

## **CONSULTANT TEAM**









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## **INFORMATION**

**Document Reference** Te Aroha Geothermal Pools and Spa Options Assessment Summary

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Sign off Craig Jones

**Version** Final

Date August 2022

### **Acknowledgements:**

Visitor Solutions would like to thank all the members of the Te Aroha Geothermal Pools and Spa Governance Group, Ngati Rahiri Tumutumu and the staff of Matamata Piako District Council.

#### Disclaimer:

**Authors** 

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This summary report conceptualises and explores options for the development of a geothermal hot pools and spa complex within the Te Aroha visitor precinct (centred around the Te Aroha Domain). The purpose of this proposed development is to stimulate business growth and prosperity that in turn improves social cohesion, economic development, and cultural outcomes for the Te Aroha community.

The study involved both field and desk top research and analysis across multiple disciplines. Three concepts were developed:

**Option 1:** is the smallest of the three with less general outdoor pool space (circa 119 m<sup>2</sup> of surface water area) and a smaller spa offer. The main hub is smaller (e.g., no cafe etc). This option has a rough order of cost estimate of \$24.3 million.

**Option 2:** offers more general outdoor pool space (circa 308 m<sup>2</sup> of surface water area) and a larger spa offer. This option's rough order of cost estimate is \$33.1 million.

**Option 3:** offers the most general outdoor pool space (circa 420 m<sup>2</sup> of surface water area) and a larger spa and main hub offer. It has a rough order of cost estimate of \$37.7 million.

Once selected further research and analysis of the favoured concept option will be required as the project advances.

The study concluded that:

- Te Aroha is in a strategic location for a destination geothermal pools and spa experience (being within the 'golden triangle of Auckland, Hamilton, and Tauranga).
- The proposed geothermal pool and spa concept has a potential point of difference from competitors.
- Demand exists for geothermal and spa experiences in Te Aroha as demonstrated by the existing operation and market demand.
- The combination of both geothermal pools and spa experiences strengthens the commercial offer.
- The three facility concepts developed are all financially profitable although Options 2 and 3 perform more strongly with estimated rates of return in excess of the Council cost of borrowing (>4%) and a payback on capital expenditure of

- ~14-16 years. The indicative costs of these three options are \$24.3, \$33.1, and \$37.7 million respectively which has been assumed to be 100% debt funded.
- Option two is likely to have a lower risk profile than Option three. It can also be staged to resemble something like option three in time. Option three has a slightly higher risk profile (by virtue of the higher capital cost and larger operational scale) but is commercially more viable.

#### The study recommended that:

- 1. Further site analysis is undertaken on the favoured development location which should include:
  - a. Further engagement with mana whenua,
  - b. a site survey
  - c. cultural impact assessment
  - d. an inventory of cultural, natural, and physical features,
  - e. more detailed geotechnical and engineering assessment (of key development areas),
  - f. A site assessment of existing and potential tracks, structure, outdoor pool locations (undertaken by a specialist outdoor structural engineer such as Frame Group).
- 2. An investment case should be developed with additional design input based on the data gathered from earlier stages (la-If above).
- Undertake a broader economic and social assessment of the wide benefits of the development for the district.
- 4. Council considers advancing either (a refined) Option two or Option three depending on its objectives.
- 5. Council selects its favoured development option and decides its level of capital contribution.
- If additional project capital is required, the search for a potential commercial partner/s should begin with an ROI process and preliminary discussions with applicants.
- 7. Information from these preliminary potential partner discussions should be used to inform an updated business model.
- 8. A partner/s is identified through a formal selection process (that follows on from the ROI process).
- 9. Tendering can be commenced to select a project manager, quantity surveyor design team and any necessary supporting consultants.



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## 1.1 PURPOSE

This work conceptualises and explores options for the development of a geothermal hot pools and spa complex within the Te Aroha visitor precinct (centred around the Te Aroha Domain). The purpose of this proposed development is to stimulate business growth and prosperity that in turn improves social cohesion, economic development, and cultural outcomes for the Te Aroha community.

## **Project Objectives**

The Te Aroha Governance Group stated that it is seeking to develop a geothermal water facility that:

- 1. Acts as a catalyst for economic development within Te Aroha and the wider district.
- 2. Generates the highest possible yields (placing an emphasis on higher yields rather than total visitor numbers),
- 3. Is a successful robust standalone commercial tourism business,
- 4. Has a core market niche that is centred on the quality of the wai/ngapha,
- 5. Makes the best use of the available natural resources,
- 6. Is culturally appropriate and respectful of whakapapa and the wider Te Aroha cultural landscape.
- 7. Has strong environmental and sustainability credentials.

The Te Aroha Governance Group was clear in stating that it is not:

- a) Developing a facility catering to the general community aquatic leisure provision. This is accommodated in a separate facility within the Te Aroha Domain.
- b) Creating a facility that mirrors its potential competitors. We want to be ahead of the pack and maintain a clear market niche.

#### **Additional Considerations**

The new facility should take account of the following considerations:

- The facility will be developed within a precinct. The wider precinct will cater to a variety of diverse (often non-commercial) needs.
- The facility mix may include retail, F&B and accommodation (or alternatively some of these aspects could be delivered elsewhere in the precinct).
- The facility will demonstrate a deep Tangata Whenua narrative which will be reflected in the visitor experience offered.

## 1.2 SCOPE

The project scope was stated as:

- Develop three high level geothermal water facility concept options with high level financial models. This will include things such as:
  - a. Concept outlines,
  - b. Schedule of spaces,
  - c. High level sketch concepts,
  - d. Competitor analysis,
  - e. Water utilisation summaries,
  - f. Costings,
  - g. Preliminary financial models,
  - h. Pros and cons.
- 2. Develop the favoured geothermal water facility concept option further. This will include such things as:
  - a. Detailed narrative around the concept,
  - b. More detailed schedule of spaces (functions),
  - c. Competitor analysis,
  - d. Higher level sketch concepts,
  - e. More detailed water utilisation analysis,

- f. Costings,
- g. More detailed financial models (including whole of life costs),
- h. Pros and cons.
- i. Development staging (if any),
- j. Concept / market testing,

During the study it was decided to take all three concept options to a higher level for comparative purposes.

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## 2.1 CULTURAL CONTEXT

"Ngati Rahiri Tumutumu have occupied Te Aroha since ancient times and held the mana over the mountain, hot springs and surrounding whenua. The mountain and hot springs are sacred to the tribe, a taonga.

Ngati Rahiri Tumutumu consider Mount Te Aroha to be wahi tapu associated with their ancestors, particularly Te Ruinga. A maunga tapu is a spiritual halfway station between this world and the next. In traditional stories, patupaiarehe inhabit its misty peaks embodying and intensifying the tapu nature of the mountain. The hot springs at the base of the mountain flow out of its heart, right underneath Te Ruinga's later pa site at Whakapipi.

Maori tradition ascribes the hot springs to the taniwha, Ureia, who left the Okoroire hot springs to gouge out the channel of the Waihou River. He is said to have taken several gourds of hot water from O-koroire to leave at various points, including O-kauia springs and Te Aroha which lie along the Hauraki fault line.

Ngati Rahiri Tumutumu have always used the waters – the cold water for drinking and the hot water for bathing and healing. For centuries, battle wounded Maori often repaired themselves in Te Aroha by bathing in the springs. During the Waikato Wars, many wounded warriors were brought to the waters for healing and recuperation. Maori were also reported to have been brought from miles around by sleigh to receive the benefits of the healing waters. Ngati Tumutumu chief, Te Mokena Hou, hosted the Maori King, Te Whaio, on numerous occasions in the 1880s. Te Whaio bathed in the pools to relieve his rheumatism. Old warriors also used the waters to soak in to relive symptoms of rheumatism and old age. Diseases of the eye were treated by the colder springs.

Māori built clay walls to create bathing pools and dammed the water flow with rocks to regulate the temperature by controlling the flow of hot and cold water into the pools. Māori would also contain the water by using raupu.

Following three fiercely contested cases in the land court, the Crown acquired the Aroha block in 1878. Various reserves were granted back to the tribe in the block including the Omahu Reserve which was originally to include the hot springs. Just before the vesting, 20 acres around the hot springs were excluded from the reserve. Crown control of the hot springs was asserted through the Aroha block purchase and several pieces of subsequent legislation. Tribe members either hold the view that the hot springs were confiscated, or the hot springs were gifted by the chief Te Mokena Hou on the condition that Maori were to continue to have free unencumbered access to their waters (the latter being supported by documentary evidence).

The perception of Te Mokena Hou of a partnership in the joint management of the hot springs was ignored by the Crown as it progressively sought to remove Maori from management and access to their taonga. The Waitangi Tribunal found that the Crown had failed to protect the traditional values and kaitiakitanga of Ngati Rahiri Tumutumu in Te Aroha mountain and hot springs and the management of those places.

Ngati Rahiri Tumutumu today still hold the mountain and hot springs sacred. The current structures and containment of the Mokena geyser have destroyed the wairua of the waters. Ngati Rahiri Tumutumu have been excluded from access and management of the waters, as promised by the Crown back in 1878 and yearn to have this remedied and the wairua of the waters restored".

Text kindly provided by Ngāti Rahiri Tumutumu (September 2019).

Ngati Rahiri Tumutumu considers that the redevelopment of the Geothermal Pools and Spa and surrounding domain aligns strongly to its own strategic objectives. The development affords Ngati Rahiri Tumutumu strategic opportunities both culturally and economically.

## 2.2 SPA HISTORY

This section summarises the history of Te Aroha with respect to its development as a spa destination<sup>1</sup>.

Mana Whenua have been aware of the Te Aroha hot springs and making use of the waters for hundreds of years before European arrival.

European visitor use of the hot springs began to build after the opening of the Thames Goldfield in 1867, with many residents of the ensuing 'boomtown' of Thames travelling up the Waihou River for recreational activities, including regular excursions visiting the hot springs at Te Aroha. The possibility of a 'sanatorium' being developed at Te Aroha was raised as early as the 1870s.

A decade later, the discovery of gold at Te Aroha (1880) and nearby Wairongomai (1881) led to Te Aroha's own time as a 'boomtown'. While this was only a short-lived period it contributed to improved access to Te Aroha and improved infrastructure within it. In 1880 regular boat services commenced up the Waihou River between Thames and Te Aroha and a coach service was established from Hamilton. Following Te Aroha land purchases in 1878, the springs area was designated the 'Te Aroha Hot Springs Reserve' in 1882 under the Public Domains Act. The construction of the first permanent Bath Houses began in 1883. In 1885 the initial landscape development began including manicured lawns, provision for lawn tennis and racket courts, and tree planting. Further springs were being opened and the paths were beginning to be constructed linking the new features.

By this time Te Aroha was becoming increasingly well known as a tourist spa destination. The railway from Hamilton to Te Aroha was completed in 1886, opening a direct link from Auckland and greatly increasing Te Aroha's accessibility and popularity for visitors. This was enhanced by the opening of the Thames to Te Aroha railway link in 1889, increasing local accessibility, and creating an option to boat from Auckland to Thames and then taking the railway. With these enhanced accessibilities the town of Te Aroha developed rapidly with visits to the hot pools progressively taking over from mining as the main driver. There was accommodation

for up to 500 visitors and in the year ended March 1887, 28,553 baths were taken at Te Aroha, compared with only 4,878 in Rotorua over the same period. By the 1890s Te Aroha had become the most popular Spa in the country (although Rotorua soon took over following its connection to the rail network in 1894).

In Te Aroha Domain itself the Cadman Bath House and a new band rotunda were opened in 1898. By the turn of the century 22 springs had been discovered. And by 1910 many new facilities were established including new and well-used bowling greens, croquet lawns, tennis courts (grass and asphalt), baths and bath houses, massage rooms, a tea kiosk, and staff facilities.

Visits had initially been driven by the attraction of the reputed 'curative' properties of the hot spring waters, which were a very strong driver of tourism in the late 19th and early 20th century.

Over time visits became increasingly driven by recreational experience opportunities as well as expectations of therapeutic outcomes. The Domain became a popular picnic spot and school parties regularly came on special excursion trains. Apart from the hot springs and the recreation opportunities associated with the Domain itself, these visitors also enjoyed visits to the mines, walks on Mount Te Aroha and along the river, and river trips. Te Aroha became an especially popular destination for day-trippers on public holidays. It was reported that on New Year's Day 1912, 7,000 visitors arrived in Te Aroha for the day. Many of such visitors arrived on special excursion trains from Auckland, which took five hours each way.

From their heyday in the early 20th Century there ensued a gradual decline. This resulted in part initially from the rise of Rotorua as the preeminent spa destination, a loss of rail and river access options, and then increasingly from a general decline in the attraction of the 'health-spa' destination concept overall. People still continued to use the baths, but with emphasis on more casual recreational enjoyment than the more formal health-driven 'taking of the waters'. Most facilities had closed or were re-purposed by the mid-20th century, although basic maintenance of the Domain and retention of its facilities continued.

<sup>1</sup> A more general and comprehensive summary of the town's history and development from pre-European times to the present can be found on the

Matamata-Piako District Council website https://www.mpdc.govt.nz/about-te-aroha/te-aroha-history

In signs of turning the corner in more recent years there appear to have been some reconsolidation of experiences in the Domain. 'Te Aroha Mineral Spas' was opened in 1980, providing modern spa pools using the thermal soda water. 'Swim Zone Te Aroha' was opened in 1990, providing a new outdoor swimming and soaking pool. In 1997 the historic No.2 Bath House was restored as a heritage bathing pool, the No.7 Bath House refurbished, a new Foot Pool established, and historic lakelets reestablished. Development of tracks for walking and mountain biking starting from the Domain has also added new activities and visitors. Overall, the focus appears to have now shifted to as much a historic heritage theme as a hot springs theme. Compared to other thermal water attractions in New Zealand, the living historic heritage component now appears to represent a particularly unique feature of the Te Aroha Hot Springs attraction.

This section addresses the population numbers, demographics and trends among potential domestic visitor catchments and for the host community. It considers features such as age, ethnicity and other socioeconomic indicators.

The catchment populations for the proposed Te Aroha spa are viewed here at three 'catchment' levels - 'Te Aroha' (as the host community); 'Matamata-Piako' District and the 'Golden Triangle' Regions<sup>2</sup>. Information on changes in population numbers and the compositions of age-groups and ethnicities are presented overleaf. The main summary points are that:

- There has been a population growth trend in Te Aroha over recent years after a long period of steady but slight decline. Across the wider 'Golden Triangle' Regions numerical growth has been strong (particularly in Auckland).
- An aging local age-profile with projections indicating those aged 65+ projected to increase (and reducing numbers in all other agegroups). This pattern was weaker across the Golden Triangle Regions, and least apparent for Auckland.

- Very high proportions of Europeans in local Te Aroha/Matamata-Piako populations, but higher proportions and larger numbers across the Golden Triangle Regions (particularly in Auckland).
- Projections of strongly increasing non-European ethnicities generally, although this only represents large new population numbers in the Golden Triangle Region (and particularly Auckland).
- Lower proportions of overseas born people living more locally than for the 'Golden Triangle' Regions overall (and Auckland in particular).
- Lower socioeconomic indicators for the Te Aroha population compared with the populations of Matamata-Piako District overall and wider catchment areas. Underscoring the need for economic development in Te Aroha.

