# Hamilton City Council

# Central City Reservoir - Ruakiwi

Contract number: 149000.06

# Notice of Requirement for an Alteration to an existing designation

August 2025







# Document control

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#### 1. Introduction

#### 1.1 Purpose

This Notice of Requirement (NOR), and Outline Plan Waiver application is submitted by Hamilton City Council (HCC) Capital Projects team (the Applicant) in accordance with Section 168 and Section 176A of the Resource Management Act 1991 (RMA). This application seeks to alter the existing A67 designation within the Operative Hamilton City District Plan (ODP) to enable the construction, operation and maintenance of the Central City Reservoir Project (the project), which includes 2 x 25 mega litres per day (MLD) reservoirs, valve chamber and ancillary pipelines. HCC is a Requiring Authority pursuant to Section 166 of the RMA.

The separate NOR document has been prepared in accordance with the requirements of Form 20 of the Resource Management (Forms, Fees, and Procedure) Regulations 2003 and provided in Appendix A.

#### 1.2 Project Background

Central Government's Infrastructure Acceleration Fund (IAF) was launched in June 2021. It is a fund of approximately \$1 billion to support new or upgraded bulk infrastructure – such as roading, three waters and flood management – to enable new homes to be built in areas of high housing need.

Administered by Kāinga Ora, the IAF is designed to help increase the pace and scale of housing delivery by funding critical infrastructure needed for these developments. IAF funding of \$150.6 million was committed to HCC to support intensification of Hamilton's central city. The funding has been confirmed for critical infrastructure projects to facilitate further development in the area – including a new water reservoir and pump station and local waters upgrades and improvements. The funding is expected to support around 4,000 new homes, located close to employment, education and transport to enable a '20- minute city' where people can live, work and play in the same space and reduce their need for travel.

The project aims to meet the commitments of the IAF funding programme by providing sufficient drinking water supply to service the growing population within the city centre. The funding is contingent on delivering the required assets by the end of June 2028. Reservoir 2 is contingent on demand but is forecast to be constructed 8 to 10 years after the completion of Reservoir 1.

The project includes the following four key components:

- 1. Reservoirs: 2 x 25 mega litre water reservoirs to be located at 18 Ruakiwi Road (the site). Development of each reservoir is to be staged with the Reservoir One to be delivered by 2028 and the Reservoir Two to be delivered circa 2040.
- 2. Valve chamber: 420 m<sup>2</sup> valve chamber located at the site, between the reservoirs, to support the operation of the reservoirs.
- 3. Ancillary pipelines: includes clean water scour/stormwater discharge pipeline to Lake Rotoroa and connections to public three water systems from the site.
- 4. Booster pump station: A booster pump station at 139 Clarence Street. Noting a separate land use consent is being sought for this aspect of the project, thus, it is not subject to the NOR application.

For the purposes of this Assessment of Environmental Effects (AEE), the Project also includes construction activities including site access and construction yards/laydown areas (described in more detail in Section 4). The new designation boundary being sought is shown in Figure No. 1 alongside the construction footprint



boundary. The Project is described in detail in Sections 3 and 4 of this AEE, and the design drawings are provided in Appendix B.



Figure No 1: Existing (shaded red) and new (shaded green) designation boundaries

# 1.3 Notice of Requirement

The HCC Capitals Project team has lodged a NOR which seeks to:

Permanently alter the boundaries of the existing A67 designation to encompass the proposed new reservoirs and valve station including sufficient area for the contractors working area to build both reservoirs.

The designation is for a public work; being the construction, operation and maintenance of new water supply infrastructure (including two new water reservoirs, a pump station and pipelines), within Hamilton, under the ODP and any subsequent proposed District Plan applying to the land subject to this designation.

The proposed designation drawings are provided in Appendix C.

# 1.4 Approach to Assessment of Effects and Report Structure

This report, in conjunction with all attached appendices including plans and technical reports, constitutes an AEE in accordance with Schedule 4 of the RMA. This report has been prepared to support the NOR and Outline Plan Waiver applications (collectively referred to as 'the application').

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The supporting report is structured as follows:



- a) A description of the existing environment;
- b) A description of the proposed activities;
- c) An assessment of alternatives considered;
- d) An assessment of the actual and potential effects on the environment of the activity and the proposed mitigation measures;
- e) Engagement and consultation undertaken for the project;
- f) Notification assessment
- g) An assessment of the proposed activities against matters set out in Part 2 of the RMA; and
- h) The statutory framework relevant to the assessment of effects.

Matters which trigger a National Environmental Standard Freshwater (NES:F) or Regional consent requirement pursuant to section 9(2) of the RMA are not authorised by this designation and are therefore not considered within this report. All consents required for the project under the NES:F or the Waikato Regional Plan for Regional matters are being sought under a separate application which is being processed by the Waikato Regional Council in parallel to this NOR.

# 2. Existing Environment

This section provides an overview of the existing environment, including the location and surrounding land use and ODP zoning and overlays

#### 2.1 Location and Surrounding Land Uses

As shown in Figure No. 2, the designation site is located within the northeastern part of the Hamilton Lake Domain Reserve above Lake Domain Drive, with direct frontage onto Ruakiwi Road. The Ruakiwi Road location has been determined following an extensive city wide Multi Criteria Analysis assessment which focussed on determining the most efficient hydrological/engineering arrangements for the project; (refer to the WSP Site Location Assessment provided in Appendix D). This NOR also includes consideration of the key planning constraints and opportunities associated with the alternatives assessment.



Figure No. 1: Designation site (outlined in red) and surrounding environment



Table No. 1 provides details on the site location as well as key district plan considerations. The Certificate of Title for each parcel is provided in Appendix E.

Table No. 1

Site Details and District Plan considerations		
Applicant Details	Name	Jonathon Brooke
		IAF Infrastructure Delivery Programme Manager
	Address	Hamilton City Council, Private Bag 3010, Hamilton 3204
	Email	Jonathon.brooke@hcc.govt.nz
	Phone	027 312 0364
Site Details Reservoir project area		area
	Legal	Lot 2 Deposited Plan 16167 (RT SA399/80)
	Description	Allot 74 Hamilton West Town Belt, Lot 1 Deposited Plan 16167,
		and Allot 22B Hamilton West Town Belt (263543)
	Site Address	18A Ruakiwi Road, Hamilton 3204
		68 Pembroke Street, Hamilton 3204
		24 Ruakiwi Road, Hamilton 3204
	Ownership	Hamilton City Council owns both RT SA399/80 and RT 263543
	Reserve Status	RT 263543 is classified as a recreational reserve (under the
		Reserves Act 1977) and forms part of the Lake Domain reserve
		vested to HCC.

The site is approximately 700 metres southwest of the Hamilton Central Business District (CBD). The surrounding area exhibits a mix of established residential and recreational land uses, with signs of intensification consistent with the urban character of central Hamilton.

To the west lies Hamilton Lake (Lake Rotoroa), bordered by open parkland, sports fields, and recreational facilities including public playgrounds. The eastern side of the site is flanked by Ruakiwi Road, which is lined with high-density residential properties. Further east, beyond Pembroke Street, the land transitions into commercial zones (Business Zone 4), and north of Thackeray Street lies the Central City Zone – Precinct 2 (City Living).

The immediate surroundings of the site include undulating grassed open space interspersed with mature macrocarpa trees and younger plantings. The steep southwestern slopes are predominantly vegetated with native species. A heritage-listed water tower is located within the designation area and occupies a prominent position on the top of the ridge. The heritage reservoir has a current capacity of 15 Megalitres (15ML) and services the Ruakiwi Water Supply Zone (RWSZ) that includes the central city area of Hamilton. This structure is planned to be decommissioned and retained following the completion of the first reservoir.

Ruakiwi Road and Clarence Street serve as key transport corridors in the area, with Ruakiwi Road functioning as a minor arterial route. These roads provide access to the site and connect the Domain to surrounding residential and commercial precincts. The broader transport network and traffic conditions are detailed in the accompanying Construction Transport Assessment and the Construction Traffic Management Plan prepared by Bloxam, Burnett & Olliver (Appendix F).

# 2.2 Zones and Overlays

The site is located within the Hamilton Lake Domain and is subject to a range of planning controls under the ODP. It is primarily zoned for open space purposes, reflecting its recreational and environmental significance (refer to Figure No. 3). The site is also subject to Designation A67 – Water Reservoir (Ruakiwi Road), which

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encompasses the existing heritage water tower and associated infrastructure. This designation reflects the site's long-standing role in supporting the city's water supply network.

In addition to the zoning, the site is affected by several overlays and features that acknowledge its ecological, heritage, and landscape values (refer to Figure No. 4). These planning layers are summarised in Table No: 02 below.

The proposed designation alteration and infrastructure upgrades are directly linked to HCC's broader urban growth strategy and the implementation of Plan Change 12 – Enabling Housing Supply. Plan Change 12 was made operative in December 2024 and introduces new planning provisions to support housing intensification across the city. The plan identifies the central city and an 800-metre walkable catchment as priority areas for high-density development, including buildings of six storeys or more. The Stage 1 development area, which includes the central city and surrounding corridors, is expected to accommodate significant population growth, with projections indicating up to 10,800 additional residents by 2035.

Table No. 2

Zones and Overlays			
Site Details	Zoning (Hamilton City Operative District Plan)	<ul><li>Open Space Zone – Destination (green)</li><li>Open Space Zone - Natural</li><li>Designation A67</li></ul>	
	Overlays and Features	<ul> <li>Significant Natural Area (green hatch)</li> <li>Built Heritage - A Ranked Heritage Item</li> <li>Peat Lake Catchment (green)</li> <li>Notable tree and Protected root zone</li> </ul>	



Figure No. 2: ODP zoning maps showing existing designation A67and surrounding zoning





Figure No. 3: OPD Features map

#### 2.3 Reserve Status

In terms of reserve status, the site is part of a larger area that is classified under the Reserves Act 1977. Specifically, parts of the Hamilton Lake Domain, including the area around the existing reservoir, are classified as recreation reserve. This classification reflects the land's primary purpose for public recreation and enjoyment, and it imposes certain constraints on the types of activities and developments that can occur on the land.

HCC has acknowledged that the proposed reservoir development will require reclassification of some park land under the Reserves Act to enable the construction and operation of the new infrastructure. This process will run in parallel with the NOR and is necessary to align the legal status of the land with its intended use for essential public infrastructure. At the date of this NOR, HCC had approved the reserve reclassification proposal to be progressed for public submissions in October/November 2025 followed by a hearing and decision in early 2026.

Reclassification carries several implications. Firstly, it formally changes the purpose of the land, allowing it to be used for infrastructure such as water supply facilities, which would otherwise be inconsistent with the recreation reserve classification. Secondly, the process requires public notification and engagement, ensuring that the community has an opportunity to provide feedback on the proposed change. Thirdly, the reclassification must be consistent with the Hamilton Lake Domain Management Plan or may trigger a review of that plan to reflect the new land use. Finally, even with reclassification, Council must continue to consider how to maintain or enhance public access, amenity, and recreational values, particularly given the site's location within a high-profile public space.

Together, these steps ensure that the reclassification process is transparent, legally robust, and responsive to both infrastructure needs and community values.

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#### 2.4 Existing Infrastructure

The Ruakiwi Reservoir site has long served as a critical component of Hamilton city's water supply network. The site currently accommodates an existing water reservoir that has supplied potable water to the central city for nearly a century. Its strategic location offers hydraulic advantages, making it an optimal point for gravity-fed distribution to key areas, including Waikato Hospital and surrounding residential and commercial zones.

The existing designation (A67) reflects the sites longstanding use for water infrastructure and provides for the operation, maintenance, and upgrade of water supply assets. The designation area includes the existing reservoir and associated infrastructure, and it is proposed to be expanded to accommodate two new 25 million litre reservoirs and a valve chamber, as part of Hamilton's long-term infrastructure planning.

The existing reservoir is integrated into the city's broader water distribution system, which includes other reservoirs such as Dinsdale and Newcastle. Modelling undertaken as part of strategic planning indicates that the Ruakiwi Reservoir plays a key role in supplying the central city zone, particularly during peak demand periods and emergency scenarios. It contributes to the resilience of the network by providing backup storage and supporting firefighting capacity.

The site is also connected to the city's three waters network, with existing pipelines facilitating water distribution and stormwater management. The proposed infrastructure upgrades, including a booster pump station and scour discharge pipeline to Lake Rotoroa, will build upon this established network and enhance service levels across the central city.

In summary, the Ruakiwi site represents a well-established and strategically located water infrastructure hub. Its existing designation and physical assets provide a strong baseline for the proposed expansion, which is aligned with HCC's urban growth strategy and infrastructure planning objectives.

## 2.5 Ecology

The site is located within the Hamilton Lake Domain, an area of elevated terrain adjacent to Lake Rotoroa, within the Hamilton Ecological District. Historically, this district supported extensive bogs, scrublands, and swamp forests, but has since undergone significant modification due to urbanisation and agricultural development.

The current landscape is characterised by maintained exotic grassland interspersed with mixed exotic and native treeland. While the grassland holds negligible ecological value, the treeland—though dominated by exotic species—provides important habitat for native fauna. Notably, the site includes 14 mature macrocarpa trees and other exotic species such as Norfolk pine and Japanese cedar, alongside recently planted native species like kahikatea, tarata, and houpara. A Mexican cypress within the footprint of proposed Reservoir 1 is listed as a Notable Tree under the district plan (Reference: T280-26).

The entire treeland area falls within a proposed Significant Natural Area (SNA C31), recognised for its value as fauna habitat, particularly for long-tailed bats (*Chalinolobus tuberculatus*), which are classified as Threatened – Nationally Critical. A Terrestrial Ecological Impact Assessment was prepared by Tonkin and Taylor (Appendix G) where acoustic monitoring confirmed bat activity at 12 of 15 locations across the site, with several trees exhibiting features suitable for roosting. Although no active roosts were found during climbing inspections, the presence of suitable habitat and pest mammals such as possums—known predators of bats—indicates moderate ecological value for bat habitat.



Native bird species including pūkeko and pīwakawaka are often observed on site, with kererū considered likely to utilise the area. All bird species are classified as Not Threatened, with kererū holding moderate ecological value due to its role in seed dispersal.

No native lizards were detected during surveys, and the site's high pest mammal activity and lack of suitable cover suggest low likelihood of lizard presence within the immediate project footprint.

Overall, the site exhibits low botanical value but moderate ecological value as fauna habitat, particularly for bats and birds. The ecological context reflects a modified urban environment with fragmented native vegetation yet retains pockets of habitat that contribute to local biodiversity and ecological connectivity.

#### 2.6 Landscape and Visual Characteristics

The site sits along a natural ridgeline that runs north to south, forming part of the Destination Open Space Zone under the ODP. This ridgeline is a prominent landscape feature, flanked by Lake Rotoroa to the west and residential housing to the east. The surrounding area is characterised by undulating topography, mature exotic and native vegetation, and open grassed spaces that contribute to the park-like setting of the Domain. Notably, the site includes the heritage-listed water tower, which is a significant visual and cultural landmark within the landscape.

The Domain's open space is well-utilised for recreation and features walking paths, playgrounds, and lakeedge amenities contributing to its high public value. The visual character of the site is defined by its green canopy, open lawns, and the contrast between natural elements and surrounding urban development.

The visual catchment of the site is relatively contained due to the surrounding topography, vegetation, and built form. Views of the proposed reservoir structures will be most prominent from Ruakiwi Road and adjacent residential properties, while visibility from the wider Domain and Hamilton Lake will generally be filtered or obscured by vegetation. The site's location within a historically and culturally significant area, including its proximity to former Māori pathways and settlements, adds further depth to its landscape character.

Overall, the existing landscape and visual environment is defined by a blend of natural and urban elements, with the Domain providing a valued green space within the city. The Project will introduce a substantial built form into this setting, but the design aims to integrate the reservoirs through sensitive architectural treatments and landscape mitigation, preserving the character and amenity of the area as much as possible.

# 2.7 Geography

The Project area features gently rolling hilltop terrain that descends from approximately RL68m to RL56m, and more steeply to RL38m near the margin of Lake Rotoroa. Geologically, the site is underlain by reworked non-welded ignimbrite sequences of the Walton Subgroup, overlain by Hamilton Ashes and Karapiro Formation. The low-lying terraces near the lake are composed of Holocene-aged alluvial swamp deposits.

A Geotechnical Design Report prepared by CMW Geosciences is provided in Appendix H. Subsurface investigations revealed a stratified ground profile comprising topsoil and fill, followed by stiff clay and silty clay layers associated with the Hamilton Ashes, transitioning into sandy silts and silty sands of the Karapiro Formation, and finally into dense ignimbrite of the Walton Subgroup.

Groundwater monitoring identified a regional water table at depths of 15–16 metres below ground level, with intermittent perched water tables observed at shallower depths following rainfall events. Laboratory testing confirmed the presence of expansive soils, with high plasticity and shrink/swell potential, particularly



within the Hamilton Ashes. These soils are considered moderately to highly expansive, with anticipated surface movements of up to 75mm.

