters and shores. Tributaries such as the Mangatawhiri, Whangamarino, and Awaroa have been used by Ngati Tamaoho for centuries.

Ngati Tamaoho also trace their descent back to the crew of the Tainui waka which arrived passed through the Waitemata and Te Manukanuka o Hoturoa before travelling down to Whaingaroa, Marakopa and eventually Kawhia. These tupuna settled in the region known as Waikato and their descendants came to populate the entire area. It is from these descendants that Ngati Tamaoho arise. Along with the other Waikato-Tainui hapu, Ngati Tamaoho are truly tangata whenua; people of the land.

This is the place Ngati Tamaoho sprang from, the place they return to in times of strife, the place of their leadership, the place that sustains them as a people, and the place where the spirits of their ancestors rest.

The Mangatangi/Mangatawhiri area is one of the most significant in Ngati Tamaoho's rohe. Their long occupation and extensive use of the area makes its history an integral part of their identity as a people.

The area covers a wide range of sites from defensive pa to food gathering sites, urupa to marae, and rivers to ritual sites. The variety of the uses of the places in this region indicate the importance of the entire area as an interconnected whole to Ngati Tamaoho. Each of the sites described are important in their own right but their real significance becomes clear when one considers the area as Ngati Tamaoho do. That is, as a single, contiguous region with all land, forest and waters an essential part of their turangawaewae.

This is a place that has provided Ngati Tamaoho with so much more than can be described in any historical narrative. It is a place which Ngati Tamaoho have cared for and defended since their formation. It is part of the mauri of this people and is an absolutely fundamental part of their culture and history.

Part 2. Environment. Lucie Rutherford

1.0 Backdrop

- 1.1 It is vital for the people of Tamaoho that three key considerations are provided for regarding any development;
- That the mana of our people is upheld, acknowledged and respected. That our people have rangatiratanga (opportunity to participate, be involved and contribute to decision making) over our ancestral Taonga
 - That as kaitiaki we fulfil our obligation and responsibility to our environment in accordance with our customs passed down and to be accountable to the people (current and future generations) in these roles as custodians.

2.0 Kaitiakitanga

- 2.1 This knowledge of the workings of the environment and the perceptions of humanity as part of the natural and spiritual world is expressed in the concept of mauri and kaitiaki. As Kaitiaki it is our responsibility to speak for and protect those who cannot speak for themselves the earth, the trees, water, fish, birds, the crabs, every single element on this earth which man has not created, is alive. It has wairua (the breath of life) and mauri (life force).
- 2.2 Mauri can be described as the life force that is present in all things. Mauri generates regenerates and upholds creation, binding physical and spiritual elements of all things together.
- 2.3 Without mauri things cannot survive. Practices have been developed over many centuries to maintain the mauri of all parts of the world. Observing these practices involves the ethic and exercise of kaitiakitanga.
- 2.4 Kaitiakitanga underpins everything we (iwi) do in 'our' world. Kaitiakitanga or guardianship is inextricably linked to tino rangatiratanga and is a diverse set of tikanga or practices which result in sustainable management of a resource. Kaitiakitanga involves a broad set of practices based on a world and environmental view. The root word is tiaki, to guard or protect, which includes a holistic environmental management approach which provides for the following:

- Restoration of damaged ecological systems
 - Restoration of ecological harmony
 - Ensuring that resources and their usefulness increases
 - Reducing risk to present and future generations
 - Providing for the needs of present and future generations
- 2.5 Maori through their traditional tribal belief, link ancestral names and events to landscapes, often associating these [names and events], with the gods themselves and the very body of our earth parent- Papatuanuku
- 2.6 Maori shares strong believe, in God the Father [Ranginui] and Earth, the mother [Papatuanuku].
- 2.7 The mother is the nurturer, the giver of life. Therefore, everything born of the mother is alive and has its own life force [mauri]. All elements of the natural environment possess mauri and all life is related. Mauri is a critical aspect of the spiritual relationship of Māori with their environment and specific features (such as maunga and waterways) within it.
- 2.8 The condition of these reflects our ability as kaitiaki and predicts our own wellbeing. We are all inter-connected, and therefore have a duty to protect and enhance our natural surroundings, not only for ourselves, but our future generations.
- 2.9 The arrival of Europeans [Pakeha] has seen not only the loss of Maori land, but also the pollution of our waterways [streams, lakes, rivers, estuaries, and harbours]. The Pakeha brought with them an old system, which had caused many diseases and illness regarding their waste. It was common English practise to dispose of 'waste' into moats surrounding castles, and into streams, rivers and harbours. These practises were continued in their 'new land'. Unfortunately, towns were built with the mind-set of disposing waste to water. Maori living on the Manukau despaired at the despoiling of their harbour, long treasured for its fisheries.
- 2.10 Estuaries were favoured for food gathering and provided safe, sheltered waters with an abundance of fish, shellfish, and birds for eating. Estuaries also gave access to the interior of the country and its wealth of resources-tall timbered rain forests, abundant bird life, flax swamps and rivers full of eels.
- 2.11 Because estuaries were viewed by many European settlers as unproductive wastelands, estuarine land was reclaimed for

harbours, and filled in for pasture, sewerage schemes and stormwater discharge. Many are still under threat from;

- Excess silt
- Pollution from sewerage, industrial/ agricultural runoff and stormwater
- Invasion by introduced species [plant and animal]
- Reclamation
- Extraction of sand and gravel

- 2.12 Public concern over this environment mess grew. But the Waitangi Tribunal's report on the Manukau Claim in 1985 was the catalyst for major change. It laid the basis for new relationships between Maori living near the harbour, local government bodies, businesses and the wider community.
- 2.13 The Waitangi Tribunal's Manukau Report of 1985 found that the Crown had failed to recognise Treaty rights to land and traditional seafood resources and had not provided the protection promised.
- 2.14 Maori have been and continue to be part of the development of our towns and cities. Developments of the landscape are a part of Maori history now also; roading, grazing, reserves, buildings, reservoirs, construction, quarrying, wastewater/stormwater disposal. Some and such developments have not always been supported by tangata whenua. In many cases these developments have damaged or destroyed significant sites and failed to recognise the values held by their kaitiaki. Mana whenua have never ceased visiting these places or appreciating their cultural significance. Maori still share an interest in the on-going sustainable management.

3.0 Water/Wai

“Water is the life giver of all things

“From the source to the mouth of the sea all things are joined as one, from the sky father (Ranginui) to the earth mother (Papatuanuku), from the earth mother to the oceans from the oceans back to sky father”

- 3.1 All water has mauri (a living energy). It is this mauri which provides for all living things and every place with a unique disposition. It is therefore imperative that nothing adversely impacts upon its integrity. Such an action detrimentally affects

the mauri of the resource and consequently the mana, wellbeing and health of the people. The key here is the importance of not altering the mauri to the extent that it is no longer recognizable as a healthy component, waiora. The act of discharging wastewater, including untreated stormwater, into natural water [fresh or harbour], goes against this very belief.

- 3.2 The quality of water determines the relationship that the tribe has with its waters. Environmental degradation, at a national level, has occurred at a large cost and the physical, chemical, and biological quality of water has deteriorated as a result of both point source pollution (discharges into a body of water at a single location), and non- point source pollution (contamination from diffuse sources).
- 3.3 The waters of Tamaki [and Waikato] regions have been modified to support economic gains, and the dire impacts of really poor management practices are increasingly being seen. As a result, human impacts such as farming/agriculture, wastewater treatment, damming, horticulture, urban development, stormwater, and forestry conversions have modified natural water flows and the degree of contaminants that a water body receives, resulting in a decrease in water quality.
- 3.4 Ngati Tamaoho hold on to the belief that water is pure when it leaves the heavens, and with today's technology and in the ever-increasing pollution created by man that there should be a natural treatment train approach to retain the cleanliness of the wai [water] from the skies to the sea.
- 3.5 The waters of the Auckland region have been modified to support economic gains, and the impacts of previous poor management practices are increasingly being seen. As a result, human impacts from such uses as farming/agriculture, wastewater discharges, damming, horticulture, urban development, alterations to the natural hydrology (straightening/piping) of rivers and streams, and forestry conversions have modified natural water flows and increased the degree of contaminants that a water body receives resulting in a decrease in water quality of rivers and streams.
- 3.6 Water is a fundamental component for all dimensions of life. Water not only sustains life, but also serves an economic, social, cultural, spiritual, and political purpose. Regardless of the significance of water, the increase in water contamination by cities, industries, and agriculture/horticulture has led to the deterioration of the mauri of water.
- 3.7 Ngati Tamaoho does not accept that because a natural waterway has been previously "straightened" by previous landowners, that

it becomes a “drain”, it still has water flowing within it, water that still has mauri [life]. The interfering of a natural waterway, while altering its natural state does not alter that which flows through it. Also, we do not accept that because an area of swamp, wetland or stream has become degraded through past land use [cows, horticulture] that when developing, this becomes the “base line”. It is possible to restore and enhance any degraded waterway through the development process. It is usually only a matter of willingness on behalf of the applicant and council to achieve this.