Overall, the market opportunities for the new spa development will need to focus on the Golden Triangle Region (particularly Auckland) and/or overseas visitor populations (rather than just the local market).

catchment is the larger population of the Matamata-Piako District Council area, labelled here as 'Matamata-Piako'. And from a Regional perspective the 'Golden Triangle Regions' (combining Waikato, Auckland and Bay of Plenty Regions) provide the larger population catchment for potential domestic visitors.

<sup>&</sup>lt;sup>2</sup> The immediate local user catchment area within around 5km of Te Aroha is labelled here as '**Te Aroha**', as represented by the 'Te Aroha East' and 'Te Aroha West' Statistical Areas (SA2s). Prior to Census 2018 Te Aroha was represented by the single Statistics New Zealand Census Area Unit (CAU) of 'Te Aroha'. Beyond this local town

#### 2.3 LOCATION

Te Aroha is located very strategically and centrally within an area of the upper North Island sometimes termed 'The Golden Triangle' - named as such for its growing concentration of domestic population, visitor arrivals and transport/commerce connections (Figure 2.1).

Figure 2.1: The 'Golden Triangle' Area



This area incorporates New Zealand's predominant domestic population concentration<sup>3</sup>, and is defined by Auckland, Hamilton, and Tauranga. It effectively incorporates the combined populations of the Auckland,

<sup>3</sup> Combined population of around 2.5 million in 2018 (Statistics NZ Population Estimates)

Waikato, and Bay of Plenty Regions, representing around 2.5 million residents all within under a 2-hour drive of Te Aroha.

Te Aroha is located approximately 130km (1.5 hours drive) from New Zealand's main tourism entry point of Auckland Airport. Over the year ending June 2019<sup>4</sup>, Auckland Airport received around 1.31 million people making holiday/vacation visits to New Zealand. In addition, Auckland received around 211,000 cruise ship passenger arrivals in the year ending June 2018, while Tauranga received around 152,000<sup>5</sup>.

Combined, these domestic residents and international visitors represent the largest potential visitor catchment available within 2 hours drive. Additionally, Te Aroha's location has numerous strategic characteristics:

- It is located on State Highway 26 which joins Hamilton to the Coromandel Peninsula (via Morrinsville and Paeroa).
- On State Highway 26, Te Aroha is located only 20km (17 minutes drive) south of the State Highway 2 turnoff at Paeroa; State Highway 2 links Auckland to Tauranga/Bay of Plenty.
- On State Highway 26 Te Aroha is located only 55km (50 minutes drive) east of the State Highway 1 turnoff at Hamilton; State Highway 1 links Auckland to Hamilton/Waikato and the rest of the North Island (this is also the closest current connection to rail services).
- Te Aroha is also located only 14km (12 minutes drive) east of Tatanui where State Highway 26 crosses State Highway 27; which provides a second Auckland to Tauranga/Bay of Plenty link option (via Matamata).
- Te Aroha is also located:
  - at the western gateway to Kaimai-Mamaku Forest Park (via tracks at Mt Te Aroha, Wairongomai etc.).
  - centrally along the Waihou River which has been variously navigable from the Firth of Thames to Te Aroha and beyond for various craft at different times (subject to channel conditions).
  - centrally along the Hauraki Rail Trail from Kaiua/Miranda south to Matamata

<sup>&</sup>lt;sup>4</sup> Statistics New Zealand, International Travel and Migration: Visitor arrivals by country of residence, purpose and NZ port (Annual-Jun)

<sup>&</sup>lt;sup>5</sup> Statistics New Zealand, Cruise Ship traveller and expenditure statistics: YE 2018. Note, many may have been counted as visitors at both Ports.

- 28km (20 minutes' drive) south of the Karangahake Gorge and its attractions/gateways to Kaimai-Mamaku Forest Park.
- 50km south of both the Kopu/Thames and Waihi gateways to the Coromandel Peninsula.
- 37km (30 minutes' drive) north of the growing tourism hub in Matamata (with its core Hobbiton attraction).

# 2.4 OVERALL POPULATION NUMBERS AND TRENDS

Table 2.1 presents the populations of the respective catchment areas at the most recent 2018 Census. It also includes data from the previous three censuses to illustrate recent population trends. This shows that over the last 15-20 years there has been general growth across all potential population catchment areas. This growth has been less for the Matamata-Piako District overall than the wider 'Golden Triangle' area (particularly Auckland). Within the District relative growth has been somewhat higher in Te Aroha. This represent a change from the years prior to 2001 when the District population had been declining.

Table 2.1: Current population and recent trends (2001-2018)

	2001	2006	2013	2018	Change 2001-18	% change
Te Aroha	3,684	3,771	3,906	4,554	870	24
Matamata-Piako	29,469	30,480	31,536	34,404	4,935	17
'Golden Triangle' Regions	1,756,032	1,943,163	2,086,932	2,338,419	582,387	33
Auckland Region	1,160,271	1,304,961	1,415,550	1,571,718	411,447	35
Waikato Region	356,346	380,823	403,638	458,202	101,856	29
Bay of Plenty Region	239,415	257,379	267,744	308,499	69,084	29

Source: Statistics NZ Censuses 2001-2018

Closer examination reveals that most of this overall growth has occurred in the last few years (with higher rates in Te Aroha). Table 2.2 compares the population growth in these areas for a 5-year period between the 2001-006 censuses, and more recently in the 5-year period between the 2013-2018 censuses.

Table 2.2: Comparative population change 2001-06 and 2013-18

	Change 2001-06	% change	Change 2013-18	% change
Te Aroha	87	2	648	17
Matamata-Piako	1,011	3	2,868	9
'Golden Triangle' Regions	187,131	11	251,487	12
Auckland Region	144,690	12	156,168	11
Waikato Region	24,477	7	54,564	14
Bay of Plenty Region	17,964	8	40,755	15

Source: Statistics NZ Censuses 2001-2018

This shows population growth has been occurring at higher rates over the last 5 years across the 'Golden Triangle' Regions generally, and for Te Aroha in particular. Looking forward this appears to signal a change from the relatively low-growth population projections made by Statistics New Zealand for Matamata-Piako (based on standard census 2013 projections<sup>6</sup>) and of subsequent customised projections made later in 2013 and in 2017<sup>7</sup>. Table 2.3 summarises the most recent Statistics NZ projection (Census 2013 base) which illustrates relatively low projected growth.

Demographic and Economic Analysis, and then reviewed out to 2048 along with the base Statistics NZ data by Rationale Limited in 2017 as part of the Long-Term Plan 2018-2048. In both cases the actual Census 2018 population counts for Te Aroha exceeded those that had been projected for 2018.

<sup>&</sup>lt;sup>6</sup> Corresponding standard projections based on the most recent 2018 Census have not yet been released.

<sup>&</sup>lt;sup>7</sup> Customised growth projections for Matamata-Piako District based on Census 2013 data were made later in 2013 by the University of Waikato's *National Institute of* 

Table 2.3: Projected population and future trends (2018-2043)

	2018	2043	Change 2018-43	% change	
Te Aroha	4,240	4,360	120	3	
Matamata- Piako	,		2,000	6	
'Golden Triangle' Regions	2,470,600	3,241,400	770,800	31	
Auckland Region	1,699,900	2,326,200	626,300	37	
Waikato Region	467,200	562,100	94,900	20	
Bay of Plenty Region	303,500	353,100	49,600	16	

Source: Statistics NZ Census 2013base

In all these cases the actual population counts from Census 2018 exceeded the population levels projected for 2018, indicating that current population growth is tracking higher than that most recently projected. For Te Aroha in 2018, while Statistics New Zealand had projected a population of 4,240, and the most recent 2017 'Rationale' customised projection (as used for the LTP) had estimated a population of 4,258, the actual Census 2018 count was 4,554.

This indicates growth is exceeding that projected and that the projected population of Te Aroha in future years may be notably higher than indicated from currently available projections. The latest new projections based on Census 2018 figures are due for release in late 2020. Overall, notable population growth can be anticipated for Te Aroha, for the surrounding Matamata-Piako District and particularly for the wider Golden Triangle Regions.

#### **Important Note:**

Since Statistics NZ issued the 2018 Census data and associated population projections actual growth within the 'Golden Triangle' has exceeded projections, in some locations substantially (within the Bay of Plenty, Waikato, and Auckland Regions).

#### 2.5 MARKET TRENDS

#### Te Aroha Market Trends

Key points include:

- A significant number of users come for mineral quality of the water.
- 70-80% of the current guests visit both the hot pools and spa.
- 60-70% of current clientele come from Auckland (on weekends). The majority are Asian.
- Massage and couples' experiences are currently the most popular.
- Current spa demand requires 6+ spa treatment rooms (also more than I dual room required)
- Weekdays are popular amongst seniors / the older community.
- Busy Easter to end Oct Need to grow summer market with cold and outdoor experiences.
- Guests value privacy of their experience currently no walking between pool/spa
- Guests indicate they'd like to enjoy experiences set amidst nature / with nature views.

#### Regional Spa / Hot Pools Growth

Key points include:

- Pre-Covid, the New Zealand spa and hot pools industry was in amidst the country's greatest growth.
- Now, some key recent developments in Australasia include:
  - A 29,000sqm, 195-room development with F&B, event spaces, spa, fitness centre, 25m pool & extensive heat/water areas (Park Hyatt, Auckland) - Opened Sept 2020
  - A 15-mil development in Methven (Opuke Thermal Pools & Spa) – Opened late 2021

- o IHF Health Club with luxury heat / water areas (Christchurch) Opened 2021
- A 62-milion dollar development in Rotorua (Wai Ariki Hot Springs & Spa) – Opening early 2023
- The regeneration of QE Health & Wellness facility (Rotorua)
- Lakeview Hot Pools & Spa, Queenstown Under development
- Hidden Valley Thermal Pools & Spa, Taupo Under development
- 12 Apostles Hot Springs & Resort (Great Ocean Road, Australia) – Under development
- Alba Thermal Springs (Mornington Peninsula, Australia) -Opening Spring 2022

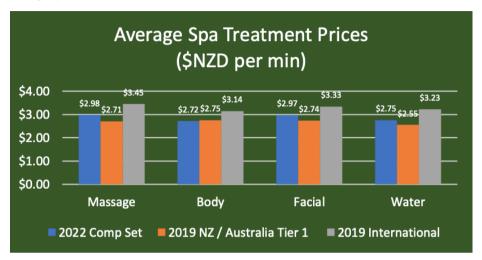
#### **Hot Pools Entry Charges**

Average pool prices in 2019 combined general and private rates. These are separated in 2022.

- The international average in 2019 for general pool entry was NZD\$82.94 equivalent
- The regional average in 2022 for general pool entry is NZD\$49.68 equivalent
- The regional average in 2022 for private pools is NZD\$86.16 equivalent

#### **Spa Entry Charges and Key Points**

The average spa treatment prices in NZ \$ by the minute are illustrated in the graph below.



#### Key points include:

- Despite border restrictions, massage, facial and water treatment prices have increased up to 10%
- Body treatments are more basic in NZ. Good opportunity for unique point of difference
- Water treatments are on the rise, yet only 54% of competitors in New Zealand offer them (opportunity for point of difference).
- In 2019, 81.8% of NZ and Australia facilities had gender- segregated locker areas. This climbed to 92.3% in 2022.

Additional market analysis is contained in Appendix 1.



#### 3.1 CONCEPT OVERVIEW

An immersive, cultural, and authentic geothermal spa experience that transports guests back to the age-old story of the local whenua (land) of Mount Te Aroha and the bathing traditions of Ngati Rahiri Tumutumu and the healing local waters of Mokena Hou Geyser (the only natural soda water geyser in the world).

Somewhere that creates a strong sense of cultural cohesiveness. A place to truly unify our wider communities through the collective sharing of our unique and plentiful gifts of local natural resource. A site to celebrate the birthplace of indigenous bathing within New Zealand and the path walked before us.

Users are encouraged to find genuine Hauora by interacting directly with the landscape. Where naturalism is at its best, and the healing powers of the land and water are both emphasised and respected through an earth to body philosophy. The Rongoā (herb garden), local muds, and the inimitable geothermal water richness are woven luxuriously and ritualistically into the tale. Where guests naturally reconnect to the historical pursuit of wellness in the region, through a range of modern-day geothermal water, spa, and heat experiences.

Natural aesthetics tastefully create a sense of place amidst the native bush and overlooking the local maunga (mountain) and riu (valley). Local sustainable timber, glass and easeful native pathways invite light and nature in around you while creating the perfect blend of privacy and expansive views.

A pioneering, calming and comfortable facility to feel at home. Somewhere that encourages meaningful connections (both shared and personal). An immersive, and effortless series of local spa, bathing and wellness spaces that are interactive and healing both physically and

spiritually. All these experiences are offered in an environment with cultural integrity.



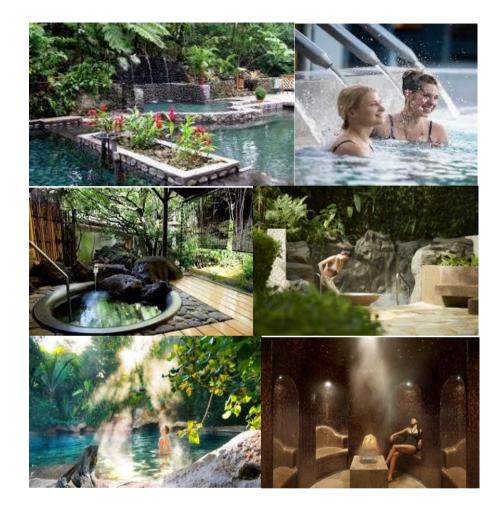
## 3.2 POSITIONING STATEMENT

A special place for individuals, couples and small groups seeking a cultural and natural geothermal experience at the true birthplace of spa in New Zealand. A nature-connecting pool, spa, heat, water and wellness facility that transports guests (in a modern and interactive way) to the history of the interaction with the water and land of the region.

The site will be one of cultural inclusivity that is proud to be Te Aroha. Locals, domestic and international travellers (predominantly Asian and Australian) will experience immersive and meaningful 'spa' and 'wellness' encounters all year round. This is a place where spa and bathing meet and the mind / body can re-connect with the age-old wellness benefits of geothermal 'spa' – through healing water, nature, touch, and activity. Guests will leave feeling refreshed and reconnected to nature and themselves.

The property is a luxurious, yet comfortable hot pools, spa and 'wellness' facility where predominantly adult guests<sup>8</sup> can benefit from the healing powers of water and land in its many forms. Users will relax and connect with the surrounding native flora to ultimately regenerate. An immersive, and effortless series of carefully curated local spa, bathing and wellness spaces that are both interactive and healing.

This pioneering property will be distinct from others within the region in that it will be the first to truly embrace the earth to body concept. A modern geothermal spa extension of the history and uniqueness of bathing in the region where those who visit will be reminded of the true healing power of nature in all its forms.



<sup>&</sup>lt;sup>8</sup> A separate Council owned family focus pool precinct is located separately elsewhere on the site.