#### 2.8 Heritage

The prominent ridgeline within the Hamilton Lake Domain was an area historically significant to Māori and later developed for municipal infrastructure. The ridge, known in Māori tradition as Te Kōpū Mania o Kirikiriroa, was a landmark associated with Ngāti Wairere and used for cultivation, gathering, and ceremonial purposes. While no archaeological sites are currently recorded within the project footprint, the location's proximity to Lake Rotoroa and the Waikato River, combined with oral histories and previous archaeological investigations nearby, suggest a moderate potential for subsurface pre-European Māori archaeological evidence, such as artefacts or remnants of occupation.

The site has undergone substantial modification since the early 20th century, including the construction of three reservoirs between 1901 and 1931, and the presence of a now-demolished 1920s dwelling. These developments likely disturbed parts of the site, particularly in the northern and southeastern areas.

The existing Ruakiwi Road water tower reservoir is included in the ODP Schedule 8A: Built Heritage (structures, building, and associated sites) as a Category A place (District Plan Reference H27, Map 45B) being an historic place of highly significant heritage value. This denotes it as a place of outstanding or high value in relation to one or more of the heritage assessment criteria and is considered to be of outstanding or high heritage value locally, regionally or nationally. The water tower is a relatively rare example of its type and is an important example of a comparatively unusual building type in New Zealand. Structures for municipal water storage were often utilitarian in nature, however the Hamilton water tower is one of a small number of these structures that were designed to be architectural landmarks. The water tower is also recognised in the New Zealand Heritage List Administered by Heritage New Zealand Pouhere Taonga as a Category 2 place (List Entry 4210). A Heritage Impact Assessment prepared by Adam Wild from Archifact is provided in Appendix I.

# 3. Description of the Project

# 3.1 Project Need, Objectives and Outcomes

This Project is essential to meet the demands of a growing population in Hamilton City. A specific focus of the project is to enable up to 4,000 additional homes to be developed in central Hamilton with an aim to enable a "20 minute city" where people can live, work and play in the same space and reduce their need for travel. Current growth projections and modelling indicate that the first 25 megalitre reservoir (Reservoir 1) will be sufficient to meet population needs until at least 2041. Beyond that point, a second 25 megalitre water reservoir (Reservoir 2) will be required to ensure continued service capacity.

HCC in its capacity as a Requiring Authority will undertake the planning and investigation work for both reservoirs at the same time but will only construct Reservoir 1 under the Agreement – Figure No. 5. The construction timeframe for the second reservoir will be determined at a later date based on existing and forecast population growth in the central city.

HCC has conducted a comprehensive investigation and site assessment to identify a preferred location for the new reservoir and an associated booster pump station. The evaluation considered 30 potential sites situated between the existing Waiora Water Treatment Plant (WTP) and the Ruakiwi Road Reservoir. Each site was assessed based on several key criteria, including land ownership, site size, elevation, proximity to the bulk water network and the WTP, energy efficiency (a critical factor for resilience and operations), distance to the central city, and underlying geological conditions.



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Based on the outcomes of the investigation and site assessment, Ruakiwi Road Reserve site was identified as the preferred location. As a result, further investigation and concept design work have been initiated for this site to support the next phase of project development.

A further site layout options analysis was then undertaken for the Ruakiwi Road site to refine the site layout to best meet the project objectives and outcomes while striving to address effects on the Lake Domain Reserve and the surrounding residential area as much as possible, with the concept site layout reflecting that balance.



Figure No. 5: Aerial view of proposed staged construction

#### 3.2 Operation

The operational activities expected on site once the new reservoir is operational will primarily involve servicing and maintenance activities. These include:

- Water level monitoring
- Flow control
- SCADA (Supervisory Control and Data Acquisition) monitoring
- Water quality monitoring
- Security surveillance

These activities are expected to be carried out by a small team of 5–8 personnel, depending on the level of automation.

# 3.3 Design

The design of the Ruakiwi Reservoir Project has been guided by a set of principles and objectives that reflect cultural, environmental, heritage and community values while creating a final landform that supports a smooth integration into the landscape. The principles were developed in consultation with mana whenua and are intended to ensure the reservoirs are integrated sensitively into the Hamilton Lake Domain landscape.

A key design principle of the Ruakiwi Reservoir Project is community and mana whenua involvement, with a collaborative approach to landscape design and long-term stewardship. In recognition of the site's significance and the high level of public interest in the Hamilton Lake Domain, the decision to publicly notify



the application reflects a commitment to transparency and inclusive engagement. HCC as Requiring Authority has proactively engaged with both the immediate and the wider community through public dropin sessions, website and letter drop campaigns and face to face meetings in some of the closest neighbours' homes where needed. Public notification provides an opportunity for the wider community to participate in the planning process and contribute to shaping the future of this important public space.

Environmental harmony is another central theme, with the design aligning to principles of kaitiakitanga. This includes habitat restoration for native species and the use of traditional ecological knowledge to guide planting and management. The landscape will feature native vegetation, stormwater treatment gardens, and pest management to enhance biodiversity and ecological resilience.

The design also prioritises pathways and connectivity, with new walkways of various heights and positions linking the reservoirs to existing trails and cultural sites. These routes will incorporate traditional Māori motifs and wayfinding elements, enabling visitors to engage with the cultural narratives of the area. A mix of paving typologies will be used to ensure surfaces are low maintenance, durable, cost-effective, and accessible to all users.

Cultural heritage and identity are expressed through the inclusion of Māori narratives, art spaces (wāhi toi), pouwhenua, and bilingual interpretive signage, designs will be confirmed following direction from mana whenua. Plantings will include species significant to mana whenua, such as harakeke, kawakawa, and rongoā plants. Architecturally, it is proposed to clad the reservoirs in corten steel, set against textured concrete retaining walls, with patterns on the concrete developed in partnership with iwi. These materials reflect the volcanic geology of the region and the heritage water tower nearby. The design includes elevated walkways around the reservoirs, offering new vantage points and visual connections to the surrounding landscape, including views to Pirongia, Karioi, and Te Kawa – Figure No. 6.

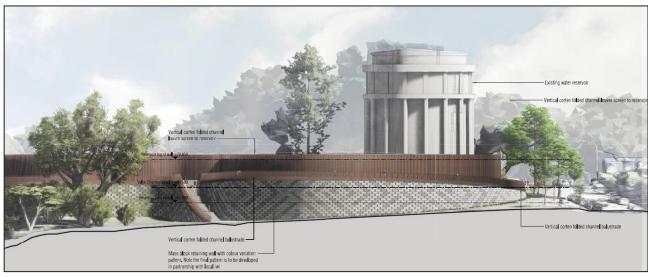


Figure No.4: South-west elevation featuring stairs to elevated walkway around reservoir 1

The proposed landscape design incorporates terraced seating, natural play areas, and educational features such as interactive water elements and signage. These elements are intended to enhance public amenity and create a welcoming, multi-functional space for recreation, learning, and cultural engagement.

Overall, the design reflects a thoughtful integration of infrastructure into a culturally and ecologically significant landscape, with a strong emphasis on storytelling, sustainability, and community connection.



# 4. Construction Methodology

#### 4.1 Construction Duration

A Construction Method Statement (CMS) for the construction of Reservoir 1 has been prepared by Traction Room (Appendix J). The CMS outlines the anticipated sequence of works for the development of the Central City Reservoir and associated infrastructure. While it does not detail every individual task, it provides a comprehensive overview of the key construction phases, particularly those involving large-scale machinery and significant site activity.

The programme has been developed with a degree of conservatism in estimating durations, acknowledging the complexity of the works and the potential for seasonal and environmental constraints. Based on current planning and design assumptions, the total construction period is expected to span approximately 24 to 30 months. This timeframe includes site establishment, bulk earthworks, reservoir and valve chamber construction, trenching and pipework installation, architectural treatments, and final landscaping and commissioning.

This methodology serves as a guide for understanding the scale and progression of the project and will be refined further as detailed design and contractor input are incorporated.

#### 4.2 Site Establishment

The geotechnical risk assessment (Appendix H) identified several potential hazards, including seismicity, liquefaction, cyclic softening, expansive and sensitive soils, and load-induced settlement. While most risks are considered low and manageable, ground improvement measures such as surcharging and rigid inclusions are recommended to mitigate differential settlement risks. The site is also classified as a deep soil site (Class D) for seismic design purposes, and the proposed reservoir and valve chamber structures are designed to Importance Level 4 (IL4¹) standards with a 100-year design life. Overall, the site presents a complex but well-characterised geotechnical environment suitable for reservoir development, provided that appropriate mitigation and design measures are implemented.

Site establishment will occur over approximately two weeks and includes several concurrent activities. These comprise site set-out, installation of erosion and sediment control measures, preparation of access points, delivery and setup of contractor offices and facilities, and fencing of the site perimeter. A smaller excavator (5–8 tonnes) will be used for installing silt controls and access points, while a larger excavator will strip topsoil. Hiab trucks will deliver site offices. Tree works, including relocation, pruning, and removal, will also be undertaken during this phase.

# 4.3 Vegetation Alteration and Removal

Vegetation alteration and removal is a critical early phase of the construction programme, designed to balance the operational needs of the reservoir development with the ecological and amenity values of the Hamilton Lake Domain. The works have been carefully staged to minimise disruption and preserve as much of the existing tree canopy and landscape character as possible.

A total of 32 trees are scheduled for relocation and 23 trees for removal. The relocation process will utilise a mechanical tree spade, which allows for the safe extraction and replanting of mature trees with minimal root disturbance. These trees will be transplanted to other suitable locations within Hamilton City parks, contributing to the city's broader urban greening strategy.



<sup>&</sup>lt;sup>1</sup> seismic restraints that are required for a tank that must be operational immediately after an earthquake or disastrous event for critical venues

Tree removal will be undertaken using chainsaws and mulching equipment, with stump grinding employed to reduce the extent of excavation required during subsequent earthworks. This approach helps to preserve soil structure and reduce the risk of erosion. The tree works will be carried out over a 2–4 week period, concurrent with other site establishment activities such as fencing, erosion control, and access preparation. The vegetation removal has been planned in stages, aligned with the construction sequencing, to reduce the cumulative impact on the site and surrounding environment. Trees located near the Reservoir 1 footprint and construction access points will be addressed first, while those in proximity to future Stage 2 works will be retained until that phase commences. This staged approach also supports the protection of root zones for trees that are to remain, ensuring their long-term health and stability.

Environmental constraints, including seasonal limitations and ecological sensitivities, have been factored into the timing of these works. Arboriculture oversight will be maintained throughout the process to ensure best practice is followed, and to respond to any unforeseen issues that may arise during tree handling and removal.

In addition to the physical removal and relocation of trees, the project includes a comprehensive reinstatement and planting programme. This will involve the introduction of new native and amenity species, selected to complement the existing landscape and enhance biodiversity. The planting programme will be implemented during the final stages of construction and maintained post-completion to ensure successful establishment.

Overall, the vegetation alteration and removal works have been designed to support the infrastructure development while maintaining the ecological integrity and visual character of the Hamilton Lake Domain.

#### 4.4 Earthworks

Bulk earthworks will commence following the completion of tree works and site establishment. The initial phase involves stripping topsoil from the site, which will be stockpiled to form an earth bund around the perimeter, positioned upstream of silt fences to assist with sediment control (Figure No. 7). Once the topsoil is removed, excavation will begin, with preliminary estimates of approximately 13,650m³ of material to be cut and 5,680m³ of fill for Stage 1, as summarised in Table No. 3. Including a volume of 1,350m³ for pavements; based on 200mm of buildup underneath hardstand areas, these volumes equate to around 2,585 truck movements for Stage 1 works, assuming the use of standard six-wheeler trucks with a maximum of 8m³ per truck.

Table No. 3: Summary of preliminary earthworks volumes

Detail	Volume (m³)	Maximum Depth (m)
Stage 1		
Cut	13,650	7.6
Fill	5,680	3.7
Nett Total	7,970	N/A
Stage 2		
Cut	7,040	2.0
Fill	6,150	5.0
Nett Total	890	N/A



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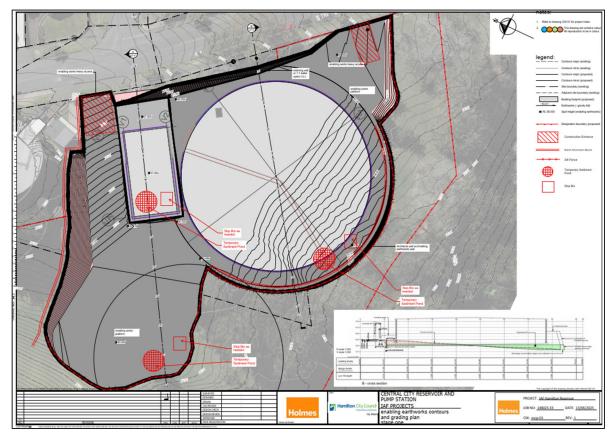


Figure No.5: Enabling earthworks contours and grading plan

A portion of the excavated material will be reused on-site for preloading the reservoir platform, which is necessary to consolidate the underlying soils. The preload will remain in place for a period of four to six months. Earthworks are expected to take 6 to 8 weeks, with the preload placement occurring early in this phase. It is anticipated that the cut material will not be suitable for re-use under the reservoir and engineered fill material will need to be brought to site.

Sheet piling will also be undertaken during the earthworks phase, with approximately 100 metres of piling required. Around 200 piles will be vibrated into position over a 10 to 15 day period. This activity will be sequenced to occur partway through the earthworks programme, with excavation continuing before and after piling is completed.

The bulk earthworks will be carried out using large excavators in the 25 to 35 tonne range, supported by a 25 tonne site dump truck. Approximately 6,000 cubic metres of engineered fill will be imported to the site, with around 30% of this volume arriving during the bulk earthworks phase. This material will be placed progressively to stabilise the site and improve access for construction vehicles.

The earthworks plan includes detailed excavation and fill mapping, with darker red areas indicating deeper cuts and green areas representing fill zones. The works are designed to prepare the site for subsequent construction phases while maintaining environmental controls and safe access throughout.

Best practice erosion and sediment control measures are proposed to be implemented throughout the duration of the earthworks activities in accordance with the Waikato Regional Council (WRC) Erosion and Sediment Control Guideline document. A civils design report and preliminary Erosion and Sediment Control Plan (ESCP) has been prepared by Holmes (refer Appendix K) that includes plans, calculations and the general implementation methodology.



Key components of the ESCP include:

- Temporary sediment ponds strategically located across the site to capture and treat runoff before it leaves the construction area.
- Silt fences installed along the downslope boundaries of disturbed areas to intercept sediment-laden water and reduce overland flow velocity.
- Earth diversion bunds constructed to direct clean and dirty water flows separately, preventing cross-contamination and aiding in controlled drainage.
- Stabilised construction entrances to reduce sediment tracking onto public roads by construction vehicles.
- Skip bins placed as needed to manage construction waste and prevent debris from entering stormwater systems.

These measures are supported by a site-specific grading and contouring plan to ensure water is directed appropriately across the site. The ESCP will be implemented prior to the commencement of bulk earthworks and maintained throughout the construction period, with regular inspections and maintenance to ensure ongoing effectiveness. Consent applications have also been lodged with Waikato Regional Council for the necessary earthworks and discharge consents necessary for the project.

#### 4.5 Reservoir Construction

Construction of the reservoir will commence following the completion of preload settlement and subbase preparation. The preload material, placed during the earthworks phase to consolidate the underlying soils, will be removed over approximately one week. This will be followed by the importation and placement of engineered fill and potentially site concrete to form the reservoir's foundation platform. This preparatory phase is expected to take 10–15 days and will involve excavators, compaction equipment, and multiple truck deliveries.

The reservoir floor will be constructed in situ using reinforced steel and post-tensioning ducts. The concrete pour for the floor is substantial, likely exceeding 1,200m³, and may be completed in one or two stages depending on logistics. Due to the volume of concrete required, early morning starts will be necessary to accommodate the delivery of approximately 200 concrete trucks. Once the floor has cured, post-tensioning strands will be installed and tensioned to ensure structural integrity. This phase will take approximately 4–6 weeks.

Following the floor construction, 60 precast concrete wall panels will be delivered and installed. Each panel is approximately 10m tall and will arrive individually by truck and be lifted into place using a centrally positioned crawler crane. Once the panels are in place, infill stitch pours, internal column installation, and roof beam placement will begin – Figure No. No. 8. These activities will require scaffolding, concrete pumping, and deliveries of additional precast elements, and will span approximately 12–16 weeks. Post-tensioning of the reservoir walls will follow, involving the installation and stressing of cables through pre-installed ducts. This process will take 1–2 weeks. Additional structural elements, such as foundation nibs, will be constructed using in situ concrete and reinforcing steel, requiring a further two weeks.



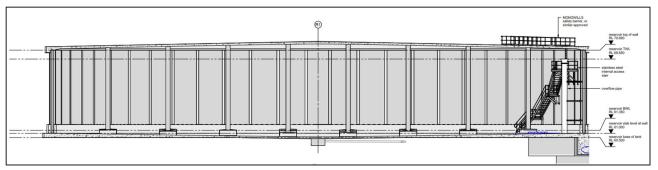


Figure No. 6: Reservoir typical cross-section

The reservoir roof will be cast in situ in two halves to reduce the amount of formwork required. Each half will involve a large concrete pour of approximately 450 cubic metres, necessitating early starts and the use of boom pumps, vibrators, and power floats. The roof will require seven days of curing before the formwork can be relocated to the second half. Post-tensioning of the roof will be completed once curing is sufficient, and scaffolding will be removed through the roof hatches using the crawler crane. Roof construction is expected to take 12–16 weeks.

