

54.12 FERNLEIGH BUSINESS PARK STRUCTURE PLAN

Part 54.12 consists of the following sections:

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- 54.12.2 Key resource management issues and how the structure plan manages those issues
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54.12.1 DESCRIPTION OF THE STRUCTURE PLAN AREA (Maps 54.12.1 – 54.12.3)

A structure plan has been prepared for the Fernleigh Business Park and the residential area between the GVR and Collingwood Road, and Rule 54.12 applies

The structure plan area is approximately 100 hectares gross and 80 hectares net in extent. It lies to the east of Waiuku and borders the existing Business Zone (as at June 2007); the location of the structure plan area adjacent to an existing business area promotes a clustering of business activity and hence promotes economies of scale. It is strategically situated adjacent to two important roads, namely:

- the main road that leads to the steel mill at Glenbrook and to State Highway 1, namely Glenbrook-Waiuku Road
- the main road that leads to Pukekohe, namely Waiuku Road.

Its location on these strategic roads means that heavy vehicles will not be required to pass through the town in order to get to the two most significant destinations, namely State Highway 1 and Pukekohe.

The area has easy access to Kitchener and Collingwood Roads, which are the main roads into Waiuku, providing excellent access to Waiuku's town centre, residential areas and community facilities, enabling the development of tangible and intangible linkages.

One road, Cornwall Road, traverses the western portion of the area.

The area is traversed by a railway line, which is currently used only for short tourist and visitor trips. However, there is potential for the railway line to be used more intensively in the future.

The land is characterised by a slope that is suitable for the provision of water, wastewater, stormwater and roading infrastructure.

Pukeoware School is located approximately 1.3 kilometres to the east of the proposed new business area.

Part of the area is farmed. Non-farming business activity also takes place.

The area slopes generally from east to west and a few gullies occur within the area. The existing vegetation on-site consists of shelter-belts, native bush, pasture and crops. One area of bush is a large 2.2 hectare covenanted area located centrally to the business area. This natural element contributes significantly to the amenity of the business area and helps to establish it as a business park.

A prominent ridgeline runs west - east from the southern edge to the centre of the business area. It links with bush outside the business area and it links with the significant area of covenanted bush in the centre of the area.

Slurry and water-pipes that serve the steel mill at Glenbrook traverse the site.

Precinct A is the gateway, from Auckland, to urban Waiuku. It contributes to the character and image of Waiuku as a well-functioning, well-designed and attractive rural town. Precincts B and C are rural areas that interface with the business area. The activities provided for in precincts B and C support the rural economy and the visitor sector.

54.12.2 KEY RESOURCE MANAGEMENT ISSUES AND HOW THE PLAN MANAGES THOSE ISSUES

Part 54.12.2 addresses the following issues:

- a) Gateway status
- b) Interface between activities
- c) Mix of land uses
- d) Connectivity
- e) Stormwater management
- f) Wastewater management
- g) Water supply
- h) Provision of open space
- i) Provision of electricity
- j) Geology and topography
- k) Stream protection
- l) Earthworks
- m) Contamination
- n) Noise and ventilation
- o) Covenanted bush

a) Gateway status

The structure plan area is located at the gateway into Waiuku; the entrance to Waiuku from Pukekohe runs along the south of the structure plan area and the entrance from Auckland runs along the north-west of the structure plan area. As such, the function and form of the structure plan area is a contributor to the character of Waiuku as a whole. The District Plan provisions, including the structure plan, are aimed at managing the

effects of development on the broader environment. For example, some of District Plan provisions pertain to architectural design, others pertain to traffic and roading. All the provisions aim to facilitate the development of a high-quality, well-functioning environment.

b) Interface between activities

Where the Waiuku Industrial Zone (WIZ) and Waiuku Industrial Services Zone (WISZ) activities interface with other activities, there is the potential for adverse effects to be experienced by one or more parties. The same is true for the interface of the WIZ and WISZ. The District Plan provisions, including the structure plan, enable the management of those potential adverse effects.

Buffer areas are one mechanism used to manage interface effects. For example:

- A gully and a future low-impact business zone serve as a buffer between the WIZ and the Rural Zone to the north.
- Stormwater and recreation reserves serve as buffers between the WIZ and the WISZ.
- Proposed landscaping requirements serve a buffering function; they mitigate potential adverse visual effects of business land uses on roads, reserves and other zones.
- The WISZ serves as a buffer between the WIZ and other zones.
- The open space along the Glenbrook Vintage Railway aids in the management of potential adverse effects of business development on the Glenbrook Vintage Railway.

Residential activities close to business activities can create reverse sensitivity effects, making it difficult or impossible for businesses to operate. The structure plan area was chosen as a business area partly because it does not interface with the Residential Zone.

