<u>Draft NOR conditions – Ruakiwi Reservoir</u>

19 September 2025 version

Pursuant to section 168A of the Resource Management Act 1991, Hamilton City Council as Territorial Authority recommends to Hamilton City Council as Requiring Authority that the notice of requirement for the designation of two new water reservoirs, valve station and associated works be confirmed, subject to the following recommended conditions:

Description of Works

The terms and conditions described herein apply to the designation for the Ruakiwi water supply reservoirs and valve station, specifically for their construction, operation, inspection and maintenance to allow for the storage and supply of water.

Land Subject to the Designation

The designation applies to the area of land shown on the Designation plans CB000-CIV-3010 & 3011 entitled "Central City Reservoir and Pump Station, IAF Projects, Designation Areas Plan View prepared by Holmes and contained in **Appendix A**. The area is described below:

- The land legally described as Lot 2 DP 16167 held in Computer freehold Register (CFR) SA399/80 with an area of 5296 m², and
- An area of 2798 m² of the land legally described as Lot 1 DP 16167 held in Computer Freehold Register (CFR) 263543, and
- An area of 11905 m² of the land legally described within Allot 74 Hamilton West TN Belt held in Computer Freehold Register 263543.

General

 The works to give effect to the designation for the water reservoirs and valve station shall be in accordance with the information provided with the Notice of Requirement for an Alteration to a designation - Ruakiwi Road Reservoir by BBO dated August 2025 including all supporting documents.

Lapse Period

- 2. The designation shall lapse on the expiry of a period of ten (10) years after the date it is included in the District Plan in accordance with section 184 of the Resource Management Act 1991 unless:
 - a. It is given effect to before the end of that period; or
 - b. The Council determines, on an application made within 3 months before the expiry of that period, that substantial progress or effort has been made towards giving effect to the designation and is continuing to be made, and fixes a longer period for the purpose of this subsection.
- 3. For the avoidance of doubt, the designation shall be considered to have been given effect to on the completion of Reservoir 1.

Built Form

4. The layout of the Reservoir 1 and the valve station shall be in accordance with the 90% Preliminary Design plans prepared by Holmes and included as Appendix B to the NoR and the Designation Drawings prepared by Holmes (Ref: CB000-CIV-3010 and 3011) included as **Appendix C** to the NoR.

Cultural induction & monitoring

- 5. At least 15 working days prior to the commencement of earthworks, the Requiring Authority shall invite Ngaati Wairere, and Te Haa o te Whenua o Kirikiriroa (ThawK) to give a cultural induction on the subject site to all relevant contractors to be involved with earthworks and construction associated with this development. The Requiring Authority shall notify the Council and Mana Whenua in writing at least 5 working days prior to earthworks commencing on the site.
- 6. The Requiring Authority shall, prior to commencement of earthworks and on an on-going basis for that activity, invite Ngaati Wairere, and Te Haa o te Whenua o Kirikiriroa (ThawK) to undertake cultural monitoring of earthworks. The details of such monitoring to be agreed between the Requiring Authority and Mana Whenua.

Construction Management Plan

- 7. At least 20 working days prior to the proposed commencement of activities authorised by this designation the Requiring Authority shall provide the Hamilton City Council's Chief Executive Officer (or nominee) with a Construction Management Plan (CMP) for certification that it meets the objectives in condition 8 (a) to (l).
- 8. The objective of the CMP is to outline the approach to be taken for the managing of construction works to ensure that impacts that may arise from the works have been appropriately identified, managed and minimised. As a minimum, the CMP shall include:
 - a. Details of the site manager, including 24-hour contact details (telephone, email, and postal address),
 - b. The proposed start date of the works authorised by this designation,
 - c. A schedule of construction activities,
 - d. Staging of the project including the commencement date and expected duration of the cut and fill operations and staged construction of the reservoir and valve station,
 - e. The location of a large notice board on the site visible from a public place that clearly identifies the name, telephone number, email, and address for service for the site manager,
 - f. Measures to maintain the site in a tidy condition in terms of the storage and disposal of rubbish, unloading and storage of building materials and similar construction activities,
 - g. Proposed hours of work on the site (noting the working hours authorised by the conditions of this designation),
 - h. Procedures for ensuring that the owners and/or occupiers in the immediate vicinity of the construction area are given prior notice of the commencement of construction activities and are informed about the expected duration of works and potential effects of the works (e.g. noise associated with construction activities, extended concrete pours

- etc). The minimum area of owners and/or occupiers are to be those shown on the plan attached as **Appendix B** to these conditions,
- Temporary protection measures surrounding existing trees 1 to 10 inclusive as shown on page 048 of the Ruakiwi Reservoirs Hamilton Lake Domain Landscape Concept Plans comprising Appendix G to the Landscape and Visual Assessment Report,
- j. Temporary protection measures that will be installed to ensure that existing trees 41, 42 and 43 are protected as shown on the plans set out on page 047 of the Ruakiwi Reservoirs Hamilton Lake Domain Landscape Concept Plans comprising Appendix G to the Landscape and Visual Assessment Report.
- k. Dust management technique and procedures to ensure that all dust and particulate emissions are kept to a practical minimum to the extent that there are no dust discharges beyond the boundary of the site that may cause an objectionable effect.
- I. Any measures to address the management of hazardous substances used on the site;
- 9. The CMP shall be implemented for the duration of the construction works period associated with Reservoir 1. A revised version of the CMP shall be developed and implemented for the duration of the construction works period associated with Reservoir 2.
- 10. Any changes to the CMP shall be made in accordance with the methodology and approved procedures in that plan and shall be confirmed in writing by the Requiring Authority following consultation with the Hamilton City Council's Chief Executive or nominee (before implementation).