- 3.8 Ngati Tamaoho aspires to have waters that are drinkable, and swimmable, and fishable.
- 3.9 The ability to have drinkable and fishable water is limited by a number of factors such as the concentrations of *E. coli*, eutrophication, suspended sediments, arsenic and mercury and stormwater runoff contaminants.

4.0 Sustainable Development

- 4.1 Ngati Tamaoho promotes sustainable development, and believe, that *all* new development should in some, if not most ways, be self-reliant and self-sustainable.
- 4.2 There are many options for sustainability, with solar panels and green roofs to roof water capture for re-use and groundwater recharge being among a few.
- 4.3 Each new development should be considering “where is my power coming from” and “how can we not waste any of the good clean water that falls from the sky”.
- 4.4 Sustainable also includes the retention of landscapes, cultural, visual and archaeological, enhancement of streams, bush areas, flora and fauna.

5.0 Stormwater

- 5.1 Stormwater is a term commonly used in today’s climate as referring to all water run-off, both clean [ie from roof tops] to contaminated [from roads, access ways, silt etc].
- 5.2 The past practice with “stormwater” has been to get it all into a pipe and out of the way as fast as possible, usually draining into curb and channel, a cess pit then piped into the nearest waterway.

- 5.3 Water is a precious resource that has been “wasted” for many years. This is not sustainable practice. The environmental practices pertaining to our natural water resource must become implemented if there is to be water both on and under the ground for our future generations.
- 5.4 The separation of clean roof water from contaminated road runoff must become a priority for all new development, and all “brown fields” development. This is easy enough to do. The provision of roof tanks to capture clean water, which is then reused for outdoor, and some indoor use is important, if we are to retain enough available water for future generations. Excess water can then be directed to groundwater recharge via soakage pits, and any additional can then be slowly released into the rest of the infrastructure.
- 5.5 Our aquifer and ground water resources are slowly depleting and becoming polluted at a fastening rate as our population continues to grow. While not necessarily “taking groundwater” new houses continuing to be built are taking away the earth’s natural way of recharge by way of pervious covering. Each new dwelling, road, cycle/pedestrian way prevents rainwater from naturally permeating through the ground. Then there is the practice of soak pits for contaminated road runoff with no prior treatment adding to groundwater pollution.
- 5.6 Ngati Tamaoho promotes the use of the new GD01 stormwater guidelines as an appropriate means, to support the mitigation of stormwater issues.

6.0 Treatment of contaminants

- 6.1 Water and water quality is such an important part of life for all, and as such new approaches to treating contaminated road runoff and stormwater in general are constantly being looked into and methods becoming more “natural”.
- 6.2 The mixing of clean roof water runoff and contaminated road water is now considered a wasted resource, and often the cause of stormwater devices becoming “inundated” during heavy rainfall, leading to further pollution and erosion of natural waterways.
- 6.3 Often in the common “stormwater pond” the sediments that have “dropped out” during the “settlement” phase within the ponds; are “re-suspended” during heavy rain fall and inundation, and so all those contaminants become “mobile” again and are flushed out of the pond and into the water ways, making the pond in-effective,

and a source of contaminants.

- 6.4 The “treatment train” approach is promoted as current best practice as this promotes at source retention, provides quality contaminant removal, less inundation at the final stage, ensures the cost is more evenly spread, and easier to maintain.
- 6.5 The treatment train approach includes methods such as roof water detention on site via rain tanks and or soakage pits, where clean rainwater can be reused or used to recharge the underground water systems as first treatment, then road water to vegetated swale and/or rain-garden, and then to a wetland for a final “polish”. Natural stream greenways are being designed into natural waterways instead of piping to produce a more natural look, and further treatment. This is particularly important when creating a “coastal or stream outfall”, natural vegetated, semi rocked outfall/flow structures also add additional treatment and are more natural.
- 6.6 Ngati Tamaoho promotes the regeneration of any wetland [even if degraded] as wetlands featured prominently in the past as nature’s natural filters. Natural wetlands should not be used as a stormwater filter device, or they will become a source of pollution. Natural wetlands should only be used to filter stormwater once it has passed through at least two forms of treatment.
- 6.7 All wetlands, stormwater ponds, artificial or natural waterways should be riparian planted with native riparian plants/trees. All watercourses and water bodies need to be afforded shade, which means staggering tall growing species.
- 6.8 All realigned, natural waterways should have not only shade but pools and riffles, shallow areas, and incorporate naturalization measures including the placement of logs and or rocks where fish can “rest” and breed.
- 6.9 Rain gardens/swales for contaminated road water retention detention, underground Stormwater 360 or Hynds Up-Flo devices can be used where a site is already developed if space is available and then a wetland or attenuation device [large vegetated dry swale system] for a final “polish”.
- 6.10 This system is currently best International practice; it serves to reduce initial runoff by infiltrating the first 10mm back into source, while containing contaminants, and adding to the recharge of the ground water. This also lessens volumes to device, which improves the function of the treatment device.

- 6.11 Green roofs are also becoming popular mainly in overseas countries, and where pollution is a problem, the green roof concept not only adds to more oxygen being produced but to the health and well-being of people who can grow their own vegetables, fruit trees etc.
- 6.12 It is important to note that as time goes by technologies change and monitoring has time to gather data and gain understandings of how stormwater is best treated.
- 6.13 At the very least Ngati Tamaoho expects all cess pits to be fitted with a “stormwater 360 litter trap” or “enviro-pod”. These devices fit easily into a cess pit, and have been designed to fit under the grate for easy convenient installation and cleaning.
- 6.14 The reference to and addition of the GD01 stormwater guidelines is promoted. Mana Whenua have had input into these designs and if used in a treatment train approach is an effect guideline to encouraging better stormwater quality outcomes.

7.0 Groundwater Recharge

- 7.1 Groundwater recharge is vital to retain base flows within streams, and to keep aquifers recharged. In some areas [depending on soil type] rainwater can take between 1-100 years to seep down into aquifer]. Stream base recharge does not take so long.
- 7.2 Piping of any water flow lowers the base flow of a stream, piping causes higher peak flows, and lower base flows. Impervious cover also has a devastating effect on stream base flow health. Up to 25% impervious cover of any site reduces base flow by 50%. Up to 50% and over of impervious cover of an area totally negates the ability for stream base flow recharge [Dr. Tom Schueller]
- 7.3 Our Maunga and Tuff rings are a direct avenue for groundwater recharge because of their porous nature and it is therefore imperative that they are not built upon or modified so they can continue to function as they are intended.
- 7.4 Our aquifers are being constantly relied upon as a source of water supply. Aquifer water can take between 2 and 100 years to regenerate depending on soil type. Some of our aquifer in the Auckland Region are already fully allocated, some over allocated and already have saline intrusion. This is NOT sustainable, and ground water recharge must be applied in all instances.

8.0 Native Trees and Plants

- 8.1 Native trees and biodiversity are what make New Zealand unique. Prior to the arrival of Europeans, native trees were abundant, and used only following Karakia [prayer] and for specific purposes. To Mana Whenua these old trees were Tupuna Taonga, living entities that commanded respect.
- 8.2 Following the arrival of Europeans, entire Regions were “clear felled” then burnt for both the profit from the trees that were not only used for building houses within the country, but exported by the ship full, then the land turned into farm land. Imagine the greed of being able to destroy thousands of hectares of forest, hundreds and thousands of years old, there for “the taking.”
- 8.3 Sadly this attitude prevails today in some instances, and even our current and proposed Council Plans to not offer “blanket protection” to these remaining old trees. Each tree has to be individually protected if not within a covenant.
- 8.4 Ngati Tamaoho believes that all trees over 200 years old should be automatically protected.
- 8.5 There are so many exotic plants and trees within our society today, and not all of them are welcomed. Some have proven to be pests, while others drop their leaves in the autumn and block stormwater infrastructure, while adding to the nitrate content within the waterways.
- 8.6 There are also a lot of “hybrid” trees and plants around, as people meddle with nature to achieve “better looking” or “producing” trees/plants.
- 8.7 It is distressing to see areas denuded of original flora. Some areas were specifically named because of a particular tree species that thrived there, only today to find not even one still flourishing.
- 8.8 Ngati Tamaoho support and promote the use of “eco-sourced” trees and plants within their rohe, to achieve the outcome of original species returned to the area from locally sourced seed.
- 8.9 This in turn promotes the return of the native bird and insect species back into the immediate and surrounding environment.