The interface between business and residential activities on the one hand, and the open space system on the other hand, requires special attention. The WIZ and WISZ contain specific provisions relating to fencing along the open space system. With respect to the Residential Zone along Cornwall Road and Collingwood Road, the Council recognises the desire that land owners might have for private property to be secured by perimeter fences, but this must be balanced with maintaining amenable and safe public spaces. Walls and fences can alienate, visually and functionally, residential activities and residential buildings from public places and spaces. Where residential activities and buildings are visually and functionally integrated with, and form an holistic entity with, public places, the following positive results are attained:

- passive surveillance, and thus safety, is increased (safety of the private property as well as safety of the open space system)
- the public places are more easily accessed and utilised by residential populations
- aesthetic values are enhanced

Thus, in relation to the Residential Zone along Cornwall Road and Collingwood Road, the following shall apply:

- no fence (or wall serving the same purpose as a fence) erected within 4 metres of the open space system may exceed a height of 1 metre
- no fence (or wall serving the same purpose as a fence) may exceed a height of 2 metres
- all fences (or walls serving the same purpose as a fence) higher than 1 metre shall have a gap of at least 10 cm x 30 cm every 1.5 metres.

In addition, in relation to the Residential Zone along Cornwall Road and Collingwood Road, the following shall apply:

- Where a SITE has a common boundary with the Glenbrook Vintage Railway, an amenity YARD of 20 metres shall be observed along that boundary of that SITE.
- Where a SITE has a common boundary with Cornwall Road, an amenity YARD of 20 metres shall be observed along that boundary of that SITE.

c) Mix of land uses

The structure plan provides for an appropriate mix of land uses.

The primary purpose of the structure plan area is to provide for manufacturing, processing, assembly, storage and distribution activities; these are provided for in the WIZ. Small-scale manufacturing, processing, assembly, storage and distribution activities are provided for in the WISZ. Business services that are required to support the WIZ activities are provided for in the WISZ.

A residential area is located within a park-like setting on the western side of the railway line. This residential area is separated from the WIZ and WISZ by the open space system and thus the potential for adverse effects to be experienced by any of the land uses is minimised. Furthermore, the residential areas are separated from the WIZ by the railway line, which reduces their usefulness as areas that could provide business services to the WIZ; they are thus zoned for residential purposes rather than business purposes. Residential activities are sensitive to the noise and physical movement generated by heavy vehicles. Since heavy vehicles will be entering and exiting at the Collingwood/Cornwall intersection, residential activities on the corner of Collingwood and Cornwall Roads have the potential to create reverse sensitivity effects and thus compromise the functionality of the WIZ and the WISZ. Therefore, where a SITE in the Residential Zone shown on Part 54.12.2 maps has a common boundary with Cornwall Road, an amenity YARD of 20 metres shall be observed along that boundary of that SITE.

The residential components (in the Residential Zone) are located adjacent to open space, providing opportunities for outdoor activities.

The open space system provides recreation opportunities for people working in the WISZ and WIZ.

The open space system also contributes to stormwater management.

The specifically designed transport network enables the safe and free movement of motor vehicles, pedestrians and cyclists. Its specific design also makes a positive contribution to the character of the area.

The location of the WISZ in relation to the WIZ facilitates pedestrian and cycle access between the WIZ and the WISZ. The WISZ is situated alongside or near to the open space system in support of the "lighter" character of the WISZ (than that of the WIZ), as set out in Part 37.

Precinct A is the gateway, from Auckland, into urban Waiuku. Therefore, visitor activities are provided for in this area. These activities have the potential to support Waiuku's visitor economy. Precincts B and C are rural areas that interface with the business area. The activities provided for in precincts B and C support the rural economy and the visitor sector.

d) Connectivity

Connectivity is discussed in terms of the following elements:

- i. Compact development
- ii. Pedestrian and cycle networks
- iii. Road network
- iv. Public transport

i. Compact development

The structure plan area comprises a compact, walkable footprint; the area has a radius of about 500 metres. Three WISZ areas are provided for; one is located near the northern entrance to the business area, one is located at the southern entrance and one is located centrally. The location of the WISZ in relation to the WIZ facilitates pedestrian and cycle access between the WIZ and the WISZ.

The compact nature of the structure plan area, and the design of the circulation system, provide employment opportunities within walking and cycling distance of Waiuku's resident population.

A future business area is identified to provide for additional business activity if demand requires it.

ii. Pedestrian and cycle networks

Walkways and cycle ways form an integral part of the structure plan and are part of the roading design.

Cycle ways and walkways are located along roads and in the open space network. Cyclists are provided with dedicated cycle lanes. Rumble strips and markers are to be used between footpaths and cycle paths (see diagram 11 for examples).