# **EXPERIENCE COMPONENTS & OPTIONS**

## 4.1 INTRODUCTION

The following section describes the main individual experience components that make up the three different development options. Visitors will first arrive at the reception areas (one for the general pools and one for the spa). From here they will progress into either the pool or spa change areas and then either the main outdoor pool or the spa. The main components (by virtue of surface water area) are the outdoor pools and the private pools.

The three development options differ based on the size of their outdoor pool, spa and wellness experiences offers.

## **4.2 FACILITIES BRIEF**

#### Reception/Retail Areas

Separated pool and spa receptions to maximise guest experience.

Pool reception - first point of entry for all guests - including:

- Pool check-in pods:
  - Pool guests move to pool change
  - Spa guests move to adjacent spa reception
- Pool retail area
- Adjacent pool back of house space

Spa reception: multi-functional, integrated space - including:

- Spa reception
- Retail area
- Consultation and welcome lounge
- Adjacent back of house spa space



## Change / Locker Areas

The first area guests go after reception:

- Pool guests to move to pool change
- Spa guests to move to spa change
- Private changing in deluxe forest suites / private pools

Gender segregated spa and pool change areas - including:

- lockers
- seated benches
- private change cubicles
- janitorial and storage space
- swimsuit dryer

- wc's (+ accessible), showers and WHB's
- linen shelving and towel drop(s)
- seated vanity areas (spa only)
- Male and female sauna and experience shower (spa only)

The spaces are adjacent to the respective reception areas. The spa change leads to mixed gender rasul and relaxation room while the pool change leads to general pool areas.



#### **Outdoor Pools**

Most of the site's experiences will be comprised of outdoor pools. Pools range in size from 24 – 70m² (mostly 30-48m²) and will be for 'general pool access' guest use. Each pool will vary in temperature (between 35°c to 41°c). Some pools include:

- Aqua experience pools w/ hydro jet features for neck/body
- Maunga view pools
- Panorama view pools
- Garden setting pools
- Forest waterfall pools
- A starlit grotto pool

The pools will be adjacent to the herbal sauna, cold plunge, and experience showers (enabling a heat/water journey). They will also be adjacent to pool change / wc area(s). A mix of pools will be provided (virgin geothermal and geothermal water with additional heat source).



#### **Private geothermal pools**

Water sourced from groundwater (geothermally heated) and temp' controlled (38 - 40°c). Rich in natural algae and minerals to clean, exfoliate, and nourish the skin. Capable of accommodating 1-4 guests to enjoy privately or with loved ones. Ability to include a range of air and water jet features for neck/body with seating contours. These pools are great for relaxation, reconnection and to relieve stress / pain. They are set amidst native bush / maunga landscape to maximise the setting and history of the area.

These spaces can either be more natural (landscaped into the natural open environment) or in more of a built form (with walls, shelter roof or enclosed). They can also potentially accommodate in-built storage, guest shower, and change capability. They would be adjacent to spa and wc facilities.



#### Cold plunge pool

A fresh cold pool for guests to refresh after experiencing a hot pool / sauna. It will be one of the 'general access pools' placed in an area near hot experiences. The water temperature will be between 10°c to 12°c. An access rail and ladder will be provided for easy entry / access. The cold pool helps reduce inflammation, muscle spasms and pain, promotes circulation and endorphins



#### Mixed Gender Rhassoul / Rasul

An enclosed tiled / alcoved space with high-temperature steam. Temperatures are usually maintained at 40-45°c +, humidity 100% (+/-). Ideally a space with built-in audio and local essential oils available.

Normally accommodates up to 4 guests as a private mixed-gender heat/water space. This is a paid spa experience where guests can self-apply local mineral mud, the room then fills with steam for 10-20 minutes and once the steam stops, the showers over seats automatically wash mud from the body. During rasul treatment, guests use a kneipp hose to cool body.

This is a treatment to condition skin and relax the body. An adjacent dual experience shower is used for guests to rinse experientially post rasul



## **Experience Showers**

A shower combining a range of temperature, water, and sensory experiences – such as::

- Mist, tropical rain, jets
- Hot, cold, and lighting

Used for rinsing body before / after a treatment to:

- Cool,
- Increase blood flow,
- flush toxins,
- Contrast heat experiences.

Assumed to be positioned in the spa (male and female heat and water areas), near the outdoor pools (adjacent to high temperature pools and sauna's).



## Sauna(s) / Herbal Sauna

A small wooden room to enjoy dry heat (with herbal benefits in the herbal sauna). Generally made from oak, spruce, cedar, aspen or hemlock wood. Standard sauna air temperatures average 75–100°c (65-75 °c - herbal sauna). The sauna warms muscles prior to treatments or after cold bathing. Local herbs can be infused with water to strengthen immune and respiratory health (in the herbal sauna).

Standard saunas would be in both male and female spa heat and water areas - complimentary for spa guests. The herbal sauna would be in the general pool area for all pool and spa guests. Ideally with views of surrounding bush areas.



#### **Spa Treatment Rooms**

A comfortable space where guests have paid spa treatments. All are assumed multi-use treatment rooms with showers (optimal operational flexibility), a mix of single and couples' treatment rooms is assumed to maximise yield. Indoor couples' treatment rooms to convert into two (sound-proofed) single rooms. They would have connectivity / accessible to private pool(s) and relaxation area.



### Relaxation Area(s)

Gender-mixed or segregated (private) space(s). a quiet, cosy area near treatment rooms for guests to relax pre/post spa treatment. Relaxation beds are laid out singularly with privacy being key. Each bed has the potential for built-in headsets, lighting and reading for guest enjoyment. Healthy refreshments also available (self-service)





## Mani / Pedi Lounge

A relaxed, social space near spa reception guests to enjoy hand/food rituals. It will contain 2-4 comfortable stations suitable to conduct mani / pedi in same space. Benches will be laid out singularly with individual foot basins. Each station will have built-in reading lighting for guest enjoyment. Healthy refreshments will also available (self-service). The space will be suitable for small groups.



#### Forest Couples Suite(s)

An exclusive private space set amidst native forest for guests to enjoy:

- Deluxe private pool
- Spa treatments
- Dual experience shower
- Nature views

Each suite will contain in-room change, wc and storage capabilities. Seated areas in-room for foot rituals pre-treatment. Each space accommodates up to 2 paying guests at once (booked / paid privately).



#### Mixed use Wellness Space ('Hauora Space')

A spacious, calming and transportive multi-use indoor wellness studio with panoramic views and the ability to have open-air with retractable windows (away from the spa area) for seasonal flexibility. This space can be used for Yoga, Mat Pilates, Meditation, Mindfulness, Stretch, Wellness or Cultural Workshops etc. to enable the facility to deliver all dimensions of wellness in a group setting.

The studio will integrate local and sustainable wooden design for a luxury, a clean feel with built-in cabinetry for mats, cushions, towels, water cooler and other wellness equipment. Lighting in the studio will be key to set the appropriate mood (relevant to classes delivered) and excellent soundproofing will be key to maintain overall facility ambience.



## **4.3 SCHEDULE OF SPACES**

	Option 1	Option 2	Option 3
Ground Level			
Pool Reception/Retail/Office/Staff	115 m <sup>2</sup>	171 m²	209 m <sup>2</sup>
Pool Male Change/Lockers/WCs/Showers etc	50 m <sup>2</sup>	82 m <sup>2</sup>	91 m²
Pool Female Change/Lockers/WCs/Showers etc	50 m <sup>2</sup>	82 m <sup>2</sup>	91 m²
Circulation	103 m <sup>2</sup>	103 m <sup>2</sup>	103 m <sup>2</sup>
Dining area	NA	75 m <sup>2</sup>	75 m <sup>2</sup>
Kitchen	NA	36 m <sup>2</sup>	36 m <sup>2</sup>
Deck	50 m <sup>2</sup>	NA	NA
Upper Level			
Spa Reception/Retail/Office/Laundry	143 m <sup>2</sup>	156 m <sup>2</sup>	164 m2
Pedicure/Manicure	10 m <sup>2</sup>	16 m <sup>2</sup>	16 m <sup>2</sup>
Spa Male Change/WCs/Showers/Exp. Shower/Sauna etc	90 m²	90 m <sup>2</sup>	90 m²
Spa Female Change/WCs/Showers/Exp. Shower/Sauna etc	90 m <sup>2</sup>	90 m <sup>2</sup>	90 m <sup>2</sup>
Rhausoul	17 m <sup>2</sup>	17 m <sup>2</sup>	17 m <sup>2</sup>
Relaxation Lounge	48 m²	48 m²	48 m²
Treatment Rooms	140 m²	140 m²	140 m²

Multi Use Space (yoga, workshops etc)	50 m <sup>2</sup>	50 m <sup>2</sup>	50 m <sup>2</sup>
Circulation	120 m <sup>2</sup>	120 m <sup>2</sup>	120 m <sup>2</sup>
Basement Level			
Plant /Service	161 m²	215 m <sup>2</sup>	317 m <sup>2</sup>
Circulation	62 m <sup>2</sup>	62 m <sup>2</sup>	62 m <sup>2</sup>
Outdoor Experiences			
Deluxe Couples Forest Suite 1	NA	48 m <sup>2</sup>	48 m <sup>2</sup>
Deluxe Couples Forest Suite 2	NA	48 m <sup>2</sup>	48 m <sup>2</sup>
Deluxe Couples Forest Suite 3	NA	NA	48 m <sup>2</sup>
Deluxe Couples Forest Dual Experience Shower	NA	2	2
Private Pool 1 (Deck & Enclosure structures – pool is 12m²)*	36 m <sup>2</sup>	36 m <sup>2</sup>	36 m <sup>2</sup>
Private Pool 2 (Deck & Enclosure structures– pool is 12m²)*	36 m <sup>2</sup>	36 m <sup>2</sup>	36 m <sup>2</sup>
Private Pool 3 (Deck & Enclosure structures – pool is 12m²)*	36 m <sup>2</sup>	36 m <sup>2</sup>	36 m <sup>2</sup>
Private Pool 4 (Deck & Enclosure structures – pool is 12m²)*	36 m <sup>2</sup>	36 m <sup>2</sup>	36 m <sup>2</sup>
Private Pool 5 (Deck & Enclosure structures – pool is 12m²)*	36 m <sup>2</sup>	36 m <sup>2</sup>	36 m <sup>2</sup>
Private Pool 6 (Deck & Enclosure structures – pool is 12m²)*	36 m <sup>2</sup>	36 m <sup>2</sup>	36 m <sup>2</sup>
Mixed gender outdoor Herbal Sauna	14 m²	14 m²	14 m²
Outdoor experience shower	1	2	2
Private pools Change Space	36 m <sup>2</sup>	48 m²	54 m <sup>2</sup>
Outdoor remote Change /WC Cubicle	NA	16 m <sup>2</sup>	16 m <sup>2</sup>

General Outdoor Pools**			
Forrest Waterfall Pool small	24 m <sup>2</sup>	30 m <sup>2</sup>	28 m <sup>2</sup>
Starlit Grotto pool small 10,700 256,800	24 m <sup>2</sup>	30 m <sup>2</sup>	28 m²
Garden Pool small	NA	30 m <sup>2</sup>	30 m <sup>2</sup>
Maunga Pol small	NA	30 m <sup>2</sup>	30 m <sup>2</sup>
Panorama Pool med	35 m <sup>2</sup>	48 m <sup>2</sup>	48 m <sup>2</sup>
Aqua Experience Pool med	36 m <sup>2</sup>	48 m <sup>2</sup>	48 m <sup>2</sup>
Forrest Pool med	NA	48 m <sup>2</sup>	48 m <sup>2</sup>
Panorama Pool med	NA	42 m <sup>2</sup>	48 m <sup>2</sup>
Panorama Pool med	NA	NA	40 m <sup>2</sup>
Aqua Experience Pool large	NA	NA	70 m <sup>2</sup>
Cold Plunge Pool	NA	3 m <sup>2</sup>	3 m <sup>2</sup>
Standard Private Pools	6	6	6
Deluxe Private Pool (in Forrest Couples Suite)	NA	2	3

Notes: \* The design approach for the private pools is yet to be fully defined given the site topography. For schedule and costing purposes a larger size and level of construction has been assumed. This may be reduced as additional data becomes available.

\*\* The design approach for the outdoor pools is yet to be fully defined given the site topography. The total surface water area for each option conforms to engineering advice although in the future the number and scale of individual pools may adjust.

## **4.4 OPTION 1**

All options enter through a Waharoa archway upon arrival to create a sense of place for visitors and to begin the cultural wellness story. This option is the smallest of the three (in both spa and pool offerings). The general outdoor pool space (circa 119 m² of surface water area) is made up of approximately four 'general use' outdoor pools (with varying temperatures, aqua massage components and settings for a small experiential offering). Six standard private pools (inclusive of shower and

change areas) are also offered for a more exclusive experience (but no 'Deluxe Couples Forest Suites').

The spa is slightly smaller, offering gender-segregated change and heat/water areas with male/female experience showers and saunas (for guests to prepare themselves for their treatments). A mixed gender rhassoul is also available, where paying guests can self-apply local mud.

This spa offers six individual treatment rooms, two (divisible) couples treatment rooms, and a small manicure and pedicure space for couples within the indoor area. The spa offering also extends outdoors slightly with a multi-sensory experience shower and outdoor herbal sauna (where local herbs are infused to enhance the guest experience) within the surrounding garden/forest.

A multi-use wellness 'Hauora' space is also included within this option to enable the facility to provide a wide range of wellness classes and activities (e.g. Yoga, Mindfulness, Mat Pilates, Wellness & Cultural Workshops) to help round off the holistic wellness story. Accommodation will be key to drive this offering. The main hub in this option is smaller (i.e. no café and slightly smaller public areas).

Option 1 has a rough order of cost estimate of \$24.3 million (see Appendix 2 for a breakdown and list of exclusions).

#### **4.5 OPTION 2**

Guests again enter this facility through a Waharoa archway upon arrival. This option offers a more extensive & varied general outdoor pool space (circa 308 m² of surface water area). The facility is proposed to be made up of approximately nine outdoor pools (all with varying temperatures, aqua massage components and settings for a more experiential offering) inclusive of an outdoor cold plunge pool for heat contrast and additional health benefits. Locally inspired music can also be integrated within the surrounding bush to create cultural ambience.

Six standard private pools (inclusive of shower and change areas), and two deluxe forest suites are also offered with Option 2. Each Forest Suite is nestled within the bush surrounds and inclusive of a luxury couples treatment area, experience shower and private pool area space for a more exclusive and all-inclusive experience.

The spa is slightly larger overall with this offering. Gender-segregated change and heat/water areas with male/female experience showers and saunas (for guests to prepare themselves for their treatments). A mixed gender rhassoul is also available, where paying guests can self-apply local mud.

In additional to solo guests, this spa, caters more for small groups and couples with six individual treatment rooms, one (divisible) couple's treatment room, and a larger manicure and pedicure space for up to four guests within the indoor area (in addition to the two all-inclusive Forest Suite treatment areas). The spa offering in this option also extends further outdoors into the surrounding garden/forest with two multi-sensory experience showers and an outdoor herbal sauna (where local herbs are infused to enhance the guest experience). The concept is for guests to really interact with the landscape in an earth to body concept – picking local herbs with use of a 'Kete' from the Rongoa (healing herb garden) to use within tea infusions and treatments for enhanced health and storytelling. Option 2 also offers two private change / WC spaces in the wider forest setting for guest ease due to the more extensive pool offerings.