Heritage Management Plan

- 11. At least 20 working days prior to the date construction work (including earthworks) is commenced on site, the Requiring Authority shall submit a Heritage Management Plan (HMP) to Hamilton City Council's Chief Executive or nominee for certification that the plan meets the objectives in Condition 12 (a) to (d).
- 12. The objective of the HMP shall be to:
 - a. Ensure that the structural integrity of the existing heritage ranked water tower is not adversely affected by the construction of the new reservoirs, valve station and surrounding landscape elements.
 - Ensure that post de-commissioning, the existing water tower is returned as close as
 possible to its original state and setting (excluding the roof, communications
 facilities and stairs).
 - c. Describe how the Requiring Authority will maintain an ongoing relationship with Heritage NZ in relation to the care and maintenance of the heritage ranked water tower, including interpretative information for the public.
 - d. Describe how the Requiring Authority will programme the seismic strengthening work as set out in the Detailed Seismic Assessment.
- 13. The HMP shall, as a minimum, address the following matters:

- a. Provide a heritage plan (text and graphics) for the water tower and its immediate surroundings which details the following:
 - i. Buildings and features to be removed,
 - ii. Existing trees to be removed,
 - iii. Removal of existing paint and graffiti to return the water tower to its original concrete,
 - iv. Location and type of new trees to be planted,
 - v. Location and content of interpretive panels,
 - vi. Survey marks, including location and monitoring before and after conditions.
 - vii. Recreation of "cone shaped" area immediately surrounding the water tower.
 - viii. Outline measures that will be taken to protect existing heritage fabric from damage during construction.

Noise & Vibration

14. Construction noise shall be measured and assessed in accordance with the provisions of New Zealand Standard NZS 6803:1999 "Acoustics – Construction Noise" and comply with the limits in the following table, except where authorised by the required CNVMP in Condition 15.

Time	Weekdays (dBA)		Saturdays (dBA)		Sundays and Public Holidays (dBA)	
	\mathbf{L}_{eq}	L_{max}	\mathbf{L}_{eq}	\mathbf{L}_{max}	L_{eq}	L_{max}
0630 - 0730	55	75	45	75	45	75
0730 – 1800	70	85	70	85	55	85
1800 – 2000	65	80	45	75	45	75
2000 - 0630	45	75	45	75	45	75

- 15. All construction work shall comply with the vibration limits in German Standard DIN 4150-3:2016 "Vibration in buildings Part 3: Effects on structures" when measured in accordance with that Standard on any structure not on the same site.
- 16. The construction works shall only be carried out between the hours of 7:30am to 6:00pm, Monday to Friday and shall not be carried out on any Sunday or public holiday. This restriction does not apply to the following activities which shall be specifically managed under the Construction Noise Management Plan (CNMP):
 - a. site specific concrete pours;
 - b. the delivery of oversized loads and equipment;
 - c. tie ins to existing networks;
 - d. Arrival to site of construction crews and start up/toolbox meetings and health and safety briefings;
 - e. Dewatering or over-pumping operations requiring 24/7 operation;

- f. Commissioning activities requiring 24/7 operations.
- g. Trenching across roadways to avoid road closures during the day (except for initial saw cuts which shall be completed within the hours specified in condition 13.

Construction Noise and Vibration Management Plan

- 17. At least 20 working days prior to the date construction work (including earthworks) is commenced on site, the Requiring Authority shall prepare a Construction Noise and Vibration Management Plan (CNVMP) which shall be submitted to Hamilton City Council's Chief Executive or nominee for certification that it meets the objectives in condition 18 (a) to (c).
- 18. The objective of the CNVMP is to set out the Best Practicable Option for the management of noise and vibration effects. The plan shall be prepared by a suitably qualified and experienced person in construction noise and vibration and shall provide for the following objectives:
 - a. Designed and implemented to demonstrate compliance with the requirements of NZS6803:1999 Acoustics Construction Noise; and
 - b. Designed and implemented to demonstrate compliance with German Standard DIN 4150-3:1999 Structural Vibration Effects of Vibration on Structures; and
 - c. Implemented in accordance with the requirements of section 16 of the Resource Management Act 1991, so as to adopt the best practicable option to ensure the emission of noise from construction works does not exceed a reasonable level.
- 19. In order to achieve the objectives established in condition 18 above, the CNVMP shall, as a minimum, address the following matters:
 - a. Construction noise criteria
 - Identification of likely affected properties (off-site) which shall include (as a minimum) those properties identified in Appendix C of the Marshall Day Acoustics Assessment of Acoustic Effects dated 7 August 2025;
 - c. Site Manager as per condition 8 (a) of this designation.
 - d. Description and duration of the works, anticipated equipment and the processes to be undertaken.
 - e. Hours of operation, including specific times and days when construction activities causing noise would occur but not limited to early morning concrete pours,
 - f. Identify and adopt the BPO for minimising adverse construction noise effects on neighbours including specific mitigation measures to be implemented when noise levels approach or exceed relevant limits. Such measures shall include but not be limited to:
 - i. the site hoarding shown as Figure 5 in the Marshall Day Acoustics Assessment of Acoustic Effects dated 7 August 2025 including the guidance on the design and use of temporary noise barriers as contained in Section 6.0 of that same report.
 - ii. time management and
 - iii. alternative construction methodologies.