Footpaths enable safe pedestrian movement. Raised medians provide pedestrian refuges.

The landscaping on both sides of roads contributes to the small-town character of the area, which enhances amenity for pedestrians and cyclists.

At the time of more detailed planning and development, the location of landscaped pedestrian refuges, pedestrian crossings, cycle ways and walkways should be coordinated to create an integrated and free-flowing cycle way and walkway system.

Some of the cycle ways and walkways are located within the open space system. Where feasible, roads are located alongside the open space system. This helps to:

- enhance surveillance and safety for pedestrians and cyclists using the open-space system and
- provide high visual amenity for road users, including cyclists and pedestrians

Locating cycle ways and walkways in the open-space system provides opportunities for shading of cycle ways and walkways. This reduces risks related to exposure to the sun.

The District Plan provisions serve to integrate buildings with roads and the open space network. For example, buildings facing roads are required to have glass frontages to enhance passive surveillance. Another example is the requirement for sites adjacent to reserves to have landscaped setbacks. The District Plan provisions help to ensure stewardship, usability and safety of roads and the open space network for cyclists and pedestrians.

Where roads run along open space, the landscaped road reserve acts as a buffer between business activity and open space, thereby enhancing the amenity of the open space and making it more user-friendly for pedestrians and cyclists.

iii. Road network

This plan acknowledges that the road system has various functions including:

- It enables people to get to places
- It contributes to the character of the area
- It provides for network utility infrastructure

With that in mind, the following principles guided the design of the internal road system:

- Enable traffic to flow freely
- Promote safety
- Promote small-town character
- Provide shade
- Integrate walkways and cycle ways into the design of the roading system at the outset
- Facilitate natural surveillance
- Facilitate continued operation of existing network utilities
- Promote efficient development of new infrastructure

The following description of the internal road network should be considered in conjunction with map 54.12.2 and diagrams 1 – 11.

Road A

The main road into the area, Road A, provides an additional access to and from the business area (additional to Cornwall Road). The intersection site-lines are good. This road serves the eastern part of the area.

The provision of this access into the business area will take pressure off Cornwall Road and its intersection with Kitchener Road. The provision of this additional access into the business area fosters traffic distribution rather than traffic concentration and consequent congestion.

Because it is the main road into the business area, Road A helps to establish the character of the business area. The form and function of Road A and the area flanking it is thus of critical importance.

At various points Road A runs along the open space system. This helps to soften the impact of the business area for road users; it helps to achieve a balance between providing for development and retaining a small-scale, small-town character in keeping with Council's vision and mission statement. It also helps to ensure that there is passive surveillance from the road towards the open space area, thus making the open space area safer for pedestrians and cyclists using the open space area.

Where Road A is designed with a raised median as per the structure plan, the following applies:

- a) Cyclists are provided with a dedicated 2 metre cycle lane on both sides of the road.
- b) A 2 metre wide footpath on both sides of the road enables safe and comfortable pedestrian movement.
- c) The raised median:
 - prevents u-turns, which enhances safety and facilitates traffic flow
 - provides a grade-separated pedestrian refuge.
- d) The landscaping on the raised median contributes to the small-town character of the area.
- e) Parallel parking (2.25 metres wide) is provided on both sides of the road. The cycle ways are not located between the carriageway and the parking areas; this is to ensure that cyclists do not have to negotiate vehicles that are entering and exiting parking spaces. The parking area is relatively narrow to discourage heavy vehicles from parking on the road side.
- f) The landscaping down the centre of the road is essential if the small-town character and human scale of the area is to be retained.
- g) The 3.5 metre carriageway on both sides of the planted raised median is designed to accommodate buses and other heavy traffic.

Where Road A is designed without a raised median, the road will be designed with a flush median. Where there is a flush median the following applies:

- a) Cyclists are provided with a dedicated 2.5 metre cycle-lane on one side of the road.
- b) A 2 metre wide footpath on both sides of the road enables safe and comfortable pedestrian movement.
- c) The flush median helps motor vehicles to undertake right turns. There should be clear and obvious signage communicating the fact that the flush median is not a refuge for pedestrians. The use of the flush median as a pedestrian refuge will result in conflicts between heavy vehicles and pedestrians.
- d) Raised medians shall be provided at intervals to facilitate safe crossing for pedestrians.
- e) Parallel parking (2.25 metres wide) is provided on both sides of the road. The cycle ways are not located between the carriageway and the parking areas; this is to ensure that cyclists do not have to negotiate vehicles that are entering and exiting parking spaces. The parallel parking bays are relatively narrow to discourage heavy vehicles from parking on the road side.

- f) The landscaping on both sides of the road is essential if the small-town character and human scale of the area is to be retained.
- g) The 3.5 metre carriageway on both sides of the flush median is designed to accommodate buses and other heavy vehicles.
- h) A 2 metre wide network utility corridor is provided.