This facility includes a small cafe component designed to offer healthy light locally-inspired meals, snacks and beverages to cater for pool guests and small groups / couples requiring in-suite wellness packages. The inclusion of the café also allows small groups within the 'Hauora' space to be catered for. This is a multi-use holistic wellness space providing a wide range of wellness classes and activities e.g., Yoga, Mindfulness, Mat Pilates, Wellness & Cultural Workshops). Option 2 also enables the operator (if desired) to introduce the natural surrounds into the narrative with options to run tours amidst the surrounding tracks to share the history of the region (e.g. historical bathing tours, wedding grotto experiences etc). Accommodation will be key to drive this more holistic offering.

Option 2 has a rough order of cost estimate of \$33.1 million (see Appendix 2 for a breakdown and list of exclusions).

#### **4.6 OPTIONS 3**

The Waharoa archway also marks this facilities arrival experience. Option 3 offers the most extensive and varied general outdoor pool space of the three (circa 420 m<sup>2</sup> of surface water area). This is proposed to be made up

of approximately eleven outdoor pools (with varying temperatures, aqua massage components and settings for a more experiential offering) inclusive of an outdoor cold plunge pool. Locally inspired music can also be integrated within the surrounding bush to create the perfect cultural ambience. Six standard private pools (inclusive of shower and change areas) are still offered, but three deluxe forest suites are also offered with Option 3. Each Forest Suite is nestled within the bush surrounds and inclusive of a luxury couples treatment space, experience shower and private pool area within one space for a more exclusive & all-inclusive experience.

The spa is similar in size to that of Option 2 with gender-segregated change and heat/water areas with male/female experience showers and saunas available for guests to prepare themselves for their treatments. A mixed gender rhassoul is also available, where paying guests can self-apply local mud. As with Option 2, in additional to solo guests, this spa also caters more for small groups and couples with six individual treatment rooms, one (divisible) couples treatment room, and a larger manicure and pedicure space for up to four guests within the indoor area (in addition to the three all-inclusive Forest Suite treatment areas).

This spa also extends further outdoors into the surrounding garden/forest with two multi-sensory experience showers and an outdoor herbal sauna (where local herbs are infused to enhance the guest experience). Option 3 also has the capability to interact with the nearby Rongoa (healing herb garden) to integrate the earth to body concept and offers two private change / WC spaces in the wider forest setting for guest ease due to the more extensive pool offerings.

The main hub in this option is larger (to accommodate a potentially great guest volume). This facility also includes a small cafe component designed to offer healthy light locally inspired meals, snacks, and beverages to cater for pool guests and small groups / couples requiring in-suite wellness packages. The inclusion of the café also allows small groups within the 'Hauora' space to be catered for. This is a multi-use holistic wellness space providing a wide range of wellness classes and activities e.g. Yoga, Mindfulness, Mat Pilates, Wellness and Cultural Workshops). This option also enables the operator (if desired) to introduce the natural surrounds into the narrative with options to run tours amidst the surrounding tracks to share the history of the region (e.g. historical bathing tours, wedding grotto experiences etc). Key considerations with this option will be accommodation (to drive this more holistic offering)

and how the USP of the Te Aroha water can still be maximised with the greater volume of water surface area.

Option 3 has a rough order of cost estimate of \$37.7 million (see Appendix 2 for a breakdown and list of exclusions).

#### **4.7 IMPORTANT NOTES**

#### Te Aroha Waipuia Mana whenua Cultural Setting

One of the overarching goals of the design exercise is to acknowledge and celebrate the original Waipuia allowing Ngāti Rāhiri Tumutumu (as mana whenua) and manuhiri / visitors alike to deepen their appreciation of this significant taonga.

This process involves allowing the Waipuia to emanate from the ground in a natural landscaped setting, revealing its essential integrity and enhancing experiential perspectives.

Surrounding landscaped pools and support facilities are designed to complement this central treatment with opportunities to provide interpretive information focussing on Ngāti Rahiri Tumutumu narratives for the pools and wider cultural landscape.

#### Accommodation

As identified in the earlier Te Aroha Spa feasibility study and business case reports, accommodation is central to the success of the spa and wellness aspects of the development. At this stage accommodation has been excluded from the financial modelling because the provision of commercial accommodation was considered better provided by the private sector (rather than via Council).

A lack of suitable accommodation near the development remains a risk to the facility's financial performance. This could be addressed via a range of approaches such as:

• A commercial investor in the spa and geothermal facility also investing in accommodation (if an investor is brought in),

 Working with one or more of the several local developers who expressed an interest in developing higher quality accommodation in Te Aroha (if a spa and geothermal pool facility was developed).

We are aware accommodation opportunities are possible on both the proposed car park site and surrounding areas.

#### **Level of Design and Optimisation**

The very preliminary design work undertaken for this report is proportionate to what is required for financial modelling only (proof of concept). Further design will be required which will result in greater optimisation as the project advances. This will begin with further refinement of the schedule of spaces based on inputs such as the final business model, potential partner requirements, and detailed site data (topography, geothermal sites, cultural points of significance etc).

#### Approach to Water / Energy

The primary water and heating source for the facility is the Mokena Geyser. The Geyser has approximately  $78\text{m}^3$ /day of approximately  $77^\circ\text{C}$  water. The water comes out naturally intermittently and is required to be captured and stored in tanks before being utilised. The volume and temperature of water nominated a fixed amount of 'free heat energy' that can be utilised before an additional heating source is required. The water has higher mineral content when compared with more typical thermal pool water which provides a unique silky water which is a cultural and commercial asset. This is typically known as a virgin water experience where the silky Mokena Geyser water us used directly as a single use for the occupants and would provide a premium experience.

There is an option therefore to provide a virgin water experience where water would be drained and refilled with clean geyser water after each use. Alternatively, you have a more traditional pool experience which would be continuously filtered and treated, this could be with Geyser Water or towns supply water.

There are three options that were investigated predominately based on the utilisation of the Mokena Geyser. The first option maximises the heating available, and this water can be used either directly as a virgin water experience or alternative as an energy source to maintain temperature with more traditional pools.

The second option uses a water sourced heat pump to maximise the heat extraction from the thermal water and there is opportunity to design this with some virgin water experiences still but ultimately the majority of the pool will be more traditional where the heat from the water will be used as an energy source. Note that an alternative water source will also be required.

The third option expands on the second option and introduces an additional heating source such as an air sourced heat pump which is sized accordingly to provide the additional pool area as required.

In options two and three geothermal water can be captured, treated and re heated retaining some of the water's characteristics.

Preliminary spatial layout plans are shown for each option's main hub together with three indicative option layouts on the following pages. These are indicative plans for business modelling rather than detailed conceptual plans. A preliminary render of a potential building is also provided.







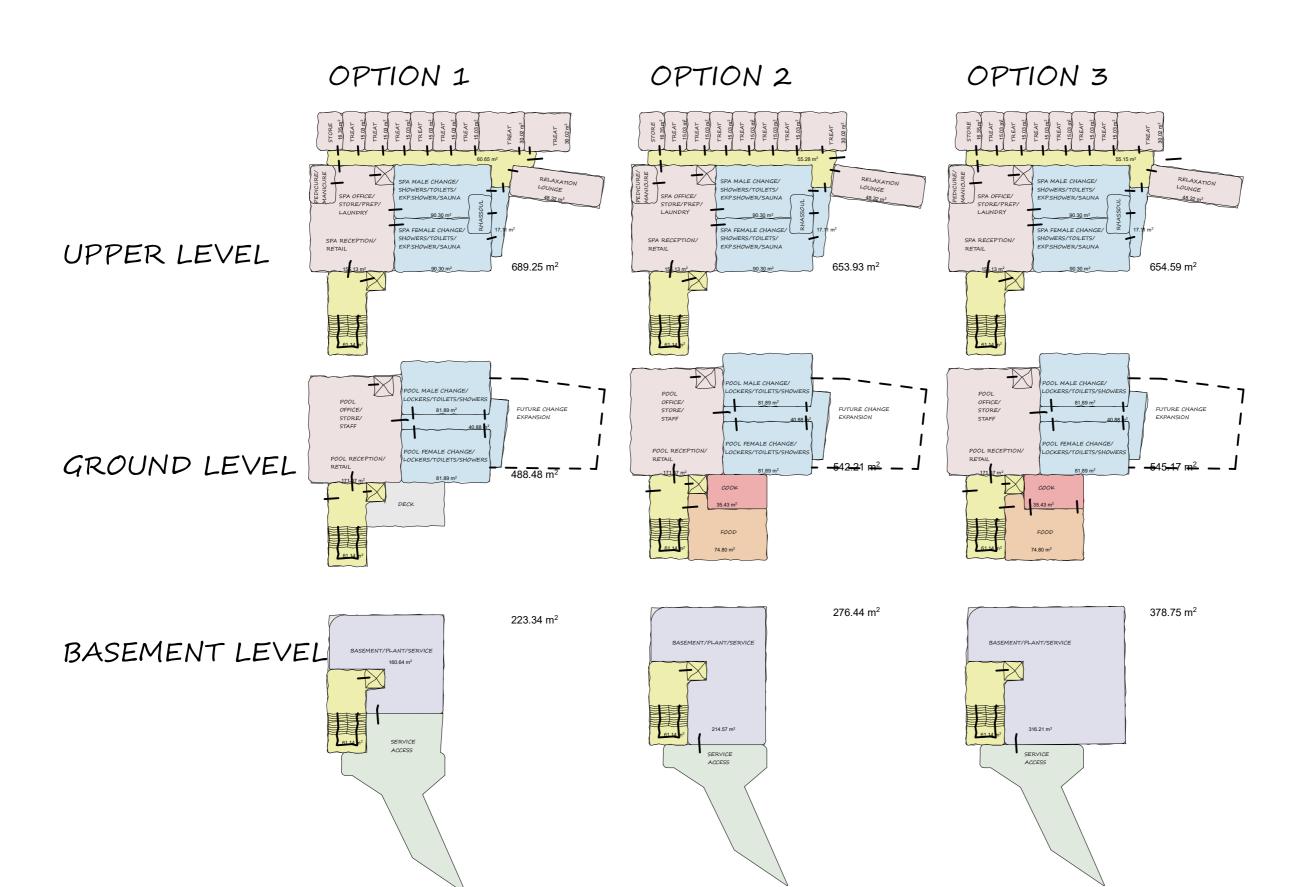






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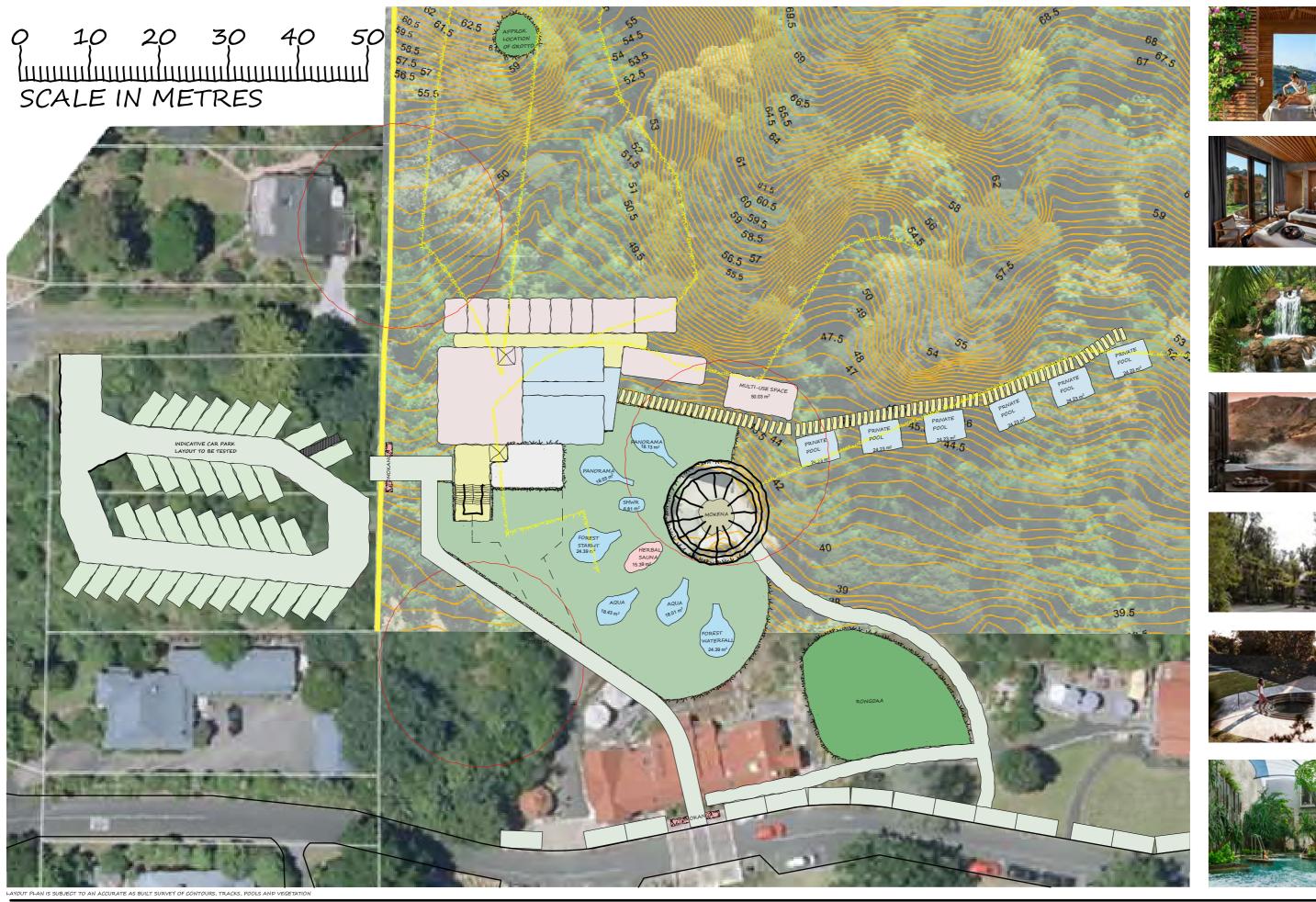