- g. Schedule and methods for sound level monitoring by a suitably qualified and experienced person in construction noise (a third party acoustic consultant) of the first occurrence of earthworks to confirm compliance with the construction noise limits;
- h. Define the procedures to be followed to ensure that the construction noise and vibration standards set out in these conditions are being met.
- A complaint management procedure, which shall include the use of sound and vibration level monitoring if required.
- j. Details of the process for ensuring contractors and operators are aware of the potential for noise and vibration effects on neighbours and procedures for the minimisation of noise and vibration as far as practicable.
- 20. Construction works shall not commence until certification of the CNVMP has been received in writing from the Hamilton City Council's Chief Executive or nominee.
- 21. All construction works shall be carried out in accordance with the certified Construction Noise and Vibration Management Plan.
- 22. Any changes to the CNVMP shall be made in accordance with the methodology and certification procedures in that plan and shall be confirmed in writing by the Requiring Authority following consultation with the Hamilton City Council's Chief Executive (or nominee) before implementation.

Construction Traffic Management Plan

- 23. At least 20 working days prior to the date construction work (including earthworks) is commenced on site, the Requiring Authority shall submit a Construction Traffic Management Plan (CTMP) to Hamilton City Council's Chief Executive or nominee for certification that the plan meets the objectives in Condition 24 (a) to (c).
- 24. The objective of the CTMP shall be to:
 - a. Ensure all legislative requirements and designation conditions in relation to construction traffic are adhered to:
 - b. Minimise disruption to the local road users and local residents;
 - c. Keep the local community informed of construction operations.
- 25. In order to achieve the objectives established in condition 24 above, the CTMP shall, as a minimum, address the following matters:
 - a. Hours of operation;
 - b. Vehicle parking requirements for site staff, contractors, and sub-contractors
 - c. Ingress and egress to and from the site for vehicles and construction machinery during the works period;
 - d. How deliveries would be made to the site, the location of loading activities, and how heavy or over-dimension vehicles would be brought to and removed from the site;
 - e. Numbers and timing of truck movements throughout the day, their proposed routes and management of their ingress and egress around nearby school drop off and pick up times;

- f. Wheel washing facilities (if required to ensure that material is not tracked onto Ruakiwi Road);
- g. Maintenance of vehicular access to all adjacent properties throughout construction;
- h. Signage (this should include signage that warns the public of vehicle movements);
- i. Ensuring access to neighbouring properties is not compromised;
- j. Staging of the project; and
- k. Any other general issues that are applicable as listed within the standard CTMP guidelines.
- 26. The CTMP shall be prepared in accordance with the Waka Kotahi New Zealand Transport Authority's Code of Practice for Temporary Traffic Management and shall be complied with at all times throughout construction.
- 27. Any changes to the CTMP shall be made in accordance with the methodology, and certified procedures outlined in the plan. Amendments shall be confirmed in writing by the Requiring Authority following consultation with the Hamilton City Council's Chief Executive or nominee (before implementation).

Works in proximity to Retained Trees

- 28. Prior to any works commencing including site preparation:
 - a. The Requiring Authority shall engage the services of a suitably qualified and experienced on-site supervising arborist, having a minimum NZQA level 4 qualification in arboriculture and sound knowledge of the Australian Standard AS-4970-2009, Protection of trees on development sites. They are to supervise and coordinate all works and activities relating to tree protection. They will be the point of communication between the site team and Council.
 - b. Appropriate tree protection fencing or area marking shall be erected around Retained Trees 41, 42 and 43 as shown on the Adrian Morton/Edwards White/Brodie Hailwood plan 4.1 entitled "Tree Removal Strategy" included as an Appendix to the application. The tree protection fencing shall be designed and installed in accordance with plan 4.1.
 - c. Appropriate tree protection fencing or area marking shall be erected around Retained Trees 1, 2, 3, 4, 5, 7, 8, 9, 10 and 15 as shown on the Adrian Morton/Edwards White/Brodie Hailwood plan 4.2 entitled "Existing Trees to be removed" included as an Appendix to the application. The fence or area marking shall serve to demarcate a construction exclusion zone.
 - d. Suitably visible weather-resistant signs shall be hung on each face of the tree protection fence that states the following: "Construction Exclusion Zone Tree Protection Area Keep Out".

Tree Protection Management Plan

- 29. At engineering design stage, a Tree Protection Management Plan ("TPMP") shall be prepared by a suitably qualified and experienced arborist and submitted to Hamilton City Council's Chief Executive (or nominee) for certification that the plan meets the objective in condition 30.
- 30. The objective of the TPMP is to ensure that the proposed construction works will not compromise the survival of Trees 1 to 10 and 41, 42 and 43 as set out on the Adrian Morton/Edwards White/Brodie Hailwood plans 4.1 and 4.2 in **Appendix C.**
- 31. The TPMP shall provide details of the construction foundations for Reservoir 1 and associated works (ie. Impermeable surfaces, paths, underground services, sheet pile locations) within the root protection zone or canopy, whichever is the greater.

The TPMP shall include the following (but not limited to):

- a. Pruning of Retained Trees 1 to 10, 41, 42 and 43;
 - i. Maximum amount of foliage to be removed
 - ii. The maximum pruning of living canopy and branches required
- b. Activities in the Root Protection Zone of Retained Trees 1 to 10, 41, 42 and 43;
 - Maximum thickness (cross-section at point of severance) of any root that will be cut
 - ii. The maximum soil level depth
 - iii. Mulch layer depth
 - iv. Area of earthworks using mechanical or non-mechanical practices for the purpose of installing and/or replacing underground services.
- 32. Methodology for pruning and activities within the root protection zone, including measures to minimise the extent of disturbance, and to ensure the ongoing health, wellbeing and longevity of the trees.
- 33. The TPMP shall be amended by the Requiring Authority, if required, until they are stamped as 'certified' by Hamilton City Council's Chief Executive (or nominee). No work for Reservoir 1 shall commence until the TPMP is certified.
- 34. The certified TPMP shall be implemented. Any amendments to the proposal or methodology shall be submitted for certification by the Hamilton City Council's Chief Executive (or nominee) prior to any works for Reservoir 1 commencing.