9.0 Landscapes

- 9.1 Landscapes are of particular value to Ngati Tamaoho. They are part of who we are and define history. It is imperative that our

landscapes are identified and preserved. This includes view shafts and hilltops, tuff rings and ridge lines.

- 9.2 In order to achieve sight lines and protection of ridgelines and hilltops, height restrictions, and setbacks may need to be implemented. As already mentioned, tuff rings are also an important part of our landscapes, they are not only outstanding geological features worthy of protection but are a valuable source of groundwater recharge.
- 9.3 Flood plains and reclaimed swamps are also an integral part of our landscape. They all at one time were wetlands/swamps that not only performed great ecological benefit but were also a valuable source of food. As development “progresses” these areas are drained, built up and modified. These areas should be retained and returned to their natural state. This not only benefits the environment by creating habitat for our declining native species, but also adds huge wellbeing benefits to the people living around the area. Visual amenity has been recognized as being necessary for the physical, emotional and spiritual wellbeing of humans.
- 9.4 Streams, tributaries, estuaries, coastlines, springs, all form part of the cultural landscape and their preservation, protection and enhancement is paramount. A 20-meter setback is promoted for all stream, estuarine and coastal edges. As these areas usually provide for pedestrian/cycle paths a 20meter riparian setback is necessary to provide for proper riparian enhancement.

10.0 Planning Rules and Regulations

- 10.1 All Districts/Regions within New Zealand must have a “Plan”. Within these Plans are the visions, objectives, policies and rules for each Region/District.
- 10.2 Each Plan has to have development standards and methods with rules for achieving the “desired” outcome. All rules within these Plans are a “minimum requirement”.
- 10.3 Unfortunately, the bare minimum does not give an adequate outcome for the environment.
- 10.4 Ngati Tamaoho believes that the minimum is a starting point, not an aspiration and promotes that more than the minimum be applied to development and outcomes. The “minimum requirement” is just that, a very bottom line, and in order to enhance and maintain our current base line of slowly declining

air, land and water quality, more than the minimum needs to be provided for.

11.0 Te Aranga Design Principles.

11.1 Te Aranga Design Principals- The design principles referred to here have been developed during a number of projects over recent times. These principals have been adopted by Auckland Council and are being applied to all projects with iwi involvement within the Auckland Region.

11.2 Ngati Tamaoho seek that this project endorses the adoption of these principles as a way to incorporate Ngati Tamaoho values and outcomes into the design of elements of the project and during future consultation on this project we expect these principles to be fundamental to be applied wherever possible to underpin Iwi connections to these significant areas.

11.3 The principals are as follows^[1]_{SEP}

- Mana – Treaty based relationships Iwi require high level Treaty based relationships with all key stakeholders including local and regional Councils as well as Council Controlled Organizations which recognize their Tangata Whenua status in order to fulfill their roles as Kaitiaki. Such relationships can then inform Iwi participation in collaborative design and development processes. Such relationships are a precursor to actualising the other 6 principles:
- Whakapapa - Names / naming - Ancestral names provide entry points for exploring historical narratives, tupuna and critical events relating to development sites.^[1]_{SEP} Tohu – the wider cultural landscape Acknowledge wider significant Iwi land marks and their ability to inform the design of projects. Such Tohu can include wahi tapu, maunga, awa, puna and ancestral kainga.
- Taiao - Natural environments - Exploring opportunities to bring natural landscape elements back into urban / modified areas – trees, water – insects, birds, aquatic life, Mahinga kai (food gathering areas) allow for active kaitiakitanga.^[1]_{SEP} Mauri tu – environmental health Ensuring emphasis on maintaining or enhancing environmental health / life essence of the wider site – in particular focussing on the quality of wai / water (puna / springs), whenua / soil and air.
- Mahi toi – Creative endeavour Drawing on names, local tohu

and appropriate plant species to develop strategies to creatively re-inscribe iwi narratives into architecture, interior design, landscape, urban design and public art. Iwi designers and artists are readily available to assist in such collaborative projects.

- Ahi ka – Visibility / living presence Need to explore opportunities to facilitate living presences for iwi / hapu to resume ahi-ka and kaitiaki roles.

12.0 Managing Effects

12.1 In managing the effects of a resource use or activity, regardless of the magnitude, frequency, or duration of the effect, Ngati Tamaoho considers that it is necessary to provide a net benefit when considering social, economic, environmental, spiritual and cultural impacts – to strive for environmental enhancement. Therefore, it is necessary to suitably manage any effects so that effects are avoided, remedied, minimized, mitigated, or balanced.

12.2 For Ngati Tamaoho, this is essentially a hierarchy where the first way to manage an effect is to avoid the effect, the second way is to remedy the effect, and so on through to suitably balancing the effect, what some may call offset mitigation. In managing effects consideration needs to be given to:

(a) Avoid: is there any way to manage the effects to a point where they can be avoided (i.e. no effect occurs)?

(b) Remedy: can the effect be managed to the point that it is eliminated (e.g. cleaning discharges to water so that the water discharge is of a suitable quality)?

(c) Minimize: is there a way to minimize the effect so that the effect is no longer of sufficient frequency or magnitude to cause Ngati Tamaoho any concern?

(d) Mitigate: if the effects cannot be adequately avoided, remedied, or minimized, is there something that can be done to mitigate or offset the effect to create a benefit not directly linked to the proposed resource use or activity. (e.g. an effect of discharge to water being offset by additional riparian planting or wetland restoration).

(e) Balance: when taking all the effects into consideration, and considering the relative weight of the effects to Ngati Tamaoho, do the positive effects adequately balance out the negative effects, and provide environmental enhancement?

- 12.3 Only Ngati Tamaoho can determine whether effects are suitably balanced for Ngati Tamaoho. [SEP] Generally, where mitigation is proposed, this should be closely linked to the site of the resource use or activity and relatively balance out the negative effect. Only Ngati Tamaoho can determine what, from a Ngati Tamaoho perspective, constitutes a suitable way to avoid, remedy, minimize, mitigate, or balance effects caused from a resource use or activity.
- 12.4 The 'highest target or measure' could be a target or measure applied by Ngati Tamaoho, a community, a local authority, the resource user or activity owner, or central government. Regardless, Ngati Tamaoho is generally supportive of the highest target or measures being applied to best achieve objectives. Ngati Tamaoho encourages the on- going use of the *best practicable option* being applied when considering targets or measures.
- 12.5 Where consents are granted for a resource use or an activity that may continue to have an adverse effect on the social, economic, cultural, spiritual or environmental wellbeing of Ngati Tamaoho, a precautionary approach is encouraged.
- 12.6 This includes but is not limited to ensuring that consents are granted for a term that is sufficiently short enough to allow for a review and that any effects observed through monitoring be addressed sufficiently and without delay. This step is an important step when considering the consent holder needing to apply for a consent renewal.
- 12.7 Ngati Tamaoho understands that the biggest improvements in consent conditions are through consent renewals and not consent reviews. Ngati Tamaoho also understands that less than 1% of consents are reviewed. A consent renewal also means that the existing resource use or activity is looked at afresh. This is understood to be different to a review which is undertaken based on the purpose specified within the review.
- 12.8 The indiscriminate use of indigenous plant material not sourced from local plant material (i.e. not eco-sourced) for restoration and development rehabilitation projects continues to alter the natural character of the region and the genetic composition of the remaining natural plant and animal populations. Such use needs to give consideration to strengthening the genetic pool of indigenous species.
- 12.9 Inadequate rural and urban design standards may allow ill-considered designs for dwellings and other structures to be built in areas of high natural character. This further detracts from the mauri of the land and weakens the connection with its natural,

cultural, and spiritual foundations.

- 12.10 Sites and activities of cultural significance define the history of Ngati Tamaoho. The Auckland rohe has many areas of significance that are associated to the history of its people, its environment and culture. After the confiscation of Ngati Tamaoho lands and the subsequent industry and urban development, many known sites of significance were destroyed, and shifted to the ownership and management of other persons and organisations. Once Ngati Tamaoho sites are altered or lost, they cannot be replaced and there is no mitigation that can restore its original significance.
- 12.11 Therefore, Ngati Tamaoho must protect their waahi tapu and waahi tuupuna for the benefit of future generations and to acknowledge the sacrifices of tuupuna.

13.0 The Proposal/Application

- 13.1 Ngati Tamaoho undertook an onsite in November 2018, and noted the following
- 13.2 There is a silt trap which currently collects silt runoff from the existing operation. The silt trap appears to be regularly maintained.
- 13.3 There is a 2x pond system [north and south ponds], to filter any silt that finds its way into the ponds, there was some discolouring of the smaller pond, and desilting may be beneficial.
- 13.3 The pond system discharges to a tributary of the Waiponga stream.
- 13.3 The site is a mixture of mature and regenerating native bush, quarrying and farm land.
- 13,4 There is a large wetland up the back of the farm, with some native raupo. Some natives are dispersed around the edges of the wetland.
- 13.5 The wetland is close to both native forest on the applicant's site, and native forest on neighbouring lands.
- 13.6 The applicant offered [while onsite] to plant up a "native corridor" where the large wetland sits. This would provide a green link for native birds and other native creatures to not only live in but to access the large native surrounding bush areas.