PRELIMINARY HUB LAYOUTS

Sheet number: A100 @A3







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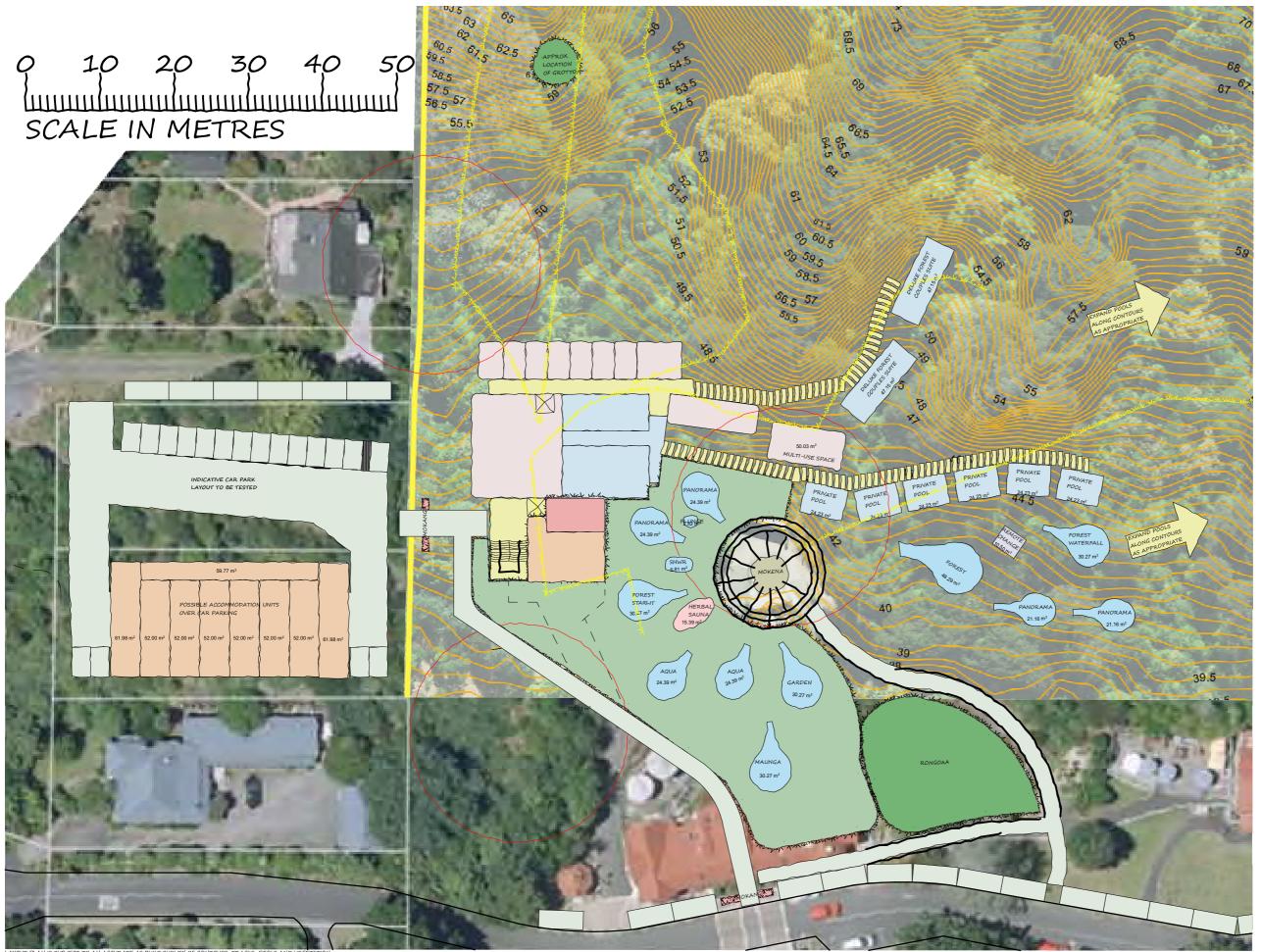


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PRELIMINARY LAYOUT OPTION PLAN 1

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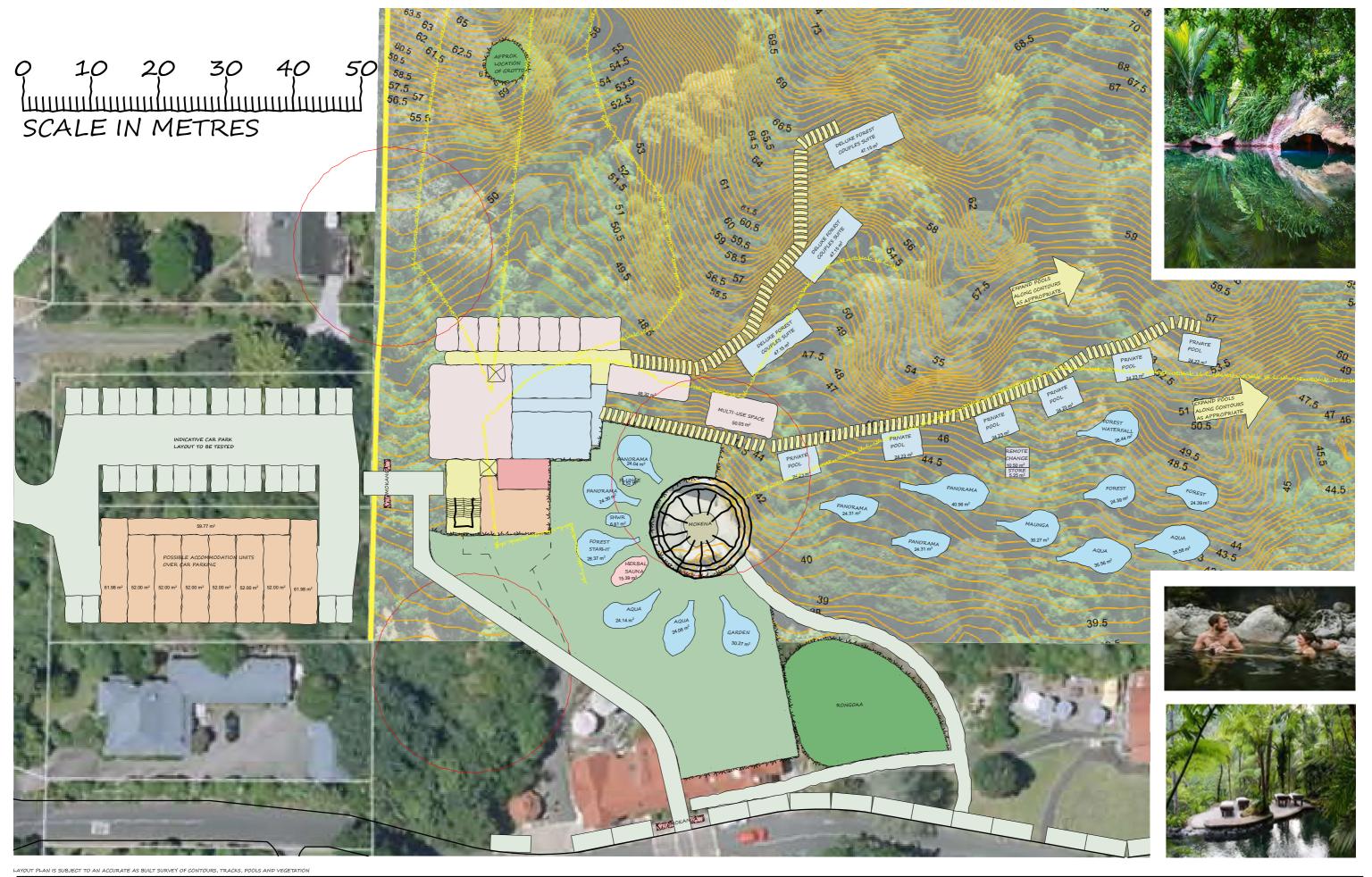
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PRELIMINARY LAYOUT PLAN OPTION 2
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PRELIMINARY LAYOUT PLAN OPTION 3

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Te Aroha Spa and Geothermal Pool Development Preliminary Business Case Concept - Birds Eye View



Te Aroha Spa and Geothermal Pool Development Preliminary Business Case Concept – Domain Steet View



Te Aroha Spa and Geothermal Pool Development Preliminary Business Case Concept – Parking Lot View



Te Aroha Spa and Geothermal Pool Development Preliminary Business Case Concept – Side Pool View



Te Aroha Spa and Geothermal Pool Development Preliminary Business Case Concept – Birds Eye View of Lower Pools



## 5.1 INTRODUCTION

The following section sets out a series of base assumptions and a summary operation evaluation for each option.

# **5.2 ASSUMPTIONS**

All revenue assumptions are based on:

- Forty-nine global competitors researched in 2019 & 2021 (26 international & 13 regional competitors)
- A further 13 key competitors Researched in 2022 (focusing on service and facilities offered, price etc.)

# Option 1

### **Revenue Assumptions**

#### **General Pools**

- Assumed \$50 General Pool Entry rate is based on the 2022 research of 13 competitors (inclusive of GST)
- Max general pool guest capacity = 192 / day based on:
  - o 119m² water surface area estimating 2.5m2 per person (48)
  - o 4 daily sessions of 48
- Assumed occupancies are based on 4 key national competitors (comparing location & infrastructure). 2019 Waikato hot pools occupancies data is also considered.
  - Sat/Sun (normal) Assuming 75% occupancy (Nov Feb),
     80% occupancy (Mar Oct)
  - Mon-Fri (normal) Assuming 40% occupancy (Nov Feb),
     60% occupancy (Mar Oct)

- Sat/Sun (cap) Assuming 85% occupancy (Nov Feb)
   8 90% occupancy Mar Oct
- Mon-Fri (cap) Assuming 65% occupancy (Nov Feb)
   8 70% occupancy (Mar Oct)

#### **Private Pools**

- Assumed \$85 Private Pool Entry rate is based on the 2022 research of 13 competitors (inclusive of GST)
- Max private pool capacity / day = 144 based on:
  - o 6 private pools x average of 2 people per pool
  - o 12 hours booking time per day
- Assumed occupancies are based on 4 key national competitors (comparing location & infrastructure)
  - o Normal: 60% occupancy (86/day) weekdays
  - o Normal: 70% occupancy (101/day) weekends
  - o Cap: 70% occupancy (101/day) weekdays
  - o Cap: 80% occupancy (115/day) weekends

#### Spa

- Spa capture rate of pool guests assumed: 2.6% (based on regional & global luxury average of 2.5–2.8%)
- Assumed 1 1.2 hours of treatment time per guest (depending on season).
- Assumed \$171 per 60-min treatment inclusive of GST (based on the 2022 competitor research average of all treatment types).
- Assumed \$55 average Heat & Water Facility use rate (based on 2022 competitor research indicators).
- Spa treatment room utilization is guided by Asia Pacific averages:
  - o Asia Pacific Luxury Norm: Approx. 24%
  - o Maximum Cap: Approx. 40.1%
- Spa retail to treatment revenue percentage assumed at Asia Pacific luxury spa average of 10%
- Therapist utilization (55.4%) is based on luxury hotel/resort spa averages of approx. 51% (Asia Pacific) & 60% (Globally).

• Facility opening hours: 10am-8pm (Spa) / 9am-9pm (Pools) - based on 2022 competitor research trends.

# Option 2

#### **Revenue Assumptions**

#### **General Pools**

- Assumed \$50 General Pool Entry rate is based on the 2022 research of 13 competitors (inclusive of GST)
- Max general pool guest capacity = 492 / day based on:
  - o 308m2 water surface area estimating 2.5m² per person (123)
  - o 4 daily sessions of 123
- Assumed occupancies are based on 4 key national competitors (comparing location & infrastructure). 2019 Waikato hot pools occupancies data is also considered.
  - Sat/Sun (normal) Assuming 75% occupancy (Nov Feb), 80% occupancy (Mar – Oct)
  - Mon-Fri (normal) Assuming 40% occupancy (Nov Feb),
     60% occupancy (Mar Oct)
  - Sat/Sun (cap) Assuming 85% occupancy (Nov Feb)
     8 90% occupancy Mar Oct
  - Mon-Fri (cap) Assuming 60% occupancy (Nov Feb)
     70% occupancy (Mar Oct)

#### **Private Pools**

- Assumed \$85 Private Pool Entry rate is based on the 2022 research of 13 competitors (inclusive of GST)
- Max private pool capacity / day = 192 based on:
  - o Eight private pools x average of 2 people per pool
  - o 12 hours booking time per day
- Assumed occupancies are based on 4 key national competitors (comparing location & infrastructure)
  - o Normal: 60% occupancy (115/day) weekdays
  - o Normal: 70% occupancy (134/day) weekends
  - o Cap: 70% occupancy (134/day) weekdays
  - o Cap: 80% occupancy (154/day) weekends

#### Spa

- Spa capture rate of pool guests assumed: 2.5% (based on regional & global luxury average of 2.5–2.8%)
- Assumed 1 1.3 hours of treatment time per guest (depending on season).
- Assumed \$171 per 60-min treatment inclusive of GST (based on the 2022 competitor research average of all treatment types).
- Assumed \$55 average Heat & Water Facility use rate (based on 2022 competitor research indicators).
- Spa treatment room utilization is guided by Asia Pacific averages (factoring in an increase in facility size):
  - o Asia Pacific Luxury Norm: Approx. 24%
  - o Maximum Cap: Approx. 40.1%
- Spa retail to treatment revenue percentage assumed at Asia Pacific luxury spa average of 10%
- Therapist utilization is based on luxury hotel/resort spa averages of approx. 51% (Asia Pacific) & 60% (Globally).
- Facility opening hours: 10am-8pm (Spa) / 9am-9pm (Pools) based on 2022 competitor research trends.

## Option 3

#### **General Pools**

- Assumed \$50 General Pool Entry rate is based on the 2022 research of 13 competitors (inclusive of GST)
- Max general pool guest capacity = 672 / day based on:
  - 420m2 water surface area estimating 2.5m² per person (168)
  - o 4 daily sessions of 168
- Assumed occupancies are based on 4 key national competitors (comparing location & infrastructure). 2019 Waikato hot pools occupancies data is also considered. Occupancy assumptions <u>slightly</u> reduced due to increased water volume:
  - Sat/Sun (normal) Assuming 73% occupancy,
     (Nov Feb), 78% occupancy (Mar Oct)
  - o Mon-Fri (normal) Assuming 38% occupancy

- (Nov Feb), 58% occupancy (Mar Oct)
- Sat/Sun (cap) Assuming 85% occupancy
   (Nov Feb) & 90% occupancy Mar Oct
- Mon-Fri (cap) Assuming 60% occupancy
   (Nov Feb) & 70% occupancy (Mar Oct)

#### **Private Pools**

- Assumed \$85 Private Pool Entry rate is based on the 2022 research of 13 competitors (inclusive of GST)
- Max private pool capacity / day = 216 based on:
  - o Nine private pools x average of 2 people per pool
  - o 12 hours booking time per day
- Assumed occupancies are based on 4 key national competitors (comparing location & infrastructure)
  - o Normal: 60% occupancy (130/day) weekdays
  - o Normal: 70% occupancy (151/day) weekends
  - o Cap: 70% occupancy (151/day) weekdays
  - o Cap: 80% occupancy (173/day) weekends

#### Spa

- Spa capture rate of pool guests assumed: 2.5% (based on regional & global luxury average of 2.5–2.8%)
- Assumed 1 1.3 hours of treatment time per guest (depending on season).
- Assumed \$171 per 60-min treatment inclusive of GST (based on the 2022 competitor research average of all treatment types).
- Assumed \$55 average Heat & Water Facility use rate (based on 2022 competitor research indicators).
- Spa treatment room utilization is guided by Asia Pacific averages (factoring in an increase in facility size):
  - o Asia Pacific Luxury Norm: Approx. 24%
  - o Cap: Approx. 40%
- Spa retail to treatment revenue percentage assumed at Asia Pacific luxury spa average of 10%
- Therapist utilization (53.7%) is based on luxury hotel/resort spa averages of approx. 51% (Asia Pacific) & 60% (Globally).