Road B

Road B is a loop that links the southern end of the main road, Road A, to the northern end of Road E. It services the northern, western and southern parts of the area. It also provides two options for future road linkages eastwards if the area to the east is required for business land use in the future.

At various points Road B runs along the open space system. This helps to soften the impact of the business area for road-users; it helps to achieve a balance between providing for development and retaining a small-scale, village character in keeping with Council's vision and mission statement. It also helps to ensure that there is passive surveillance from the road towards the open space area, thus making the open space area safer for pedestrians and cyclists using the open space area.

Road B is designed with a flush median as described under "Road A" above.

Cornwall Road

Cornwall Road serves the centre of the business area and it is proposed that it is upgraded to the same standard as Road B.

At various points Cornwall Road runs along the open space system. This helps to soften the impact of the business area for road-users. It also helps to ensure that there is passive surveillance from the road towards the open space area, thus making the open space area safer for pedestrians and cyclists using the open space area.

Road C

Road C links Cornwall Road with Roads A, D and E.

Road C surrounds an area of covenanted bush. This helps to soften the impact of the business area for road-users; it helps to achieve a balance between providing for development and retaining a small-scale, village character in keeping with Council's vision and mission statement. Businesses are oriented towards the road and hence the central open space, enhancing passive surveillance and encouraging a sense of stewardship.

Road D

Road D serves the east of the area. It is located adjacent to protected bush. It is also located alongside a culturally important ridge, Grandstand Ridge, linking present users of the road with Waiuku's past. It provides an option for a future road linkage eastwards if the area to the east is required for business land use in the future.

Waiuku Road

A service lane parallel to Waiuku Road is proposed where the proposed business area interfaces with Waiuku Road. Access to and from Waiuku Road is via a limited number of access points along the parallel service lane. This reduces the number of accesses onto Waiuku Road and provides access to Waiuku Road where visibility is good. This facilitates safe access to and from Waiuku Road. The visual effects of the business development as viewed from the road are enhanced; this is important because Waiuku Road is a gateway into Waiuku. Businesses are also provided with good exposure from Waiuku Road; thus the service lane is a valuable asset for businesses.

Shakespeare and Hall Roads

Shakespeare and Hall Roads are roads with rural character, not industrial roads serving the businesses at Fernleigh Business Park. Therefore, the following shall apply:

- There shall be no access between Precinct A and Shakespeare Road for traffic associated with manufacturing, processing, assembly, storage and freighting (see 42.5 Non-complying activities).
- There shall be no access between Precincts B and C and Shakespeare/Hall Roads (see 23.2 Controlled Activities).
- For activities 4 – 9 listed in 42.2 Controlled activities, access to and from Shakespeare Road is a controlled activity (see 42.2 Controlled Activities).

Minor Roads

Much of the minor road system is located along the open space system. This helps to soften the impact of the business area for road-users; it helps to achieve a balance between providing for development and retaining a small-scale, village character in keeping with Council's vision and mission statement. It also helps to ensure that there is passive surveillance from the road towards the open space area, thus making the open space area safer for pedestrians and cyclists using the open space area.

The proposed minor roads are located so as to maximise the use of the WIZ for large-footprint activities.

Roundabouts

Landscaped roundabouts with deep set-backs are proposed. Roundabouts provide the benefit of enabling vehicles to return in the direction from which they came. This minimises trip length and hence reduces fuel usage and emissions. It also helps vehicles to proceed more directly to their destinations (as opposed to having to continue in a direction which leads them away from their destination). This helps traffic to flow efficiently.

Deep set-backs at the roundabouts achieve the following:

- maximising the number of businesses that can locate around the traffic circle and thereby acquire high profile
- providing the opportunity to develop the spaces around different traffic circles in different ways, thereby individualising each traffic circle and thus creating landmarks and unique vistas, which in turn helps people to create mind-maps of the area and thus helps them to negotiate their way around the area.

Cul-de-sacs

Cul-de-sacs are not provided for in the new business area because:

- large vehicles find them difficult to negotiate
- they hinder direct access which works against the objective of shorter trips and lowered fuel usage and emissions.

In the short term, roads that are only partly developed could operate as no-exit roads, but such roads should be provided with sufficiently large turning areas.

It is acknowledged that cul-de-sacs have the potential to achieve the following:

- a. a sense of community
- b. reduction in the number of vehicles passing any particular site; this in turn contributes to a small-scale town character
- c. traffic calming
- d. passive surveillance

These benefits of cul-de-sacs are significant and they can only be realised by relatively short cul-de-sacs; the benefits of cul-de-sacs are significantly reduced where a certain length is exceeded. If it is found that a

cul-de-sac is appropriate in a particular situation, then the principle of shorter, rather than longer, cul-de-sacs shall be applied so that the advantages listed in a - d above can be achieved.