- 13.7 The applicant does not want to remove any of the mature native forest, but wishes to expand the quarry activity into a small area of mainly Kanuka/Manuka, which sit up behind the existing quarry.
- 13.8 Below the current overburden area are flat paddocks, with drains to keep from flooding.

NGATI TE ATA

CULTURAL VALUES ASSESSMENT

REPORT

<p>HE TIKANGA Ā TE RŌPŪ KAITIAKI KI TE TIAKI TE WAIRUA-TANGA, TE AHUREA MŌ ŌNA AKE WHENUA ME NGĀ PUNA TAONGA. TĒNEI WHAKAATURANGA KI TE WHAKAMŌHIA IA KOUTOU TO TĀTOU WHAKAPAPA, WHENUA, WHAKAHAERE Ā MANA WHENUA.</p>	<p>IT IS ESSENTIAL THAT WE, THE GUARDIANS HAVE SPIRITUAL AND CULTURAL CONTROL OVER OUR TRADITIONAL LANDS, WATERS, AND RESOURCES. OUR INTENSION IS TO GIVE YOU A GLIMPSE INTO OUR CULTURE, REGION, CULTURE RESOURCES, AND CARETAKER RESPONSIBILITIES.</p>
--	--

As a priority Ngati Te Ata have consistently sought the removal of contaminants discharged into the Waikato River.

Ngati Te Ata has always taken the position that the discharge of wastewater to natural water is culturally unacceptable and offensive.

The discharge of human effluent into natural water bodies is culturally offensive.

Only land-based treatment through Papatuanuku (Mother Earth) can cleanse this type of waste.

Our preference is for land-based disposal or a significant percentage of it.

Ngati Te Ata will always seek maximum protection of waterways in all decisions regardless how minimal the environmental effects are purported to be.

1.0 **PRINCIPLES AND VALUES**

- 1.1 Maori values form the basis for developing principles protocols, ethical and cultural standards, and guiding philosophies for planning sustainable development and resource use. Values tend to work in combination to form a solid foundation and framework for tribal development and sustainable planning.
- 1.2 Maori value themes and concepts are still highly relevant in modern day Maori society and fundamental for forming principles and a guiding philosophy for culturally, based sustainable development.
- 1.3 With regard to the resource consents sought at the McPherson Quarry, Pokeno and its potential impact on taonga three key factors need to be assured:
 - ❑ that the mana of Ngati Te Ata is upheld, acknowledged and respected.
 - ❑ that Ngati Te Ata assert and exercise (their) rangatiratanga over ancestral taonga.
 - ❑ that as kaitiaki Ngati Te Ata fulfil (their) obligations and responsibilities to our people (and future generations) as custodians, protectors and guardians of the tribes interests, its taonga and the various resources it owns.

Mana

- 1.4 Mana is the authority, control, influence, and prestige over the taonga that we customarily own. Our mana comes from our ability to whakapapa to this taonga (resources) water and land. Mana is also recognition that others give for (your) deeds and actions. A person may be born with mana but it is the way they conduct themselves throughout life which will either strengthen or weaken their own personal mana and by that the mana of their tupuna.
- 1.5 Our people therefore are very careful and conscientious of how we conduct ourselves when waahi tapu and taonga are involved. Our actions today have consequences on the issues of tomorrow.

Rangatiratanga

- 1.6 Rangatiratanga over our tribal resources reflects the relationship between people and resources. Not only as physical commodities but also of personal and tribal identity. Rangatiratanga is an

essential prerequisite for our people's ability to use (their) resources to meet tribal needs and objectives in ways which express our cultural preferences. The very essence of the words Rangatiratanga denotes the 'weaving' together of our people. Ranga meaning to weave, tira into a bundle and tanga the act of weaving together into a bundle. The ability of the chief to weave his people together in communal pursuit of political, social and cultural development.

Kaitiakitanga

- 1.7 The principle of Kaitiakitanga has dominated from the very beginning and provided the foundation for later environmental controls and customary practices. There is an obligation from birth, even if not realised until later life, as custodians, protectors and guardians of the tribe's interests, its taonga and resources it owns. This means treating resources in ways, which respect, conserve and sustain us both physically and spiritually. Kaitiakitanga is an integral part of the expression to the connection of Rangatiratanga.
- 1.8 The kaitiaki principle denotes obligations or responsibilities incumbent on the iwi, its members and appointed kaumatua, kuia or tohunga to carry out particular functions, be custodians, protectors and guardians of Iwi interests, its taonga and the various resources it owns. Kaitiaki are directly accountable to the iwi. Only manawhenua can be kaitiaki – those with the authority to make decisions. The Kaitiaki approach to environmental management is holistic and provides for the following:
 - ❑ Restoration of damaged ecological systems
 - ❑ Restore mana of the iwi
 - ❑ Restoration of ecological harmony
 - ❑ Ensuring that resources and their usefulness increases and plan long term usage of taonga
 - ❑ Reducing risk to present and future generations
 - ❑ Providing for the needs of present and future generations.

2.0 TIKANGA

Tikanga

- 2.1 The Maori tikanga has a wide range of meanings — culture, custom, ethic, etiquette, fashion, formality, lore, manner, meaning, mechanism, method, protocol, style. Generally taken to

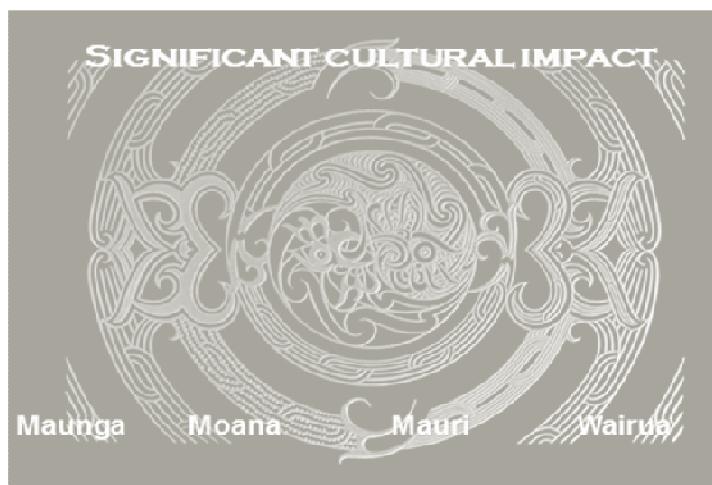
mean "the Maori way of doing things", it is derived from the Maori word *tika* meaning 'right' or 'correct'.

Tapu

- 2.2 Certain restrictions, disciplines and commitments have to take place if mana is to be expressed in physical form, such as in a person or object. The concepts of sacredness, restriction and disciplines fall under the term tapu. For example, mountains that were important to particular tribal groups were often tapu and the activities that took place on these mountains were restricted.

Mauri

- 2.3 Mauri is an energy, which binds and animates all things in the physical world. Without mauri, mana cannot flow into a person or object. The concept of mauri is central to Tangata Whenua belief regarding the environment. Mauri is the binding force between the physical and the spiritual aspects. When the mauri is totally extinguished, this is associated with death.
- 2.4 Mauri is the essence that has been passed from Ranginui (Sky father) and Papatuanuku (Earth mother) to their progeny Tane Mahuta (deity of the forests), Tangaroa (deity of the oceans) ma (and others), and down to all living things through whakapapa (genealogy) in the Maori notion of creation. Mauri is considered to be the essence or life force that provides life to all living things. Water also has mauri.
- 2.5 Mauri also establishes the inter-relatedness of all living things. The linkages between all living things within the ecosystem are based on the whakapapa or genealogies of creation. This establishes the basis for the holistic view of the environment and our ecosystem held by the Tangata Whenua.



3.0 IWI RELATIONSHIP TO TE AWA O WAIKATO (Waikato River)

- 3.1 Water is the essence of all life. It transcends all boundaries. It is essential for our health, wellbeing and ability to enjoy the environment in which we live. Water has a natural cycle, which we affect by our activities. It is a treasure that we must manage carefully. It is our responsibility to protect it for those who follow.
- 3.2 Our obligations will not be met if we view water as many separate parts because they are all linked. From the rain that falls, the storm water produced, the drinking water we use, and the wastes that result, none can be considered in isolation, as each affects the other.
- 3.3 Wai Maori (fresh water) is also the life-giving gift of the Gods (Te waiora o Tane) and is also used to bless and to heal. Separate water streams are used for cooking, drinking and cleaning (which explain why no Maori will wash clothes in a kitchen). Wastewater is purified by return to the earth, ritualistic purification or, with the exception of water containing animal wastes, by mixing with large quantities of other pure water. Maori objection is to the mixing of the waters by unnatural means, the mixing of two separate mauri, and the boiling processes that discharge "dead" or "cooked" water to living water that supplies seafood.
- 3.4 Wai mataitai (salt water) is separate (te wai ora o Tangaroa). It provides food but its domestic use is limited. Conceptually each water stream carries its own mauri (life force) and wairua (spirit) guarded by separate taniwha (spiritual guardians) and having its own mana (status). Of course, the waters mix. The mauri of the Waikato River flows to the mauri of the sea, but on its landward side the mauri of the Waikato is a separate entity.