• Facility opening hours: 10am-8pm (Spa) / 9am-9pm (Pools) - based on 2022 competitor research trends.

#### **Expense Assumptions - All Options**

- Salary assumptions are based on 2022 remuneration research conducted (both in salary & any relevant spa commissions) for similar positions across 20 New Zealand, and six Asia Pacific competitors.
- Energy assumptions have been built from a detailed costing model created by Powell Fenwick.
- All operating expenses assumptions are based on data from 4 key national hot pools & spa competitors & global luxury hotel / resort spa norms. Some examples of inclusions are as follows:
  - o Administrative & General Costs include in-house or external fees for marketing, human resources, and additional administrative needs.
  - Contract Services assumes international-standard annual mystery shopping fees in all service areas, spa equipment servicing costs etc.
  - o Laundry & Dry-Cleaning assumes a commercial external laundry service for a luxury level facility.
  - o Licenses & Permits expenses assume fees for facility software system licenses etc.
  - Professional Fees expenses include such things as: spa & hot pools operational audits, any required corporate office visits (if relevant), international & national awards fees, staff wellness initiatives, spa/hot pools competitor research etc.
  - Training expenses include all related costs for on-site international training for products and spa & wellness services, secret shopping costs of regional spa & hot pools destinations, professional development costs for the spa & pools team.
  - International Travel assumes a % of international specialist spa team members (predominantly therapists) inclusive of all associated annual travel costs + start/end of contract relocation costs.

### 5.3 FINANCIAL EVALUATION

# **Financial Summary**

Based on the indicative analysis and modelling all three options are EBITDA positive with EBITDA ranging between ~\$265 and ~\$1.7 million across the three options (2022 real terms). The options are cashflow positive over the 50 year modelled time horizon.

Option 3 provides the highest financial return with a lower payback (14 yrs) and a pre-tax rate of return (IRR) of  $\sim$ 9.0% versus option 2 ( $\sim$ 7.3%).

**Financial Summary** 

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\$NZ000's	Option 1	Option 2	Option 3
Project Metrics:			
Cumulative Cash Flow	26,719	137,246	214,186
NPV	(4,884)	25,338	47,223
IRR	2.8%	7.3%	9.0%
Payback (Yrs Non discounted)	29	16	14
Capital Intensity			
Capex	25,125	34,286	39,026
EBITDA (FY22 Real Terms)	265	1,225	1,719
Capital Intensity	95	28	23
Profitability (FY22 Real Terms)			
Revenue	5,557	9,398	11,174
Operating Costs	(5,292)	(8,173)	(9,454)
EBITDA	265	1,225	1,719
EBITDA Margin%	5%	13%	15%
Debt Metrics			
Debt	(25,125)	(34,286)	(39,026)
Debt Repayment	1,453	1,983	2,257

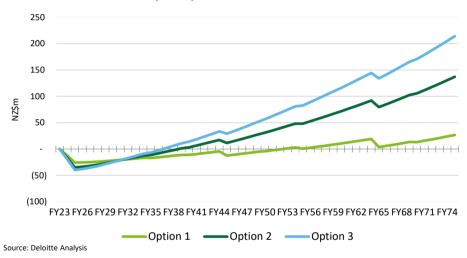
Source: Deloitte Analysis

#### **Cumulative Cashflow**

To quantify the options and ultimately determine which option is financially more viable we have assessed the cumulative cashflow difference on both an undiscounted and discounted basis.

As illustrated in the following chart Option 2 and Option 3 are more affordable relative to Option 1 due to higher operational profits over the long term driven by the larger scale facility/pool space at broadly similar occupacy assumptions.

#### Cumulative Free Cash Flow (NZ\$m)



On a discounted cash flow basis (over 50 years) Option 2 will contribute ~\$30 million more cash and Option 3 ~\$52 million more than Option 1. (~\$111 million and ~\$187 million on an undiscounted basis).

Note we have discounted the forecasts based on a 4% discount rate. This represents the cost of debt to Council which is a proxy for a required rate of return as the Council has no equity within its capital structure.

## **Impact on Rates**

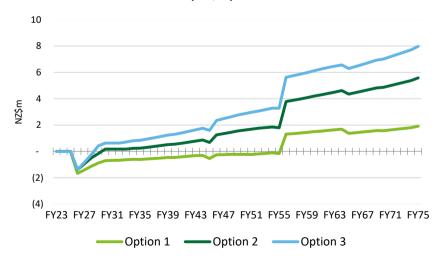
The rates cost to Council (what would be rated for) is assumed to be:

- The net operating cost (before depreciation).
- The cost of capital expenditure on the facility.
- Interest on debt borrowed to fund development of the facility.
- Debt repayment over 30 years.
- Depreciation, which is rated for and held in a reserve to fund capital replacements and renewals.

#### Our analysis indicates that:

- The contribution to rates from the facility increases over time and this is evident after 30 years (~FY55) when the debt borrowed to fund the Spa Facility has been paid off.
- The average rates contribution (over the initial 30 year forecast period) remains significantly higher for Option 2 (average of \$333k) and Option 3 (~\$1.2 million average) relative to Option 1 (which has a cost to rates until FY56).

#### Contribution to Council - Rates (NZ\$m)



# **Sensitivity Analysis**

To assess the potential impact of changes in key variables, sensitivity analysis has been conducted to evaluate the effect on cumulative cashflow, costs to council of the facility and internal rate of return (IRR) given potential changes to revenue, expenditure, capital expenditure and downside visitation growth.

Note our sensitivity analysis has only been performed in relation to <u>Option 2</u>.

#### Revenue

The first of the four variables considered in the sensitivity analysis is revenue, which considers the effects of a decrease of 5% and an increase of 5% in the overall revenue line item (no change to expenditure).

- A 5% increase/decrease in revenue is projected to result in a ~+/- \$800k pa impact on the contribution to council over the initial 30 year forecast period.
- A 5% increase/decrease in revenue is projected to result in a ~+/-\$51 million impact on cumulative cash flow (\$16 million on a discounted basis) across the life time of the Facility.
- A 5% increase/decrease in revenue is projected to result in a ~+/- 2% impact on the IRR.

# Expenditure

The second variable considered in the sensitivity analysis is expenditure, which considers the effects of a decrease of 5% and an increase of 5% in the overall facility expenditure line (no change to revenue).

- A 5% increase/decrease in operating expenditure is projected to result in a ~+/-\$659k pa impact on the contribution to council over the initial 30 year forecast period.
- A 5% increase/decrease in operating expenditure is projected to result in a ~+/-\$42 million impact on cumulative cash flow (\$14 million on a discounted basis) across the life time of the Facility.
- A 5% increase/decrease in operating expenditure is projected to result in a ~+/-1.5% impact on the IRR.

#### **Capital Expenditure**

The up front capital expenditure costs are significant and as a result we have considered the effects of a decrease of 5% and an increase of 5% in the overall capital expenditure line item (no change to expenditure or revenue).

- A 5% increase/decrease in capital expenditure is projected to result in a ~+/-\$140k pa impact on the contribution to council over the initial 30 year forecast period.
- A 5% increase/decrease in capital expenditure is projected to result in a ~+/-\$1.7 million impact on cumulative cash flow (\$1.5 million on a discounted basis) across the life time of the Facility.
- A 5% increase/decrease in capital expenditure is projected to result in a ~+/-0.3% impact on the IRR.

#### **Downside Visitation Growth**

The final variable considered in the sensitivity analysis is downside visitation numbers, which considers the effects of 0% and 2.5% growth in visitation numbers across FY27-FY30 rather than the current modelled period of 5% (no change to expenditure).

#### 0% Growth FY27-FY30

- 0% growth for FY27-FY30 in visitation numbers is projected to result in a ~-\$540k pa impact on the contribution to council over the initial 30 year forecast period.
- 0% growth for FY27-FY30 in visitation numbers is projected to result in a ~-\$7.3m pa impact on cumulative cash flow (\$6.3m on a discounted basis) across the life time of the Facility.
- 0% growth for FY27-FY30 in visitation numbers is projected to result in a ~-1.2% impact on the IRR.

#### 2.5% Growth FY27-FY30

• 2.5% growth for FY27-FY30 in visitation numbers is projected to result in a ~-\$180k pa impact on the contribution to council over the initial 30 year forecast period.

- 2.5% growth for FY27-FY30 in guest numbers is projected to result in a ~-\$2.6m pa impact on cumulative cash flow (\$2.5m on a discounted basis) across the life time of the Facility.
- 2.5% growth for FY27-FY30 in visitation numbers is projected to result in a ~-0.5% impact on the IRR.

Option two is not particularly sensitive to the 2.5% downside visitation growth. We note the facility caps (particularly in reference to private pools) are met over a short time period and don't move materially as a result of changes to the initial visitation growth rates.

Two additional downside scenarios have been prepared which reflect specific visitation assumptions supplied by Matamata-Piako District Council.

# **6.1 INTRODUCTION**

The following section sets out a pros and cons assessment of the three options.

# **6.2 PROS AND CONS**

# **Option 1: Pros and Cons**

Pros	Cons
Lower capital cost to Council	Lower financial return (IRR 2.8%). Does not cover Council cost of Debt.
Reduced footprint – less intrusive on the site	Has a cost to rates until FY55.
	Capital expenditure payback is 29 years.
	Will require on-going operational grants.
	Capital expenditure is greater than currently provided for within the LTP.

# **Option 2: Pros and Cons**

Pros	Cons					
	Higher capital cost to Council (compared to Option 1).					
Lower capital cost to Council (compared to Option 3).	Higher debt requirement to Council (compared to Option 1).					

Contributes to Council in FY36.	Capital expenditure is greater than currently provided for within the LTP.
Capital expenditure payback is shorter relative to Option 1 (16 years).	
Lower risk profile than Option 3 (in terms of visitation).	
Can be staged and expand to something resembling option three in time.	
Reduced footprint (compared to option 3) – less intrusive on the site	

# **Option 3: Pros and Cons**

Pros	Cons									
Highest financial return (IRR 9.0%).	Highest capital cost to Council.									
Largest contribution to rates. Contributes to Council in FY29.	Highest debt requirement ~\$39m.									
Capital expenditure payback is shorter relative to Option 1 and Option 2 (14 years).	Higher risk profile than Option 2 (in terms of visitation).									
Capital expenditure is greated currently provided for w LTP.										



# 7.1 BENEFITS

The new Te Aroha spa and geothermal pool development will be a strong catalyst for the economic and social revitalisation of Te Aroha and the wider sub district. The following key direct and indirect benefits are expected because of the development.

Main Benefits	Who Benefits	Direct or Indirect	Description								
In monetary terms											
Employment creation and connection (both at the Spa and in hospitality and accommodation).	Te Aroha residents.	Direct and indirect.	Creation of new permanent spa roles.								
Mana Whenua business opportunities.	Mana Whenua	Indirect and direct.	Mana Whenua can leverage off the spa development directly as an investor and / or (supplying products and experiences).								
Reduced social service costs.	Crown.	Direct.	Te Aroha has continued to lose employment opportunities and has complex social service's needs.								

Increased profitability of existing tourism and hospitality businesses.	Te Aroha business owners.	Indirect.	Existing tourism and hospitality businesses will receive more visitors.
Increased tourism sector growth.	Te Aroha Residents.	Indirect.	Existing and new business growth is anticipated.
Rising house / land values.	Te Aroha resident owners.	Indirect.	House prices can be expected to rise as economic opportunity and services develop.
	Non-m	onetary term	S
Increased community pride in Te Aroha.	Te Aroha Residents.	Direct.	The community takes pride in the Spa and the associated revitalisation of the Domain.
Mana Whenua identity restored.	Mana Whenua	Direct.	Mana Whenua can interpret their stories in the development and Domain and explain their connection to the whenua.



# **CONCLUSIONS AND RECOMMENDATIONS**

## 8.1 CONCLUSIONS

The analysis has concluded that:

- 1. Te Aroha is in a strategic location for a destination geothermal pools and spa experience (being within the 'golden triangle of Auckland, Hamilton, and Tauranga).
- 2. The proposed geothermal pool and spa concept has a potential point of difference from competitors.
- 3. Demand exists for geothermal and spa experiences in Te Aroha as demonstrated by the existing operation and market demand.
- 4. The combination of both geothermal pools and spa experiences strengthens the commercial offer.
- 5. The three facility concepts developed are all financially profitable although Options 2 and 3 perform more strongly with estimated rates of return in excess of the Council cost of borrowing (>4%) and a payback on capital expenditure of ~14-16 years. The indicative costs of these three options are \$24.3, \$33.1, and \$37.7 million respectively which has been assumed to be 100% debt funded.
- 6. Option two is likely to have a lower risk profile than Option three. It can also be staged to resemble something like Option three in time. Option three has a slightly higher risk profile (by virtue of the higher capital cost and larger operational scale) but is commercially more viable.

# 8.2 RECOMMENDATIONS

It is recommended that:

- 1. Further site analysis is undertaken on the favoured development location which should include:
  - a. Further engagement with mana whenua,

- b. a site survey,
- c. cultural impact assessment,
- d. an inventory of cultural, natural, and physical features,
- e. more detailed geotechnical and engineering assessment (of key development areas),
- f. A site assessment of existing and potential tracks, structure, outdoor pool locations (undertaken by a specialist outdoor structure engineer such as Frame Group).
- 2. An investment case should be developed with additional design input based on the data gathered from earlier stages (1a-1f above).
- 3. Undertake a broader economic and social assessment of the wider benefits of the development for the district.
- 4. Council considers advancing either (a refined) Option two or Option three depending on its objectives.
- 5. Council selects its favoured development option and decides its level of capital contribution.
- 6. If additional project capital is required, the search for a potential commercial partner/s should begin with an ROI process and preliminary discussions with applicants.
- 7. Information from these preliminary potential partner discussions should be used to inform an updated business model.
- 8. A partner/s be identified through a formal selection process (that follows on from the ROI process).
- 9. Tendering can be commenced to select a project manager, quantity surveyor, design team and any necessary supporting consultants.