Parking

On-site and on-street parking is provided in the Industrial Services Zone and in the Industrial Zone.

On-site handling of freight is essential for the WIZ, hence larger site sizes are provided for in the WIZ than in the WISZ.

Parallel street parking is provided along planted-median roads and flush median roads; this parking is intended for customers. On-site parking is required by the provisions in Part 39 and 42.

For more details on parking see "Road A" above.

iv. Public transport

The Glenbrook Vintage Railway (GVR) runs through the western section of the site between Collingwood Road and Cornwall Road. It runs under Shakespeare Road, crosses Cornwall Road (level crossing) and runs under Kitchener Road.

The GVR provides future potential for passenger and freight services.

The District Plan provisions serve to manage potential adverse visual effects of development along the GVR. Development in the vicinity of the rail corridor must be compatible with the railway activity.

The roading design facilitates the operation of bus passenger services from the residential centres where employees are likely to be drawn from, including Waiuku, Tuakau and Pukekohe.

e) Stormwater management

Consent shall not be granted for urban subdivision and/or development until the required comprehensive stormwater discharge consent has been obtained from the regional council/s. Subdivision and development shall comply with the conditions of the comprehensive discharge consent.

- Off-stream ponds, or wetlands, shall be established in accordance with Waiuku integrated catchment management plan. Run-off shall be captured in stormwater ponds or wetlands before being released into streams. When making decisions about the appropriateness of ponds versus wetlands, consideration shall be given to the management of heavy metals and organic contaminants.
- Open waterways shall be retained within the open space system as set out in map 54.12.1.
- Where a waterway has a width of 3 metres or more, an esplanade reserve with a width of no less than 40 metres shall be provided along the waterway and shall be vested in Council.
- Where a waterway has a width of less than 3 metres, a riparian margin with a width of no less than 20 metres shall be provided along the waterway.
- In all other instances where the open space system is identified in the structure plan, the width of the Recreation Zone shall be no less than 20 metres.

The extent of esplanade reserves and riparian margins on each side of the relevant waterway shall be determined by Council. In other words, esplanade reserves and riparian margins might extend equally on both sides of the relevant waterway or they might extend further on one side of the waterway than on the other side.

Flow channels may be modified and channel landscaping provided to achieve required flow rates.

Where a roofing system is designed and constructed in a manner that significantly reduces or makes use of the stormwater run-off, for example a roofing system that includes stormwater retention tanks, annual stormwater drainage fees may be discounted at the discretion of Council.

All required engineering infrastructure (water, wastewater, stormwater, roading, gas, electricity and telecommunications) shall be developed and provided to the satisfaction of Council prior to all other

development, including subdivision. Recognition of the likely need for additional capacity and connection points shall be incorporated during development (or at the time of subdivision), e.g. through provision of additional ducts and frequent connection points.

Where infrastructural limitations exist, such that the required stormwater infrastructure cannot be provided by Council within a particular time-frame, or within a particular budget, the provision of the required stormwater infrastructure will be the responsibility of the developer.

Unless specifically stated differently in the structure plan, all development will be in accordance with Council's current Engineering Code of Practice.

Stormwater infrastructure will be funded in accordance with Council's development contributions policy.

The responsibility for stormwater maintenance and compliance is not solely that of individual landowners.

The edge of a waterway, and hence the width of a waterway, shall be calculated in terms of FDC's criteria, which include, amongst other things, safety of people and erosion of stream banks.

Where this plan requires a setback from water, the setback shall be consistent with the 100 year annual recurring interval flood plain, as referred to in the Auckland Regional Council: Proposed Air, Land and Water Plan, or subsequent version of that document and shall achieve a visual amenity view corridor.

It is recognised that it is not feasible to seek prior consent for every discharge. For example, it is not feasible to seek prior consent for dissolved zinc run-off from roofs, dissolved copper from building products and run-off containing oil from vehicles using the road. It is also recognised that it is not technically feasible to carry out 100% effective treatment.

Assessment criterion for Discretionary subdivision

In addition to the assessment criteria at 41.8, all adjustment of overland flow paths for Discretionary Activity subdivisions shall also be assessed in terms of the environmental, social and cultural effects and in terms of cost.

