Auckland Level 1, 40 Hurstmere Road, Takapuna
Wanaka Level 1, 28 Helwick Street, Wanaka
T: 09 489 1681
studio@reseturban.co.nz
www.reseturban.co.nz

MEMO: LANDSCAPE AND VISUAL EFFECTS

To: Adriaan Vlok	**Company:** Hounsell Holdings Ltd
From: Garth Falconer	**Date:** 16 November 2022
Project: Rotokauri Greenway, Wetlands & Minor Arterial Road	
Subject: Project Memo – Landscape and Visual Effects	

Dear Adriaan,

Landscape and Visual Effects Memo

The following is an initial note on the landscape and visual effects, it is not intended as a full Landscape and Visual Assessment.

1. Project Summary

The proposed project for which a fast-track application under the **COVID-19 Recovery (Fast-track Consenting) Act 2020** is being applied for is the consenting and construction of:

- the Rotokauri Greenway;
- the Minor Arterial;
- the bulk watermain under the Minor Arterial and other roads;
- the wastewater rising main, and
- strategic wastewater pipeline and pump station.

The purpose of this project is to provide the necessary infrastructure pertaining to stormwater management and discharge along with critical roading connectivity to enable the residential development of the Rotokauri, a 'live' zoned residential growth cell in Hamilton north. The Rotokauri growth cell has a planned capacity of approximately 7,000 homes for approximately 20,000 people (noting this could increase with the recent proposed changed under HCC's Plan Change 12). Appropriate and necessary infrastructure is required to enable the balance of this growth cell. The key objective of this project is to design, consent and enable high-quality infrastructure that supports well-functioning urban development that can provide for the social, cultural and economic well-being of the community and wider Waikato region

As highlighted above, there are two key components to this proposal, the Greenway and the Minor Arterial, which integrate and need to be designed and consented in parallel. Both pieces of infrastructure are critical features of the existing Rotokauri Structure Plan contained in the Hamilton City District Plan and certified Rotokauri Integrated Catchment Management Plan (ICMP).

Auckland Level 1, 40 Hurstmere Road, Takapuna
Wanaka Level 1, 28 Helwick Street, Wanaka
T: 09 489 1681
studio@reseturban.co.nz
www.reseturban.co.nz

MEMO: LANDSCAPE AND VISUAL EFFECTS

The Greenway is a multi-functioning ecological corridor that will provide for stormwater management, open space and an active transport network, traverses a range of adjacent land use and offering a range of opportunities including ecological restoration, water runoff treatment recreational activities and cultural re-instatement. The Greenway will include a fluvial system of swales, artificial wetlands and ponds, with extensive planting of indigenous species along the length of the corridor. The approximately 4.7km length corridor will run between Lake Waiwhakareke (high point) and Lake Rotokauri (low point) to effectively manage and attenuate stormwater within the area, treating stormwater prior to discharge to enhance the water quality and surrounding natural environments and ecosystems. The overarching purpose of the Greenway is to provide treatment, conveyance and storage of flows from Lake Waiwhakareke at the upper extent of the catchment) to Lake Rotokauri approximately 4km north. Construction of the Greenway includes major re-alignment and re-contouring of the existing Rotokauri Drain, as well as an upgrade to the culvert below Exelby Road and the construction of check dams in the lower reaches to assist in managing flows. The Greenway includes a 5 metre wide shared path on the southern side and a 3 metre wide secondary path on the north side.

The Minor Arterial is a key piece of enabling infrastructure that promotes a housing development within Rotokauri. The Minor Arterial extends 3.8km in length from Te Wetini Drive to the northern boundary of Hounsell Holdings land, including the collector road to the Chalmers Road underpass and the northern boundary of Hounsell Holdings land to the underpass that links to Te Kowhai East Road. Supporting three water infrastructure which is sized to cater for the wider catchment is also proposed which includes:

- the bulk watermain under the Minor Arterial;
- wastewater rising main;
- strategic wastewater pipeline, and
- pump station will also be included in the project.

The Minor Arterial will prioritise and enable active transportation with wide footpaths and separated cycleways, supported by planted medians to improve safety. There will be public transport connections provided, which will connect to the Rotokauri Transport Hub (1 kilometre east of Rotokauri), with bus stops along the length of the corridor.