Post Works Tree Protection Methods

- 35. At the completion of works, the supervising arborist, at their discretion, shall 'sign off' the work of the contractor and provide a brief account of the project to Council's arborist (if necessary, with photos). The account of works shall include, but not be limited to:
 - a. The effects of the works on the subject trees,

b. Any remedial work that may be necessary

EARTHWORKS

Pre-Start Conditions

Erosion and Sediment Control

- 36. At least 10 working days prior to the commencement of earthworks within any part of the site, the Requiring Authority shall provide the Hamilton City Council's Chief Executive or nominee with a finalised Erosion and Sediment Control Plan (ESCP) in general accordance with the plans referenced in this designation.
- 37. The objective of the ESCP shall be to minimise sediment discharge from the site to the extent practicable over the earthworks period. Details of a chemical treatment plan shall also be provided, if required or proposed to be utilised on-site.
- 38. The ESCP shall be certified in writing by the Hamilton City Council's Chief Executive or nominee acting in a technical certification capacity prior to any works authorised by this designation commencing and the Requiring Authority shall undertake all earthworks authorised by this designation in accordance with the certified ESCP.
- 39. Any changes proposed to the ESCP shall be confirmed in writing by the Requiring Authority and certified in writing by the Hamilton City Council's Chief Executive or nominee acting in a technical certification capacity, prior to the implementation of any changes proposed.
- 40. The Requiring Authority shall ensure that a copy of the certified ESCP, including any approved amendments, is kept on-site and this copy is to be updated within 5 working days of any amendments being approved.
- 41. Prior to bulk earthworks commencing on any area, the Requiring Authority shall submit to the Hamilton City Council's Chief Executive or nominee a certificate signed by an appropriately qualified and experienced engineer to certify that the erosion and sediment controls have been constructed in accordance with the approved erosion and sediment control plans and in accordance with the document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities January 2009". Certified controls shall include any sediment retention pond, decanting earth bunds, silt fences and diversion channels/bunds. The certification for these measures shall be supplied within five working days of completion of construction of those measures.

Information supplied if applicable shall include:

- a. Contributing catchment area; and
- b. Retention volume of structure; and
- c. Shape and dimensions of structure; and
- d. Position of inlets/outlets; and
- e. Stabilisation of the structure; and
- f. Compliance with the Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities January 2009" (Technical Report No. 2009/02); and

g. Compliance with any relevant conditions of this designations.

Planting and Vegetation Removal Conditions

<u>Vegetation Removal – Bat Management Plan</u>

- 42. Prior to any vegetation removal, the Requiring Authority shall submit and have certified by the Hamilton City Council Chief Executive or nominee, a Bat Management Plan (BMP), incorporating Vegetation Removal Protocols (VMP). The BMP shall be prepared by a suitably qualified and experienced ecologist. The BMP shall provide the following:
 - a. A map identifying all trees (alive and standing dead) that are ≥15 cm DBH (Diameter at Breast Height),
 - A pre-felling survey method for trees identified in (a) above that is consistent with the
 Department of Conservation "Protocols for minimising the risk of felling occupied bat
 roosts", produced by the NZ DoC Bat Recovery Group 2024), or any update to that
 document,
 - c. Guidance for the use of artificial bat roosts for mitigating loss of roosts, in accordance with the New Zealand Bat Recovery Group Advice.

Vegetation Removal – Avifauna Management Plan

- 43. The Requiring Authority shall engage a suitably qualified ecologist(s) to prepare and implement an Avifauna Management Plan (AMP) across the subject site. The objective of the AMP is to protect native birds during construction works. The AMP shall be provided to Council's Chief Executive (or nominee) for certification at least 20 working days prior to commencing construction works on the site.
- 44. Vegetation to be removed shall be inspected for nesting of native birds. If nesting birds are detected, exclusion zones shall be implemented until fledging of chicks is completed.
- 45. The AMP shall record the following information in support of achieving condition 43:
 - a. A description of the methodology for pre-vegetation clearance nesting bird surveys including consideration of:
 - i. the nesting periods of native birds present onsite; and
 - ii. appropriate timing of vegetation clearance and surveys;
 - b. The details for exclusion zones around nesting birds until fledging of chicks if detected within proposed vegetation clearance areas; and
 - c. Protocols for dealing with injured or dead birds encountered during the works.
- 46. The certified AMP shall be implemented for the duration of earthworks for each stage of the project.

Ecological and Landscape Management Plan

47. At least 20 working days prior to the date construction work (including earthworks) is commenced on site, the Requiring Authority shall submit an Ecological and Landscape

Management Plan (ELMP) to Hamilton City Council's Chief Executive or nominee for certification that the plan meets the objectives in Condition 48 (a) to (d).

48. The objective of the ELMP shall be to:

- a. Ensure the reservoirs and valve chamber are integrated into the Lake Domain through the combination of landscape and tree planting and paths.
- b. Provide 21 artificial bat roost boxes and 21 artificial bat roost features with predator proof banding above and below.
- c. Provide 7.4 hectares of pest mammal control within the Lake Domain.
- d. Provide 0.58 hectares of planting within the Lake Domain.

