

### 1.2.2.23 Medium Density Residential Zone

- a) Applications for activities generating 1500 or more vehicle movements per day shall be accompanied by an Integrated Transport Assessment in accordance with Appendix 1.2.2.14.

### 1.2.2.24 Ruakura Open Space Zone

- a) Applications for activities generating 1500 or more vehicle movements per day shall be accompanied by an Integrated Transport Assessment in accordance with Appendix 1.2.2.14.

### 1.2.2.25 Land Development Plans

#### Land Development Consent

An application under Rule 3.7.4.2 shall be accompanied by a Land Development Plan including the following information:

#### **General**

- a) The exact boundaries between the Land Development Plan and adjoining Land Development Plan Areas.
- b) The exact boundaries of any Open Space Zone included in the Land Development Plan.
- c) Where an application for Land Development Consent is made for part of a Land Development Plan Area (as shown on Figure 2-16), pursuant to rule 3.7.4.2b) the following indicative information for the balance area of each Land Development Plan Areas shall be provided as part of that application:
  - i. The location and width of proposed roads and carriageways and their integration with the existing and future transport networks;
  - ii. The location of proposed Ruakura Strategic Infrastructure to ensure connectivity across the entire structure plan and adjacent Land Development Plan areas;
  - iii. The National Grid electricity transmission network;
  - iv. Where the Land Development Plan contains any part of the Inland Port (Sub Area A (Inland Port)) an indicative layout plan showing internal roads, hardstand and impermeable areas, crossing points under transmission lines, indicative building locations, future rail sidings and connections to the East Coast Main Trunk railway and clearances between finished surface levels of the Inland Port and the National Grid electricity transmission network;
  - v. The location and size of storm water treatment and control measures; and
  - vi. The location, size and purpose of open spaces.

#### **Concept Layout Plan**

- d) The location, width and design of proposed roads and carriageways (including lighting, street furniture and signs) and the integration of roads with the existing and future transport network and the National Grid electricity transmission network.
- e) The location of proposed Ruakura Strategic Infrastructure to ensure connectivity across the entire structure plan and adjacent land development plan areas.

- f) Within the Inland Port (Sub Area A (Inland Port)) – an indicative layout plan showing internal roads, hardstand and impermeable areas, crossing points under transmission lines, indicative building locations, future rail sidings and connections to the East Coast Main Trunk Railway and clearances between finished surface levels of the Inland Port and the National Grid electricity transmission network.
- g) The location and design of storm water treatment and control measures.
- h) The location and dimension of open spaces, and the total area provided for each open space purpose consistent with the purpose of the Ruakura Open Space Zone and Ruakura Structure Plan area.
- i) The location and dimension of pedestrian and cycle ways.
- j) Existing and proposed Three Waters infrastructure necessary to service the Land Development Area.
- k) Existing and proposed ground levels and associated earthworks (Note: consent for earthworks within a National Grid Yard may also be required under Rule 25.2.3 or 25.7.4).
- l) Methods to provide public access to and use of the Open Space, except as may need to be limited for safety reasons.
- m) Consistency with the overall strategic infrastructure network for the structure plan as shown on Figures 2-15A and B Ruakura Strategic Infrastructure (Appendix 2).

**Landscape Concept and Ecological Enhancement Plan**

- n) A Landscape Concept and Ecological Enhancement Plan that includes the following:
  - i. A landscape concept for the area of open space included in the Land Development Plan, consistent with the purpose of the Ruakura Open Space Zone and Ruakura Structure Plan area.
  - ii. Details of landscape treatment of streets, footpaths and cycleways.
  - iii. Details of landscape treatment of storage basins, swales and linear wetlands, which show at a minimum the following:
    - a. 100% cover of indigenous wetland vegetation in linear wetlands associated with arterial, collector roads and local roads in Industrial Park Zone; and
    - b. 80% cover of indigenous wetland vegetation in linear wetlands associated with the main greenway corridor, including the Silverdale Road to Mangaonua greenway and the corridor adjoining the expressway in the Logistics and Industrial Park Zones.
  - iv. Details of the Landscape Buffer Areas in the Inland Port (Sub Area A (Inland Port)) required in Rule 10.5 and as shown on Figure 2-17 Inland Port Building Setbacks and Landscape Controls (Appendix 2). These details shall include:
    - a. Measures to ensure that filled ground provides optimum growing conditions such as avoiding the placement of compacted fill and installing topsoil that has been stripped and stockpiled according to sound practice.