In addition to the above, and in addition to the development standards set out in 42.6.20 Stormwater management – volume control, the following shall apply to Precinct A (Map 54.12.5):

1. Precinct A shall be managed as an integrated and holistic entity for the purposes of stormwater management.
2. Council shall have access to all publically-owned stormwater ponds.
3. Council shall be provided with monitoring reports for all privately-owned stormwater ponds.
4. Stormwater ponds shall contribute to a high-amenity interface, to the satisfaction of Council, between Precinct A and the GVR.
5. The sizing, location and number of stormwater ponds shall be to the satisfaction of Council.
6. Stormwater ponds shall at a minimum provide for extended detention volume to address potential downstream effects, including erosion.
7. Stormwater ponds shall provide for attenuation volume to address the potential adverse effects of the level of imperviousness of Precinct A.
8. The stream between Cornwall Road and the GVR shall be open, protected and in public ownership.

f) Wastewater management

- i. All lots and notional lots within the subdivision intended for individual ownership or occupation shall be supplied with an independent connection to a public sewerage system.
- ii. All subdivision shall be dependent on the acquisition of the required wastewater discharge consents from the regional council.

- iii. All subdivision shall comply with the conditions of the wastewater discharge consents.
- iv. The required infrastructure shall be developed and provided to the satisfaction of Franklin District Council prior to any subdivision; where infrastructural limitations exist, such that the required infrastructure cannot be provided by Franklin District Council within a particular time-frame, or within a particular budget, the provision of the required infrastructure will be the responsibility of the developer.
- v. Wastewater infrastructure funding will be provided for in LTCCPs and annual plans.
- vi. All sewage disposal activities shall be dependent on the acquisition of the required wastewater discharge consents from the regional council.
- vii. All sewage disposal activities shall comply with the conditions of the wastewater discharge consents.
- viii. The sewage disposal required infrastructure shall be developed and provided to the satisfaction of Franklin District Council prior to any other development; where infrastructural limitations exist, such that the required infrastructure cannot be provided by Franklin District Council within a particular time-frame, or within a particular budget, the provision of the required infrastructure will be the responsibility of the developer.
- ix. Unless specifically stated differently in the structure plan, all development will be in accordance with Council's current Engineering Code of Practice.

Consent shall not be granted for urban subdivision and/or development until:

- i. The required wastewater discharge consents have been obtained from the regional council by FDC or its representative for the discharge from the Waiuku wastewater network and the Waiuku community wastewater treatment plant; and
- ii. The plant has been upgraded in terms of the provisions of the consent, and
- iii. The new connection from the subdivision or development will not lead to non-compliance with the conditions of the regional council discharge consents.

Development, including subdivision, shall comply with the conditions of the wastewater discharge consents.

New wastewater infrastructure should be in terms of:

- o the wastewater network discharge consents obtained from the regional council by FDC or its representative
- o provisions of the PARP: ALW plan.

Consent shall not be granted for urban subdivision and/or development until the required wastewater discharge consents have been obtained from the regional council/s. Subdivision and development shall comply with the conditions of the wastewater discharge consents.

In instances where wastewater discharge consents cannot be obtained by Council from the regional council within a particular timeframe, or within a particular budget, the developer shall be responsible for obtaining the required wastewater discharge consents.

All lots within the structure plan area shall be connected to the Waiuku sewerage system.

All required engineering infrastructure (water, wastewater, stormwater, roading, gas, electricity and telecommunications) shall be developed and provided to the satisfaction of Council prior to all other development, including subdivision. Recognition of the likely need for additional capacity and connection points shall be incorporated during development (or at the time of subdivision), e.g. through provision of additional ducts and frequent connection points.

Where infrastructural limitations exist, such that the required wastewater infrastructure cannot be provided by Council within a particular time-frame, or within a particular budget, the provision of the required wastewater infrastructure will be the responsibility of the developer.

Unless specifically stated differently in the structure plan, all development will be in accordance with Council's current Engineering Code of Practice.

All development shall be served by best practice collection, conveyance and treatment of wastewater.

Wastewater infrastructure will be funded in accordance with Council's development contributions policy.

In addition to the assessment criteria at 39.8 and 42.8, controlled land-use activities will be assessed against the following criterion:

Capacity of wastewater infrastructure and provisions for wastewater on-site servicing.

g) Water supply

Consent shall not be granted for urban subdivision and/or development until the required water supply consents have been obtained from the regional council/s. Subdivision and development shall comply with the conditions of the water supply consents.

In instances where water supply consents cannot be obtained by Council from the regional council/s within a particular time-frame, or within a particular budget, the developer shall be responsible for obtaining the required water supply consents.

All lots within the structure plan area shall be connected to the Waiuku water supply system.

All required engineering infrastructure (water, wastewater, stormwater, roading, gas, electricity and telecommunications) shall be developed and provided to the satisfaction of Council prior to all other development, including subdivision. Recognition of the likely need for additional capacity and connection points shall be incorporated during development (or at the time of subdivision), e.g. through provision of additional ducts and frequent connection points.