The Lower Waikato River

- 3.5 While those of the eastern marae referred to only the traditional fishing grounds of the Manukau, those of the southern marae, at Waiau, Tahunakaitoto and Whatapaka in particular, advised that their traditional fishing grounds were not only in the inlets and estuaries of South Manukau, but also in the lower Waikato river and river mouth. There the bounty of the river is shared with other marae on the banks of the lower Waikato.
- 3.6 Although one mile from the river, the people are regarded as one of the river tribes, many of them having benches on the river which they use during the fishing season.

- 3.7 The Waikato River offered much more than a network for inter-tribal travel and communication. The river, its swamps and tributaries, provided food - eel, freshwater crayfish, whitebait, mullet, flounder, shellfish, water food and wild vegetables. It provided irrigation for kumara, taro and hue. Whitebait has particular importance.
- 3.8 The river supports what is generally considered to be the North Island's most important whitebait fishery. Its significance is apparent in the number of benches erected on the riverbank. In an area between the elbow and the Maoro mine site (Waikato North Head) there were an estimated 300-400 benches, each used by four to six people meaning that between 1,500 to 2,500 people used that section of the river for white baiting.
- 3.9 Maoro Bay, some four miles from the river mouth, is a spawning area during April, May and June, the eggs adhering to rushes and flax roots along the banks and islands where they hatch to an embryo state before being carried out to sea on ebb tides. The young fish are attracted to the brackish waters of the estuaries and eventually return to the fresh water rivers and streams.
- 3.10 In the 1940's, it was claimed; the season extended from July to November and yielded some 120 tons. A canning factory was established at Kohanga and the supply was purchased mainly from Maori fishermen who relied upon the white baiting to supplement their cash incomes. Today the season is shorter, the canning factory has closed, the yield approximates only 10 tons and white baiting by Maoris no longer predominates
- 3.11 It is difficult to over-estimate the importance of the Waikato River to the Tainui tribes. It is a symbol of the tribes' existence. The river is deeply embedded in tribal and individual consciousness.
- 3.12 Like Manukau it has its taniwha or guardians, but unlike Manukau, there is a taniwha at each bend. The river has its own spirit. It is addressed in prayer and oratory as having a life force of its own. The spirits of ancestors are said to mingle and move with its currents.
- 3.13 When Waikato people are sick, uncertain or about to undertake a journey or new venture they seek the blessing of the water and the protection of their ancestors by immersion or sprinkling. Its curative and healing powers were claimed by several witnesses from personal experiences.
- 3.14 Today the Waikato adjoins areas that constitute one of the heaviest population concentrations in the country. From Lake

Karapiro to the mouth the river provides water at 20 points to industrial developments in river towns and water and sewage outlets to 21 towns. It is estimated that a massive 90 million litres of animal wastes are generated within the catchment daily and the river is under increasing stress due to difficulties in controlling agricultural runoff. We are solely concerned with the part of the river near to the mouth. It was claimed that extensive fishing there has been seriously depleted by siltation of the bed and mouth, shifting sandbanks, commercial fishing and the effects of the Maoro mine site.

- 3.15 The river mouth is shifting north. The depth of water at the bar has decreased and on occasions only the northern channel has remained open where normally two channels are clear. Many of the whitebait breeding grounds have been lost; whitebait is restricted from returning at the river mouth and whitebait no longer move the same distance up the river. Today snapper, trevally and kahawai are caught between Port Waikato and Hoods Landing.
- 3.16 In regard to this particular proposal at the McPherson Quarry, the Whangamarino wetland is of prime importance. Common Maori words for describing wetlands include "repo", "poharu", and "roto". Wetlands are regarded by Maori as taonga. They have historical, cultural, economic, and spiritual significance. Wetlands can be reservoirs for knowledge, wellbeing, and utilisation. They are mahinga kai (food gathering) sites used by local marae, whanau, hapu, and iwi and provide significant habitats for a range of culturally important (taonga) plants, animals, fish, birds, reptiles, insects, and micro-organisms. They are breeding grounds for native fish and tuna (freshwater eels), and a large range of culturally significant plants for weaving – harakeke, raupo, toetoe and kuta; carving – totara, kahikatea; Maori materials and implements – manuka. Many wetlands comprise a variety of culturally important medicinal plants for rongoā (Māori medicinal use).

4.0 TRADITIONAL PERSPECTIVE: WASTEWATER

- 4.1 Much of today's pressure for regional growth results from a number of factors, namely population growth, economic activity and commercial development. A lot of this development is taking place in sensitive ecological areas and along our rivers and coastal zones easily susceptible to adverse impact. Over recent years there has been an increasing awareness by the public of the

potential adverse impacts this type of growth has on the natural environment.

- 4.2 In pre-European there was no urban developments on the same population scale as at present. Consequently, ancient Maori were never confronted with the issue of dealing with enormous volumes of stormwater, wastewater or the pollutants that result from the discharges from modern-day large-scale subdivisions, heavy industry activity and urban developments.
- 4.3 The largest environmental impacts on waterways were caused by fires, vegetation burns off or removal of the forestation of mountain slopes. These all caused land erosion and hence contribution of large amounts of sediment into the local waterways.
- 4.4 However with the arrival of the British settlers in the area and associated establishment and growth of towns and settlements, Maori became concerned because the waterways were being used as drains and the swamps were drained to create settler farms. This caused the diminution and ultimate destruction of native bird and fish habitats. As these birds and fish were a significant part of the Maori staple diet this caused major changes in the patterns of food gathering and diet. It also had an impact on ancient Maori traditions as gathering and eating of these birds and fish were a significant part of the ceremonial Hui and tangi.
- 4.5 The present-day impacts of land development on the land and waterways continue to change the diet of Maori. Whilst in past times kumara kao (dried kumara) was a common food item, now it is rarely seen.
- 4.6 In pre-European times and today the overall concern for Maori is how pollutants impact on their traditional food sources, not only in terms of the food itself but also because it is an integral part of marae ceremonial hui. The concept of locating a cemetery in which decomposing bodies and body fluids might seep through the ground to enter the waterways or coastal areas where seafood is gathered is offensive to Maori.
- 4.7 An example is a stream that forms at the base of Taupiri Mountain and runs through the urupa on the flats. It is still forbidden to gather watercress or eels from this locality. For similar reasons the scattering of cremated human ashes in rivers, streams or the sea is unacceptable.

- 4.8 However it is worth noting that there has been considerable effort since the 70's to clean up the Waikato River and stop the discharge of untreated sewage and other polluted waters into the river.
- 4.9 All pollutants including stormwater must be discharged through Papatuanuku (Mother earth). Only Papatuanuku can cleanse human waste. As a priority iwi has consistently sought the removal of contaminants discharged into the Waikato River. Iwi have always taken the position that the discharge of wastewater to natural water is culturally unacceptable and offensive. Iwi will always seek maximum protection of waterways in all decisions regardless how minimal the environmental effects are purported to be.
- 4.10 In the modern day the sheer amount of stormwater and wastewater that would need to be filtered through the land is of concern as Pokeno grows. Coupled with this is the uncertainty of this wetland to hold extra volumes of water such as freak heavy rain deluge that discharges into it.
- 4.11 It is of such volume that if it is all dealt with in one area its discharge into or from that area could well have other adverse effects (erosion, sub soils stress). The use of wetland construction has gained for this concept of discharging wastewater water to land, rather than dealing with it in the more costly technological ways.
- 4.12 Whilst a wetland is a noble concept it will ultimately become a food source for eels and other types of native birds and fishes and a source of traditional Maori food fare. This would mean that this Maori food source would be based on a system that extracts the impurities and contaminants from the water and concentrates them in the land. This is contrary to Maori tradition. Ancient Maori simply did not tip nor dump their waste into wetlands, as this was the very place from which they gathered food or drinking water.
- 4.18 Given this therefore from a traditional Maori perspective it is better to protect Papatuanuku from having enormous volumes of contaminated and polluted water discharge into it. Instead a better option would be to invest in better technologies for improving wastewater quality to drinking water qualities.