2. Receiving Environment

- Current site features: pastures/paddocks, Rotokauri Farm Drain, existing perimeter roads (Rotokauri Rd, Lee Rd, Exelby Rd), ridgelines
- Adjacent land uses: ridgeline private homeowners, Baverstock subdivision, suburban centre interface, SH1/Waikato Expressway, Waikato Expressway cycleway; Wintec educational institution
- Lake Rotokauri: will receive treated stormwater from the upstream developments and become a destination for the new residential community via the Greenway corridor

- Waiwhakareke Natural Heritage Park and Lake: can be a recreational destination for the new residential communities via the Greenway corridor. Water from this lake, which is currently identified as poor, will flow into the Greenway Corridor. Providing artificial wetlands along the corridor will improve the water quality from this lake before it flows into Lake Rotokauri.

3. Key Effects to Consider

There is a potential disconnect between the designs of the proposed Minor Arterial Road with the Artificial Wetlands and the Greenway Corridor that would result in poor connectivity and a lack of continuity of focus areas for ecology, revegetation, stormwater, active travel, and legible activity areas.

This outcome requires a strong collaboration, early in the design process, with the project's engineers and ecologists to ensure a functional and aesthetic balance of terrestrial, wetland and aquatic habitats with the provision of these public facilities.

a. Greenway Corridor:

- Impact on local context – scale, function of site features to local landscape.
- Impact on circulation/connections (pedestrians, cyclists, vehicular, residential/commercial/industrial/institutional land uses) and location of open spaces and recreational facilities to the core functionality of the Greenway for water quality and conveyance
- Social impact
- Impact on biodiversity / existing vegetation
- Impact on water quality
- Impact on existing natural wetlands and landform (balance cut/fill, HCC gradient controls/ slope stability, diverting groundwater and overflow paths, mudfish habitat disruption)
- Cultural impact – Mana whenua input for protection/association/reaffirmation of Mana Whenua values, connection, and association to this landscape
- Visual impact
- Construction effects- visual, noise, sediments, dust, phasing

b. Artificial Wetlands

- Impact on circulation (pedestrians, cyclists, vehicular, residents)
- Impact on biodiversity / existing vegetation
- Impact on water quality
- Impact on landform/landtake – spatial design resilience, cut/fill balance, slopes, diverting of groundwater and overland flow paths
- Visual impact – design of features/landforms (i.e., affects amenity, character of open space)
- Cultural impact – how to respond if archaeological sites may appear/be uncovered in existing natural wetlands. Mana whenua input for protection/association/reaffirmation of Mana Whenua values, connection, and association to this landscape

RESET URBAN DESIGN

Auckland Level 1, 40 Hurstmere Road, Takapuna
Wanaka Level 1, 28 Helwick Street, Wanaka
T: 09 489 1681
studio@reseturban.co.nz
www.reseturban.co.nz

- Construction effects – visual, noise, sediments, dust, phasing of works

c. New Minor Arterial Road

- Impact on local context -broader road network, biodiversity, land uses
- Impact on circulation (pedestrians, cyclists, existing vehicular routes, local community & businesses)
- Impact of stormwater- provision of raingardens, swales, selection of plant species)
- Visibility – from SH1, existing residential, and institutional
- Construction effects – visual, noise, sediments, dust, phasing
- Alignment – impact on environment (e.g. existing natural wetlands, existing vegetation, earthworks, landforms, provision of and connectivity to open spaces)

4. Approach to Addressing Effects

Recreation and Open Space Provision

- Connectivity – ensure pedestrian/cycling routes are continuous, safe, positive, connected and provided with access/crossing points at key interchanges.
- Reflect local landscape character and cultural heritage – ensuring the weaving into the development of Mana Whenua input for protection/association/reaffirmation of Mana Whenua values, connection, and association to this landscape.
- Ensure continuity and integration of movement and areas for runoff, water, flora, and fauna together with pedestrians, cyclists and vehicles throughout the extent of the Greenway and Minor Arterial Road.