- b. Plant types and species, sizes at time of planting and spacing sufficient to achieve the screening purpose of the buffer areas.
- c. The selection of quick growing trees that are capable of achieving the planting heights (other than understorey and edge planting) specified on Figure 2-17 Inland Port Building Setbacks and Landscape Controls (Appendix 2) according to the following growth rates:
  - Year 1 = 2m
  - Year 5 = 6m-8m
  - Year 8 = 8m-10m
  - Year 10 = 10m-12m
- d. Details of ongoing maintenance to ensure the planting achieves the best possible growth rates.
- v. Details of the Landscape Buffer Areas for Percival Road required under Rules 10.5.4.3 and 11.5.3 and as shown on Figures 10.5.4.3a and 11.5.3a. These details shall include those as outlined in iv a), b) and d) above.
- vi. Measures to ensure the implementation and ongoing maintenance of the Landscape and Ecological Concept Plan. In particular, the Landscape and Ecological Concept Plan shall detail the proposed timeframes for the implementation of the planting in the Landscape Buffer Areas in the Inland Port (Sub Area A (Inland Port)) relative to the proposed development and operation of logistics and freight-handling activities and infrastructure.
- vii. A design statement, and details of plant species<sup>1</sup> and materials including indigenous trees and shrubs bordering the linear wetland to improve the ecological function without hindering their treatment functions.

<sup>1</sup> **Note:**  
On the basis of the soil type within the storage basin to be planted, shrubland and forest species shall be selected from Clarkson B D, Clarkson B R and Downs T M, 2005: Indigenous Vegetation Types of Hamilton Ecological District, CBER Contract Report 58. The percentage vegetation cover of the storage basins shall be consistent with Hamilton City Council Infrastructure Technical Specifications October 2013 or its replacement.
- viii. Methods in the design and layout of Open Space to provide for the amenity of adjoining and adjacent activities.
- ix. The design of the linear wetlands to support black mudfish, shortfin eels and longfin eels, including a range of vegetation suitable to support these fish species without hindering the treatment functions of the linear wetland. The design shall take account of risk factors for black mudfish including competition from pest fish, lack of suitable peat soils, drying out, lack of cavities for mudfish to aestivate (sleep over summer) and inappropriate pH of water due to lack of peat. This may necessitate retention or incorporation of peat soils in the construction of the linear wetlands.

- x. Methods to ensure implementation of a Native Fish Management Plan for the Land Development Plan Area consistent with the requirements of the Structure Plan Area-wide Native Fish Management Plan.
- xi. Methods to ensure implementation of a Native Lizard Management Plan for the Land Development Plan Area consistent with the requirements of the Structure Plan Area-wide Native Lizard Management Plan.
- xii. The Native Fish Management Plan and Native Lizard Management Plan prepared by suitably qualified and experienced ecologist and shall include:
  - a. containment and translocation methods for at risk species;
  - b. methods to ensure adequate separation between black mudfish and longfin eels;
  - c. adaptive management, monitoring and response process to determine the success or otherwise and to implement a contingency plan if necessary; and
  - d. an analysis of risk relating to timing of collection, containment and translocation.

**Water Impact Assessment**

- o) A Water Impact Assessment based on anticipated development in the Land Development Plan that includes the following:
  - i. How the proposal is consistent with, or otherwise complies with, the recommendations, measures and targets of any relevant Integrated Catchment Management Plan.
  - ii. Where there is no relevant Integrated Catchment Management Plan, how the proposal is consistent with the development of and gives effect to Ruakura Strategic Infrastructure including as shown on Figures 2-15A and B in Appendix 2 for the entire structure plan area.
  - iii. How the Land Development Plan provides for the eventual diversion of any temporary connections to strategic infrastructure, including timing or triggers for such diversions.
  - iv. An assessment of any potential effects (including cumulative effects) of the development in relation to its catchment. In particular, the assessment should include consideration of potential construction effects and the potential effects of new stormwater devices on adjacent private property.
  - v. Details of what water-sensitive techniques are proposed and methods of implementation.
  - vi. Details of the expected water efficiency benefits arising from the proposed water-sensitive techniques compared to the same development without using those water-sensitive techniques.
  - vii. Details of how the water-sensitive techniques will be operated and maintained to ensure ongoing water efficiency benefits.