5.0 CULTURAL STORMWATER POLICIES and PREFERENCES

Recommendations

- 5.1 That water sensitive design is included like rain water tanks for retention, ground water recharge for rain/roof water was discussed as was the importance of not mixing the "clean" with contaminated water; rain gardens, vegetated swales and attenuation pits/areas were discussed as best options for contaminated road runoff treatment. The reasons for this discussion is that stormwater treatment devices are more efficient if not inundated during normal rain events if they are not having to cope with the added clean water component of the rain event.
- 5.2 That a focus on implementing water sensitive designs for each sub-catchment, such as tree pits and rain gardens, through a treatment train approach. Contaminants such as hydrocarbons and suspended solids will be minimized through the use of source control water treatment devices to promote bio-filtration of surface water and groundwater recharge. The Waikato council plans promotes the use of drainage to ground wherever possible as an effective means to treat stormwater, recharge groundwater and the protection of streams and riparian margins from erosion.
- 5.3 That the overall catchment management plan must take into consideration; natural environment, maintenance, enhancement and/or protection of the values of the natural character receiving environment, including cultural values. Developers/Applicants must demonstrate how the proposed land use, quarry development controls responds to these values.
- 5.4 That the integration of green networks such as natural freshwater, coastal systems and ecological corridors, with open space, and pedestrian corridors, that reflect the underlying natural values and provide for natural restoration and biodiversity.
- 5.5 That these Policies (as below) are provided for and included and integrated into the McPherson Resources Limited proposal;

Policy

Policy – land use planning and management adjacent to wetlands.

To ensure that all land use practices that have the potential to impact on wetlands have efficient sediment, drainage, discharge, fertiliser application, and riparian buffer control practices in place to ensure that adverse impacts on wetlands are prevented.

Methods

- a) There shall be no discharges of point or non-point source wastewater to ecologically or culturally significant wetlands.
 - b) All stormwater discharged to ecologically or culturally significant wetlands shall be treated in such a way that ensures the ecological condition and cultural use of the wetland is not compromised.
 - c) Buffer zones of appropriate indigenous plant species shall be established and/or maintained around all significant wetlands to protect them from the effects of land use and to help reduce fluctuations in wetland water levels.
- 5.6 Land use changes and practices, stormwater and wastewater discharges have had an adverse impact on coastal ecosystems, modifying the hydrologic regime and the ecological value and quality of waterways. Particularly when accompanied with the removal of native flora and fauna, can place pressure on resources, can change the character of the landscape, and alter traditional views and features of the landscape. Inadequate planning for urban or rural development and growth can result in residential sprawl which impacts on landscape character. This is further aggravated when there are inadequate or the failing infrastructure services provided as (water supply, wastewater, stormwater management, solid waste management).
- 5.7 The anticipated further quarrying development (into new areas), particularly in new growth areas, provides the opportunity to develop new enhancement principles, the types of principles that could be employed include on-site stormwater and wastewater treatment, recycling of treated wastewater, and water conservation where appropriate technology enables this to occur.
- 5.8 Manage the adverse effects of urban and rural residential subdivision and development, and quarrying and heavy industrial activity through the use of Low Impact Development (LID) principles in all new developments and developments including, but not limited to:
- a) Minimising stormwater impacts to the greatest extent practicable by reducing imperviousness, conserving natural resources and ecosystems, maintaining natural drainage courses, reducing use of pipes, and minimising clearing and grading;

- b) Providing runoff storage measures dispersed through the site's landscape with a variety of detention, retention, and runoff practices;
- c) Where they will be of better valued benefit, encouraging the use of mechanisms such as rainwater harvesting, rain gardens, roof gardens, and onsite storage and retention;
- d) Where they will be of benefit, encouraging the use of stormwater treatment devices including on-site treatment systems, allowing for emergency storage and retention structures; and
- e) Such areas that have unavoidable impervious areas, attempt to break up these impervious areas by installing infiltration devices, drainage swales, and providing retention areas.

5.9 We need to ensure that wastewater and stormwater systems are designed, constructed, and upgraded to ensure wastewater does not enter stormwater systems. In this sense Waikato Council identifying any areas where stormwater enters the wastewater system and making financial allowances in the Long-Term Plan for the upgrading of infrastructure and providing education programmes and partnerships with the community and Ngati Te Ata, promoting the concept of waste minimisation a 'no waste' society, and a hierarchy of waste management.

Minimise wastewater production by:

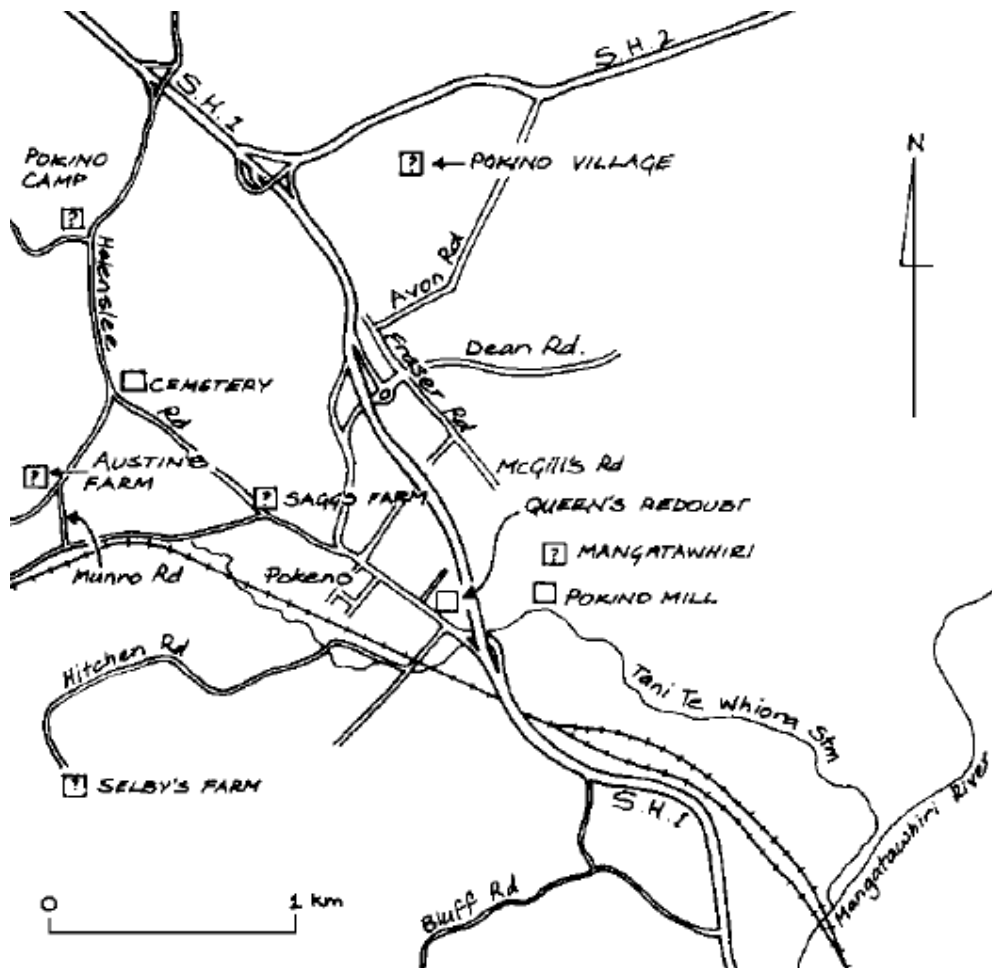
- a) Developing standards for low water use fittings;
- b) Encouraging the water metering and volumetric wastewater charging based on water consumption; and
- c) Encouraging reduction and the prevention of stormwater infiltration and ingress into wastewater systems through design standards and construction control.

5.10 Regarding trade waste, stormwater, wastewater, and trade-waste by-laws ensure high levels of on-site treatment are obtained prior to discharge e.g. improve design methods to maximise the removal of heavy metals from the trade waste.

6.0 NGA TAONGA TUKU IHO

Cultural

- 6.1 The lower Waikato area around Pokeno was rich in resources valuable to Maori. It is pointless to view each of these waahi taonga in isolation, as separate. They all interconnect and inter relate thus forming a bigger picture, a networked settlement of occupation. That is why it is crucial to re-establish these connections through heritage and environmental linkages.
- 6.2 The project site at the McPherson Quarry forms part of the cultural, traditional, historic and the environmental value to iwi as aforementioned. The history of the whole of Te Puaha o Waikato is bound closely together in a rich tapestry of culture and heritage. In our view given the scope and scale of the proposed quarry activity and expansion, there is no doubt that cultural heritage will be affected and impacted upon as a result of the proposal, the question is to what scale and how adverse?
- 6.3 Ngati Te Ata was also trading extensively along the River in conjunction with the other iwi they worked joint business ventures which includes the mills (many recorded along the River banks) Trade and exchange that most Iwi along the river entered into.
- 6.4 Tamaoho and Ngati Te Ata were not the only Iwi that had business assets and were trading extensively. In that time the Hokioi (Maori News Paper) of the time outlined the many Mills that were owned by Iwi, the amount of trading that was going, what they were trading, the fees charged just to traverse the River.
- 6.5 The Land Wars had a huge Impact upon our cultural integrity, our mana, and our rangatiratanga, we went from being landowners to tenants, a people that were dispossessed of their ancestral land - it meant an inability to practice our cultural values upon our whenua/land, our wai/water, our traditional resources but most importantly to provide for our people.