Finishing works will include the installation of internal pipework, sealants, stairs, and other steel components. These tasks are not on the critical path and will be carried out concurrently with other activities. Once structural works are complete, commissioning will begin. This includes filling the reservoir, conducting a drop test, cleaning, and preparing the facility for operational service. Commissioning will take approximately four to six weeks and will be coordinated with the completion of associated infrastructure, including the valve chamber and pump station.

The reservoir construction process is a complex, multi-stage operation requiring careful coordination of materials, equipment, and personnel. It is designed to deliver a robust, long-lasting asset that meets the city's water supply needs while integrating sensitively into the surrounding park environment.

#### 4.6 Valve Chamber Construction

The valve chamber is a critical component of the reservoir infrastructure, designed to house the inlet and outlet pipework and facilitate gravity-fed flow from the reservoir. The valve chamber will be constructed following the installation of the discharge pipes up to the edge of the site. This below-ground structure, approximately 18 metres long and 14 metres wide, will be built using precast concrete panels with in-situ stitch pours and will be topped with a steel portal frame that supports the above-ground cladding and roof – Figure No. 9.

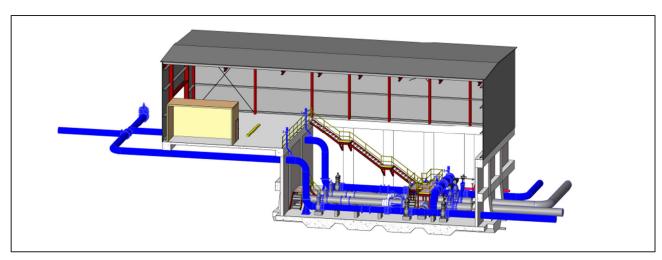


Figure No. 7: Valve chamber 3D view



Initial works will involve preparing the subbase using engineering-grade materials such as GAP 65 and GAP 20. This will be placed and compacted using an 8–12 tonne excavator, rollers, and plate compactors, with multiple truck deliveries required to bring materials to site. Once the subbase is in place, the concrete floor of the chamber will be poured in situ. This will involve the delivery and placement of reinforcing steel and a large concrete pour, potentially completed in multiple stages using either a boom pump from Ruakiwi Road or a line pump within the site.

Following the floor pour, precast wall panels will be erected using a 400-tonne crawler crane, which will be assembled on site over three days. Panel installation is expected to take approximately one week and will be supported by elevated work platforms. Once the panels are in place, wall stitching, waler beams, and structural pillars will be constructed using in-situ formwork, steel fixing, and concrete pours. These works will be completed over approximately five days.

Waterproofing (tanking) will then be applied to the chamber using small tools and access equipment. A precast box culvert will be installed adjacent to the chamber using the crawler crane, forming the discharge chamber. Discharge pipework will then be laid between the end of the drilled section and the valve chamber, although internal connections will be completed later.

The above-ground portion of the valve chamber will be formed using a steel portal frame, which will be fabricated off-site and assembled on-site using elevated work platforms and the crawler crane. Cladding and roof installation will follow, taking approximately two to four weeks and involving small tools and elevated platforms.

The final stage of valve chamber construction is the internal fit-out. This includes installation of a gantry crane, stairs, access platforms, internal pipework, electrical and control systems, cable trays, instrumentation, and small-diameter pipework. Most of the pipework will be fabricated off-site and fitted on-site. This phase is not on the critical path and will be carried out concurrently with other works, taking approximately three to four months to complete.

#### 4.7 Trench Work

Trench work includes the installation of multiple pipe sections between the valve chamber and the reservoir. These works will be completed prior to reservoir construction and involve the use of 18–23 tonne excavators. Manhole chambers and associated pipework will be installed over a six to eight week period. Additional trenching will occur during the construction of the scour/stormwater outlet and discharge mains, with trenching progressing uphill from the lake edge to the reservoir site.

#### Assessment of Alternatives

#### 5.1 Project Objectives and Outcomes, MCA Analysis

HCC has undertaken a comprehensive assessment of alternatives in terms of both the location of the site at Ruakiwi Road and the layout of the reservoirs on that site. As with any designation, it is important that HCC sets out the decision-making processes surrounding the selection of the Ruakiwi Road site and the determination that two 62 metre diameter circular tanks located as per the concept plan is the most appropriate way to achieve the Project Objectives which are to:

- Construct a treated water storage reservoir and pumping station, for enabling new Housing development (4,140 new dwellings) within the Hamilton Central city area by 30 June 2028.
- Ensure existing infrastructure (reservoir and pipe infrastructure) and cultural values are protected.
- Identify suitable locations for future treated water infrastructure to meet projected water demand.



The Project also assists in implementing the outcomes of Plan Change 12 – Enabling Housing Supply (PC12), which has been Hamilton City Council's response to the government direction on increasing housing intensification. PC12 was made operative on 20 December 2024 and has been incorporated into the Operative District Plan. PC12 enables housing intensification (six storeys or more) within the walkable catchment area (800 m) of central Hamilton. Given the zone enabled intensification that is now possible in central Hamilton, the Project is Council's infrastructural response to allow that to happen through a significant improvement in the supply of potable water to the central city.

The Project Objectives are further expanded with reference to the Project Outcomes which are set out below:

- Support an increasing number of people to live in central Hamilton.
- Provide an increased level of resilience and reliability of waters infrastructure in central Hamilton.
- Enable economic growth in central Hamilton arising from the provision of new treated water capacity.
- Provide a fit for purpose water asset that meets the operational and maintenance needs of the Council and where the whole of asset lifecycle cost is considered.
- Ensure the security of the water supply and associated assets are maintained and meet the expectations of the Water Regulator (currently HCC, soon to be CCO from July 2026).

This alternatives analysis was undertaken by WSP in conjunction with the HCC team<sup>2</sup> and is summarised below. The first part of the WSP alternatives assessment involved determining the best site within Hamilton City to locate the new water reservoirs. A "long list" of potential sites across Hamilton was selected comprising 30 open greenspace areas at varying distances and elevations relative to the CBD, the Water Treatment Plant and the existing Ruakiwi reservoir site. Out of the 30 sites, five sites with common attributes were then selected on which to undertake a comparative energy assessment, to identify how varying key site attributes can change the energy used at a specific site over time. The five sites comprised:

- The existing site (baseline comparison).
- A representative site between the Water Treatment Plant and the CBD supply area.
- A representative site near the Water Treatment Plant.
- A representative site on the east side of the Waikato River.
- A representative site north west of the supply zone.

The energy comparison showed that the existing Ruakiwi Road site is the most energy efficient, provided the reservoir level and the supply zone is optimised. The optimisation of the Ruakiwi Road site recognises that the existing water treatment reservoir pumps all the water to a higher elevation than is required to service 70% of the CBD. Placing the new reservoirs at a lower elevation on the Ruakiwi Road site would result in the ability to service 70% of the CBD by gravity (see lower elevation area in Figure No. 10) and then utilise a new booster pump station to service the remaining high elevation 30% of the CBD. This enables the Ruakiwi Road site to be optimized and result in a lower overall energy use.

<sup>&</sup>lt;sup>2</sup> Hamilton CBD Water Supply Zone – Water Supply Reservoir Upgrade Location Assessment, prepared by WSP, dated 29 May 2025 in Appendix D of the NOR.



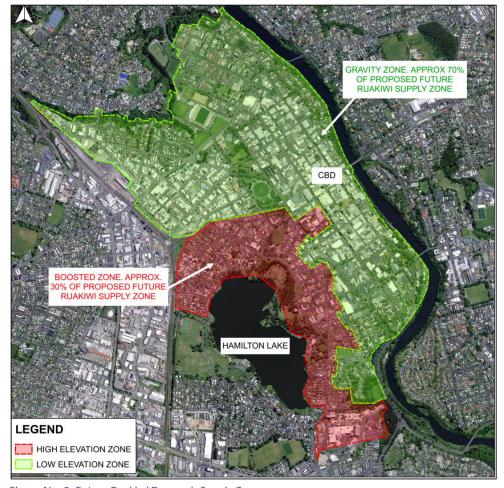


Figure No. 8: Future Ruakiwi Reservoir Supply Zones

The Water Treatment Plan site (WTP) was the second best of the five options, recognising that while the overall energy use for the WTP site is comparable, a new dedicated supply main pipeline would still need to be laid from the WTP to the CBD to enable the treated water to be delivered to the supply zone.

A fatal flaws assessment was then carried out to reduce the long list of sites down to a short list able to be assessed in more detail. The fatal flaws assessment considered the following list of attributes:

- Land ownership
- Proximity to the bulk water main
- Proximity to the Waiora WTP
- Proximity to the CBD
- Site elevation
- Site area (scale)
- Relative energy use
- Underlying site geology

Using these attributes, the long list of 30 sites was refined down to a short list through a simple "traffic light" system whereby sites with obvious fatal flaws were removed. This process resulted in nine sites being short listed for the final Multi Criteria Analysis (MCA). A summary of the MCA conclusion is set out in Table No. 4.



Table 4: MCA conclusions

No.	Location	Rank	Comment	
1	Gully reserve near 300 Peacockes Rd	8	Low ranking due to new infrastructure needed to service this remote site with new underground pipe connections needed back to both the WTP and the CBD.	
2	Peacocke/Waiora WTP	2	High ranked due to proximity to the existing WTP with less future infrastructure needed to fill a reservoir at this site. However, this site ranked lower than the Ruakiwi Road site due to its lower energy efficiency and the infrastructure needed to connect it to the CBD.	
4	Melville Park	3	Middle-high ranking due to its location in the critical	
5	Graham Park	4	efficient infrastructure corridor comprising the area directly between the WTP and the CBD. Ranked lower than either Ruakiwi Road or Peacocke WTP due to the potential loss of high use reserve areas and lower energy efficiency.	
9	Ruakiwi Reservoir Site	1	Ranked highest out of the 6 options considered due to its proximity to the CBD, high energy efficiency and the presence of an existing designation for infrastructure.	
10	Lake Domain Reserve	6	Middle-low ranking due to proximity to the CBD but both these sites are north of the current reservoir site requiring	
12	Hinemoa Park (Rostrevor Street)	5	an extension of the strategic infrastructure (underground pipes), potential loss of high use reserve areas and have a lower energy efficiency than options that sit along the WTP-CBD corridor.	
15	Kent Street Industrial Area.	7	Low ranking due to new infrastructure needed to service this relatively remote site with new connections needed back to both the WTP and the CBD.	
27	Marist Park	9	Lowest ranking of all 9 sites due to being remote from the WTP/CBD corridor including a requirement for a new pipe crossing of the Waikato River.	



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Figure No.9: Map of short-listed sites

#### 5.2 MCA Conclusion

A combination of engineering and planning reasons result in the conclusion that the Ruakiwi Road site is the preferred site. The following provides a summary of these conclusions:

- 1. The existing Ruakiwi Road site ranked 1<sup>st</sup> in the MCA by a significant margin, this site was favourable in many of the criteria used in this analysis.
- 2. The existing Ruakiwi Road site has the highest elevation of all sites that are in close proximity to the CBD. This results in this site having the lowest energy use potential and therefore is the most efficient site from an energy use perspective.
- 3. The existing site is the most resilient as it can supply water by gravity to 70% of the CBD supply area. Resilience is critical looking into the future where climate change and subsequent extreme weather events are predicted to be more frequent. The ability to supply water to 70% of the Central Business District even during a power outage is a significant benefit arising from the Ruakiwi Road site.



- 4. The existing reservoir site is also likely to result in the most resilient supply as the new reservoirs will be close to the main supply area. The greater the distance between a reservoir and its supply area, the greater the need for long pipelines, thereby increasing the potential risks to the supply.
- 5. The existing site is the most adaptable location as the new reservoirs can be built alongside the existing water reservoir making the transition from old to new easier.
- 6. The existing site already has a designation in place<sup>3</sup>, which has been in place for over 30 years. The existing designation provides the security that the community needs in relation to the existing water supply and related infrastructure and should be considered as part of the existing environment.
- 7. The existing site is already connected to an existing pipeline from the WTP and has existing connections to the CBD which makes the changeover to a new reservoir much easier in the future.

# 6. Notice of Requirement

#### 6.1 Introduction

This NOR is lodged by HCC under Section 168 and Section 181(1) of the RMA 1991. The purpose of this NOR is to seek an alteration to the boundary of an existing designation to enable the construction, operation, and ongoing use of new water infrastructure as part of the Ruakiwi Reservoir Project.

The Project includes the development of two new reservoirs and an associated booster pump station within the Hamilton Lake Domain, adjacent to the existing Ruakiwi Reservoir. These works are essential to support the growing demand for potable water and firefighting capacity in Hamilton's central city and surrounding areas. The project is funded through the Governments IAF and forms a critical component of HCC's long-term infrastructure strategy.

This application is made in accordance with the statutory provisions of the RMA, including the requirements for public notification under Section 169 and the assessment of environmental effects as outlined in Schedule 4. The designation alteration will facilitate the efficient delivery of essential public infrastructure while ensuring that environmental, cultural, and community values are appropriately considered and managed.

HCC is the requiring authority for this designation and seeks to progress the project in a manner that aligns with the ODP, relevant national policy statements, and the broader strategic objectives of the city.

# 6.2 Existing Designation

The site at Ruakiwi Road is subject to an existing designation under the ODP, identified as Designation A67 – Water Reservoir – Figure No. 3. This designation was originally transferred from the previous district plan during the 2000 plan review process and dates to approximately 1990. As such, it reflects an older style of designation that is relatively unencumbered by detailed conditions.

The designation applies to land within the Hamilton Lake Domain and authorises the use of the site for water storage and supply purposes. It includes the existing reservoir infrastructure and associated operational activities. The designation is notable for its simplicity, containing only a limited set of conditions, which primarily relate to heritage considerations associated with the historic water tower located on the site.



<sup>&</sup>lt;sup>3</sup> Designation A67 Water Reservoir (Ruakiwi Road) for Hamilton City Council. Purpose described as Water storage and supply.

Specifically, the designation conditions require that HCC:

- 1. In assessing any outline plan under Section 176A of the Resource Management Act Hamilton City Council shall have specific regard to the Objectives and Policies in Policy Section 3.1 Natural Values and Policy Section 3.2 Natural Hazards of the Proposed District Plan as they apply to land identified as being subject to the Environment Protection Overlay.
- 2. Any activity listed below shall be undertaken in consultation with the Historic Places Trust: Accessory buildings or new buildings within the site;
  - o Erection, construction, painting or extension of a sign in association with the tower;
  - o Any exterior lighting attached to the tower;
  - Any relocation of the tower;
  - o Alterations or additions to the exterior of the tower; and
  - o Demolition of the exterior of the tower.

The designation does not include specific noise, vibration, or environmental performance standards, nor does it prescribe detailed operational or design requirements.

## 6.3 Purpose of the Alteration to Designation

The purpose of the alteration to the existing designation is to enable the development, operation, and maintenance of critical water infrastructure at 18 Ruakiwi Road, Hamilton, as part of HCC's long-term strategy to support urban growth in the central city and improve water supply resilience. Specifically, the designation will facilitate the construction of two 25-megalitre potable water reservoirs and associated infrastructure, including a valve chamber, pipework, accessways, and landscape integration works.

This infrastructure is essential to meet current and projected demand for water supply in the central city, including residential, commercial, and firefighting requirements. The designation also supports the objectives of the IAF, which aims to unlock housing development by enabling timely delivery of supporting infrastructure.

The proposed alteration to the existing designation reflects a refined site layout and design response that balances operational requirements with environmental, landscape, and community considerations. It allows for:

- Efficient land use and optimal reservoir siting based on geotechnical and hydraulic assessments.
- Improved integration with the surrounding Hamilton Lake Domain Reserve and adjacent residential areas.
- Enhanced public amenity through architectural and landscape design, including pathways, viewing platforms, and tree planting.
- Safe and practical construction access and long-term operational access.

The designation ensures that the reservoir infrastructure can be delivered in a staged manner, with the first reservoir constructed by 2028 and the second by approximately 2040, aligning with forecast population growth and water demand forecasts.



#### 7. Outline Plan

Section 176A of the Resource Management Act 1991 provides for a requiring authority to request a waiver of the requirement to submit an Outline Plan, where sufficient detail is provided in the Notice of Requirement and accompanying documentation to enable the territorial authority to understand the nature, scale, and potential effects of the proposed works.

HCC is both the requiring authority and the territorial authority for the purposes of this Notice of Requirement. In accordance with Section 176A(2)(c) of the Resource Management Act 1991, the Council seeks a waiver of the requirement to submit an Outline Plan.

This application includes comprehensive information regarding the proposed works, including detailed design drawings, construction methodology, landscape integration, access arrangements, and mitigation measures. The level of detail provided enables the territorial authority (HCC) to fully understand the nature and scope of the proposed works and assess their potential effects on the environment.