49. The ELMP shall, as a minimum, address the following matters:

- a. Provide a detailed landscape planting plan based on the Ruakiwi Road Water Reservoir Landscape Plans Pages 057, 058 and 059 and prepared by Adrian Morton Landscape Architects, Edwards White Architects and Brodie Hailwood to provide the following:
 - i. A schedule of species to be planted including botanical name, average plant size at time of planting, planting density and average mature height of each plant.
 - ii. Maintenance specifications including weed control, pest plant control and animal control necessary to ensure the successful establishment of the plants over a two year period following planting.
 - iii. Requirements for monitoring of, and reporting on the successful establishment of the planting.
 - iv. A staging plan to detail those trees to be removed or transplanted to facilitate the construction of Reservoir 1 and those trees that will be tagged and retained until the commencement of the construction of Reservoir 2.
 - v. Identification of those trees to be removed around the base of the heritage water tower to enhance sight lines and uphold the visual amenity of the water tower.
- b. Provide a detailed ecological plan based on the Ecological Impact Assessment Report prepared by Tonkin and Taylor to provide the following:
 - i. the location of the 21 artificial bat roost boxes and 21 artificial bat roost features within the Hamilton Lake Domain.
 - ii. showing where the 7.4 hectares of pest mammal control will be located within the Hamilton Lake Domain and how that pest mammal control will be carried out.
 - iii. showing where the 0.58 hectares of planting will be located within the Hamilton Lake Domain and how that planting will be established, monitored and maintained.
- 50. The information submitted for certification under condition 64 shall include evidence of consultation with Ngaati Wairere and ThawK and including the following matters:
 - a. Identification of any cultural artworks/markers:
 - b. Location for a story board explaining the pre-European history of the area to be erected at an appropriate location near the main entranceway/s to the site;

- c. Final landscaping species selection.
- 51. No hard or soft landscaping works shall commence on site for the relevant stage of works until the landscape plans required by condition 61 are certified, with stamped copies being held on the site during the landscaping works.
- 52. All hard and soft landscaping (including fencing) associated with Reservoir 1 shall be implemented during the first planting season after construction works are completed and shall be thereafter maintained by the Requiring Authority.

During Construction

Certified Management Plans

53. The Requiring Authority shall maintain and implement the certified management plans throughout the entire earthworks and construction period. Any proposed changes to a certified management plan shall be prepared using the process set out in the certified management plan and submitted to the Hamilton City Council Chief Executive or nominee for re-certification. Such certification shall be obtained before the amended management plan is implemented.

Erosion and Sediment Control

- 54. The Requiring Authority shall ensure that all sediment laden run-off from the site is treated by sediment retention structures. These structures shall be fully operational before bulk earthworks commence and shall be maintained to perform to at least 80% of their full operational capacity.
- 55. The Requiring Authority shall ensure that all clean water run-off from stabilised surfaces including catchment areas above and around the site shall be diverted away from the earthworks area via a stabilised diversion system.
- 56. The Requiring Authority shall ensure that all erosion and sediment controls are inspected and in good working order prior to, and immediately after rain events. The Requiring Authority shall further ensure that all erosion and sediment controls are maintained such that optimal sediment capture efficiency is achieved at all times.
- 57. The Requiring Authority shall construct two stabilised construction entrances as set out in the HCC Central City Reservoir Construction Transportation Assessment and shall manage all traffic leaving the site to prevent the tracking of sediment onto Ruakiwi Road.
- 58. In the event that any persistent sediment tracking effects are identified, the Requiring Authority shall install an appropriate wheel wash facility to prevent any on-going effects.
- 59. The erosion and sediment controls specified in the Erosion and Sediment Control Plan, shall not be disestablished without the prior written certification by the Hamilton City Council Chief Executive or nominee, acting in a technical certification capacity.

Geotechnical

- 60. Earthworks shall be supervised by a suitably qualified professional geotechnical engineer in accordance with NZS4431:2022¹. In supervising the works, the suitably qualified engineering professional shall ensure that they are implemented and completed in accordance with the certified earthworks plans and geotechnical investigation report.
- 61. The surcharge (pre-load) required as part of the mitigation of static settlement associated with the placement of fill and future building loads shall remain in place until it can be demonstrated that settlements have reached t90 as per the recommendations of the Geotechnical Summary Report dated 17 July 2025, Ref. HAM2023-0099AI Version B.
- 62. On completion of the earthworks a geotechnical completion report shall be prepared by a suitably qualified professional geotechnical engineer presenting the earthworks testing and verification results, and settlement monitoring data

Stockpiles

- 63. If the stockpile material contains silt or is erosion-prone, the Requiring Authority shall place topsoil on top of the stockpile before stabilisation.
- 64. If a stockpile is to be stored for longer than 1 week, the Requiring Authority shall seal, mulch and stabilise the stockpile to minimise potential erosion and sedimentation. Controls are to remain until stockpiles are removed or used on site.
- 65. No stockpiles shall be placed in an identified overland flow path.

Machinery

66. All earthmoving machinery, pumps and generators shall be operated in a manner which ensures that spillages of fuel, oil and similar contaminants are prevented, particularly during refuelling and machinery servicing and maintenance. Refuelling and lubrication activities shall be carried out away from any surface water such that any spillage is contained and does not enter any surface water or public drainage systems.

Archaeological/Cultural

- 67. The Requiring Authority shall ensure that the exercise of this designation does not disturb any archaeological sites or sites of cultural significance to Tangata Whenua. In the event of any archaeological features being discovered, the following protocols shall be followed:
 - a. All work within 20m of the discovery shall cease immediately. The contractor/works supervisor will shut down all equipment and activity.
 - b. The 20m radius area shall be secured by the Requiring Authority.
 - Hamilton City Council, Heritage New Zealand Pouhere Taonga, Ngaati Wairere and ThawK (where sites are of Māori origin) shall be notified within 24 hours of the discovery.