Artificial Wetlands

- Visual Impact – design proposed artificial wetlands to better fit into the landscape and be more 'natural' in shape to mimic natural landforms whilst still ensuring their main function of stormwater mitigation and treatment is maintained.
- High degree of ecological considerations, values, and requirements relating to the existing wetlands and mudfish habitats and how these influence the design outcomes for open space networks/provision.
- Currently, a degraded wetland exists which is protected under NPS in addition to the existing habitats of 'At Risk' fish species. Our input will be the design response to ensure minimal impact to these areas and to improve the quality and biodiversity of these areas.

5. Anticipated Scope

The landscape architectural scope for this project includes the initial refinement of the overall design and layouts to provide a well resolved and functional landscape proposal. The scope of work includes developing the overarching landscape design vision and strategy, principles, and key design moves. This information will then

RESET URBAN DESIGN

Auckland Level 1, 40 Hurstmere Road, Takapuna
Wanaka Level 1, 28 Helwick Street, Wanaka
T: 09 489 1681
studio@reseturban.co.nz
www.reseturban.co.nz

inform the design and detailing of the outdoor spaces along and within the Greenway covering hardscape (gathering areas, play spaces, bridge crossings, lookout/viewing decks, shared and walking pathways, paving and surface finishes, site furniture, wayfinding signage, interpretative panels, etc) and softscape planting (trees, shrubs, ground covers and grasses).

A key component of our work will be the integration of the various requirements of the project, being ecological engineering, social, cultural, and visual amenity. The opportunity here is to develop a coordinated proposal that captures and defines the unique character of the project location and provides for both the environment and people of Rotokauri as it establishes and matures.

Key deliverables

- Resource Consent Documentation (i.e., Landscape Design Vision, Principles, and Landscape Plans) for the Greenway, Artificial Wetlands and Minor Arterial Road South – to ensure a high degree of public outdoor spaces, aesthetics, planting, safety, and functionality of these site features
- Landscape Detailed Design Drawings/Documentation for the Greenway, Artificial Wetlands and Minor Arterial Road South including coordination with other disciplines, response to S92 Queries
- Landscape Visual Assessment of the proposed Greenway, Artificial Wetlands, and Minor Arterial Road South
- Landscape Concept Design for the Minor Arterial Road North

6. Conclusions

Overall, the proposed development supports Hamilton City Council's vision to sustainably expand the city into Rotokauri, one of four key growth areas. The Greenway, and the proposed artificial wetlands, will provide positive ecological and recreational benefits to the environment and future community. The Minor Arterial Road will allow for a coherent and integrated mixed used development of the site. Based on Reset Urban Design's experience and review of the information received and known to date, there are no landscape and visual assessment reasons the Greenway, Artificial Wetlands and Minor Arterial Road could not proceed under a Fast Track application process with referral that the effects can be managed on the environment with suitable conditions.

7. Qualifications and experience

Reset Urban Design (RUD) is an international award winning specialist urban design and landscape architecture consultancy with established offices in Auckland and Wanaka serving a diverse range of projects across New Zealand, Asia, and the Pacific Islands. Our team of 10 professionals, qualified in the fields of landscape architecture and urban design, has been long involved with multi-disciplinary design teams and collaborations on large scale comprehensive master-planning on greenfield and regenerative sites. Our project experience ranges from housing and retail developments, master planning and strategic planning, town centres, streetscapes, rural and urban parks, waterfronts, and expert assessments.

Auckland Level 1, 40 Hurstmere Road, Takapuna
Wanaka Level 1, 28 Helwick Street, Wanaka
T: 09 489 1681
studio@reseturban.co.nz
www.reseturban.co.nz

8. Relevant Projects undertaken by Reset Urban Design are:

Bellfield and Opaheke Park - a 600-lot residential development in Papakura delivered in stages which includes a stream and the adjacent 6.0 hectare Opaheke Recreational Park which also functions as an artificial wetland and flood detention area.

Redoubt Ridge – a 172-lot planned residential development in Flat Bush, Auckland with an extensive network of footpaths and open spaces linking to central 'green finger' reserve, the backbone to the new neighbourhood. This reserve is one of several natural valley systems within the Flat Bush area that serve an important stormwater management and ecological function.

Waimanawa – a proposed 1100 home residential development, of over 140 hectares, in Warkworth linked by a central reserve and river system which features shared paths, extensive plantings and playing fields.

Yours sincerely,

Garth Falconer
Director
Reset Urban Design