Given the completeness of the information and the internal alignment between the requiring and territorial authority functions, it is considered appropriate for HCC to exercise its discretion under Section 176A(2)(c) and grant an Outline Plan Waiver for the Central City Reservoir Project in relation to the construction of Reservoir One. A draft resolution approving an Outline Plan of Works waiver is included in the set of draft designation conditions provided in Appendix L. However it is acknowledged that due to the lack of detailed information in relation to Reservoir Two, it is appropriate that an Outline Plan of Works is lodged with Council for certification prior to commencing the construction of this second structure.

#### 8. District Plan Resource Consents

## 8.1 Hamilton City Council

There are no resource consents required from HCC for the reservoir designation. All necessary statutory authorisations are encompassed by the alteration to designation. The only resource consents required for the reservoir designation are those required from Waikato Regional Council under the Waikato Regional Plan.

However the project requires a Booster Pump Station (BPS) that will be constructed on a separate site located at 139 Clarence Street. A Resource consent application for a Restricted Discretionary activity will be lodged contemporaneously to this Notice of Requirement for a Designation for the Booster Pump Station. Engagement with the neighbouring landowners is in progress and should this resource consent matter require notification and a hearing, this will be brought into the designation process and both matters heard together.

# 9. Regional Plan Resource Consents

# 9.1 Waikato Regional Council

The bulk earthworks and erosion and sediment control required for the construction phase along with the need to discharge stormwater from the completed site along with the discharge of clean water scour to Hamilton Lake will require the following consents from the Waikato Regional Council:

- Consents for soil disturbance, erosion and sediment control and vegetation removal in a High-Risk Erosion Area (construction consent).
- Discharge of stormwater and clean scour water to Hamilton Lake (operational consent).



- Construct and operate a stormwater outfall device in the bed of the Hamilton Lake (construction and operational consent).
- Discharge of clean dechlorinated scour water to the lake (which is a Permitted Activity providing the conditions under Rule 3.5.4.4 a) to d) can be met (operational requirement).

#### 10. Assessment of Environmental Effects

#### 10.1 Positive Effects

The selection of the existing Ruakiwi site for the new reservoir and associated infrastructure presents several positive effects that support its appropriateness from both a planning and operational perspective.

The site is already designated and used for water storage, which aligns with its current land use and reduces the need for significant changes to zoning or land acquisition. This continuity will help to streamline the consenting process and potentially minimise disruption to surrounding areas.

The site's natural elevation is particularly advantageous, allowing the reservoir to be constructed with a lower profile while still enabling gravity-fed supply to 70% of the central city. This reduces the visual bulk of the structure and limits the extent of land required for pumping infrastructure, thereby preserving more of the surrounding open space.

From a public amenity perspective, the project will deliver new pathways, seating, and recreational features that improve access and usability of the Domain. Elevated walkways around the reservoirs will offer new vantage points and visual connections to the wider landscape, including views to Pirongia, Karioi, and Te Kawa. Interpretive signage, cultural markers, and art installations will provide educational and cultural enrichment, while features such as drinking fountains, cycle racks, and picnic areas will support diverse recreational use.

Operationally, the elevated location enhances efficiency by minimising the area that requires booster pumping, which in turn lowers energy consumption and ongoing operational costs. The proximity of the site to both the existing bulk water supply network and the area it serves further supports its strategic value, reducing the need for extensive new pipeline infrastructure and improving system resilience.

Additionally, the site offers sufficient open space for construction staging and ancillary infrastructure, which helps contain construction activities within a defined footprint and limits off-site impacts.

Importantly, the site is well separated from residential properties, which helps mitigate potential amenity effects such as noise and visual disruption during both construction and operation. Overall, the reuse and optimisation of the Ruakiwi site for future water infrastructure represents a well-considered choice that balances technical, environmental, and community considerations.

## 10.2 Heritage

The proposal, while making the heritage-listed water tower redundant as a reservoir, does not promote the loss of the tower or of those heritage values for which it has been recognised. In this proposal the adjacent development of gravity supplied potable water is an appropriate use and development of the existing (and enlarged) designated area. The Project will retain, protect and enhance the heritage values of the heritage water tower. The offset of the proposed new reservoirs from the heritage tower has been carefully considered to respect and maintain sufficient distance and relative height so as not to visually dominate the heritage item or its setting and context.



The proposal looks to conserve the heritage-listed water tower and as part of the overall project investigation work, Council has completed a Detailed Seismic Assessment (DSA) on the water tower (Appendix M). The DSA concluded that overall, the structure was less than 34% New Build Standard (NBS) due to the base to wall connection being vulnerable to sliding failure. This would mean the empty water tower would be categorised as an Earthquake Prone building under the Building Act 2004.

The DSA recommends that Council undertake additional strengthening work needed for the water tower to reach greater than 34% NBS and ideally 100% NBS. The DSA also describes the required strengthening which would comprise a reinforced concrete ring beam located around the inside circumference of the base of the lower reservoir wall. Council will consider the timing and the extent of long-term strengthening of the water tower post de commissioning however this consideration will be carried out in association with annual plan and long-term asset planning.

Appropriate adaptive reuse options will also be considered by Council in the future to enhance the public benefit arising from this asset. However, any such future adaptive reuse considerations are not part of this application.

The effects arising from the Project are measured against the assessment of heritage values recognised in the HCC Built Heritage Inventory Record Form dated 2012 and in the HNZPT List record. It is noted that the HCC Inventory Record Form predates the recent Plan Change 9 adoption of revised assessment threshold criteria, but that the recognised historic heritage values in that assessment are not contested. Council as applicant has been engaging with Heritage New Zealand Pouhere Taonga in relation to this project and any feedback or correspondence received will be forwarded to Council once received.

#### 10.3 Archaeological & Cultural

An Archaeological Assessment has been prepared by Sian Keith Archaeology (Appendix Q) which concludes that while there are no recorded archaeological sites within the project footprint and no recorded sites closer than 820 metres from the site, there is still a risk that archaeological sites, features or deposits may be present within the footprint. Although no archaeological features were identified during recent field surveys, the potential for encountering buried cultural material remains, particularly in less disturbed areas of the Ruakiwi site. As such, precautionary measures are recommended, including obtaining an archaeological authority from Heritage New Zealand Pouhere Taonga for reservoir-related earthworks and implementing an Accidental Discovery Protocol for the pump station site.

HCC received two Cultural Impact Assessments (CIAs) in relation to the Ruakiwi Reservoir and Booster Pump Station Project (Appendix N). These were prepared by Te Hā o te Whenua o Kirikiriroa (THAWK) and Ngaati Wairere, both of whom hold mana whenua status in Kirikiriroa (Hamilton). The CIAs provide valuable insight into the cultural, historical, and environmental values associated with the site and offer recommendations to ensure the project is developed in a manner that respects and upholds mana whenua interests.

Both CIAs emphasise the deep ancestral and spiritual connection that mana whenua have to the Ruakiwi area and Lake Rotoroa. The site is located on a prominent ridgeline historically used for occupation, food gathering, and as a vantage point. THAWK notes that the name "Ruakōiwi" refers to ancestral remains (kōiwi) and caves (rua) once present in the area, suggesting the site may have been used for burial or rest. Ngaati Wairere similarly highlight the area's historical use as a travel route and resource hub, with strong associations to traditional pā, papakāinga, and mahinga kai.

The existing reservoir is acknowledged as a heritage structure, and both CIAs recognise the importance of retaining and integrating this feature into the new development. The proposed works are seen as a significant intervention in the landscape, with potential to impact the cultural and visual character of the area.



The CIAs identify several key areas of concern:

- Whenua (land): Both THAWK and Ngaati Wairere stress the importance of protecting the cultural integrity of the whenua. Earthworks and land disturbance must be approached with care, and cultural monitoring is recommended throughout construction.
- Stormwater and Wai (water): The discharge of stormwater into Lake Rotoroa is a significant concern. THAWK seeks assurance that stormwater management will be aligned with best practice and include real-time monitoring, while the Ngaati Wairere requests notification of any discharges that may affect the lake's restoration efforts. The stormwater effects have been addressed in the concurrent resource consents application to Waikato Regional Council (WRC).
- Biodiversity and Ecology: Both CIAs support the protection of taonga species and native vegetation. THAWK recommends ecological offsetting and collaborative planting plans, while Ngaati Wairere support the relocation of juvenile native trees and the removal of exotic species.
- Visual and Landscape Effects: The scale of the new reservoirs will alter the visual landscape. THAWK recommends that landscaping incorporate cultural narratives, native planting, and design elements that reflect mana whenua identity.
- Cultural Heritage and Archaeology: While no archaeological sites have been recorded within the project footprint, both CIAs emphasise the need for discovery protocols in the event of uncovering taonga or kōiwi. Ngaati Wairere has provided detailed procedures for such discoveries, including the appointment of kaitiaki and appropriate cultural responses.

Both CIAs provide a suite of recommendations to mitigate cultural effects and enhance outcomes for mana whenua. These include:

- Pre-construction site blessings and cultural inductions for workers.
- Appointment of cultural monitors during earthworks and stormwater infrastructure installation.
- Integration of mātauranga Māori into stormwater and ecological design.
- Use of cultural markers, pou, and bilingual signage to reflect the site's heritage.
- Ongoing partnership and transparent communication with mana whenua throughout the project lifecycle.

THAWK also proposes a legacy of betterment through koha initiatives, such as riparian restoration, cultural expression, and rangatahi education and employment opportunities. Both THAWK and Ngaati Wairere support the designation and development of the Ruakiwi Reservoir and Pump Station, subject to the implementation of their recommendations. They acknowledge the importance of the project in supporting Hamilton's growth and infrastructure needs, while also emphasising the opportunity to embed cultural values and uphold the mana of the whenua and wai.

#### 10.4 Character, Visual and Amenity

A Landscape and Visual Impact Assessment (LVIA) has been prepared by Adrian Morton of Adrian Morton Landscape Architects Ltd to support the proposal. The LVIA provides a detailed assessment of the existing landscape character and visual amenity of the site and its surrounds and evaluates the potential effects of the proposed development. It includes a Zone of Theoretical Visibility (ZTV) analysis and representative viewpoint assessments to understand the extent of visual change. The LVIA is provided in Appendix O.

The proposal will result in a significant transformation of a portion of the Hamilton Lake Domain, a well-used and valued public open space. The site, located on a prominent ridgeline, is currently characterised by mature



macrocarpa trees, open grassed areas, and the heritage-listed Ruakiwi water tower. This landscape contributes strongly to the Domain's identity as a green, elevated space within the urban fabric of Hamilton.

The introduction of two large circular reservoirs, each measuring over 62 metres in diameter and 10.2 metres in height, along with a valve chamber and associated infrastructure, will substantially alter the existing character of the site. While the land is already designated for water infrastructure, the scale and form of the proposed development represent a notable shift from the current open space character. The removal of up to 72 trees, including several large macrocarpas and a protected *Cupressus lusitanica*, will significantly change the treed skyline and reduce the vegetated character of the ridgeline. Earthworks will re-contour the site to accommodate the reservoirs, although retaining walls and benching will help minimise broader landform disruption – Figure No. 7. Importantly, the new reservoirs have been offset from the heritage water tower to preserve its prominence and visual integrity, and the removal of clutter and vegetation around the tower will enhance its setting.

Visual effects will be most pronounced for residential properties along Ruakiwi Road, which face the site directly. These properties will experience a permanent change in outlook, with the reservoirs becoming dominant features in the landscape. The LVIA concludes that this will result in a moderate to high adverse visual effect. From the western edge of Hamilton Lake and the Domain, the reservoirs will be partially visible through retained vegetation. While the change in skyline due to tree removal will be noticeable, the reservoirs themselves will not dominate views, and effects are assessed as low to moderate adverse. Views from Clarence Street and the CBD are more distant or filtered by vegetation and built form, resulting in moderate to low or negligible effects. Despite these changes to the character and visual amenity of the site, the project incorporates a comprehensive suite of mitigation measures. Architecturally, the reservoirs will be clad in corten steel and set against textured concrete retaining walls to reduce visual bulk and provide texture and interest.

Landscape design strategy includes the planting of 144 replacement trees, including 35 large-grade specimens, and 500 square metres of garden and stormwater planting to help restore the treed character – Figure No. 12. A comprehensive tree removal strategy has been proposed that will see trees removed in two stages. Tree removal will be coordinated to align with the construction of each of the reservoirs to reduce immediate visual impact and allow for progressive integration of the built form into the landscape. An existing group of mature oak trees on the Ruakiwi Road frontage of the site will be strategically retained to enhance the streetscape and create a visual barrier between the built form, softening the outlook to adjacent residential properties. Public access and amenity will be enhanced through new paths, viewing platforms, seating, and interpretive signage, which will provide new recreational and educational opportunities.



Figure No. 10: Concept design at completion (Est. 2040) - south west view

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Overall, while the project will result in a noticeable change to the character and amenity of the immediate area, particularly for adjacent residents, the architectural and landscape design has been carefully developed to soften and integrate the new infrastructure into the Domain. Over time, these measures are expected to help the reservoirs be perceived as integrated civic infrastructure rather than intrusive industrial elements.

#### 10.5 Noise

The construction of the Central City Reservoir and associated infrastructure will involve a range of activities that will generate noise and vibration over an extended period, including site establishment, bulk earthworks, trenching, concrete pours, and structural assembly. These works are expected to span approximately 24 to 30 months for each reservoir. An acoustic assessment prepared by Marshall Day Acoustics (Appendix P) has evaluated the acoustic impacts on nearby sensitive receivers associated with the construction and has recommended appropriate mitigation and management measures. The assessment considered that operational noise and vibration from the project will be negligible and therefore was not addressed.

The project site is located adjacent to residential properties along Ruakiwi Road that have been identified as potentially noise sensitive – Table No. 5 and Figure No. 13. The closest dwellings are located approximately 33 to 40 metres from the construction area.

As the existing designation A67 does not contain any construction noise and vibration performance standards the acoustic assessment has taken the guidance from the OPD Rules 25.8.3.2 and 25.8.3.3 in determining the 'reasonableness' of project noise and vibration.

Table No. 5: Receiver table

Rec no.	Address	Zoning/usage	Min. distance to site works (m)
R1	17 Ruakiwi Road (4 units)	Residential <sup>1</sup> /dwelling	33
R2	19 Ruakiwi Road (17 units)	Residential <sup>1</sup> /dwelling	37
R3	16 Ruakiwi Road	Residential <sup>1</sup> /dwelling	37
R4	14 Ruakiwi Road (12 units)	Residential <sup>1</sup> /dwelling	40
R5	145/145A Clarence Street	Residential <sup>1</sup> /dwelling	64

Residential refers to the High Density Residential Zone in the HCODP.



TV8 29



Figure No. 11: Project site and surrounding sensitive receivers

The assessment identified that most daytime construction activities—such as excavation, truck movements, and general site works—are expected to comply with the long-term construction noise limits of 70dB  $L_{Aeq}$  and 85dB  $L_{AFmax}$  when measured at 1 metre from the façade of the nearest dwellings. However, several specific activities are predicted to exceed these limits for short durations. Notably, vibratory sheet piling, required for approximately 10 to 15 days during early earthworks, is predicted to exceed the 70dB  $L_{Aeq}$  limit by up to 10dB at the nearest receivers. This activity cannot be effectively screened due to the height of the equipment and will require targeted management to manage the effects. Noise from discharge mains drilling is also expected to exceed the noise limits in Rule 25.8.3.2.

Another key source of elevated noise will be early morning concrete pours for the reservoir floor and roof. These pours are scheduled to begin as early as 5:00am to ensure continuous delivery and optimal curing conditions. Noise modelling indicates that these activities will exceed the night-time noise limits of 45dB  $L_{Aeq}$  and 75dB  $L_{AFmax}$ , with predicted levels around 60-61dB  $L_{Aeq}$  at nearby receivers. While these events are infrequent, they have the potential to cause short-term disturbance if not appropriately managed.

To address these potential effects, the acoustic assessment recommends the implementation of a comprehensive Construction Noise Management Plan (CNMP). The CNMP will outline best practicable options for noise mitigation, including the use of 2.4-metre-high acoustic hoardings around selected activities such as the drilling compound and reservoir construction site, careful scheduling of high-noise activities, selection of quieter equipment where feasible, and proactive communication with affected residents. The CNMP will also include monitoring protocols and procedures for responding to noise complaints.

In terms of vibration, the assessment confirms that all construction activities, including sheet piling and compaction, are expected to comply with the cosmetic damage thresholds set out in DIN 4150-3:1999<sup>4</sup>.

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<sup>&</sup>lt;sup>4</sup> DIN 4150-3:1999 – "Structural vibration – Effects of vibration on structures"

Vibration levels are also predicted to remain below the recommended amenity threshold of 2 mm/s peak particle velocity (PPV), meaning that no adverse effects from vibration are anticipated.

Overall, while some short-term exceedances of noise limits are expected, these will be localised and temporary in nature and can be effectively managed through the implementation of a CNMP. With these measures in place, the acoustic effects of the project are acceptable and consistent with the expectations for infrastructure development in an urban environment.