¹ Standards New Zealand (2022) Engineered fill construction for lightweight structures, NZS 4431:2022

- d. The Requiring Authority shall consult with representatives of Ngaati Wairere and ThawK to determine what further actions are appropriate to safeguard the discovered archaeological/cultural feature.
- e. Heritage New Zealand Pouhere Taonga will determine if an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014 is required for works to continue.

Advice Note: It is an offence under s87 of the Heritage New Zealand Pouhere Taonga Act 2014 to modify or destroy an archaeological site without any authority from Heritage New Zealand irrespective of whether the works are permitted or consent has been issued under the Resource Management Act 1991.

- 68. Works may recommence on the written certification by the Hamilton City Council after considering:
 - a. Tangata Whenua interests and values;
 - b. Protocols agreed upon by Tangata Whenua and the Requiring Authority;
 - c. The Requiring Authority's interests;
 - d. Any Heritage New Zealand Pouhere Taonga authorisations; and
 - e. Any archaeological or scientific evidence.
- 69. In the case where human remains have accidentally been discovered or are suspected to have been discovered, the following is also required:
 - a. The 20m radius area shall be immediately secured by the Requiring
 Authority/contractor in a way which ensures human remains are not further disturbed.

 The Requiring Authority or proponent shall be advised of the steps taken.
 - b. The NZ Police shall be notified of the suspected human remains as soon as practicably possible after the remains have been disturbed.
 - c. Hamilton City Council, Heritage New Zealand Pouhere Taonga and the project Tangata Whenua Working Group shall be notified within 12 hours of the discovery.
 - d. Excavation within 20m of the discovery shall not resume until the NZ Police, Heritage New Zealand Pouhere Taonga and the relevant iwi have each given the necessary approvals for excavation to proceed.

Design Requirements

Operational Noise

70. The cumulative noise emission from all activities on the site (excluding construction noise) shall not exceed the rating noise levels in the following table during the stated times at any point within the boundary of any other site in the residential zone. In the event it is necessary to determine compliance with the noise limits, noise levels shall be measured in accordance with NZS6801:2008 'Acoustics – Measurement of Environmental Sound' and assessed in accordance with NZS6802:2008 'Acoustics – Environmental Noise' before comparison with those levels.

Time of day	Noise level measured in Laeq (15-mins)	Noise level measured in LAF max
0600 – 0700 hours	45dB	75dB
0700 – 2000 hours	50dB	
2000 – 2300 hours	45dB	
2300 – 0600 hours	40dB	75dB

Lighting Design

- 71. A Lighting Management Plan (LMP) shall be provided to Hamilton City Council's Chief Executive or nominee for certification at least 40 working days prior to the completion of Reservoir 1. The objective of the LMP is to set out the Best Practicable Option for the management of lighting effects. The plan shall be prepared by a suitably qualified and experienced person in lighting design and shall provide for the following objectives:
 - a. The spill of light from artificial lighting from the activities within the designation on to any other adjacent residential property shall not exceed 3 lux (horizontal and vertical) when measured or calculated at points 1.5m within the boundary of the adjacent residential property.
 - b. The lighting design for the site shall also take account of the potential for bat roost habitat surrounding the reservoir locations.