# **APPENDIX 1: MARKET ANALYSIS**



2019/21 International Facilities	2019/21 International Facilities	2019/21 NZ & Aus' Tier 1 Facilities	2019/21 NZ Tier 2 Facilities	2022 Key Regional Facilities
	The same of the sa	2013/21 NZ & Aus Tier I racincies		The second secon
Therme Vals, Switzerland	Spreewald Therme, Germany	Tekapo Springs	Hot Springs, Omarama	Tekapo Springs, Lake Tekapo
Caldea, Andorra Spain	Bahia Del Duque, Tenerife, Spain	The eforea Spa at Hilton Queenstown	Spring Spa, Queenstown	Maruia Hot Springs, Maruia
Thermalbad & Spa, Zurich	Le Chabichou Courchevel, France	Onsen Hot Pools	Body Sanctum Day Spa, Queenstown	Onsen Hot Pools, Queenstown
	Cameron House, Loch Lomond Scotland	Millbrook Resort & Spa, Queenstown	Hush Spa & Salon, Queenstown	Millbrook Resort & Spa, Queenstown
Tschuggen Wellness Hotel & Spa, Arosa Switzerland	Aqua Dome, Austria	The Spa at Nugget Point	Queenstown Massage – Spa / B&B	Chuan Spa, Cordis Hotel, Auckland
Hezemeer Thermen Baden, Belgium	Blue Lagoon, Reykjavik, Iceland	Salt Float Spa	The Beauty Garden, Queenstown	The Lost Spring, Whitianga
QC Terme Milano	Thermae Bath Spa, Bath, England	Amaia Luxury Spa at Scenic Suites & Heartland Hotel, Queenstown	Amore Day Spa, Queenstown	Opuke Thermal Pools & Spa, Methven
QC Terme Dolomiti	Resorts World Sentosa Resort & Spa	So Spa, Sofitel Queenstown	Remedial Massage Queenstown	So Spa, Sofitel Queenstown
QC Terme Bagni Vecchi	Mandarin Oriental, Bodrum Turkey	Matakauri Lodge & Spa, Queenstown	Massage Clinic QT	Matakauri Lodge & Spa, Queenstown
Alnina Dolomites Italy	Mission Hills Volcanic Mineral Springs and Spa, Hainan, China	Alpine Aqualand & Alpine Health & Fitness	Queenstown Chinese Massage	Park Hyatt, Auckland
Aire Sevilla	Aire New York	Hanmer Springs Thermal Pools and Spa, Hanmer Springs		Hanmer Springs Thermal Pools & Spa, Hanmer Springs
Aqua Sana (Sherwood Forest), U.K	Scandinavie Spa, Whistler Canada	Polynesian Spa, Rotorua		Polynesian Spa, Rotorua
The Dolder Grand Switzerland	Tabacon Grand Spa Thermal Resort, La Fortuna, Costa Rica	Peninsula Hot Springs, Victoria, Australia		Peninsula Hot Springs, Victoria, Australia





Global Pool	Heat /	Water	Facility	Offering Norm	S
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											/ \	/ \						
Facility Type	Indoor Pool	Outdoor Pool	Kids Pool	Special Pool	Hamam	Cold Plunge	Vitality Pool	Hydro- Massage Pools	Stone Areas	Rasul	Steam	Sauna	Exp' Showers	Ice	Water Beds	Salt Space	Tepid' Chairs	Other
% Int'l (2019)	65%	85%	23%	46%	50%	62%	58%	54%	12%	12%	77%	77%	50%	35%	23%	19%	19%	8%
% NZ/Aus (2019)	39%	46%	31%	15%	15%	31%	69%	31%	15%	0%	46%	69%	31%	15%	8%	0%	0%	4%
% NZ/Aus Comp Set (2022)	23%	77%	39%	31%	15%	39%	77%	39%	15%	15%	54%	69%	31%	15%	0%	0%	8%	0%
Average Quantity int'l (2019)	1.3	2.2	1.3	14	1.2	1.3	2.3	2.5	2	1.7	1.9	2.6	2.6	1.1	3	1	5.4	N/A
Average Quantity NZ/Aus (2019)	2.6	8.3	1.8	4.5	1.5	1.5	1.7	2	1	0	2	1.9	2.5	2	N/A	N/A	N/A	N/A
Average Quantity NZ/Aus Comp Set (2022)	1	7.4	1.6	3.3	1.5	1.6	5.1	3.2	1	1.5	2	1.8	5	2.5	N/A	N/A	10	N/A

Other: Sunaburo, Chromotherapy, Olfactory Station & Sleep Pods.

## Key:

Popular both internationally & in NZ/Aus (including comp set)

A good differentiator - Frequent use internationally, but limited in NZ/Aus or Comp Set

Moderate to frequent use both internationally & in NZ/Aus

Moderately used internationally, but lack of in NZ/Aus or comp set - To be considered

Less inclusion in international facilities, but moderately included in NZ/Aus

Spa Evolution

Global Fitness & Leisure Facility Offering Norms

The same of the sa			/							/	/
Facility Type	Fitness Centre	Locker / Change Areas	Classes Studio	Tennis Courts	Other Sports Courts	Golf Course	Hydro Slides	Climbing Wall	Ice Rink / Snow Park	Boutique	F&B Outlets
% Int'l (2019)	58%	96%	50%	8%	4%	8%	15%	4%	0%	81%	92%
% NZ/Aus (2019)	46%	69%	31%	15%	N/A	8%	31%	8%	8%	62%	85%
% NZ & Aus Comp Set(2022)	39%/	92%	39%	8%	0%	8%	15%	0%	8%	85%	92%
Average Quantity Int'l (2019)	1.1	2.7	1.7	1.5	1	5.5	4.75	1	N/A	3.1	6.7
Average Quantity NZ/Aus (2019)	1	3.2	1.3	2	N/A	2	2	1	2	1	2.6
Average Quantity NZ & Aus Comp Set (2022)	1	4.5	1.2	3	N/A	2	4	N/A	2	1.1	2.6

**Global Spa Facility Offering Norms** 

Facility Type	Single Massage Room	Spa Suite / Couples Room	Hydro' Baths	Hamam	Vichy/ Aqua Massage	Rasul	Relax' Rooms	Watsu Pool	Hair Salon	Nail Studio
% Int'l (2019)	92%	81%	46%	50%	58%	15%	89%	19%	42%	62%
% NZ/Aus (2019)	85%	62%	54%	15%	31%	0%	62%	0%	0%	62%
% NZ/Aus Comp Set (2022)	85%	62%	54%	15%	31%	8%	62%	0%	0%	62%
Average Quantity Int'l (2019)	15.5	3.6	3	1.2	2.4	1.5	2.2	1	1	1
Average Quantity NZ/Aus (2019)	5.9	1.9	1.6	1.5	2	N/A	1.4	N/A	N/A	1
Average Quantity NZ/Aus Comp Set (2022)	5.8	1.6	1.3	1.5	1.7	1	1.1	N/A	N/A	1



# **Global Spa & Fitness Service Offering Norms**

				$\triangle$	$\sim$					$\sim$	$\sim$		_	
Service Type	Massage	Facials	Body Treat's	Bathing Treat's	Vichy Treat's	Hamam / Rasul Treat's	Watsu	Nail Services	Aair Services	Fersonal Training	Fitness Classes	Tennis Lessons	Adventure Services	Kids Spa Services
% Int'l (2019)	100%	89%	92%	85%	27%	35%	27%	58%	42%	46%	54%	8%	19%	12%
% NZ/Aus (2019)	100%	85%	69%	31%	23%	8%	0%	62%	8%	23%	31%	8%	23%	8%
% NZ/Aus Comp Set (2022)	100%	100%	92%	46%	23%	8%	0%	62%	8%	23%	31%	8%	23%	8%

#### Key:

Popular both internationally & in NZ/Aus (including comp set)

A good differentiator - Frequent use internationally, but limited in NZ/Aus or Comp Set

Moderate to frequent use both internationally & in NZ/Aus or Comp Set

Moderately used internationally, but lack of in NZ/Aus or comp set – To be considered



# **Global Wellness Trends**

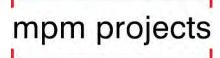




# **New Zealand Wellness Trends**



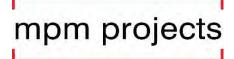
# **APPENDIX 2: ORDER OF COSTS**



**Rough Order of Cost Estimate** 

16 August 2022

MPM Projects Limited, 6 Kirk Street, Grey Lynn, Auckland PO Box 3257, Auckland <> Phone (09) 303 4920



### Rough Order of Cost Estimate - August 2022

#### **Clarifications & Exclusions**

#### Clarifications

Estimates are based on the following:

PENZL Preliminary layout plans for options 1,2 & 3 dated 4th August 2022

Spa Evolution schedule of areas dated 1/7/22

Visitor Solutions updated shchedule of spaces email dated 15th August 2022

Estimates assume a traditional procurement process

Provisional Allowances have been made where noted for items where scopes have been assumed.

Escalation has been allowed for 1 year, assuming tender in August

#### **Options Summary**

Option 1	\$ 24,300,000
Option 2	\$ 33,100,000
Option 3	\$ 37,700,000

#### **Exclusions**

The following are excluded from these estimates:

Site specific allowances including geotech issues
Furniture Fittings & equipment
Development Contributions & Infrastructure Growth charges
Client direct expenses
Land, Finance & Legal costs
GST

Te Aroha Spa Development Option 1 Rough Order of Cost Estimate - Aug 2022	mpm projects					
Cough Order of Cost Estimate - Aug 2022						
Item	Qty	Unit	Rate	Total		
New Spa Complex						
Demolition & site clearance	1	Sum	100,000	100,000		
Bulk excavation	1,200	m3	150	180,000		
Retaining walls	251	m2	1,500	376,50		
Basement Level			,			
Plant /Service	161	m2	3,300	531,30		
Circulation	62	m2	5,500	341,00		
Ground Level			,			
Pool Reception/Retail/Office/Staff	115	m2	6,100	701,50		
Pool Male Change/Lockers/WCs/Showers	50	m2	8,000	400,00		
Pool Female Change/Lockers/WCs/Showers	50	m2	8,000	400,00		
Circulation	103	m2	6,100	628,30		
Food	-	m2	6,700			
Cook	_	m2	9,100			
Upper Level			.,			
Spa Reception/Retail/Office/Laundry	143	m2	6,100	872,30		
Pedicure/Manicure	10	m2	9,100	91,00		
Spa Male Change/WCs/Showers/Exp. Shower/Sauna	90	m2	10,000	900,00		
Spa Female Change/WCs/Showers/Exp. Shower/Sauna	90	m2	10,000	900,00		
Rhausoul	17	m2	10,000	170,00		
Relaxation Lounge	48	m2	9,100	436,80		
Treatment Rooms	140	m2	9,100	1,274,00		
Multi-use space	50	m2	6,100	305,00		
Circulation	120	m2	6,100	732,00		
Specialist Plant			,	· · · ·		
Rhassoul Steam Experience	1	Sum	50,000	50,00		
Female Experience Shower	1	Sum	30,000	30,00		
Male Experience Shower	1	Sum	30,000	30,00		
Female Sauna	1	Sum	25,000	25,00		
Male Sauna	1	Sum	25,000	25,00		
Deck	50	m2	1,900	95,00		
			1,000			
Outdoor Experiences						
Deluxe Couples Forest Suite 1	-	m2	10,000			
Deluxe Couples Forest Suite 2	-	m2	10,000			
Deluxe Couples Forest Suite 3	-	m2	10,000			
Deluxe Couples Forest Dual Experience Shower	-	Nr	30,000			
Private Pool 1 (Deck & Enclosure structures)	36	m2	6,000	216,00		
Private Pool 2 (Deck & Enclosure structures)	36	m2	6,000	216,00		
Private Pool 3 (Deck & Enclosure structures)	36	m2	6,000	216,00		
Private Pool 4 (Deck & Enclosure structures)	36	m2	6,000	216,00		
Private Pool 5 (Deck & Enclosure structures)	36	m2	6,000	216,00		
Private Pool 6 (Deck & Enclosure structures)	36	m2	6,000	216,00		
Mixed gender outdoor Herbal Sauna	14	m2	11,000	154,00		
Outdoor experience shower	1	Nr	50,000	50,00		
Private pools Change Space	36	m2	8,000	288,00		
Outdoor remote Change /WC Cubicle	-	m2	8,000			
Specialist Plant						
Deluxe Couples Forest Dual Experience Shower	-	Nr	35,000			
Mixed gender outdoor Herbal Sauna	1	Nr	25,000	25,00		
Outdoor experience shower	1	Nr	35,000	35,0		

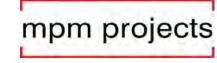
General Pools				
Forrest Waterfall Pool small 1	24	m2	10,700	256,8
Starlit Grotto pool small 2		m2	10,700	256,8
Garden Pool small 3		m2	10,700	200,0
Maunga Pol small 4	-	m2	10,700	
Panorama Pool med 1	35	m2	10,700	374,5
Aqua Experience Pool med 2		m2	10,700	385,2
Forrest Pool med 3	-	m2	10,700	000,2
Panorama Pool med 4	_	m2	10,700	
Panorama Pool med 5	_	m2	10,700	
Aqua Experience Pool Targe 2	_	m2	10,700	
Cold Plunge Pool		m2	10,700	
Standard Private Pools	6	Nr	25,000	150,0
Deluxe Private Pool (in Forrest Couples Suite)		Nr	35,000	100,0
Specialist Plant	-	INI	33,000	
Forrest Waterfall Pool small 1	24	m2	2,000	48,0
Starlit Grotto pool small 2		m2	2,000	48,0
Garden Pool small 3	24	m2	2,000	40,0
Maunga Pol small 4		m2	2,000	
Panorama Pool med 1	35	m2	2,000	70,0
Aqua Experience Pool med 2		m2	2,000	70,0
Forrest Pool med 3	-	m2	2,000	12,0
Panorama Pool med 4		m2	2,000	
Panorama Pool med 5	-	m2	2,000	
Aqua Experience Pool large 2		m2	2,000	
Cold Plunge Pool		m2	2,000	
Standard Private Pools	- 6	Nr	20,000	120,0
Deluxe Private Pool (in Forrest Couples Suite)	-	Nr	20,000	120,0
External Works				
Prov Allowance for boardwalks /staircases to Private Pools	1	Sum	200,000	200,0
Prov Allowance for boardwalks /staircases to Deluxe Forrest Suites	-	Sum	40,000	
Prov Allowance for tracks/steps to Natural Pools	1	Sum	55,000	55,0
Allowance for making good existing tracks	1	Sum	30,000	30,0
Carparks & Roads	1,600	m2	330	528,0
Paths	240	m2	220	52,8
Prov Allowance for Landscaping to Natural Pools Area	1,000	m2	150	150,0
Prov Allowance for Landscaping to Rongoaa	320	m2	100	32,0
Prov Allowance for Landscaping to Natural Hotspring	180	m2	500	90,0
Prov Allowance for Landscaping to Grotto	40	m2	100	4,0
Prov Allowance for Landscaping to site clearance areas	500	m2	100	50,0
Prov Allowance for Landscaping to carpark & paths	1	Sum	50,000	50,0
Prov Allowance for hard paving around building	1	Sum	100,000	100,0
Prov Allowance for Waharoa x2	1	Sum	200,000	200,0
Prov Allowance for services infrastucture	1	Sum	1,500,000	1,500,0
Prov Allowance for mineral water supply/ storage	1	Sum	50,000	50,0
Prov Allowance for bore for additional hydrothermal supply	-	Sum	100,000	<u>-</u>
Spa Facility Sub Total				16,315,8
Design Develpoment Contingency		5%		815,7
Professional Fees		16%		2,743,6
Consent fees		1%		171,3
Project Contingency		10%		2,005,0
,				\$22,051,
Allowance for escalation: 1 year at 10%		10%		2,205,
<b>,</b>				\$24,256,