# 10.6 Ecology

The proposed alteration to designation, and subsequent construction of the Central City Reservoir Project will result in a range of ecological effects, primarily associated with the removal of vegetation and disturbance to fauna. The Ecological Impact Assessment (Appendix G) assessed the potential impacts of the proposed designation change and subsequent reservoir development on terrestrial ecological values and proposes several effect management measures.

#### 10.6.1 Vegetation

The proposal will result in the permanent removal of approximately 0.58 hectares of treeland vegetation within the Hamilton Lake Domain. While the botanical value of this vegetation is considered negligible due to its dominance by exotic species, the area is part of a SNA – (SNA C31) and provides moderate ecological value as habitat for native fauna, particularly long-tailed bats (*Chalinolobus tuberculatus*) and native birds.

The removal of 14 mature trees with confirmed roosting features for bats was assessed as having a moderate magnitude of ecological effect. Although efforts have been made to minimise vegetation clearance through detailed design and delineation of the construction footprint, the loss of this habitat cannot be fully avoided or mitigated. As such, this residual effect will be addressed through ecological compensation measures, as outlined in the Biodiversity Compensation Model (BCM) within the Ecological assessment.

A total of 144 replacement trees are proposed, including 35 large-grade specimens to be planted onsite and 109 trees distributed throughout the wider reserve network. These trees have been selected to replicate the forms and habitats currently present, with a mix of native and exotic species chosen to provide shade, screening, and habitat for native fauna. This planting will help to restore the green ridgeline character of the Domain and contribute to long-term biodiversity outcomes.

#### 10.6.2 Long-tailed Bats

Long-tailed bats, classified as Threatened – Nationally Critical, were detected foraging and commuting within the project area during acoustic monitoring. While no active roosts were identified during arborist inspections, 14 trees were confirmed to contain features suitable for roosting. The treeland habitat is therefore considered to have moderate ecological value for bats.

The permanent loss of roosting and foraging habitat is assessed as a moderate residual effect. To address this, a suite of compensation measures has been proposed, including:

- 0.58 ha of native planting to provide future foraging habitat, providing a 1:1 ratio for compensation.
- 7.4 ha of pest mammal control within existing vegetation to reduce predation pressure and improve habitat quality.
- Installation of 21 artificial bat roost boxes.
- Creation of 21 artificial roost features in live trees creation of crevices, holes and cavities in live trees or moving existing roost features to a new location.



These measures are designed to achieve a net ecological gain and provide long-term habitat enhancement for bats in the Lake Domain area. The proposed pest management programme will enhance the ecological integrity of the SNA within the Domain, improving habitat conditions for native birds and bats, and contribute to the long-term health of the local ecosystem.

Any artificial lighting associated with the reservoirs and associated infrastructure has the potential to affect bat behaviour, particularly in relation to foraging and roosting. Artificial light at night (ALAN) can alter bat movement patterns and reduce habitat use due to increased perceived predation risk.

To mitigate this, it is recommended that a site-specific lighting plan will be developed and implemented to minimise light spill into retained habitats. This will include directional lighting, shielding, and timing controls. With these measures in place, the magnitude of effect will be reduced to negligible, resulting in a very low overall level of ecological effect.

#### 10.6.3 Birds and Lizards

The site supports a range of native bird species, including pūkeko, pīwakawaka, and kererū. While most species are classified as Not Threatened, kererū is considered of moderate ecological value due to its role in seed dispersal. The loss of nesting and foraging habitat in mature trees is considered to have a very low overall effect, given the availability of similar habitat in the surrounding area.

No native lizards were detected during manual surveys or identified on tracking cards, and the site is considered to have low-quality habitat for herpetofauna. However, the presence of At Risk – Declining species in the wider area warrants a precautionary approach. It is recommended that vegetation clearance in areas such as *Agapanthus* patches will be undertaken using hand tools to minimise the risk of injury or mortality. The overall effect on native lizards is assessed as low to very low.

Construction activities, including vegetation clearance and earthworks, may temporarily disturb native avifauna. However, the disturbance is expected to be short-term and localised, with birds likely to relocate to adjacent habitat within the Lake Domain. The magnitude of effect is considered negligible. To further reduce potential impacts, it is recommended that an Avifauna Management Plan (AMP) will be implemented if works occur during the peak breeding season (September to January).

# 10.7 Crime Prevention Through Environmental Design (CPTED)

Lighting is limited to a combination of directional lens security lighting around key access points, with low directional feature lighting used to provide visual interest in relation to the façade and 'safety' lighting as part of CETPED considerations to help manage the potential for anti-social behaviour. Lighting design will also need to take account of managing light spill to account for potential bat habitat in the trees surrounding the site.

#### 10.8 Traffic

The construction of the Ruakiwi Reservoir Project is expected to generate temporary traffic effects, primarily associated with the movement of construction vehicles, staff, and materials. These effects have been assessed in detail through the Construction Transport Assessment and the Construction Traffic Management Plan (Appendix F).

Construction activities will occur over a 30-month period for each reservoir, with traffic volumes fluctuating depending on the phase of construction. The most intensive traffic generation is anticipated during the bulk



earthworks and concrete pouring phases. During peak periods, the site is expected to generate up to 80 vehicle movements per day, with peak hour activity reaching 20 vehicle movements between 7:00 and 8:00am, and approximately 12 movements per hour between 5:00 and 7:00pm. These movements will include staff transport, deliveries of materials, and heavy vehicle operations.

Two site access points are proposed on Ruakiwi Road to manage construction traffic – Figure No. 14. Site Access 1, located approximately 18 metres north of the Ruakiwi Road and Clarence Street intersection, will accommodate all construction traffic, including 19.45 metre articulated heavy productivity motor vehicles (HPMVs). This access will remain in use for operational and maintenance purposes following construction. Site Access 2, located approximately 80 metres south of the same intersection, is designed for smaller rigid trucks and will be decommissioned after Stage 1. Vehicle tracking analysis confirms that both access points are suitable for their intended vehicle types and that sufficient on-site manoeuvring space is available to avoid reversing onto Ruakiwi Road.



Figure No. 14: Proposed site access points

Ruakiwi Road currently carries approximately 7,280 vehicles per day. The additional traffic generated by the project represents an increase of between 0.55% and 1.0% during peak construction periods. This increase is considered minor and within the capacity of the existing road network. The road's peak hour volumes remain below the Austroads guideline threshold of 900 passenger car units per hour, indicating that the network can accommodate the additional traffic without significant disruption.

Pedestrian and cyclist safety has been considered in the traffic management planning. Ruakiwi Road includes 1.5 metre wide footpaths on both sides but lacks dedicated cycle lanes. To mitigate potential conflicts between construction traffic and vulnerable road users, the CTMP includes provisions for barrier-protected pedestrian paths, temporary detours, marked crossings, and safety signage. Marshals will be deployed at access points during high-traffic periods to manage interactions between vehicles and pedestrians.

To facilitate safe vehicle movements at Site Access 2, approximately six on-street parking spaces on the western side of Ruakiwi Road will be temporarily removed. This reduction in parking supply is considered minimal, as sufficient on-street parking will remain available in the surrounding area. Staff parking will be restricted to designated areas within the site, and carpooling and minivan transport will be encouraged to reduce demand.



Oversized components such as precast wall panels and large pipe sections will be delivered using designated overweight and over-dimension routes. The preferred route for these deliveries is via SH1C, Ohaupo Road, Lake Crescent, and Pembroke Street. Temporary traffic management measures, including pilot vehicles and signage, will be implemented to ensure safe passage. In some cases, pedestrian refuge infrastructure may be temporarily removed to accommodate turning movements.

A comprehensive Construction Traffic Management Plan will be implemented and refined by the appointed contractor. Site Specific Traffic Management Plans will be developed for each phase and access point, subject to approval by HCC. These plans will include detailed protocols for vehicle movements, emergency access, signage, and communication with affected stakeholders. Monitoring will include regular audits, stakeholder surveys, and reporting of traffic volumes, incidents, and complaints.

Overall, the traffic effects associated with the construction of the Ruakiwi Reservoir Project are temporary and manageable. With the implementation of the proposed mitigation measures and traffic management protocols, the effects on the surrounding road network, pedestrian safety, and property access are expected to be less than minor.

# 10.9 Stormwater Capacity

The proposed stormwater management system for the both the Central City Reservoir Project and Booster Pump Station has been designed to accommodate both operational discharges and rainfall-derived runoff (consented separately), with a focus on minimising adverse environmental effects and ensuring compliance with relevant statutory and non-statutory frameworks. While the consenting of the stormwater discharge primarily sits within the Waikato Regional Council consent application, the details are provided here for completeness.

Stormwater generated at the site will originate from several sources, including clean water scoured from above the sludge line during maintenance or emergency events, rainfall runoff from impervious surfaces such as reservoir roofs and trafficable hardstand areas, overflow events from the reservoirs, and continuous sampling water from monitoring equipment. The design flow rates for these sources have been calculated, with the highest flows expected from rainfall-derived runoff (up to 327 litres per second for a 5% AEP, 20-year ARI event) and overflow events (up to 360 litres per second). Clean scour water may reach up to 240 litres per second under certain conditions. These flows exceed the standard HCC stormwater network level of service, which is based on a 10% AEP event, and therefore a higher design standard has been adopted to ensure resilience and reduce the risk of uncontrolled overland flow.

Hamilton Lake has been identified as the preferred receiving environment for stormwater discharges. This selection is based on the lake's significant buffering capacity, its proximity to the site, and the potential for improved water quality outcomes. The lake currently receives untreated overland flow from the site and is classified as eutrophic, with poor water quality. The proposed discharge of clean, dechlorinated water is expected to contribute positively to lake turnover and may assist in improving overall water quality.

To facilitate this discharge, a new DN500 stormwater pipe will be constructed through the adjacent reserve area. This pipe will replace the existing scour pipe, which has been assessed as undersized and in poor condition. The new pipe will convey both rainfall runoff and clean operational discharges to a single outlet structure at the lake edge. The outlet has been designed to be low-profile and visually unobtrusive, incorporating energy dissipation features to prevent erosion and protect the lakebed.

A range of mitigation measures will be implemented to ensure environmental protection. Clean scour water will be dechlorinated using sodium thiosulphate prior to discharge, and runoff from trafficable hardstand areas will be treated via raingardens to remove contaminants such as heavy metals. Continuous sampling water, which is low in volume and chlorine concentration, will be discharged directly to the lake, with



monitoring protocols in place to ensure compliance with regional water quality standards. Overflow events, while unlikely, will be managed through automated alarms and shutoff valves, with contingency measures in place to deploy dechlorination equipment if needed.

Retention and attenuation devices have not been included in the design due to the lake's inherent buffering capacity, the absence of sensitive downstream environments, and the physical constraints of the site. However, the design remains flexible and can accommodate additional controls if required during detailed design or consenting.

In conclusion, the proposed stormwater management system is expected to have negligible effects on stormwater quantity, quality, downstream flooding, and ecological values. The discharge strategy aligns with best practice and regulatory expectations and supports the long-term sustainability of the receiving environment.

# 11. Consultation and Engagement

### 11.1 Local Residents & Wider Community

Council as the applicant has taken its responsibility to proactively engage with local residents, the wider community and key stakeholders seriously. The reservoir project was first put out to the local residents in February 2025 with a post on the Council website with an invitation for comments on the reservoir concept and seeking feedback from residents as to how they use the space. Phase One of the community feedback ran from 18 February to 18 March 2025 with Local Community Drop-In sessions held at the Verandah café in the Lake Domain on Tuesday 4<sup>th</sup> March and Saturday 8 March.

The purpose of the Drop-In sessions was to provide local residents with an opportunity to speak to project staff and ask questions. The Phase One engagement period resulted in 94 submissions lodged with Council with comments on submitters use of the Lake Domain, positive and negative feedback on the design and location of the reservoirs and comments on proposed art, mural or colour options associated with the reservoir design.

A further workshop was held at the Verandah on Tuesday 27 May 2025 for key local residents, those who lived on Ruakiwi Road close to the proposed site. The purpose of the workshop was to keep key residents informed about the project and capture feedback on key design elements. Nine residents attended this workshop and expressed general support for the corten weathering steel for the screen due to its low maintenance and visual appeal. There were mixed views on the public viewing path with some supporting it while others expressed privacy and cost concerns over these elements of the project. There were also mixed views on the development of additional public walking paths linking the new site to other parts of the Lake Domain. Some preferred to keep the area surrounding the new reservoirs as natural as possible while others felt the paths would provide additional opportunities to interact with the site and support accessibility to the area. There was general support for cultural design elements and wayfinding signage but a more mixed response to the development of play elements. There was general support for new landscape plantings but some comments about the importance of ensuring that these did not block lake views. There was also support for retaining the existing Oak trees adjacent to Ruakiwi Road as much as possible.

Phase Two of the community feedback occurred between 26 June and 13 July 2025 with a public drop-in session held at the Verandah café on Wednesday 9 July. Phase Two engagement was focused on the design aspects of the project including building materials, public access, landscape planting and other features. This period of engagement resulted in 117 responses with general support for the corten weathering steel due to its durability, low-maintenance and visual appeal. There was strong support for a public viewing path around the reservoirs and the most popular material for this viewing path was concrete mass block walls. There was also support for the path network connecting the new reservoirs to the remainder of the Lake Domain with



many commenting on the improved accessibility and connection this network would provide. There were some concerns over the cost associated with these paths. The comments also included a strong desire to save as many of the trees in the Lake Domain as possible with a call for transparency over which trees will be retained, relocated and lost. There was strong support for native fauna habitat enhancement and native tree planting with some suggestions over specific trees for replanting purposes.

In person engagement has focussed on those residents directly across Ruakiwi Road from the proposed site and involved invitations to the public drop-in sessions followed up by in home visits with those residents who were interested. The closest residents were primarily concerned with the loss of views from their properties across Ruakiwi Road to the Lake Domain and further afield. There were also concerns expressed about the noise and traffic associated with the construction phase. The project team discussed these concerns with each resident directly and discussed methods that the Council as applicant would adopt to carefully manage noise and traffic effects. Visualisations were also prepared from the closest property to the new site to enable the resident to understand what the new reservoir development would look like from their home. Information was also provided to residents on the statutory Resource Management Act process that the Notice of Requirement would follow post lodgement including opportunities for them to make a formal submission if they wanted to.

# 11.2 Tangata whenua

Council as the applicant has been proactive in engaging with tangata whenua in relation to this project. Early engagement with tangata whenua comprised a briefing meeting with both THAWK and Ngāti Wairere where the project was described and preferred engagement approach was agreed upon, review processes were established and the integration of cultural design principles into the project was discussed. A number of project technical reports were reviewed to ensure the cultural parameters were appropriate captured in the CIA including reports on stormwater management, earthworks, designation plans and the landscape and visual assessment report. Recommendations arising from THAWK include the following:

- A cultural blessing prior to commencing construction and cultural inductions for all construction crews working on the site.
- Cultural monitors to oversee earthworks to ensure the protection of historical artefacts should any be discovered during the project earthworks phase.
- Application of appropriate Accidental Discovery Protocols should any artefacts be uncovered.
- Use of rain gardens or similar to control heavy stormwater flows and appropriately manage stormwater quality.
- Use silt fences and other practices to apply best practice methods to stormwater management.
- Minimise the amount of vegetation and tree removal as much as possible and replant with native species.
- Prevent soil loss and protect local waterways.
- Seek local iwi inputs to planting plans.
- Avoid impacting habitats for native species.
- Develop a mutually agreed Ecological Offset and Compensation Plan with tangata whenua.
- Use native trees and groundcover in the replanting and mitigation strategies post completion of the reservoir. Implement plant and animal pest control strategies.

Council also engaged Ngāti Wairere to complete a CIA report. This report provided a background to the Ngāti Wairere connections to the site and included several recommendations to uphold tikanga throughout the construction and operational phases of the project. The values of wai were adopted as a key theme for the project, reflecting the importance of water in the locality of the new reservoirs and integral to the project itself (storage of potable water). Key recommendations arising from the Ngāti Wairere CIA were as follows:



- Appropriate protocols to be followed prior to construction starting, during earthworks and should any artefacts be uncovered during the project.
- Clear and regular communication during the construction phase.
- Restoration and other aspects of environmental stewardship upheld and promoted during the project.
- Incorporating traditional cultural designs into elements of the project.

Council is committed to an ongoing relationship with both THAWK and Ngāti Wairere and to upholding this through both proffered consent conditions and long-term relationship agreements outside of this project.

# 11.3 Hamilton City Council Urban Design Panel

The Ruakiwi Reservoir project was presented to the Hamilton City Council Urban Design Panel (UDP) on 30 July 2025. The UDP communicated their feedback via letter (Appendix R) and noted that the design addresses the challenges inherent in a large infrastructure project located in a sensitive environment constructed over two time periods adjacent to an existing Heritage ranked structure. The UDP noted that the resulting design had been sensitively and well thought out and covered all of the major elements to be considered. They also noted that the team was to be commended for their work and for their considered approach to the project and felt that the development will make a positive contribution to the city's urban fabric.

# 12. Notification of Assessment

A territorial authority must decide whether to notify a NOR under s169, 149ZCB, 149ZCC, 149ZCE, and 149ZCF. The following section provides an assessment against these provisions.