Completion of Earthworks

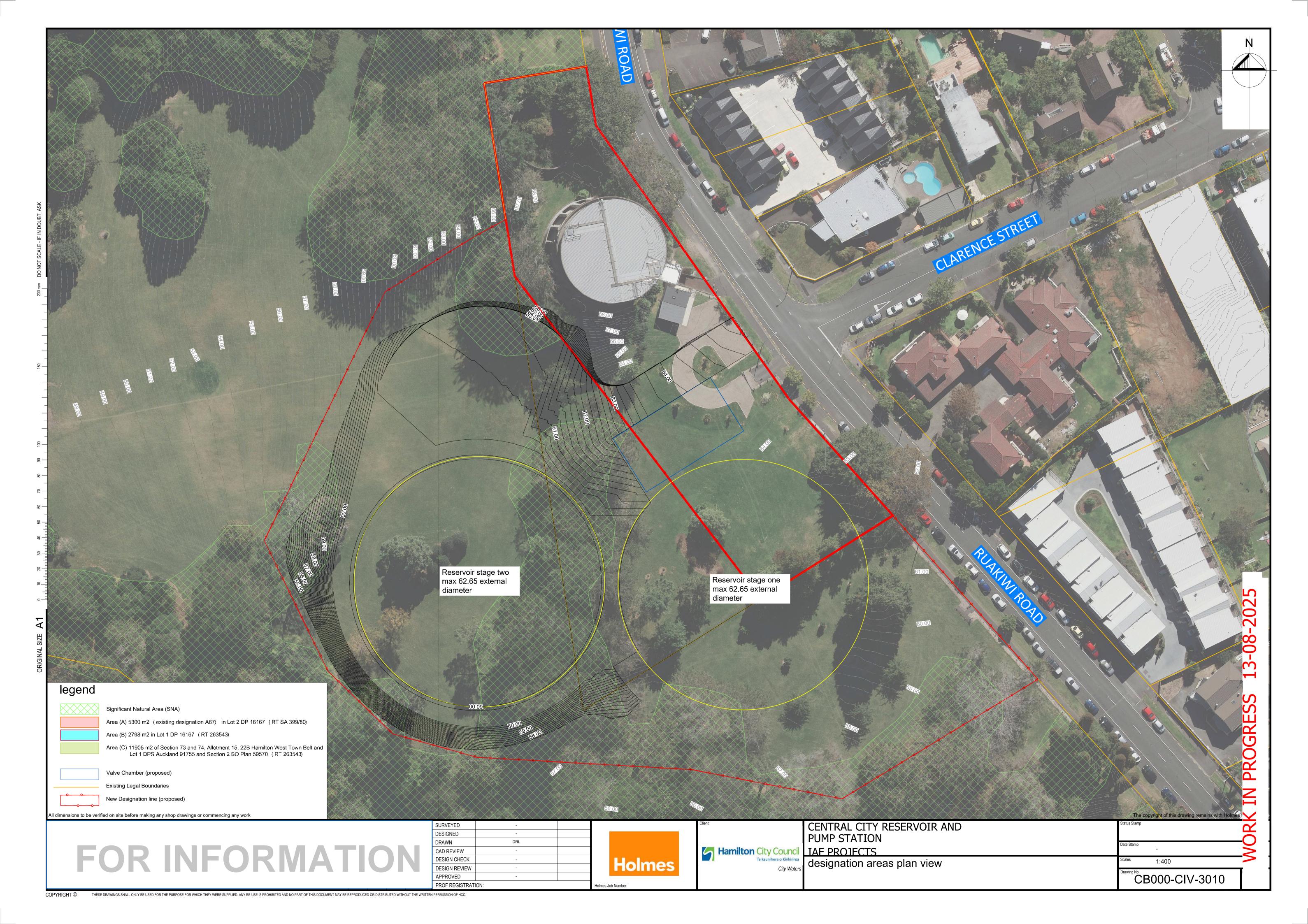
Stabilisation/Rehabilitation

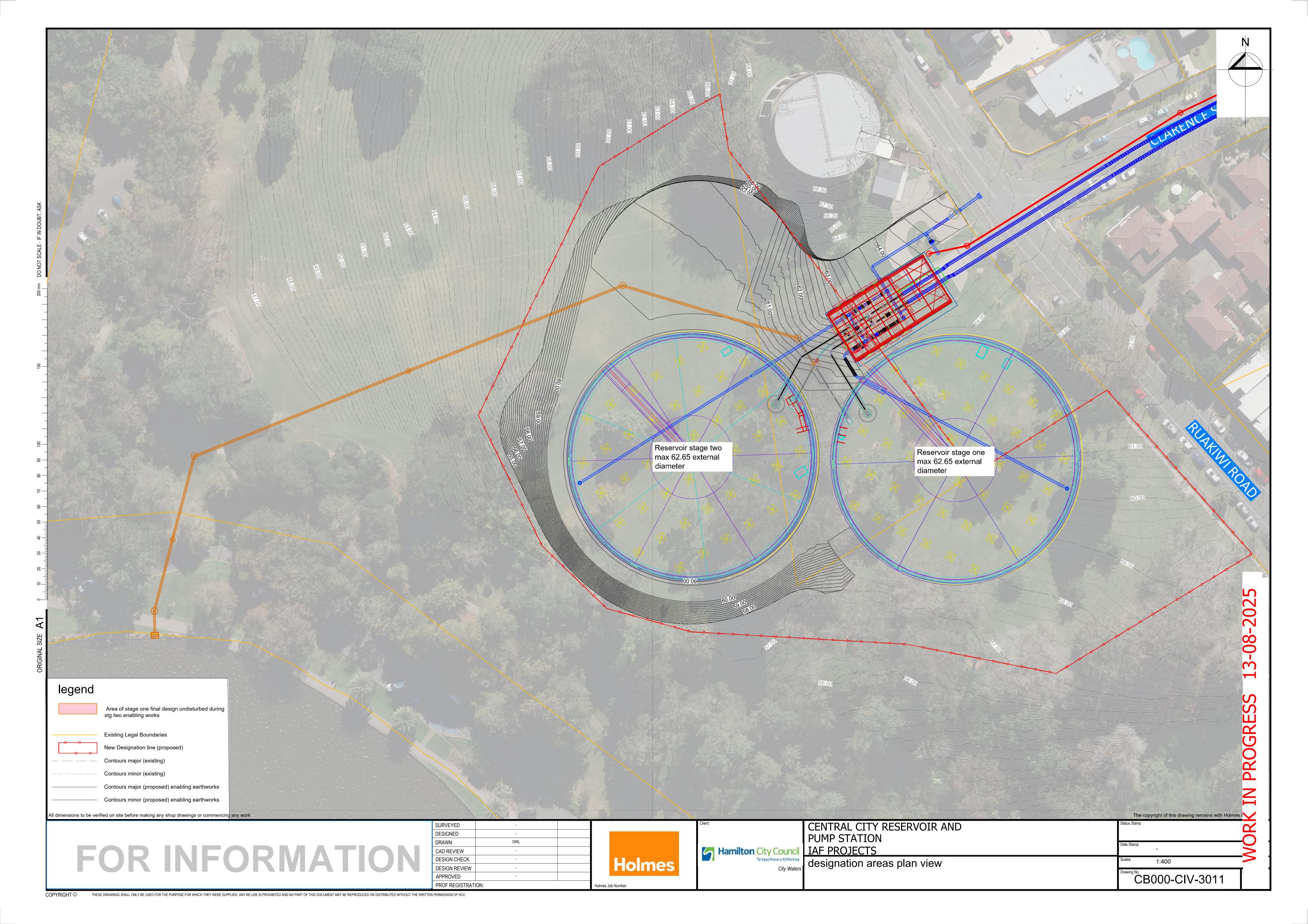
- 72. The site shall be stabilised against erosion as soon as practicable and in a progressive manner as earthworks are finished over various areas (catchments) of the site. The Requiring Authority shall monitor and maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any watercourse.
- 73. All areas of bare earth shall be re-vegetated or re-grassed as soon as practicably possible and within three calendar months following the completion of earthworks. If this cannot be achieved, the area shall be temporarily covered by a surface suitable to protect against soil erosion until such time as re-vegetation or re-grassing can occur.