6.6 Pokino (Pokeno) was destroyed by an unauthorised party of soldiers on the night of 11 July 1863; the night before General Cameron invaded the Waikato. This was the area that Tawhiao designated the troops not to cross if they didn't want to start a war, this one act was what started everything. The Invasion of Waikato had begun. Tawhiao concluded that if the European settlers continued building the road they had started through this area, the troops may finish it and use it to convey the dreaded canons down into the Waikato Area to use against our people, this course of action proved disastrous for us.

6.7 This report from Lt Mackenzie outlines the prosperity of the land ten years before the war. Evidenced in:

In 1853 Lt MacKenzie in Mangatawhiri village was visited by one. He embarked in a canoe close to the present position of Queen's Redoubt and recorded: "We passed the first native village today. Their houses – or rather huts – have a very neat appearance, and

are all fenced in, each in a separate enclosure to the other, to prevent the pigs from going into their neighbour's grounds. After we got in the canoe we proceeded down the creek on which it was until we reached the Mangatawhiri Creek.” (MacKenzie 1853).

Flora and Fauna

- 6.8 Any streams and wetlands affected by the work are largely devoid (through farm drains and farm modification) of significant or native vegetation. The banks are grassed and show signs of significant trampling by livestock. The construction work, once reinstated, will not generate any effects that are more than minor on the riparian vegetation. Please see in accompaniment to this cultural assessment report our preferred wetland and stream native species list.
- 6.9 Key issues in relation to native plants and wildlife are:
- The establishment of native plants and ecosystems for life supporting capacity and the support for the use of a riparian strategy.
 - Providing for access to flora and fauna for cultural harvest and craft.
 - Protecting and enhancing indigenous flora and fauna and their ecosystems and supporting the protection of regenerating bush and enhancing those corridors.
 - Eradicating exotic plants and animals that are damaging, destroying or competing with native species or their ecosystems.

Whenua (Land)

- 6.10 Maori have strong spiritual bonds to the land. Papatuanuku our Earth Mother provides unity and identity to the people and sustains us. It is important that we protect our land from inappropriate land use. Iwi consider that Papatuanuku sustains all life, and are spiritually connected to her. This connection is shown when a baby is born and the whenua (afterbirth) is buried in a sacred site. That is why the loss of ancestral lands is a key issue for Maori.

Earthworks

- 6.11 Those general issues and concerns are the number of large-scale earthworks and the implications that this may have on stability, water sources and other related issues.

- 6.12 Earthworks should be monitored through cultural monitors (iwi reps and regular site inspections by iwi representatives).

Soils

- 6.13 Soil resources are important for plant cultivation and for use as dyes. Kumara gardens were an important source of food. Maori added gravel to the soil used for growing kumara. Large areas of land were modified for food production, and you will find many of the borrow pits gravel excavation pits are still visible today on certain sites.
- 6.14 Notably taonga (such as carvings) were stored in peat soils in wetlands to both hide and preserve them during times of trouble.
- 6.15 Soil also has an important cleansing role. Only by-passing treated waste (such as farm effluent or treated sewage) through Papatuanuku can the mauri (life force) of water be restored.
- 6.16 Regarding large amounts of infill are they to be locally sourced or brought in from offsite and if so where will the source be from and will it be assessed for contaminants? Ngati Te Ata requires and requests further consultation regarding this.

Erosion and sediment control

- 6.17 The amount of sediment that could be mobilised as a result of the proposed quarry activity. Issues with flocculent if proposed for use, which could achieve 95% retention of sediments. Flocculent overdose is particularly harmful to the receiving environment. We support organic based flocculent.
- 6.18 Some of the methods proposed for sediment retention that is supported from a cultural perspective are:
- a) A temporary sediment retention pond to be installed
 - b) Runoff diversion channels and bunds
 - c) Silt fences and super silt fences
 - d) Mulching geotextile fabric for containment

Site contamination

- 6.19 Issues whether the site is contaminated by any point source and affected by a diffuse discharge of local surface water including the receiving Whangamarino wetland. As stated above - regarding the large amounts of fill are they locally sourced or brought in from offsite and if so where will the source be from and will it be assessed for contaminants?

Wai (Water resources)

*Ko te waite ora o nga mea katoa
Water is the life giver of all things*

*He taurawhiri ko tahi mai ano te kopu nga tai no i te pu au
From the source to the mouth of the sea all things are joined together as one*

- 6.20 As one of the iwi within the lower Waikato catchment, Ngati Te Ata has strong cultural, traditional and historic links with wetlands and inland waterways, including lakes, rivers, streams and springs. These taonga are spiritually significant and closely linked to the identities of the tangata whenua. Water is the life giver; it represents the blood of Papatuanuku, the Earth Mother, and the tears of Ranginui, the Sky Father. Waterways are home to our many taniwha that look after the people and ensure their physical and spiritual protection.
- 6.21 The tupuna (ancestors) recognised the various states of water including wai tapu, waiora, waikino, and waipiro and wai mate. Waiora are waters of life, the purest form of freshwater that gives and sustains life and can rejuvenate damaged mauri. Waimate is dead water that has no regenerative capacity; the mauri is lost and can contaminate other mauri of living things or other waters. Waitapu are tapu due to loss or restrictive use.
- 6.22 All things in the Maori world can be traced and explained through whakapapa. The whakapapa of the natural world – animals, plants, mountains, rivers, lakes, air, and coasts - is linked to that of Maori. Maori have an ancestral obligation to ensure that this taonga are protected and managed when passed on to the next generation. Mauri is the life force that generates, regenerates, and binds the physical and spiritual elements of resources together.

The main point is that spiritual and cultural concepts be recognised and provided for as key issues in water management.

- 6.23 Water is defined in terms of its spiritual or physical state as shown below: Table Categories of Water (Douglas, 1984)

Waiora	Purest form of water, with potential to give and sustain life and to counteract evil.
Waimāori	Water that has come into unprotected contact with humans, and so is ordinary and no longer sacred. Has mauri.

Waikino	Water that has been debased or corrupted. Its mauri has been altered so that the supernatural forces are non-selective and can cause harm.
Waipiro	Slow moving. typical of swamps, providing a range of resources such as rongoa for medicinal purposes, dyes for weaving, eels and birds.
Waimate	Water which has lost its mauri. It is dead, damaged or polluted, with no regenerative power. It can cause ill-fortune and can contaminate the mauri of other living or spiritual things.
Waitai	The sea, surf or tide. Also used to distinguish seawater from fresh water.
Waitapu	When an incident has occurred in association with water, for example a drowning, an area of that waterway is deemed tapu and no resources can be gathered or activities take place there until the tapu is lifted.

- 6.24 Mixing water of different types is a serious concern for Ngati Te Ata. The mauri of a water body can be destroyed by an inappropriate discharge, with serious consequences for the ecosystem concerned. Our reliance on the spiritual and physical well-being of the water body will also be affected. The diversion or combining of waters from different sources or catchments is considered inappropriate.
- 6.25 This catchment is home of our kaitiaki, our taniwha whom ensures our protection on the water both physically and spiritually. It is also of significant spiritual value in regard to ceremonial activities, waters for healing and medicinal purposes. They are also a traditional source of food such as tuna (eel). Many people wish to re-establish wetlands as a source of traditional food including eels, inanga, mullet and watercress.
- 6.26 The catchment affected by this proposed quarry development has mostly been highly modified and degraded due to present and past land uses, including farming, poor quality effluent and leachate, and used in the past as a dumping place for refuse.
- 6.27 Most are in a modified state with very limited vegetation on the stream banks. It is vital therefore that riparian planting and other native planting measures are undertaken. We support this area undertaking reinstatement planting following the earthworks in order to restore the existing stream bank vegetation.
- 6.28 It is essential that our waterways be managed to a level that ensures their use as a food source and supports active restoration programmes, including stream edge planting. That is why it is important to protect what is left of wetlands. In addition, land

drainage, adjacent landfills, animal grazing and exotic plants have degraded many surviving wetland areas. Much of the remaining wetland is on private and do not have access to these places.