#### 12.1 Public Notification

This Notification Assessment has been prepared in accordance with the requirements of the Resource Management Act 1991 (RMA), specifically sections 169 and 149ZCB to 149ZCF, to support the publicly NoR for an alteration to the designation for the Ruakiwi Reservoir project.

Under section 169(1) of the RMA, a territorial authority must decide whether to notify a NOR within 10 working days of receiving it. In this case, HCC, as the requiring authority, has requested that the NOR be publicly notified. Accordingly, the territorial authority is not required to undertake the notification tests under sections 95A to 95F but must proceed with public notification under section 169(1A).

Sections 149ZCB to 149ZCF of the RMA, which apply to NORs with necessary modifications, provide the framework for assessing whether public or limited notification is appropriate. These provisions require consideration of whether the proposed designation is likely to have adverse effects on the environment that are more than minor (section 149ZCB), whether there are affected persons (section 149ZCC), and whether any relevant statutory provisions or other matters should be taken into account (sections 149ZCE and 149ZCF).

In this instance, the requiring authority has determined that the scale and nature of the Project, including the construction of two new 25ML reservoirs adjacent to a Category A heritage item, the Ruakiwi Water Tower, and the location within a high-use public reserve, may result in effects that are more than minor. These effects include potential visual, amenity, and cultural heritage effects, as well as temporary construction-related impacts such as noise, access restrictions, and vegetation removal. The project is also likely to generate significant public interest.



Given the potential for these effects and the importance of transparency and community engagement, the requiring authority has elected to proceed with public notification. This approach aligns with the projects design principles, which emphasise community and mana whenua involvement and will ensure that all interested parties, have the opportunity to make submissions and participate in the decision-making process.

Public notification of the NOR will follow the process set out in sections 170 to 172 of the RMA, including the opportunity for submissions, a hearing (if requested), and a recommendation by the territorial authority. The requiring authority will then make a final decision under section 172(1).

This Notification Assessment confirms that the NOR will be publicly notified and outlines the statutory basis and rationale for that decision.

#### 12.2 Limited Notification – Section 149ZCC

Section 149ZCC of the Resource Management Act 1991 outlines the requirements for limited notification of a notice of requirement or application where public notification is not directed. In this instance, HCC has elected to proceed with public notification for the Ruakiwi Reservoir Project under Section 149ZCB, recognising the high level of public interest in the Hamilton Lake Domain and the potential for effects on landscape character, amenity, and recreational values.

As a result, limited notification under Section 149ZCC is not applicable to this application. The Environmental Protection Authority (EPA) will publicly notify the application and invite submissions from any person. This approach ensures transparency and provides an opportunity for broad community engagement in the assessment of the proposal.

Should any affected protected customary rights groups or customary marine title groups be identified during the EPA's assessment, notification to those parties will be undertaken in accordance with Section 149ZCC(3), notwithstanding the public notification process.

# 13. Statutory Assessment

This section provides an analysis of the Project against the relevant legislative framework and concludes by providing an assessment against Part 2 of the RMA.

# 13.1 S171(1) Notice of Requirement

Section 171(1) of the RMA sets out the matters need to be covered by the NOR and supporting AEE:

When considering a requirement and any submissions received, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to:

- a) any relevant provisions of
  - i. a national policy statement:
  - ii. (ii) a New Zealand coastal policy statement:
  - iii. (iii) a regional policy statement or proposed regional policy statement:
  - iv. (iv) a plan or proposed plan; and
- b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if
  - i. the requiring authority does not have an interest in the land sufficient for undertaking the work; or
  - ii. it is likely that the work will have a significant adverse effect on the environment; and



- c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
- d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.

## 13.2 Section 171(1)(a) – Relevant Planning Documents

An assessment of the Project against the relevant rules, objectives and policies of the applicable plans and regional policy statement has been provided below.

#### 13.2.1 National Policy Statement for Urban Development (NPS-UD)

The NPS-UD sets out objectives and policies to ensure that New Zealand's urban environments are well-functioning, resilient, and capable of meeting the diverse needs of communities now and into the future. The NPS-UD applies to Tier 1 local authorities, including HCC, and is particularly relevant to infrastructure projects that support urban growth and intensification.

The proposed Ruakiwi Reservoir Project directly supports the implementation of the NPS-UD in the following ways:

#### Objective 1 – Well functioning urban environments

The project contributes to a well-functioning urban environment by providing essential water infrastructure that supports housing, employment, and community wellbeing. The reservoir will enable the development of up to 4,000 new homes in the central city, consistent with the IAF programme and Hamilton City's strategic growth objectives.

#### Objective 2 – Responsive planning

The project responds to the need for infrastructure in areas identified for intensification under PC12, including the Stage 1 development area and the 800-metre walkable catchment around the central city. The reservoir is a critical enabler of this growth and has been planned in alignment with population forecasts and urban development capacity requirements.

#### Objective 6 – Infrastructure provision

The reservoir provides for the efficient and timely delivery of infrastructure to support urban growth. It ensures that water supply capacity is available to meet short, medium, and long-term demand, and that the network is resilient to future challenges, including climate change and emergency events.

#### Policy 2 – Sufficient development capacity

The project enables sufficient development capacity by ensuring that water supply infrastructure is in place to support housing and business growth in the central city. Without this infrastructure, the development capacity identified in PC12 would be constrained.

#### Policy 6 – Benefits of urban development

The project delivers clear benefits to urban development, including improved infrastructure resilience, reduced energy use through gravity-fed supply, and enhanced public amenity through integrated landscape design. These benefits support the creation of a compact, connected, and liveable city.

#### Policy 9 – Treaty of Waitangi and Māori involvement

The project has been developed in partnership with mana whenua, including the preparation of CIA's by THAWK and Ngāti Wairere. The design incorporates mātauranga Māori, cultural markers, and bilingual



signage, and provides for ongoing engagement and cultural monitoring. These actions reflect a commitment to the principles of Te Tiriti o Waitangi and support Māori involvement in decision-making.

The Ruakiwi Reservoir Project is positively needed to deliver on the objectives and policies of the NPS-UD. It enables housing and urban development in a strategic growth area, provides essential infrastructure in a timely and efficient manner, and reflects a collaborative and culturally responsive planning approach. The project is consistent with the direction of the NPS-UD and contributes to the creation of a well-functioning urban environment in Hamilton.

#### 13.2.2 National Policy Statement for Indigenous Biodiversity (NPS-IB)

The NPS-IB applies to indigenous biodiversity in the terrestrial environment, and recognises that the health and wellbeing of people and communities are dependent on the health and wellbeing of indigenous biodiversity, and in return people have a responsibility to care for it and nurture it. The overall objective of the NPS-IB is to maintain indigenous biodiversity so that there is at least no overall loss in indigenous biodiversity, including by protecting and restoring indigenous biodiversity as necessary to achieve the overall maintenance of indigenous biodiversity, whilst providing for the social, economic and cultural wellbeing of people and communities now and in the future.

#### 13.2.3 National Policy Statement for Freshwater Management (NPSFM)

The National Policy Statement for Freshwater Management (NPS-FM) sets out objectives and policies to ensure that freshwater resources are managed in a way that prioritises the health and wellbeing of water bodies and freshwater ecosystems, followed by the health needs of people, and then the ability of people and communities to provide for their social, economic, and cultural wellbeing.

The Ruakiwi Reservoir Project is located within the catchment of Lake Rotoroa, a peat lake with ecological and cultural significance. While the reservoir structures themselves are not located within the wetland margins, associated infrastructure—including a stormwater discharge pipe and scour outlet—connects to the lake edge. These works have been designed to avoid direct disturbance of wetland margins and to minimise adverse effects on water quality and lake ecology.

Stormwater and scour discharges will be treated prior to entering Lake Rotoroa, including dechlorination and filtration via raingardens. The outlet structure has been designed to be low-profile and includes energy dissipation features to prevent erosion and protect the lakebed. These measures are consistent with the NPS-FM's requirement to avoid further degradation of freshwater bodies and to improve water quality where possible.

The project also aligns with the principles of Te Mana o te Wai, recognising the intrinsic value of water and the need to protect its mauri. Engagement with mana whenua has informed the stormwater design and discharge strategy, and ongoing monitoring will ensure that the health and wellbeing of Lake Rotoroa is maintained.

In summary, the project is considered to be consistent with the objectives and policies of the NPS-FM, with appropriate safeguards in place to protect freshwater values and avoid adverse effects on the wetland margins of Lake Rotoroa.

#### 13.2.4 Reserves Act 1977

The Lake Domain was declared a reserve for public recreation under the control of the Hamilton Domain Board, the local authority of the time, in 1886.



The Domain is made up of Recreation Reserve and Local Purpose (Esplanade) Reserve. The main purpose of the reserve under both of these classifications is to protect the natural environment, while providing for public access, outdoor recreation activities and open space.

The Lake Domain is managed under a reserve management plan. The Plan lists the following principles to guide and inform the management of the Domain:

- Conserve and enhance the open space natural character.
- Historic and cultural values of the Domain are recognised, conserved and protected.
- Provide informal no-cost leisure and recreation opportunities.
- Safe and accessible.
- Lake water quality meets the needs of the community.
- Provide for growth of selected sports.
- Limit built environment and development to key areas.
- Ecological and environmental values of the lake margin and natural environment are enhanced and protected.

The management plan also identifies a number of strategic goals and objectives for the development and management of the Domain. Of these, the following are considered relevant to the project:

#### Ecological value

- Manage activities at the Domain to avoid, reduce and mitigate negative effects on the lake's ecological and environmental values including water quality.
- Manage Lake Rotoroa and activities within the reserve considering the mauri of the lake and in accordance with the principles of Te Ture Whaimana o te Awa o Waikato Vision and Strategy for the Waikato River (2010).

#### Historic and cultural value

- The historic and cultural values of the Domain and Lake Rotoroa are identified, conserved, and protected.
- Visitors to the Domain are able to learn about the historical and cultural significance of the Domain and its features.
- Public art is used to connect visitors with the history and culture of the Domain and its features. Figure 15 identifies key areas of the domain.





Figure No. 15: Key areas of the domain, noting the new reservoirs will be partially located within the Lake Domain Reserve source HCC Hamilton Lake Management Plan

HCC are progressing an application to undertake a Reserve Reclassification of that part of the Lake Domain where the designation is to be expanded. The process will seek to change the Reserve status from Recreation Reserve to Local Purpose (Water Infrastructure) Reserve pursuant to Section 24(1) of the Reserves Act 1977.

#### 13.2.5 Te Ture Whaimana o Te Awa o Waikato

Te Ture Whaimana o Te Awa o Waikato is the primary direction-setting document for the Waikato River and its catchment. It was established under the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 and holds precedence over other planning instruments under the RMA. The Vision and Strategy seeks to restore and protect the health and wellbeing of the Waikato River, recognising its significance to Waikato-Tainui and other iwi, as well as to the wider community and environment. The Vision is expressed as:

"Tooku awa koiora me oona pikonga he kura tangihia o te maataamuri – The river of life, each curve more beautiful than the last."

It promotes a future where the Waikato River sustains abundant life and prosperous communities, and where all people are responsible for its restoration and protection.

The project is located within the Waikato River catchment and therefore must be assessed in light of Te Ture Whaimana. The project aligns with the Vision and Strategy by incorporating measures to avoid further degradation of the river system, including robust erosion and sediment control, stormwater management, and landscape integration. The infrastructure is designed to support urban growth while maintaining environmental integrity, and will contribute to improved water supply resilience for Hamilton City.



In accordance with Te Ture Whaimana, the project adopts a precautionary approach to environmental effects, particularly those that may be cumulative or irreversible. The design and construction methodology reflect an integrated and holistic approach to resource management, and the project will be delivered in a manner that respects the cultural, ecological, and spiritual values associated with the Waikato River.

Engagement with iwi and stakeholders will continue throughout the project lifecycle to ensure that the principles of Te Ture Whaimana are upheld and that the outcomes contribute positively to the health and wellbeing of the river and its communities.

#### 13.2.6 Hamilton District Plan Objectives and Policies

The ODP objectives and policies of relevance to this application are outlined and assessed below in Table No. 6

Table No: 6

#### Relevant District Plan Objectives and Policies

#### Chapter 15 Open Space Zones

#### Objective 15.2.1

Development and activities must complement the functions and values of the particular open space and the surrounding environment.

The proposed Ruakiwi Reservoir Project is located within the Hamilton Lake Domain, which is zoned Open Space – Destination and Open Space – Natural under the Operative District Plan. The Domain is a high-profile public reserve valued for its recreational, ecological, and cultural significance. The project has been carefully designed to complement these values by integrating essential infrastructure within an existing designated site, while enhancing public access, amenity, and ecological outcomes.

The project includes extensive landscape mitigation, native planting, and public realm improvements such as pathways, seating, and interpretive signage. These features will enhance the usability and character of the open space and ensure that the development complements the surrounding environment. Policy 15.2.1a

Open space shall be developed and used in accordance with any relevant operative Reserves Act Management Plan.

The Hamilton Lake Domain Management Plan (2017) is the operative reserve management plan for the site. The project has been assessed against this plan and is considered to be consistent with its vision, principles, and strategic goals. A reclassification process under the Reserves Act 1977 is being progressed in parallel with the Notice of Requirement to ensure alignment between the land's legal status and its proposed use for water infrastructure.

#### Policy 15.2.1b

Buildings and structures shall be designed and sited to be compatible with the function and predominant purpose of the open space.

The proposed reservoirs and valve chamber have been designed to integrate with the park setting through architectural treatments, landscape design, and cultural expression. The built form is sited to minimise visual dominance, preserve key viewshafts, and maintain the open space character of the Domain. The design includes elevated walkways, corten steel cladding, and textured concrete walls that reflect the site's volcanic geology and heritage context.

#### Policy 15.2.1c

Development shall recognise and protect the function of current Three Waters and solid waste assets and infrastructure.

The project directly supports the function of Hamilton's Three Waters infrastructure by providing critical potable water storage and supply capacity for the central city. It builds upon the existing Designation A67



and enhances the resilience and efficiency of the water network. The development has been designed to avoid conflict with existing infrastructure and to future-proof the site for long-term operational needs.

#### Policy 15.2.1d

Development and use of open space shall be managed through specific zoning.

The site is zoned Open Space – Destination and Open Space – Natural, which recognises its recreational and ecological values. The proposed designation alteration is consistent with the zoning framework and is supported by a robust assessment of effects and alignment with the relevant reserve management plan. The reclassification process under the Reserves Act will ensure that the land use is appropriately managed and legally enabled.

#### Policy 15.2.1e

Development and use of open space shall recognise and support the objectives and policies for adjacent Central City precincts.

The project supports the objectives of the Central City Zone and PC12 by enabling housing intensification and urban growth within the Stage 1 development area. The reservoir is a key enabler of the IAF programme and will provide the water supply capacity needed to support up to 4,000 new homes in the central city. The project also enhances connectivity between the Domain and surrounding precincts through new pathways and public access improvements.

#### Chapter 19 Historic Heritage

#### Objective 19.2.3

The heritage values of significant buildings, structures and their immediate surroundings are protected. The Ruakiwi Water Tower is a Category A heritage item listed in Schedule 8A of the ODP and is also recognised by Heritage New Zealand Pouhere Taonga as a Category 2 historic place. The proposed reservoir project has been designed to retain and protect the water tower and its heritage values, with careful consideration given to its setting, visibility, and future use.

#### Policy 19.2.3a

Demolition or relocation of buildings and structures ranked A in Schedule 8A shall be avoided.

The project does not propose the demolition or relocation of the Ruakiwi Water Tower. The structure will be retained in situ, and its heritage values will be protected. A Detailed Seismic Assessment has been completed, and Council is considering future strengthening and adaptive reuse options, which will be progressed outside of this designation process.

#### Policy 19.2.3c

Subdivision and development shall retain, protect and enhance the heritage values of any building or structure listed within Schedule 8A.

The proposed development has been designed to retain and enhance the heritage values of the water tower. The reservoirs have been offset from the tower to avoid visual dominance, and surrounding vegetation will be managed to improve the tower's visibility and prominence. The landscape design includes interpretive signage and cultural markers that will help communicate the tower's historical significance.

#### Policy 19.2.3e

Heritage buildings and structures shall be used in a manner that ensures essential heritage qualities are not damaged or destroyed.

The water tower will be retained and protected throughout the construction and operational phases of the project. No works are proposed that would damage or destroy its essential heritage qualities. Future



adaptive reuse options will be considered by Council in a manner that respects and enhances its heritage values.

#### Policy 19.2.3g

The continued use or adaptive reuse of any building or structure of identified heritage value shall be encouraged.

While the water tower will be decommissioned as a reservoir, its continued presence and potential adaptive reuse are supported by Council. The project creates opportunities for the tower to be repurposed in a way that contributes to public amenity and cultural storytelling, consistent with this policy.

#### Policy 19.2.3h

The site surrounding the heritage building or structure shall be protected to the extent that it contributes to the heritage values.

The design of the reservoir project has been carefully developed to protect the setting of the water tower. The reservoirs are sited to maintain visual separation, and the surrounding landscape will be enhanced through native planting, open space improvements, and removal of visual clutter. These measures will help preserve the character and context of the heritage item.