Where infrastructural limitations exist, such that the required water supply infrastructure cannot be provided by Council within a particular time-frame, or within a particular budget, the provision of the required water supply infrastructure will be the responsibility of developer.

Unless specifically stated differently in the structure plan, all development will be in accordance with Council's current Engineering Code of Practice.

Water supply infrastructure will be funded in accordance with Council's development contributions policy.

h) Provision of open space

The structure plan sets out the approximate location and extent of an integrated open space system. The open space system incorporates a network of cycle ways and walkways and consists of stormwater reserve, protected bush and publically accessible open space that is not required for stormwater management.

The open space system will be in accordance with the general intent of structure plan. The open space system will:

- contribute to stormwater management
- accommodate cycleways
- accommodate walkways
- provide linkages
- act as a buffer to aid in the management of potential adverse effects
- enable relaxation and informal recreation
- protect significant vegetation
- provide amenity along the Glenbrook Vintage Railway line

The multi-functionality of the open space resource promotes an efficient use of resources and contributes to amenity for pedestrians and cyclists in the area. It also enhances the amenity for people in the business area generally, because open space areas utilised by pedestrians and cyclists are less likely to be compromised by anti-social behaviour due to the component of passive surveillance.

i) Provision of electricity

An existing electricity substation is located adjacent to the Structure Plan Area. However, it is proposed to relocate and upgrade this substation to a site within the Structure Plan Area. The proposed relocation of this substation will impact on the routes of the incoming electricity lines connecting the substation with the national grid and outgoing lines from the substation to electricity customers. This substation provides electricity to the entire Waiuku Service Area and therefore it is a key item of infrastructure for the Waiuku area.

Development in the vicinity must occur in consultation with the relevant service provider. The developer shall pay the costs associated with undergrounding the distribution network within the road corridor.

j) Geology and topography

Prospective sites in the area might have limitations resulting from instability and possible flooding adjacent to existing streams. Specific foundation design may be required for heavy structures or structures founded in deep cuts. Since 1940 the land use at Waiuku has mainly been agriculture. In recent years, some commercial development has occurred in the southwest corner of the area. It is expected that detectable residues of persistent agricultural sprays will be present in agricultural soils and these will have to be considered in any redevelopment of this land. These levels are not expected to present any human health risk, but may trigger the requirement for remedial action under the contaminated land rules of the Proposed ARPALW.

Development on steep slopes is not provided for in the structure plan; steep slopes are incorporated into the open space system. All sites will require detailed geotechnical investigations prior to subdivision or development, in accordance with Council requirements.

k) Stream protection

Stream protection shall occur as set out in the ICMP and ARC's TP 148.

l) Earthworks

Prior to undertaking any earthworks, appropriate sediment and erosion control measures shall be installed in terms of the Auckland Regional Council's Technical Publication 90 'Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region'.

The potential adverse effects arising from earth disturbance must be avoided by the implementation of appropriate sediment and erosion control measures. Those persons proposing any earthworks shall also ascertain whether resource consent is required from the Regional Council prior to the commencement of those earthworks.

m) Contamination

Any activity shall comply with the requirements of the District Plan as well as the standards and rules of any relevant Regional Plan and its supporting technical publications. Any persons undertaking any activity shall enquire of the relevant Regional Council as to the need for resource consents for any activity.

Assessment Criteria for Controlled Subdivision Activities

In addition to the assessment criteria for controlled activities set out at Rules 38.6 and 41.6, controlled activity subdivision proposals shall be assessed against the following criteria:

Every application for subdivision must include a detailed history of the known land uses of the subject land for the purpose of identifying whether a risk of contamination exists on site. Along with standard features, the subdivision scheme plan shall show the position of both existing and former areas or buildings in which activities or chemicals contained in the Hazardous Activities and Industries List published in the Ministry for

the Environment's Contaminated Land Management Guidelines – Schedule A may have or are taking place, particularly where such activities were/are concentrated and known as 'hot spots'.

Should the Council consider that a risk of contamination exists on the site it shall require any applicant to provide a Site Assessment Report including soil sampling test results and, if necessary, remedial action plans and remedial validation reports produced in accordance with the Ministry for the Environment 'Contaminated Site Management Guideline No1 dated June 2001 and updated 2003 that shall determine the conditions that the Council may apply or, if a discretionary activity, whether consent may be granted or refused.