Raupo huts, probably in Rangiriri but indicative of the housing most likely observed by Hochstetter at Pokino/Mangatawhiri. Taken during the Government Scientific Exploring Expedition, conducted by Dr Ferdinand Von Hochstetter in 1859. Sir George Grey Special Collections, Auckland Libraries, 7-A15829

Groundwater

- 6.29 It is essential that groundwater, our aquifers are not adversely impacted upon and breached by this proposal. The net improvement of water quality across the region, the reticulation of wastewater will ensure that ground and surface water is protected from pollution by inappropriate use of on-site wastewater disposal systems. The key issue is to ensure the aquifer does not get contaminated.

Receiving Catchment

- 6.30 As stated in the AEE report “the quarry itself and the surrounding area contain several swales, natural watercourses, overland flow paths and culverts. A number of existing man-made ponds are also present across the site. These are primarily recreation and/or animal watering ponds. The southern end of the site contains two

existing sediment control/treatment ponds. From the quarry onsite drain system, the water flows approx. 540 m to a tributary of the Waipunga Stream, which flows to the wetland area adjoining the Mangatawhiri River approximately 3 km to the south.

- 6.31 This site adjoins the Whangamarino wetlands, which are nationally recognised for their significance as an environmental feature, and historically significant to Ngati Te Ata. The Whangamarino wetlands have been historically used for thousands of years, and the higher ground surrounding the wetlands were especially important and used for hunting and fishing camps and pa tuna.
- 6.32 Drainage, pollution, quarry activity and animal grazing and introduced plants have already degraded much of this surviving area. The protection of this outstanding and nationally recognised, catchment from inappropriate drainage and development effects like sediment build up is paramount to iwi. The water quality of the receiving catchments has been seriously affected by years of industrial discharges resulting in a highly degraded aquatic system. Any discharge to this environment needs to be treated to a high standard by setting environmental bottom lines.
- 6.33 Most of the Bombay, Pokeno, Lower Waikato streams are small and threatened by rural and urban development activities including modification, the removal of riparian vegetation and pollution by sediments and waste. Are the Waikato District and Regional Councils involved in the 'bigger picture' of cleaning this catchment up from source to discharge point, and ensuring that their proposal is consistent and compliant with council's integrated catchment management plans.
- 6.34 Areas of wetlands have huge beneficial value to the community and Iwi. This project is part of that consideration to conserve wetland rather than destroy it. The farming communities of the past are largely responsible for most wetland drainage and destruction for farming purposes. Over the last 150 years we have seen a 90% destruction rate of natural wetland and now we are beginning to really understand the ramifications of that.
- 6.35 The Whangamarino wetland is a good example of the viability of protection and preservation of these areas these nonuse values have cultural and economic gains which can contribute to our well-being also include:

- a) An abundance of water birds including heron, bittern, waders and waterfowl. It helps with the flood control in the lower Waikato regions.
- b) It reduces damage to any surrounding wetlands, it can encourage gamebird hunting, cultural and commercial harvesting of tuna, provides a habitat for whitebait Inanga, encourages recreational fishing of introduced species i.e.) catfish, rudd and koi carp, it can encourage birdwatching on a local and wider platform.
- c) It knowingly creates an awareness of public access and encourages further education, can encourage dating and further research of manuka/kanuka and peat bogs. Water irrigation of farm land during dry periods encouraging ecosystem values. When these benefits are run in conjunction with our Maori Resource Management values of sustainability, we all benefit.

Cultural Resources

- 6.36 The Lower Waikato area around Pokeno was rich in resources valuable to Maori. Those cultural resources of the time would have included the land for cultivations (high in volcanic content) rich soil content, available rock sources for gardening walls, for nga mara, growing everything needed for Pataka kai/food storage house which included kumara, taro, maize, potatoes, peaches to name some. Dried shark, dried pipi were staple food of the times that could be transported easily as edibles, these were some of the resources observed by those early European settlers.
- 6.37 The site-specific resources were there in the form of manu/birds, koropiko/food, karaka/food, wood. Harakeke/flax for hinaki/nets, fishing weirs, taruke crayfish pots. Various types of wood were used for making carvings taiaha/weapons, waka/canoe, ko/, gardening tools, kereru (wood pigeon snares), paepae kiore (rat snares), and, palisades, house structures, pataka kai/pantry, rongoa/medicines. resources from the repo/swamp would have provided thatching for the roofs and house structures, provided dies for clothing, it was also known to be used as cache areas for Taonga/carvings, and other treasures.
- 6.38 A comparison of food and resource-based analysis was carried out during an onsite hikoi of Mt Wiremu (William) and a review of all historical files of the area, archaeological reports of the area. Resources of the forest were -koromiko, karaka, titoki, pohutukawa, ti kauka, kawakawa, koromiko, mamaku, karamu, kumarahou, manuka, kanuka, mahou, makomako, tupakihi, harakeke, koari, traditional native species available most had

multiple uses more specifically is the medicinal uses as outlined in this cultural assessment report.

- 6.39 These cultural resources were used for rongoa (medicinal resources). This is the Maori is the traditional healing system of Maori. It focused on the oral transmission of knowledge (korero a waha), diversity of practice (how the tohunga practices) and the spiritual dimension of health. Rongoa Maori encompasses herbal remedies, physical therapies and spiritual healing. The tohunga was the discipline of traditional healing and its practitioners (Tohunga takes care of the spirit of the individuals. Therefore, the resources of wetlands and forests for medicinal purposes were pivotal for the health and wellbeing to early Maori and for us in present times.

CONCLUSIONS AND RECOMMENDATIONS

Ngati Tamaoho and Ngati Te Ata

Conclusions

1. The McPherson quarry sits within a significant cultural landscape, this is evident by the surrounding archaeological sites, that once formed a networked settlement we call 'waahi nohoanga' (places of past occupation).
2. This cultural report is only a starting point for further consultation and dialogue given the scale, scope and future implications of the proposal. Further on-going discussion will be needed to identify information gaps in our thinking, raise issues or opportunities we had not foreseen, and clarify any issues as identified in this cultural assessment report.
3. We recognise the need for the continuation and expansion of the quarry. The population of New Zealand continues to grow, and with it the market for quarry materials produced from the McPherson Quarry continue to be in demand. However, this should never be at the cost of our cultural and environment heritage, a sustainable balance must always be sought.
4. During our onsite, we found the site to be well maintained and cared for. There were no 'inorganic' materials seen within the overburden areas.
5. The native bush land-areas are mainly fenced and well cared for with very few exotic weeds.
6. The proposed offset mitigation of planting a native corridor between the existing native forest regarding both the McPherson Quarry land and neighbouring properties will be beneficial to the native wildlife.
7. Our primary concern is with regard to issues pertaining to the quality of water being discharged from the site.
8. A second wetland was discussed with the applicants which is located where the existing north and south ponds are.
9. Also discussed was establishing a two-pond system where the overburden of the site is proposed to be above the low-lying flat paddocks.

Recommendations

We are not opposed to these resource consents being granted on condition that the following are provided for:

1. That where the ponds/wetlands are requested the second pond is to be a wetland with raupo to give a final polish (cleanse) and remove any fine sediments found in overburden and clean fill.
2. That a third pond/wetland is established for a final polish prior to discharge to the tributary of the Waiponga stream, and ultimately the Waikato River.
3. That at a minimum there is a two pond/wetland system for the proposed overburden site regarding Stages 2 and 3, especially above the flat land.
4. That the mitigation native ecological corridor is to be provided for as discussed at the onsite up the back behind the large farm wetland.
5. That the native ecological corridor is to be fenced which will exclude stock from gaining access and doing irretrievable damage.
6. That Iwi (Ngati Tamaoho and Ngati Te Ata) are to receive a copy of the planting proposal and associated management plan once available.
7. That Iwi are to be regularly kept informed of any variations to the original consent application put before us.
8. That we agree with the findings and recommendation of the archaeological assessment which states:

Given the lack of any potential archaeological features or materials encountered during the site visit, as well as the high degree of modification to the landscape within the proposed works area, it has been determined that the risk of encountering intact archaeology during the proposed works is low. It is recommended that the proposed ongoing operation of the quarry proceed under an Accidental Discovery Protocol (ADP). Under an ADP, if suspected archaeological material is encountered, then works must stop and an archaeologist contacted for further advice.

9. That Iwi participates on a regular basis with regard to the cultural monitoring of any proposed earthworks from a kaitiaki perspective – and that all earthworks in ‘new’ broken ground are culturally monitored for potential taonga by iwi in conjunction with the project archaeologist.

10. That Iwi are engaged directly with the applicant, their agents and the site manager regarding any further required consultation requirements, are informed of the results of all monitoring and consent related assessments relating to the proposed quarry development and expansion.
11. Should there be any significant changes to the proposed quarry development and expansion (resource consents) then Iwi are to be notified and consulted with immediately and reserve the right to reconsider any of our earlier decision.