#### Chapter 25.1 Development Suitability

#### **Objective 25.1.2.2**

Any development of land is carried out in a manner which reflects the physical constraints on its use and development and minimises any adverse effects on the environment.

The Ruakiwi Reservoir Project has been designed with a comprehensive understanding of the site's physical constraints, including topography, soil conditions, ecological values, and proximity to Lake Rotoroa. A Geotechnical Design Report and Terrestrial Ecological Impact Assessment has informed the design and the construction methodology to ensure that adverse effects are minimised and that the development is appropriate for the site.

#### Policy 25.1.2.2a

Development of land shall:

i. Not result in increased risk of erosion, subsidence, slippage or inundation:

The project includes robust erosion and sediment control measures, ground improvement techniques, and careful earthworks sequencing to manage geotechnical risks. The site has been classified as suitable for reservoir development, provided that recommended mitigation measures are implemented.

ii. Wherever possible, avoid or mitigate any adverse effects on water quality and quantity: Stormwater management has been designed to avoid adverse effects on Lake Rotoroa, including dechlorination of scour water, treatment of runoff via raingardens, and energy dissipation at the lake outlet. These measures ensure that water quality is protected and that discharges are managed in accordance with best practice.

iii. Avoid or mitigate adverse effects on significant infrastructure:

The project enhances the city's water infrastructure and does not adversely affect existing assets. The design integrates with the existing bulk water network and avoids disruption to other Three Waters infrastructure.

#### Policy 25.1.2.2b

Development shall be located and designed to maintain or enhance any:

i. Scheduled built heritage item:

The Ruakiwi Water Tower is a Category A heritage item. The project retains and protects the tower, with offset siting and landscape design to preserve its prominence and heritage values.



#### ii. Archaeological and cultural site:

While no archaeological sites are recorded within the project footprint, the site holds cultural significance. CIA's have informed the design, and protocols for discovery and cultural monitoring will be implemented during construction.

#### iii. Significant tree:

The site includes a Notable Tree (Mexican cypress) and other mature specimens. Tree removal has been carefully staged, and a comprehensive planting programme will replace and enhance tree cover, including large-grade specimens.

#### iv. Significant natural area:

The site includes SNA C31, which provides habitat for long-tailed bats and native birds. The project includes ecological compensation measures, pest management, and habitat restoration to maintain and enhance the ecological values of the area.

#### Chapter 25.2 Earthworks and Vegetation Removal

#### Objective 25.2.2.1

Minimise the adverse effects of earthworks and vegetation removal on people, property, and the environment.

The Ruakiwi Reservoir Project involves significant earthworks and vegetation removal within the Hamilton Lake Domain. These activities have been carefully planned and sequenced to minimise adverse effects on the surrounding environment, including land stability, water quality, ecological values, and public amenity. A comprehensive Erosion and Sediment Control Plan (ESCP) and Construction Method Statement have been prepared to guide implementation and ensure compliance with best practice.

#### Policy 25.2.2.1a

Earthworks and vegetation removal shall occur in a way that:

- i. Minimises adverse effects on existing landforms, natural features and significant vegetation: The design minimises landform modification through sensitive siting and grading. Vegetation removal has been staged to reduce visual and ecological impacts, and a planting programme will restore canopy cover and habitat values post-construction.
- ii. Maintains natural processes and features including natural drainage patterns and streams: The stormwater design maintains natural drainage patterns and includes raingardens and energy dissipation structures to manage runoff and protect Lake Rotoroa.
- iii. Does not create new or exacerbate existing natural hazards:

Geotechnical investigations have informed the earthworks design, and ground improvement measures will mitigate risks such as settlement, liquefaction, and slope instability.

- iv. Minimises adverse effects on land and water, especially effects such as erosion and sedimentation: The ESCP includes sediment ponds, silt fences, diversion bunds, and stabilised entrances to manage erosion and sedimentation throughout the construction period.
- v. Creates practicable building sites, efficient use of land and infrastructure, ensures effective stormwater flow paths, and a safe living and working environment:

The reservoir platforms have been designed to optimise land use and hydraulic efficiency, with safe access and integrated stormwater management.

vi. Minimises dust, noise, and runoff:

Dust and noise will be managed through construction protocols, including watering, acoustic hoardings, and scheduling of high-noise activities. Runoff will be treated prior to discharge.

vii. Adopts a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River and, in particular, those effects that threaten serious or irreversible damage to the Waikato River:

Although the project discharges to Lake Rotoroa, which is part of the Waikato River catchment, a



precautionary approach has been adopted. Clean scour water will be dechlorinated, and stormwater will be treated to protect water quality and ecological values.

viii. Maintains or enhances riparian vegetation on the margins of natural watercourses and wetlands: While the project does not directly affect riparian margins, the planting programme includes native species that contribute to ecological connectivity and habitat enhancement within the Domain.

#### Chapter 25.5 Landscaping and Screening

#### Objective 25.5.2.1

To maintain and enhance amenity values within and around development, while contributing to local ecology and cultural connection where possible.

The Ruakiwi Reservoir Project has been designed to integrate sensitively into the Hamilton Lake Domain landscape, with a strong emphasis on maintaining and enhancing amenity values. The landscape design includes terraced seating, elevated walkways, native planting, and interpretive signage, all of which contribute to the visual quality, ecological function, and cultural expression of the site.

The project also supports local ecology through ecological compensation planting, pest management, and habitat restoration, particularly for long-tailed bats and native bird species. Cultural connection is embedded through the inclusion of mātauranga Māori, cultural markers, and bilingual signage, developed in partnership with mana whenua.

#### Policy 25.5.2.1a

Minimise visual impacts of developments in part by providing appropriate screening and planting around activities and between zones.

The reservoirs and valve chamber have been sited and designed to minimise visual impacts, particularly from adjacent residential properties. Screening is provided through retained vegetation, new native planting, and architectural treatments such as corten steel cladding and textured concrete walls. A group of mature oak trees along Ruakiwi Road will be retained to soften views and enhance the streetscape.

#### Policy 25.5.2.1b

Encourage the planting of native species where appropriate.

The planting strategy prioritises native species, including harakeke, kawakawa, and rongoā plants, which are culturally significant and ecologically beneficial. A total of 144 replacement trees are proposed, including 35 large-grade specimens, with native species selected to support biodiversity, habitat restoration, and cultural expression.

#### Chapter 25.8 Noise and Vibration

#### **Objective 25.8.2.1**

Activities have minimal adverse noise and vibration effects on other activities and sites, consistent with the amenity values of the receiving environment.

The Ruakiwi Reservoir Project is located adjacent to residential properties along Ruakiwi Road, which are considered noise-sensitive receivers. The Acoustic Assessment has informed the construction methodology and mitigation measures to ensure that noise and vibration effects are minimised and managed appropriately.

#### Policy 25.8.2.1a

The amenity values of the surrounding neighbourhood and adjoining activities, especially noise-sensitive activities, shall be protected from the effects of unreasonable noise.

The project includes a CNMP that outlines best practicable options to manage construction noise. Measures include acoustic hoardings, scheduling of high-noise activities, and proactive communication with affected residents. While some short-term exceedances of noise limits are anticipated (e.g. during



vibratory sheet piling and early morning concrete pours), these will be temporary and managed to avoid unreasonable impacts on residential amenity.

#### Policy 25.8.2.1b

Construction, maintenance and demolition activities shall be required to minimise potential adverse effects on the surrounding neighbourhood and adjoining activities.

Construction activities have been sequenced and designed to minimise disruption. The CNMP includes protocols for monitoring, complaint response, and mitigation. Vibration levels are expected to remain below thresholds for cosmetic damage and amenity effects, and construction traffic will be managed to reduce noise impacts.

#### Policy 25.8.2.1e

Noise from non-residential activities in residential areas shall not unduly adversely affect residential amenity values.

The reservoir is a non-residential activity located within a high-use public reserve adjacent to residential properties. Operational noise is expected to be negligible, and construction noise will be managed to avoid undue adverse effects. The CNMP ensures that residential amenity is protected throughout the construction period.

#### Policy 25.8.2.1f

Temporary events shall minimise noise impacts on residential activities when taking into account the level and duration of the noise.

While the reservoir construction is not a temporary event in the traditional sense, the principles of this policy have been applied. High-noise activities are limited in duration and frequency, and mitigation measures are in place to minimise impacts. Early morning pours and vibratory piling will be communicated in advance to affected residents, and monitoring will ensure compliance with noise limits.

#### Chapter 25.9 Public Art

#### Objective 25.9.2.1

Increased provision of art throughout the City that is reflective of the character and diversity of the Hamilton community.

The Ruakiwi Reservoir Project includes a strong emphasis on cultural expression and public amenity, with provisions for art and interpretive features that reflect the character, history, and cultural diversity of Hamilton. The design incorporates spaces for public art (wāhi toi), cultural markers, and bilingual signage, developed in collaboration with mana whenua. These elements contribute to the city's identity and provide opportunities for storytelling and community engagement.

#### Policy 25.9.2.1a

Public art shall be encouraged in public places and on private land that is easily visible from public places and that has relevance to the site, history, the environment, or has cultural significance.

The proposed reservoirs and surrounding landscape will include public art installations that are visible from Ruakiwi Road and within the Hamilton Lake Domain. These artworks will be designed to reflect the site's cultural significance, including its historical use by mana whenua and its role in the city's water infrastructure. The integration of Māori design motifs, pouwhenua, and interpretive signage ensures that the art is relevant to the site and enhances its cultural and environmental context.



#### Chapter 25.13 Three Waters

#### Objective 25.13.2.2

The health and well-being of the Waikato River are protected from the adverse effects of stormwater runoff from subdivision and development and enhanced when development or redevelopment occurs. The Ruakiwi Reservoir Project is located within the catchment of Lake Rotoroa, which ultimately connects to the Waikato River. The project includes a comprehensive stormwater management system designed to protect and enhance water quality, consistent with this objective. Stormwater runoff and clean scour water will be treated prior to discharge, including dechlorination and filtration through raingardens. The discharge outlet has been designed to be low-profile and includes energy dissipation features to prevent erosion and protect the lakebed.

#### Policy 25.13.2.2a

Subdivision and development incorporate on-site stormwater management measures that: Retain increased stormwater volumes and flowrates from new development, prior to discharge: The stormwater system has been designed to accommodate increased runoff from impervious surfaces, with flow rates calculated for a 5% AEP (20-year ARI) event. While retention devices are not included due to the buffering capacity of Lake Rotoroa, the system is designed to manage flows effectively and prevent uncontrolled overland flow.

Protect and improve water quality of receiving environments:

Stormwater from trafficable areas will be treated via raingardens, and clean scour water will be dechlorinated prior to discharge. These measures will improve the quality of water entering Lake Rotoroa and contribute to the lake's ecological health.

Enhance the health and wellbeing of the Waikato River by reducing the effects of existing development at the time of site redevelopment:

The project replaces an outdated scour pipe and introduces modern stormwater treatment infrastructure. This redevelopment reduces the environmental footprint of the site and aligns with the goals of Te Ture Whaimana o Te Awa o Waikato.

#### Objective 25.13.2.4

Three Waters infrastructure is provided as part of subdivision and development, and in a way that is: Integrated, Effective, Efficient, Functional, Safe, Sustainable, Resilient.

The reservoir and associated infrastructure have been designed to meet all of these criteria:

Integrated: The project connects seamlessly with the existing bulk water network and supports the Infrastructure Acceleration Fund programme.

Effective and Efficient: The site's elevation allows for gravity-fed supply to 70% of the central city, reducing energy use and operational costs.

Functional and Safe: The infrastructure is designed to Importance Level 4 (IL4) standards, ensuring resilience and safety in emergency scenarios.

Sustainable and Resilient: The design incorporates ecological restoration, stormwater treatment, and climate adaptation measures, supporting long-term sustainability.

#### Policy 25.13.2.4c

Three Waters infrastructure is to be designed and constructed in accordance with any existing Structure Plan and relevant Integrated Catchment Management Plan.

The project aligns with Hamilton City's strategic planning documents, including Plan Change 12 and the Nature in the City Strategy. While no specific Structure Plan applies to the site, the design reflects integrated catchment management principles and supports the goals of Te Ture Whaimana o Te Awa o Waikato.

The proposed Ruakiwi Reservoir Project has been carefully designed to align with the relevant objectives and policies of the OPD. The assessment demonstrates that the project supports the sustainable use and development of land, protects heritage and ecological values, enhances amenity and public access, and



integrates essential Three Waters infrastructure in a manner that is efficient, resilient, and culturally responsive. Overall, the project is consistent with the strategic intent of the District Plan and contributes positively to the long-term wellbeing of Hamilton's central city and its communities.

### 13.3 Section 171(1)(b) – Alternatives Assessment

Section 171(1)(b) of the RMA 1991 requires that, when considering a Notice of Requirement, the territorial authority must have particular regard to whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work, if:

- the requiring authority does not have an interest in the land sufficient for undertaking the work; or
- it is likely that the work will have a significant adverse effect on the environment.

In this case, HCC, as the requiring authority, owns the land subject to the proposed designation and therefore has sufficient interest in the land to undertake the works. However, given the scale and potential environmental effects of the project, a comprehensive assessment of alternatives has been undertaken as detailed in Section 5 of this AEE.

The alternatives assessment included a city-wide MCA of over 30 potential reservoir sites. These sites were evaluated against a range of criteria including land ownership, proximity to the bulk water network and the Waiora Water Treatment Plant, elevation, energy efficiency, constructability, and environmental constraints. The Ruakiwi Road site was identified as the preferred location due to its operational advantages, existing infrastructure, and ability to service the Central City zone via gravity in the event of power failure.

Further refinement of the site layout was undertaken to minimise environmental and amenity effects, including staging the construction of two reservoirs, integrating the design with the surrounding parkland, and adopting best practice erosion and sediment control and stormwater management measures.

The consideration of alternatives has therefore been robust and proportionate to the scale of the project and its potential effects. The selected site and method represent the most appropriate option to achieve the project objectives while avoiding or mitigating adverse effects to the extent practicable.

# 13.4 Section 171(1)(c) – Reasonably necessary to achieve Project Objectives

Section 171(1)(c) of the RMA 1991 requires consideration of whether the proposed work and designation are reasonably necessary to achieve the objectives of the requiring authority.

HCC's objectives for the Central City Reservoir Project are to provide sufficient potable water storage and supply capacity to support planned urban growth in the central city, improve network resilience, and meet firefighting and operational requirements. The project is also a key deliverable under the Infrastructure Acceleration Fund (IAF), which is intended to unlock housing development through timely infrastructure provision.

The proposed designation is reasonably necessary to achieve these objectives for the following reasons:

- It enables the construction and operation of critical water infrastructure in a location that optimises hydraulic efficiency and energy use.
- It provides certainty for long-term planning and investment in water infrastructure by securing land use rights for both reservoirs and associated infrastructure.
- It allows for staged delivery of infrastructure aligned with population growth forecasts and funding milestones.
- It ensures integration with existing water supply networks and minimises the need for extensive new pipeline infrastructure.



• It supports the Council's strategic planning goals for a compact, resilient, and well-serviced urban centre.

The designation mechanism is the most appropriate planning tool to secure the land and provide for the long-term operation and maintenance of the infrastructure, consistent with the Council's statutory role and responsibilities.

#### 13.5 Part 2 of the RMA

Part 2 of the Resource Management Act sets out the purpose and principles of the Act, which guide all decision-making under the RMA.

The purpose of the Act, as stated in Section 5, is to promote the sustainable management of natural and physical resources. The proposed designation supports this purpose by enabling the efficient use of land for essential infrastructure that supports urban development, while incorporating measures to avoid, remedy, or mitigate adverse environmental effects.

The proposal is consistent with the principles in Sections 6, 7, and 8 of the Act.

#### 13.5.1 Section 6 – Matters of National Importance

Section 6 of the Resource Management Act 1991 identifies matters of national importance that must be recognised and provided for when exercising functions and powers under the Act. The following matters are particularly relevant to the Central City Reservoir Project:

Section 6(a) – The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

The project is located within the catchment of Lake Rotoroa (Hamilton Lake), a significant natural feature within the city. While the reservoir itself is not located within the lake margin, associated infrastructure such as the stormwater outfall and scour discharge pipeline will connect to the lake. The project includes a range of measures to protect the lake's natural character and water quality, including:

- Dechlorination of scour water prior to discharge;
- Use of energy dissipation structures at the lake outlet to prevent erosion;
- Implementation of erosion and sediment control measures during construction;
- Avoidance of direct works within the lakebed, except where necessary for the outfall structure, which has been designed to be low-profile and visually unobtrusive.
- These measures ensure that the natural character of the lake and its margins is preserved and protected from inappropriate development.

Section 6(c) – The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

The site includes a proposed Significant Natural Area (SNA C31), which provides habitat for long-tailed bats (classified as Threatened – Nationally Critical). The project has been designed to minimise impacts on this habitat through:

- Avoidance of key roost trees.
- Staged vegetation removal with arboricultural oversight.
- Implementation of a planting and restoration programme to enhance habitat values post-construction.



These actions demonstrate a commitment to protecting significant indigenous habitats in accordance with Section 6(c).