Advisory Notes:

- a) Following the issue of the alteration to designation decision and pursuant to section 176(A)(2) (b) of the Resource Management Act, Council will issue a waiver of the requirement for an Outline Plan of Works under Section 176 (3) on the basis that the details of proposed Reservoir 1 are already incorporated into the designation.
- b) An Outline Plan of Works will need to be submitted by the Requiring Authority prior to the construction of Reservoir 2.

Appendix A Designation Plans

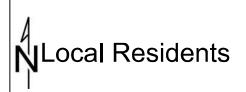




Appendix B Neighbours plan for CMP information



Map Prepared



DISCLAIMER: This map/plan is illustrative only and all information should be independently verified on site before taking any action. Whilst due care has been taken, Grip gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information.

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Appendix C Landscape plans 4.1 & 4.2

Tree Removal Strategy

The Project will require a moderate amount of tree removal to enable the construction of the reservoirs and ancillary valve chamber building.

Based on the arborist report the macrocarpas have reach maturity with most having canker disease, which although is not fatal, affects their long-term vitality and potential of retention. The position of the reservoirs and construction access areas has been adjusted to minimise the potential effects on tree root zones and to avoid tree removal where possible.

The tree removal will be staged and will be co-ordinated to align with the construction of each of the reservoirs, which will also assist in reducing the visual effects of the tree loss across two separate periods.

Although there are a moderate number of trees that will be removed, the strategy to retain as many as possible (by adjusting the reservoir and construction access) and implementing a staged removal will assist in reducing the overall change in landscape and visual amenity.

To accommodate the first reservoir, the removal of 58 trees is proposed. This includes:

- 12 native trees 9 will be transplanted within the Hamilton Lake Domain, 1 is in poor health, and 2 are Pittosporum trees that are too large to transplant.
- 46 exotic trees all of which will be removed, 21 will be transplanted. 18 of these are in below-average or poor health. One tree, a Cupressus lusitanica, is protected under the Hamilton District Plan. It is too large to transplant and will require removal as part of the designation process.

When the second reservoir is constructed in 2040, a further 14 trees are proposed to be removed.

PROTECTING EXISTING TREES

Refer to Plan on page 18.

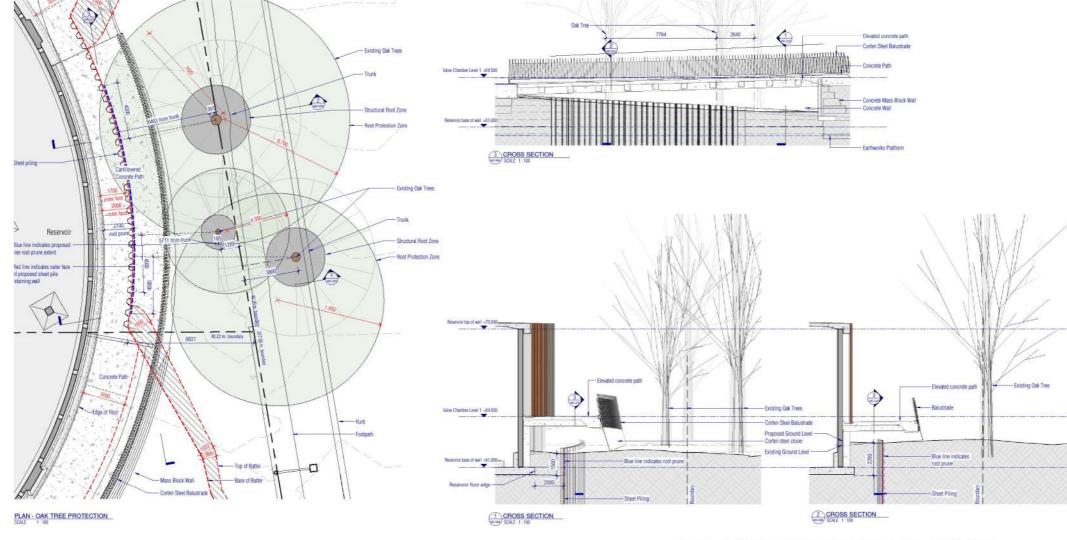
Its proposed to retain four existing trees at the edge of the construction zone as they contribute positively to the amenity and character of the site and surrounding area.

The trees provide established greenery that enhances the streetscape, create a visual buffer between the built form and neighbouring properties, and help to soften the built form within the urban context. One tree also provides excellent habitat for bats.

Their retention aligns with good urban design principles and supports a more integrated and sensitive development outcome.

The construction methodology has been adjusted in this area to minimise the impact on the trees. See proposed plan.

The trees health will be monitored during and after construction. In the case of serious decline, the trees will be replaced with large grade specimens of the same variety.













Existing Trees to be removed

KEY



Existing tree



Tree to be kept and protected



New tree



Transplant



Stage 1 removals



Protect during Stage 1 -Remove Stage 2



Stage 2 removals

Please refer to the following page for details of the tree types.





CENTRAL CITY RESERVOIR IAF PROJECT - LANDSCAPE CONCEPT DESIGN

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