- viii. Confirmation of available Three Waters infrastructure and capacity, existing and proposed, to appropriately service anticipated development in the Land Development Plan area and the wider structure plan area.
- ix. Details of the water demand (flow and pressure) and water sources.
- x. An assessment of the effect that any staged or interim development and infrastructure has on the strategic network described in Figures 2-15A and B Ruakura Strategic Infrastructure (Appendix 2) including an assessment of when any diversion to that strategic network is required to restore the city wide network capacity that was being used on an interim basis.

**Note:**

Consent from the Regional Council for an increased water take may be required where a development proposal is to take in excess of 15m<sup>3</sup> of water per day.

**Integrated Transport Assessment**

- p) An Integrated Transport Assessment (ITA) for anticipated development within the Land Development Plan area, prepared in accordance with the requirements of Appendix 1.2.2.14 and confirming that the anticipated levels of development will comply with Rule 3.7.4.3 Staging and Traffic Requirements. Prior to approving an ITA or Land Development Plan for the first stage of the Inland Port (Sub Area A (Inland Port)), the upgrading requirements of Ruakura Road from, and including, the Silverdale Road intersection to Wairere Drive shall be reviewed. Any upgrading required shall be agreed with the Hamilton City Council, and be completed in accordance with the agreement before operation of the Inland Port (Sub Area A (Inland Port)) or other development commences.
- q) Details of how the Land Development Plan has been designed to align with the Cyclist and Pedestrian Network Plan in Figure 2-18 Ruakura Cyclist and Pedestrian Network Plan in (Appendix 2), including the grade separation of facilities on arterial routes.
- r) Details of any proposed crossing of the East Coast Main Trunk Railway by the Spine Road, which show how it will be grade-separated.

**Mitigation of Adverse Land Development Effects on Habitats**

- s) Details of how land development avoids, remedies or mitigates adverse effects on, or where possible enhances, any significant habitats of indigenous fauna.

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- t) The layout of roads, public spaces and lots, showing how compliance with a minimum net density of 16 dwellings per hectare will be achieved.
- u) The specific location and extent of the Integrated Retail Development consistent with that shown on Figure 2-14 Ruakura Structure Plan – Land use (Appendix 2).

**Open Space Provisions**

The following components of the open space network are to be considered when developing a Land Development Plan to ensure the various functions are not compromised. The Land Development Plan shall demonstrate the maintenance and development of:

- v) Greenway - In addition to the stormwater management function, the greenway shall create opportunities for improved habitat and ecological benefits in the Ruakura Structure Plan area and in downstream receiving environments.
- w) Gullies - Layout of the residential area is to be designed to provide opportunities for the restoration and enhancement of the Kirikiriroa Stream headwaters.
- x) Visual amenity and buffer between incompatible activities – in particular the following open space areas identified on the Ruakura Structure Plan are intended to provide a buffer function: (See Figure 2.14 Ruakura Structure Plan – Land use (Appendix 2))
  - The greenway;
  - The area to the north of the proposed Ruakura Industrial Park Zone that adjoins the General Residential Zone;
  - The transmission corridor between Ruakura Road and the Knowledge Zone
  - The area between the realigned Ruakura Road and Silverdale Road, and between the Ruakura Industrial Park Zone and the existing General Residential Zone to the south;
  - The area between the logistics and industrial activities, and the residential neighbourhoods in Silverdale and the University of Waikato.
  - The area between Fairview Downs residential area and the Spine Road.
- y) Neighbourhood reserves – these will be required as part of the subdivision process and the establishment of residential neighbourhoods. As such the location of the neighbourhood reserves on Figure 2-14 Ruakura Structure Plan – Land use (Appendix 2) is indicative only. Each neighbourhood reserve shall be an area of approximately 0.5ha and serve a catchment area of approximately 500m radius. Neighbourhood reserves complement the range of facilities provided by the Ruakura Open Space Zone and provide a focal point for, and contribute to the visual amenity of the local community.
- z) Connectivity – a concept layout plan at Land Development Plan stage will show the location and dimension of pedestrian and cycle ways in accordance with Figure 2-18 Cyclist and Pedestrian Network Plan (Appendix 2) as well as the landscape treatment of streets, footpaths and cycleways.