Assessment Criteria for Controlled Land-use Activities

In addition to the assessment criteria for controlled activities set out at Rules 39.8 and 42.8, controlled activity land use proposals shall be assessed against the following criteria:

The extent to which the site may be contaminated. Unless provided as part of a prior subdivision or land development application, any application for land development must include a detailed history of the known land uses of the subject land for the purpose of identifying whether a risk of contamination exists on site. Should the Council consider that a risk of contamination exists on the site it shall require any applicant to provide a Site Assessment Report including soil sampling test results and, if necessary, remedial action plans and remedial validation reports produced in accordance with the Ministry for the Environment 'Contaminated Site Management Guideline No1 dated June 2001 and updated 2003 that shall determine the conditions that the Council may apply or, if a discretionary activity, whether consent may be granted or refused.

n) Noise and ventilation

Mechanical ventilation systems shall be installed in accordance with public health standard NZS 4303:1990 to ensure that windows and doors are not required to be opened to ventilate those rooms subject to internal ambient noise limits thereby breaching the noise requirements of this rule.

o) Covenanted bush

An area of covenanted bush is shown on the structure plan maps. This area is to be protected and managed in terms of the conditions of the covenant.

54.12.3 STAGING OF DEVELOPMENT

Timing of development and the establishment of services (including water, wastewater, transportation and recreation areas) will require the completion of a structure plan that sets out the alignment and sizing of the infrastructure. Any infrastructure funding to be undertaken by Council will be dependent on commitment of the Council capital works programme. As with other infrastructure, the availability of electricity and telecommunications may necessitate the need for staging of development. In respect of these two infrastructure elements, the Council will require that developers meet the cost of undergrounding these services.

Currently, Council services are unsuitable to support wet industries (industries which use large amounts of water).

Council is adhering to a staging programme (map 54.12.3) to ensure that the required infrastructure is in place to support new business activities.

The staging reflected in map 54.12.3 is intended to accomplish the following:

- a mix of land uses at the initial stages
- options for small and larger sites at the initial stages because some of the area that is included is flat, which enables larger footprint buildings, and some of the area included in the first stage consists of slightly sloping topography, requiring smaller footprint buildings
- development that occurs in sequence (the first stage is contiguous with the current business area, thus areas closer to existing urban development will be developed before more outlying areas)

- good footpaths and cycle ways from the start
- the progressive provision of infrastructure to meet the requirements of each stage
- infrastructure costs spread over time

No development of buildings for business purposes shall take place until all the required infrastructure has been provided to the satisfaction of Council.

Approximate development timeframes are as follows:

Stage 1: approximately 2014 – 2038

Stage 2: approximately 2039 – 2052

Stage 1 shall not be developed until Council is satisfied that the infrastructure required to support Stage 1 has been constructed and is in place. This includes infrastructure within Stage 1 as well as infrastructure that might be required beyond the boundaries of Stage 1.

Stage 2 shall not be developed until Council is satisfied that:

- Stage 1 is sufficiently developed to warrant development of, and infrastructure provision for, Stage 2, and
- the infrastructure required to support Stage 2 has been constructed and is in place; this includes infrastructure within Stage 2 as well as infrastructure that might be required beyond the boundaries of Stage 2.

All required services shall be provided to the satisfaction of Council prior to all other development, including subdivision.

Where infrastructural limitations exist, such that the required infrastructure cannot be provided by Council within a particular time-frame, or within a particular budget, the provision of the required infrastructure shall be the responsibility of the developer.

However, there is flexibility in Council's approach because Council will continue to work with landowners and developers, formally, in accordance with the RMA and the LGA, and informally, consistent with good practice. For example, stage 1 could become available prior to the anticipated 2014 date if market demand for business land requires it and if the necessary infrastructure is in place. Similarly, parts of stage 2 could be developed prior to parts of stage 1 if the required infrastructure is provided by the developer to the satisfaction of Council. It is thus recognised that the staging reflected in map 54.12.3 is subject to change as a result of more detailed investigations required for the preparation of subdivision and land-use plans. This process allows for landowner and developer participation in making decisions about staging.

As it will be the landowners and developers that will be preparing the subdivision and land-use plans for their land, they will be setting out a staging pattern they consider to best suit the contour of the land and provide efficient use of the land. It will be the role of Council to ensure that the staging is consistent with the outcomes sought by the structure plan. Therefore, a collaborative approach will arise from the resource consent process.

In addition to the assessment criteria at 38.6(8) and 41.6(8), controlled sub-division activities will be assessed against the following criterion:

The infrastructure shall be appropriately consented, designed and operated in terms of the relevant consents to fulfil its function.

54.12.4 STANDARD OF DEVELOPMENT

Unless specifically stated differently in the structure plan, all development will be in accordance with Council's current Engineering Code of Practice.

54.12.5 FUNDING OF INFRASTRUCTURE

Infrastructure will be funded in accordance with Council's development contributions policy.

54.12.6 INFRASTRUCTURAL LIMITATIONS

Where infrastructural limitations exist, such that the required infrastructure cannot be provided by Council within a particular time-frame, or within a particular budget, the provision of the required infrastructure will be the responsibility of developer.