Section 6(e) – The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga:

The project acknowledges the cultural significance of the site and its proximity to Lake Rotoroa and the Waikato River. Engagement with tangata whenua has been undertaken and will continue throughout the project lifecycle. The project aligns with the principles of Te Ture Whaimana o Te Awa o Waikato and includes measures to protect water quality and cultural values associated with the lake and river.

Section 6(f) – The protection of historic heritage from inappropriate subdivision, use, and development:

The heritage-listed Ruakiwi Water Tower is located within the designation area. The project has been designed to retain and protect this structure, with new infrastructure sited to avoid visual dominance or physical impacts. Future adaptive reuse of the tower is being explored by Council, and the project will not compromise its heritage values.

#### 13.5.2 Section 7 – Other Matters

Section 7 of the Resource Management Act 1991:

Outlines matters to which particular regard must be had when managing the use, development, and protection of natural and physical resources. The following matters are relevant to the Central City Reservoir Project:

#### Section 7(a) – Kaitiakitanga:

The project acknowledges the role of tangata whenua as kaitiaki of the Waikato River and surrounding environment. Engagement with iwi has been undertaken and will continue throughout the project lifecycle. The project aligns with Te Ture Whaimana o Te Awa o Waikato and incorporates measures to protect water quality and ecological values, reflecting a commitment to guardianship and stewardship.

Section 7(b) – The efficient use and development of natural and physical resources:

The reservoir and pump station are designed to optimise energy efficiency and hydraulic performance. The site selection and infrastructure layout minimise the need for additional pumping and long-distance pipework, reducing operational costs and environmental footprint. The reuse of an existing designated site also represents efficient land use.

Section 7(c) – The maintenance and enhancement of amenity values:

The project includes architectural treatments, landscape integration, and public access improvements to maintain and enhance the amenity of the Hamilton Lake Domain. Vegetation removal has been carefully staged, and a comprehensive planting programme will restore and improve the site's visual and ecological character.

Section 7(d) – Intrinsic values of ecosystems:

The project has been designed to avoid and mitigate impacts on significant habitats, including those for long-tailed bats and native bird species. The ecological assessment has informed the construction methodology and vegetation management, ensuring that intrinsic ecosystem values are respected.

Section 7(f) – Maintenance and enhancement of the quality of the environment:

Best practice erosion and sediment control measures, stormwater treatment, and dechlorination protocols will be implemented to protect the quality of the surrounding environment, particularly Lake Rotoroa.



Section 7(g) – Any finite characteristics of natural and physical resources:

The project recognises the finite nature of potable water resources and infrastructure capacity. It is designed to support long-term urban growth while ensuring resilience and sustainability of the water supply network.

Section 7(i) – The effects of climate change:

The reservoir is designed to provide gravity-fed supply to 70% of the central city, enhancing resilience in the event of power outages or extreme weather events. This supports climate adaptation and reduces reliance on energy-intensive infrastructure.

#### 13.5.3 Section 8 – Treaty of Waitangi

Section 8 of the RMA requires that all persons exercising functions and powers under the Act shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). These principles include partnership, active protection, participation, and informed decision-making.

In the context of the Ruakiwi Reservoir Project, HCC has actively engaged with mana whenua throughout the planning process, including commissioning two CIAs from THAWK and Ngaati Wairere. These assessments have informed the design and implementation of the project, ensuring that cultural values, narratives, and tikanga are embedded throughout.

The project aims to empower local iwi and community members to take an active role in the care and interpretation of the site, with provisions for cultural monitoring, site blessings, and the integration of mātauranga Māori into landscape and stormwater design. The inclusion of cultural markers, bilingual signage, and ecological restoration initiatives further reflects a commitment to partnership and cultural visibility. These measures demonstrate that the principles of the Treaty have been meaningfully considered and incorporated into the project's development.

Overall, the designation is considered to be consistent with the purpose and principles of the RMA and represents a sustainable and responsible approach to infrastructure planning that respects and upholds the rights and interests of tangata whenua.

# 14. Non-statutory Assessment

#### 14.1 Introduction

In addition to the statutory planning framework, the proposed designation and associated works must be considered in light of relevant non-statutory documents that guide the management and development of the Hamilton Lake Domain. Chief among these is the Hamilton Lake Domain Management Plan (2017), prepared under the Reserves Act 1977. This plan sets out the vision, principles, strategic goals, and management policies for the Domain, which includes Lake Rotoroa, the surrounding parkland, and Innes Common.

# 14.2 Hamilton Lake Domain Management Plan (2017)

The Management Plan describes the Domain as a significant recreational and ecological asset for Hamilton, valued for its natural beauty, cultural heritage, and role in providing informal and formal recreation opportunities. The vision for the Domain is to provide "an exceptional nature, leisure and recreation experience in the heart of Hamilton." This vision is supported by principles that include:

- Conserving and enhancing the open space natural character.
- Recognising and protecting historic and cultural values.



- Providing informal, no-cost leisure and recreation opportunities.
- Ensuring safe and accessible public spaces.
- Enhancing ecological and environmental values, particularly around Lake Rotoroa.
- Limiting built development to key areas.

The proposed reservoir project aligns with many of these principles. While the development introduces new built infrastructure into the Domain, the chosen site is subject to an existing designation for water infrastructure, and the built form has been carefully designed to integrate with the surrounding landscape. The project includes extensive landscape mitigation, native planting, and public amenity improvements such as pathways, seating, and interpretive signage. These features will enhance public access and recreational use of the Domain, consistent with the Plan's objectives.

The Management Plan also identifies strategic goals for ecological value, including the protection of Lake Rotoroa's water quality and the restoration of native vegetation. The project supports these goals through stormwater treatment measures, dechlorination protocols, and ecological compensation planting. The inclusion of pest management and bat habitat restoration further contributes to the ecological wellbeing of the Domain.

In terms of cultural values, the Management Plan emphasises the importance of recognising and protecting the historic and cultural significance of the Domain. The project responds to this through engagement with mana whenua, incorporation of mātauranga Māori into design, and the retention and enhancement of the heritage-listed Ruakiwi Water Tower. Cultural markers, bilingual signage, and art installations are proposed to reflect the site's history and identity.

HCC is progressing a Reserve Reclassification under Section 24(1) of the Reserves Act 1977 to change the status of the relevant portion of the Domain from Recreation Reserve to Local Purpose (Water Infrastructure) Reserve. This reclassification is necessary to enable the construction and operation of the reservoir infrastructure and will be undertaken in parallel with the Notice of Requirement. The reclassification process includes public notification and engagement, ensuring transparency and alignment with the Management Plan's emphasis on community involvement.

Overall, the project is considered to be consistent with the Hamilton Lake Domain Management Plan. It supports the long-term vision for the Domain by enhancing public amenity, protecting ecological and cultural values, and delivering essential infrastructure in a manner that is sensitive to the park's character and significance.

# 14.3 Hamilton City Council Play Strategy 2019-2039

The Hamilton City Council Play Strategy 2019–2039 sets out a long-term vision for enhancing physical activity and wellbeing through play across the city. It defines play broadly to include organised sport, informal recreation, and spontaneous or "pop-up" play, and recognises the critical role that Council-owned and managed infrastructure plays in enabling these activities.

The strategy's vision—"Hamilton is a great place for everyone to play"—is supported by a purpose statement that commits Council to ensuring the provision of spaces, facilities, and services that enable everyone to play and be active. This aligns closely with the objectives of the Ruakiwi Reservoir Project, which includes landscape integration, public access improvements, and the creation of new recreational features within the Hamilton Lake Domain.



The strategy identifies four outcome areas:

- 1. Hamilton is reimagined as an urban playground The reservoir project contributes to this by enhancing connectivity through new pathways and integrating infrastructure into the park setting.
- 2. Decision-making is informed by evidence and community voice The project has been shaped by community engagement and cultural assessments, reflecting the strategy's emphasis on inclusive planning.
- 3. Play opportunities are achieved through collaborative partnerships The project has involved collaboration with mana whenua and other stakeholders, consistent with the strategy's partnership approach.
- 4. Responsiveness to changing play, sport and recreation trends The design incorporates flexible, multiuse spaces and supports active transport, aligning with contemporary trends in recreation and wellbeing.

The Play Strategy also highlights the importance of equity, accessibility, and safety in play infrastructure. The reservoir project responds to these priorities by providing safe, accessible pathways, seating, and interpretive signage, and by integrating Crime Prevention Through Environmental Design (CPTED) principles.

Importantly, the strategy recognises the role of open space in supporting broader wellbeing outcomes, including environmental and cultural values. The reservoir project supports these outcomes through ecological restoration, stormwater management, and cultural expression in design.

In summary, the Ruakiwi Reservoir Project is consistent with the Hamilton City Council Play Strategy. It contributes to the vision of Hamilton as an active, inclusive, and connected city, and demonstrates how infrastructure development can support play, wellbeing, and community engagement.

# 14.4 Hamilton City Council Nature in the City Strategy 2020–2050

The Nature in the City Strategy 2020–2050 sets out HCC's long-term vision for restoring and enhancing nature across the city. The strategy recognises that nature is not only ecological but also cultural, social, and spiritual, and that thriving ecosystems contribute to the wellbeing of people and communities. The vision—"Nature thrives in Kirikiriroa/Hamilton and nurtures us wherever we are"—is supported by a goal to achieve 10% native vegetation cover by 2050, and four outcome areas that guide Council's actions.

The proposed Ruakiwi Reservoir Project aligns with the Nature in the City Strategy in several key ways:

Ecological Restoration and Connectivity: The project includes native planting, ecological offsetting, and pest management measures that contribute to habitat restoration and biodiversity enhancement. These actions support the strategy's goal of increasing native vegetation cover and creating connected ecological corridors, particularly within the Hamilton Lake Domain and surrounding gully systems.

Integration of Mātauranga Māori and Kaitiakitanga: The project has been developed in partnership with mana whenua, with cultural values embedded in the design, including interpretive signage, cultural markers, and planting of rongoā species. This reflects the strategy's emphasis on uplifting the power of kaitiakitanga and integrating mātauranga Māori into ecological restoration.

Climate Resilience and Green Infrastructure: The reservoir design incorporates low-impact stormwater management, tree planting, and landscape integration, which contribute to cooling, erosion control, and



water quality improvements. These elements align with the strategy's recognition of nature as a key climate adaptation tool and its call for investment in green infrastructure.

Community Engagement and Stewardship: The project includes provisions for public access, education, and community involvement in landscape stewardship. This supports the strategy's vision of nature as a shared responsibility and a source of connection and wellbeing for all Hamiltonians.

Regulatory Alignment: The Nature in the City Strategy is informed by and aligned with statutory frameworks including the Resource Management Act 1991, the Local Government Act 2002, and Te Ture Whaimana o Te Awa o Waikato. The reservoir project has been assessed against these frameworks and incorporates measures to protect ecological values and uphold Treaty principles.

In summary, the Ruakiwi Reservoir Project is consistent with the Nature in the City Strategy. It contributes to the restoration of native vegetation, supports ecological and cultural wellbeing, and demonstrates how infrastructure development can be integrated with environmental stewardship and community values.

### 14.5 He Pou Manawa Ora – Pillars of Wellbeing Strategy

The He Pou Manawa Ora – Pillars of Wellbeing Strategy outlines HCC's commitment to working in partnership with mana whenua and Māori communities to support cultural, social, environmental, and economic wellbeing. The strategy is structured around four pou (pillars): History, Unity, Prosperity, and Restoration, each of which provides a framework for inclusive and culturally responsive development across the city. The proposed Ruakiwi Reservoir Project aligns with the He Pou Manawa Ora strategy in the following ways:

#### Pou Manawa Kōrero – Pillar of History:

The project acknowledges the cultural and historical significance of the Ruakiwi site, including its proximity to Lake Rotoroa and traditional Māori pathways. The retention of the heritage-listed water tower and integration of cultural narratives into the landscape design reflect the strategy's emphasis on celebrating Māori heritage and identity.

#### Pou Torangapu Māori – Pillar of Unity:

The project has been developed in partnership with mana whenua, including the receipt of CIA's from THAWK and Ngaati Wairere. These assessments have informed the design, construction methodology, and mitigation measures, ensuring Māori voices are embedded in decision-making and planning.

#### Pou Taurikura – Pillar of Prosperity:

The project contributes to long-term infrastructure resilience and supports urban growth, including housing development enabled by the Infrastructure Acceleration Fund. It also provides opportunities for employment, cultural expression, and community engagement, aligning with the strategy's goals of equitable access to services and economic wellbeing.

#### Pou Taiao – Pillar of Restoration:

The reservoir development includes ecological restoration, native planting, pest management, and stormwater treatment measures that support environmental enhancement. The project also reflects the principles of Te Mana o te Wai and Te Ture Whaimana o Te Awa o Waikato, recognising the role of mana whenua as kaitiaki and supporting the health of the Waikato River and surrounding ecosystems.

The strategy also emphasises the importance of Te Tiriti o Waitangi principles—Partnership, Participation, Protection, and Prosperity—which are reflected throughout the project's engagement process, design response, and cultural integration.



### 14.6 Papa Ahuareka o Kirikiriroa – Hamilton Open Spaces Strategy 2023–2053

The Hamilton Open Spaces Strategy 2023–2053 sets out a 30-year vision for the city's open space network, recognising open spaces as essential to community wellbeing, environmental resilience, and cultural identity. The strategy defines open spaces broadly to include parks, reserves, gullies, wetlands, civic spaces, and streets, and emphasises their role in supporting recreation, biodiversity, climate adaptation, and placemaking.

The proposed Ruakiwi Reservoir Project aligns with the Open Spaces Strategy in several key ways:

Outcome One: Open Spaces that Reflect Culture and History

The project incorporates cultural design elements, interpretive signage, and indigenous planting, developed in partnership with mana whenua. These features reflect the site's historical and cultural significance and support the strategy's goal of embedding storytelling and mātauranga Māori into open space design.

Outcome Two: Open Spaces for People

The reservoir site will include new pathways, seating, and viewing platforms that enhance public access and amenity. These features contribute to inclusive, safe, and well-used community spaces, particularly in a high-use area like the Hamilton Lake Domain.

Outcome Three: Open Spaces for Nature

The project includes ecological restoration, pest management, and native planting, supporting biodiversity and climate resilience. These actions align with the strategy's emphasis on restoring natural areas, protecting the Waikato River and gully systems, and achieving 10% indigenous vegetation cover by 2050.

Outcome Four: A Connected Network of Open Spaces

The reservoir site is integrated into the wider open space network, with connections to existing trails and recreational areas. The project supports the strategy's goal of creating a well-connected, accessible network that enhances movement, placemaking, and ecological health.

The strategy also highlights the importance of partnership with mana whenua, the principles of Te Tiriti o Waitangi, and alignment with other Council strategies such as Nature in the City, He Pou Manawa Ora, and Our Climate Future. The reservoir project reflects these priorities through its collaborative design process, cultural integration, and environmental stewardship.

In summary, the Ruakiwi Reservoir Project is consistent with the Hamilton Open Spaces Strategy. It contributes to the enhancement of public space, cultural visibility, ecological restoration, and community wellbeing, and supports the long-term vision for a connected, inclusive, and resilient city.



### 15. Conclusion

The Central City Reservoir Project represents a significant and strategic investment in Hamilton's infrastructure, aimed at supporting the city's growth and enhancing its resilience. This project, funded through the IAF, is essential for meeting the increasing demand for potable water in the central city, enabling the development of up to 4,000 new homes and supporting the vision of a "20-minute city" where residents can live, work, and play within the same area 1.

The project involves the construction of two 25-megalitre reservoirs, a valve chamber, and associated infrastructure, all designed to integrate seamlessly with the Hamilton Lake Domain's natural and cultural landscape. The design principles emphasize community and mana whenua involvement, environmental harmony, and cultural heritage, ensuring that the reservoirs are not only functional but also enhance the public amenity and ecological values of the area. Extensive consultation and engagement with local residents, mana whenua, and other stakeholders have been integral to the project's development. This collaborative approach has informed the design and implementation of the project, ensuring that it aligns with the community's needs and values. The project also includes comprehensive mitigation measures to address potential environmental impacts, including ecological compensation, stormwater management, and noise control.

Overall, the Central City Reservoir Project is a well-considered and necessary development that will provide long-term benefits to Hamilton's residents and environment. It reflects a commitment to sustainable urban growth, infrastructure resilience, and community well-being, positioning Hamilton for a prosperous and sustainable future



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# Appendix A – Application Forms



# Appendix B – Design Drawings



# Appendix C – Designation Drawings



# Appendix D – Site Location Assessment



# Appendix E – Certificate of Title



# Appendix F – Construction Transport Assessment and Construction Traffic Management Plan



#### Appendix G – Terrestrial Ecological Impact Assessment



## Appendix H – Geotechnical Design Report



## Appendix I – Heritage Impact Assessment



## Appendix J – Construction Method Statement



# Appendix K – Civil Design Report and Erosion and Sediment Control Plan



# Appendix L – Draft Conditions



## Appendix M – Detailed Seismic Assessment



## Appendix N – Cultural Impact Assessments



#### Appendix O – Landscape and Visual Impact Assessment



## Appendix P – Acoustic Assessment



## Appendix Q – Archaeological Assessment



# Appendix R – Urban Design Panel letter