**Ruakura Strategic Infrastructure (as shown on Figures 2-15A and B)**

- aa) Consistency with Figures 2-15A and B Ruakura Strategic Infrastructure (Appendix 2) 3.7.2.6 Connections to Ruakura Strategic Infrastructure and 3.7.4.4 Ruakura Strategic Infrastructure Rules, where relevant.

### 1.2.2.26 Staging and Traffic Requirements

- a) The application shall be accompanied by an Integrated Transport Assessment (ITA) prepared in accordance with Appendix 1.2.2.14.
- b) All ITAs required shall be prepared by suitably qualified professionals and should generally follow the approach and guidelines of New Zealand Transport Agency’s “Research Report 422: Integrated Transport Assessment Guidelines, November 2010”, or its replacement.

### 1.2.2.27 Concept Plan Consent for Knowledge Zone (excluding Precinct C)

Any application for a Concept Plan Consent for Precinct A, B or D in the Knowledge Zone shall show the total expected development of the facility (even if the development in that area is to proceed in stages) through plans and explanatory text which may include the following information (as relevant).

- a) How the proposal is in general accordance with the urban design approach objectives and policies in Volume 1, Chapter 25.15: City-wide – Urban Design.
- b) Demonstrate how the objectives, policies and rules in Volume 1, Chapter 8: Knowledge Zone have been met.
- c) Demonstrate how the relevant assessment criteria have been met.
- d) Details of any consultation undertaken.
- e) A Concept Plan shall be provided as part of a Concept Plan Consent that shows diagrammatically, in the form of sub areas:
  - i. The general distribution of activities, buildings, open space and parking facilities.
  - ii. Provision for access to and movement within the site for vehicles.
  - iii. Pedestrian and cycle links. Show the position of existing and proposed walkway and cycleway links within the site and to adjacent sites.
  - iv. The interrelationships with the surrounding locality, including buffer areas, links to local centres and access to passenger transport.
  - v. Future development areas, major landscaping areas and protected natural heritage and cultural features.
  - vi. The parameters to which development in different areas will be subject, in terms of the general configuration and bulk of existing and proposed buildings.
  - vii. Development Staging. Explain if development of the precinct is to be staged, the manner and proposed timeframes for the staging (if known) and the means of managing any vacant land during the staging process.
  - viii. How Interface Areas on site are being appropriately planned for in the development of Concept Plans as part of a Concept Plan Consent.
- f) Any other information that may be needed to assess the application.
- g) New Concept Plan Consents shall include a Broad ITA in accordance with Appendix 1.2.2.14.

#### **Note**

A Concept Plan Consent may include a condition which requires the consent holder to submit a detailed building design, prior to construction commencing. This is to ensure quality outcomes for the Knowledge Zone in circumstances where a CPC identifies building envelopes. The matters which may be required to be addressed will be based on Assessment Criteria B – Design and Layout in Appendix 1.3.3.

### 1.2.2.28 Land Development Consent - Te Awa Lakes Medium Density Residential Zone

An application under Rule 4.5.6 c) shall be accompanied by a Land Development Plan including the following information. All information shall demonstrate consistency with the Te Awa Lakes Structure Plan.

- a) The boundaries between the Land Development Plan and adjoining Land Development Plan Areas.
- b) The boundaries of any Open Space Zone included in the Land Development Plan.
- c) Where an application for Land Development Consent is made for part of a Land Development Plan Area (as shown on Figure 2-20) pursuant to Rule 4.5.6 b), the following indicative information for the balance area of each Land Development Plan Areas shall be provided as part of that application:
  - i. The location of proposed roads and their integration with the existing and future transport networks
  - ii. The location and size of stormwater treatment and control measures
  - iii. The location, size and purpose of open spaces
- d) The location, width and design of proposed roads and carriageways (including lighting, street furniture and signs) and the integration of roads with the existing and future transport network.
- e) The location and design of stormwater treatment and control measures.
- f) The location and dimension of open spaces, including any neighbourhood reserves, and including esplanade reserves, consistent with the purposes of the Natural Open Space Zone and the Te Awa Lakes Structure Plan.
- g) The location and dimensions of pedestrian and cycleways.
- h) Existing and proposed Three Waters infrastructure necessary to service the Land Development Plan Area and in accordance with any approved Integrated Catchment Management Plan or Subcatchment Integrated Catchment Management Plan.
- i) Existing and proposed ground levels and associated earthworks.
- j) A landscape concept plan incorporating an indigenous landscape plan that includes:
  - i. A landscape concept for any areas of open space, including neighbourhood reserves and esplanade reserves.
  - ii. Details of landscape treatment of streets, footpaths and cycleways.
  - iii. Details of landscape treatment of stormwater swales, wetlands, detention basins and lake edges.
  - iv. Details of landscape treatment to provide a buffer adjacent to the Waikato Expressway.
  - v. Details of plant types and species and sizes at time of planting, including ecosourcing of plants from within the Waikato Basin and choice of species that reflect the history of the area.
  - vi. Details of ongoing maintenance to ensure the planting achieves the best possible growth rates.