e Aroha Spa Development Option 2	• **		n pro	jects
ough Order of Cost Estimate - Aug 2022				
Item	Qty	Unit	Rate	Total
New Spa Complex				
Demolition & site clearance	1	Sum	100,000	100,000
Bulk excavation	1,255	m3	150	188,250
Retaining walls	261	m2	1,500	391,50
Basement Level	-		,	
Plant /Service	215	m2	3,300	709,50
Circulation	62	m2	5,500	341,00
Ground Level			0,000	0 , 0 0
Pool Reception/Retail/Office/Staff	171	m2	6,100	1,043,10
Pool Male Change/Lockers/WCs/Showers	82	m2	8,000	656,00
Pool Female Change/Lockers/WCs/Showers	82	m2	8,000	656,00
Circulation	103	m2	6,100	628,30
Food	75	m2	6,700	502,50
Cook	36	m2	9,100	327,60
Upper Level	30	1112	3, 100	021,00
Spa Reception/Retail/Office/Laundry	156	m2	6,100	951,60
Pedicure/Manicure	16	m2	9,100	145,60
Spa Male Change/WCs/Showers/Exp. Shower/Sauna	90	m2	10,000	900,00
Spa Female Change/WCs/Showers/Exp. Shower/Sauna	90	m2	10,000	900,00
<u> </u>				
Rhausoul Relevation Leaves	17	m2	10,000	170,00
Relaxation Lounge	48	m2	9,100	436,80
Treatment Rooms	140	m2	9,100	1,274,00
Multi-use space	50	m2	6,100	305,00
Circulation	120	m2	6,100	732,00
Specialist Plant				
Rhassoul Steam Experience	1	Sum	50,000	50,00
Female Experience Shower	1	Sum	30,000	30,00
Male Experience Shower	1	Sum	30,000	30,00
Female Sauna	1	Sum	25,000	25,00
Male Sauna	1	Sum	25,000	25,0
Deck	-	m2	1,900	
Outdoor Experiences				
Deluxe Couples Forest Suite 1	48	m2	10,000	480,0
Deluxe Couples Forest Suite 2	48	m2	10,000	480,0
Deluxe Couples Forest Suite 3	-	m2	10,000	
Deluxe Couples Forest Dual Experience Shower	2	Nr	30,000	60,0
Private Pool 1 (Deck & Enclosure structures)		m2	6,000	216,0
Private Pool 2 (Deck & Enclosure structures)		m2	6,000	216,0
Private Pool 3 (Deck & Enclosure structures)		m2	6,000	216,0
Private Pool 4 (Deck & Enclosure structures)		m2	6,000	216,0
Private Pool 5 (Deck & Enclosure structures)		m2	6,000	216,0
Private Pool 6 (Deck & Enclosure structures)		m2	6,000	216,0
Mixed gender outdoor Herbal Sauna	14	m2	11,000	154,0
Outdoor experience shower	2	Nr	50,000	100,0
Private pools Change Space	48	m2	8,000	384,0
Outdoor remote Change /WC Cubicle		m2	8,000	128,0
Specialist Plant	10	1112	3,000	120,0
Deluxe Couples Forest Dual Experience Shower	2	Nr	35,000	70,0
			25,000	
Mixed gender outdoor Herbal Sauna Outdoor experience shower	1	Nr Nr	35,000	25,0 70,0

General Pools				
Forrest Waterfall Pool small 1	30	m2	10,700	321,0
Starlit Grotto pool small 2		m2	10,700	321,0
Garden Pool small 3		m2	10,700	321,0
Maunga Pol small 4	30	m2	10,700	321,0
Panorama Pool med 1	48	m2	10,700	513,6
Aqua Experience Pool med 2	48	m2	10,700	513,6
Forrest Pool med 3	48	m2	10,700	513,6
Panorama Pool med 4	42	m2	10,700	449,4
Panorama Pool med 5	-	m2	10,700	770,
Aqua Experience Pool Targe 2		m2	10,700	
Cold Plunge Pool	3	m2	10,700	32,
Standard Private Pools	6	Nr	25,000	150,0
Deluxe Private Pool (in Forrest Couples Suite)	2	Nr	35,000	70,0
Specialist Plant		1 11	33,000	70,
Forrest Waterfall Pool small 1	30	m2	2,000	60,0
Starlit Grotto pool small 2		m2	2,000	60,0
Garden Pool small 3	30	m2	2,000	60,0
Maunga Pol small 4	30	m2	2,000	60,0
Panorama Pool med 1		m2	2,000	96,0
Aqua Experience Pool med 2		m2	2,000	96,
Forrest Pool med 3	48	m2	2,000	96,0
Panorama Pool med 4	42	m2	2,000	84,0
Panorama Pool med 5	42	m2	2,000	04,
Aqua Experience Pool large 2	-	m2	2,000	
Cold Plunge Pool		m2	2,000	6,0
Standard Private Pools	6	Nr	20,000	120,0
Deluxe Private Pool (in Forrest Couples Suite)		Nr	20,000	40,0
External Works Prov Allowance for boardwalks /staircases to Private Pools		Sum	200,000	200,0
Prov Allowance for boardwalks /staircases to Deluxe Forrest Suites	1	Sum	70,000	70,0
Prov Allowance for tracks/steps to Natural Pools	1	Sum	55,000	55,0
Allowance for making good existing tracks	1 1 252	Sum	30,000	30,0
Carparks & Roads	1,250	m2	330	412,
Paths		m2	220	52,
Prov Allowance for Landscaping to Natural Pools Area		m2	150	150,
Prov Allowance for Landscaping to Rongoaa		m2	100	32,
Prov Allowance for Landscaping to Natural Hotspring		m2	500	90,
Prov Allowance for Landscaping to Grotto	40	m2	100	4,
Prov Allowance for Landscaping to site clearance areas	500	m2	100	50,
Prov Allowance for Landscaping to carpark & paths	1	Sum	50,000	50,
Prov Allowance for hard paving around building	1	Sum	100,000	100,
Prov Allowance for Waharoa x2	1	Sum	200,000	200,
Prov Allowance for services infrastucture	1	Sum	1,500,000	1,500,0
Prov Allowance for mineral water supply/ storage	1	Sum	100,000	100,0
Prov Allowance for bore for additional hydrothermal supply	1	Sum	100,000	100,0
Spa Facility Sub Total				22,266,3
Design Develpoment Contingency		5%		1,113,3
Professional Fees		16%		3,742,6
Consent fees		1%		233,7
Project Contingency		10%		2,736,0
				\$30,092,
Allowance for escalation: 1 year at 10%		10%		3,009,
anomalies for escalation. I your at 1070				¢22 404
The manage ren essentiation. I year at 10%				\$33,101,

Te Aroha Spa Development Option 3	n	npr	n pro	jects
Rough Order of Cost Estimate - Aug 2022	_			
Item	Qty	Unit	Rate	Total
New Spa Complex				
Demolition & site clearance	1	Sum	100,000	100,000
Bulk excavation	1,500	m3	150	225,000
Retaining walls	283	m2	1,500	424,500
Basement Level			,	,
Plant /Service	317	m2	3,300	1,046,100
Circulation	62	m2	5,500	341,000
Ground Level			,	,
Pool Reception/Retail/Office/Staff	209	m2	6,100	1,274,900
Pool Male Change/Lockers/WCs/Showers	91	m2	8,000	728,000
Pool Female Change/Lockers/WCs/Showers	91	m2	8,000	728,000
Circulation	103	m2	6,100	628,300
Food	75	m2	6,700	502,500
Cook	36	m2	9,100	327,600
Upper Level			·	<u> </u>
Spa Reception/Retail/Office/Laundry	164	m2	6,100	1,000,400
Pedicure/Manicure	16	m2	9,100	145,600
Spa Male Change/WCs/Showers/Exp. Shower/Sauna	90	m2	10,000	900,000
Spa Female Change/WCs/Showers/Exp. Shower/Sauna	90	m2	10,000	900,000
Rhausoul	17	m2	10,000	170,000
Relaxation Lounge	48	m2	9,100	436,800
Treatment Rooms	140	m2	9,100	1,274,000
Multi-use space	50	m2	6,100	305,000
Circulation	120	m2	6,100	732,000
Specialist Plant				
Rhassoul Steam Experience	1	Sum	50,000	50,000
Female Experience Shower	1	Sum	30,000	30,000
Male Experience Shower	1	Sum	30,000	30,000
Female Sauna	1	Sum	25,000	25,000
Male Sauna	1	Sum	25,000	25,000
Deck	-	m2	1,900	C
Outdoor Experiences				
Deluxe Couples Forest Suite 1	48	m2	10,000	480,000
Deluxe Couples Forest Suite 2	48	m2	10,000	480,000
Deluxe Couples Forest Suite 3		m2	10,000	480,000
Deluxe Couples Forest Dual Experience Shower		Nr	30,000	60,000
Private Pool 1 (Deck & Enclosure structures)		m2	6,000	216,000
Private Pool 2 (Deck & Enclosure structures)		m2	6,000	216,000
Private Pool 3 (Deck & Enclosure structures)		m2	6,000	216,000
Private Pool 4 (Deck & Enclosure structures)		m2	6,000	216,000
Private Pool 5 (Deck & Enclosure structures)		m2	6,000	216,000
Private Pool 6 (Deck & Enclosure structures)		m2	6,000	216,000
Mixed gender outdoor Herbal Sauna		m2	11,000	154,000
Outdoor experience shower		Nr	50,000	100,000
Private pools Change Space		m2	8,000	432,000
Outdoor remote Change /WC Cubicle	16	m2	8,000	128,000
Specialist Plant				
Deluxe Couples Forest Dual Experience Shower	3	Nr	35,000	105,000
Mixed gender outdoor Herbal Sauna	1	Nr	25,000	25,000
Outdoor experience shower	2	Nr	35,000	70,000

General Pools				
Forrest Waterfall Pool small 1	28	m2	10,700	299,6
Starlit Grotto pool small 2		m2	10,700	299,6
Garden Pool small 3		m2	10,700	321,0
Maunga Pol small 4	30	m2	10,700	321,0
Panorama Pool med 1	48	m2	10,700	513,6
Aqua Experience Pool med 2	48	m2	10,700	513,6
Forrest Pool med 3	48	m2	10,700	513,6
Panorama Pool med 4	48	m2	10,700	513,6
Panorama Pool med 5	40	m2	10,700	428,0
Aqua Experience Pool Targe 2	70	m2	10,700	749,0
Cold Plunge Pool	3	m2	10,700	32,
Standard Private Pools	6	Nr	25,000	150,0
Deluxe Private Pool (in Forrest Couples Suite)	3	Nr	35,000	105,0
Specialist Plant	3	INI	35,000	105,0
Forrest Waterfall Pool small 1	28	m2	2 000	56,0
		m2	2,000	56,0
Starlit Grotto pool small 2 Garden Pool small 3	28	m2 m2	2,000	
Maunga Pol small 4	30	m2 m2	2,000	60, 60,
Panorama Pool med 1	48	m2 m2	2,000 2,000	96,
		m2		96,
Aqua Experience Pool med 2 Forrest Pool med 3	48	m2	2,000	
	48		2,000	96,
Panorama Pool med 4	48	m2	2,000	96,0
Panorama Pool med 5	40	m2 m2	2,000	80,0
Aqua Experience Pool large 2	70	m2	2,000	140,
Cold Plunge Pool Standard Private Pools	3		2,000	6,
Deluxe Private Pool (in Forrest Couples Suite)	6	Nr Nr	20,000 20,000	120,0 60,0
Prov Allowance for boardwalks /staircases to Private Pools Prov Allowance for boardwalks /staircases to Deluxe Forrest Suites	1	Sum Sum	200,000 90,000	200,0 90,0
Prov Allowance for tracks/steps to Natural Pools	1	Sum	110,000	110,0
Allowance for making good existing tracks	1	Sum	30,000	30,0
Carparks & Roads	1,500	m2	330	495,
Paths		m2	220	52,
Prov Allowance for Landscaping to Natural Pools Area		m2	150	150,
Prov Allowance for Landscaping to Rongoaa		m2	100	32,
Prov Allowance for Landscaping to Natural Hotspring		m2	500	90,
Prov Allowance for Landscaping to Natural Hotspring  Prov Allowance for Landscaping to Grotto	40	m2	100	4,
Prov Allowance for Landscaping to site clearance areas	500	m2	100	50,
Prov Allowance for Landscaping to sale clearance areas  Prov Allowance for Landscaping to carpark & paths	1	Sum	50,000	50,
Prov Allowance for hard paving around building	1	Sum	100,000	100,
Prov Allowance for Waharoa x2	1	Sum	200,000	200,
Prov Allowance for services infrastucture	1	Sum	1,500,000	1,500,0
Prov Allowance for mineral water supply/ storage	1	Sum	150,000	150,0
Prov Allowance for bore for additional hydrothermal supply	1	Sum	100,000	100,0
	'	Cum	100,000	•
Spa Facility Sub Total		<b>-</b> 0/		25,345,2
Design Development Contingency		5%		1,267,2
Professional Fees		16%		4,259,6
Consent fees		1%		266,1
Project Contingency		10%		3,114,0
All ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (		4007		\$34,252,
Allowance for escalation: 1 year at 10%		10%		3,425,
				\$37,677,
Total Te Aroha Spa Development Option 3			Say	\$37,700,

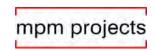


# Order of Cost Estimate - August 2022

**Capital Cost Estimate Analysis** 

	Option 1	Option 2	Option 3
Building Structure	8,080,344	10,397,340	11,375,784
Pools	1,423,300	3,526,300	4,759,700
Building Plant & Equipment	3,362,356	4,368,410	4,783,916
Pool Plant	358,000	778,000	1,022,000
Parking & Roading	580,800	465,300	547,800
Landscaping	2,511,000	2,731,000	2,856,000
Professional Fees	2,914,916	3,976,397	4,525,725
Contingency	2,820,790	3,849,318	4,381,260
Escalation	2,205,151	3,009,206	3,425,218
Total Capital Cost	24,256,656	33,101,271	37,677,403





	Replacement										
Asset Replacement	cycle	\$ Today	year 5	year 10	year 15	year 20	year 25	year 30	year 35	year 40	year 45
Roofing & cladding	40	1,600,000								1,600,000	
Roofing & cladding repaint	10	175,000		175,000		175,000		175,000			
Skylights	25	150,000					150,000				
Alumin Joinery	20	890,000				890,000				890,000	
Repaint internal linings	10	300,000		300,000		300,000		300,000		300,000	
Joinery	15	300,000			300,000			300,000			300,000
WC partitions	15	70,000			70,000			70,000			70,000
Floor Finishes	10	600,000		600,000		600,000		600,000		600,000	
Ceilings	20	500,000				500,000				500,000	
Fixtures	20	400,000				400,000				400,000	
Elect/Fire /data/security	20	1,000,000				1,000,000				1,000,000	
HVAC	20	1,200,000				1,200,000				1,200,000	
Sanitary Fittings	15	150,000			150,000			150,000			150,000
Lift car re fit	15	40,000			40,000			40,000			40,000
Pools tiling /sealant maintenance	5	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Pool plant	20	400,000				400,000				400,000	
Reseal carparks	15	120,000			120,000			120,000			120,000
Landscaping	10	100,000		100,000		100,000		100,000		100,000	
Furniture Fittings & Equipment	15	200,000			200,000			200,000			200,000
Annual Total			100.000	1.275.000	980.000	5.665.000	250.000	2.155.000	100.000	7.090.000	980.000