- vii. Use of indigenous plant species and landscape design that reflect cultural perspectives.
- k) An Ecological Rehabilitation Management Plan (ERMP) that includes the following, and the methods to implement them:
- i. An indigenous fish management plan, including a summary of fish habitat and species present, a summary of planned works, permitting requirements, procedures for dealing with pest fish, biosecurity protocols, timing of works, procedures for recovering indigenous fish prior to and during works, roles and responsibilities of parties, reporting requirements and any specific mitigation measures.
  - ii. Planting of trees for bat habitat, including tall tree species such as Kahikatea and Totara, in areas where bat habitat utilisation is likely to be high.
  - iii. Lighting design that is sensitive to bat habitat including minimal lighting in areas close to the Waikato River, avoidance of upward facing lighting and UV lighting, and avoidance of lighting in wetland and riparian margin areas.
  - iv. Restoration planting to include wetland restoration, habitat enhancement and riparian buffer zones.
  - v. Provision of passage into the recreational lake for indigenous fish if practicable, while excluding exotic pest fish species.
  - vi. Recreational lake bathymetry that is sufficient to help reduce wind-driven sediment resuspension and excessive growth of nuisance weeds.
  - vii. Incorporating diversity into recreational lake shore habitat including built areas, wetland plants and beach areas.
  - viii. Ensuring sufficient water flow through the lake or other methods to maintain high water quality having particular regard to avoidance of nuisance phytoplankton blooms.
  - ix. Ensuring new stream habitat mimics natural systems.
  - x. A specific ecological rehabilitation plan to restore and enhance the unnamed tributary to the Waikato River that is the southern stormwater outlet of the site. The stream runs through the adjacent Lot 1 DPS 57602 and Part Lot 1 DPS 11080, and the plan is to apply to its full length and incorporate as a minimum:
    - Creation of a diverse and variable habitat and channel complexity over time to allow for differences in flow velocities.
    - Provision of vegetative cover, woody debris or other in-stream structures.
    - Fish passage by way of lined ramp or similar to enable native climbing species.
    - A meandering channel.
    - Creation of pool-riffle-run sequences.
    - Proposals for ongoing maintenance and management.
    - Avoidance of instream works during peak fish migration periods (August-December)

- l) Within 200m of the Waikato Expressway carriageway, the layout of roads and lots to generally achieve orientation of noise sensitive spaces in buildings away from the Expressway.
- m) A Water Impact Assessment that demonstrates how the proposal is consistent with the recommendations, measures and targets of the relevant Integrated Catchment Management Plan or Subcatchment Integrated Catchment Management Plan.
- n) A management plan for the main linear lake that includes:
  - a monitoring plan of stormwater inflows to provide sufficient data to adaptively manage the lake to meet a swimmable standard and trophic state
  - a series of triggers and actions to maintain the lake to a swimmable standard and trophic state
- o) The layout of roads, public spaces and lots, showing how the dwelling unit yields in Rule 4.6.2 b) will be achieved.
- p) Building envelopes to demonstrate the suitability of any lots intended for duplex or apartment development.
- q) An Integrated Transport Assessment for anticipated development within the LDP area, prepared in accordance with the requirements of Appendix 1.2.2.14 and assessing the levels of traffic generation against the traffic generation threshold and associated mitigation measures described in clause 3.8.3 in section 3.8, Te Awa Lakes Structure Plan.