16.15 — Structure Plans

16.15.11 Wiri North

[AM162]

16.15.11.1 Description of the Area

The Wiri North Structure Plan Area is 38 hectares in extent and comprises a quarry that is nearing the end of its economically viable life. It is bounded by the scheduled Wiri North Stonefields Waahi Tapu area and Roscommon and Wiri Station Roads to the west and south, an Open Space zoned drainage reserve (abutting the Puhinui Stream) and State Highway 20 to the north and main trunk railway line to the east. The Wiri North Structure Plan Area is surrounded by industrially zoned land and major road networks.

As at 2012, the quarried area floor is significantly lower than the land around the site perimeter and the surrounding land as a result of quarrying activities. As the former quarry is rehabilitated over time, through the importation of clean fill, the ground level is gradually being raised. At present much of the quarried area remains below the level of the surrounding water table and both groundwater and stormwater must be pumped from the quarried area to Puhinui Stream.

16.15.11.2 Development Pattern

The key factors that have determined the pattern of development within the Wiri North Structure Plan Area are:

- The recognition of the significant arterial roads bordering the west and south boundaries of the site and the influence these have on the location of intersections to the site and the route of the internal road.
- The need to provide a robust stormwater and groundwater disposal system which ensures that sites and buildings have protection from the risk of flooding consistent with the District Plan's normal standards and avoidance of significant ongoing cost commitments to landowners, or the Council.
- Relationship to the Wiri North Stonefields Waahi Tapu area, to the Wiri North Geological Feature, safety issues in relation to the stability of the Cliff Hazard Area and the future requirement to consider the Cliff face as a geological feature.
- The relationship between the Wiri North Structure Plan Area and Puhinui Stream.
- Urban design and amenity considerations, including an appropriate relationship of buildings with Roscommon and Wiri Station Roads, including enabling significant structural planting.
- Proximity of regionally significant infrastructure, especially the Wiri Oil Terminal and appropriate management of risk issues.

16.15.11.3 Wiri Oil Terminal

Definitions applying to the Wiri North Emergency Management Areas A and B only:

"Emergency scenarios" means events of low probability but potential high impact to people or property including but not confined to vapour cloud explosion, tank and bund fire arising from on-going use and development of the Wiri Oil Terminal. Adverse effects of such events may include blast overpressure, fragments and heat radiation.



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"Sensitive activities" includes care centre facilities for children or elderly persons, educational facilities, hospitals, healthcare service, household units, minor household units, visitor accomodation and any activities involving 24 hour occupation by the same persons.

"Wiri North Emergency Management Area A" means the area identified on Figure 16.13 which is closest to the Wiri Oil Terminal and subject to the greatest potential effects from emergency scenarios. Consequently, building design elements should be considered for all new buildings and alterations within the area. Activities in Area A are also required to undertake appropriate emergency planning procedures for their respective site(s) and sensitive activities should not be located in this area if the on-going use and future operation of Auckland's fuel supply network is not to be compromised.

"Wiri North Emergency Management Area B" means the area identified on Figure 16.13 where sensitive activities should not be located if the on-going use and future operation of Auckland's fuel supply network is not to be compromised. Persons undertaking activities need to be made aware of the potential risks arising from emergency scenarios at the Wiri Oil Terminal. They are therefore required to undertake appropriate emergency planning procedures for their respective site(s). In the absence of any defined land parcels, Area B has been delineated by a straight line (with the co-ordinates defined on Figure 16.13) in order to facilitate and simplify subsequent land use development.

The Wiri North Structure Plan Area is located close to the Wiri Oil Terminal, which is identified as regionally significant infrastructure under the Auckland Regional Policy Statement. Land use change in and around the Wiri Oil Terminal can be subject to emergency scenarios and for this reason the Wiri Oil Terminal is a major hazard facility. Inappropriate land use activities or high populations of people around this major hazards facility could result in constraints on its use and development, and therefore inefficient utilisation of regionally significant infrastructure.

In order to ensure that development within the Wiri North Structure Plan Area is compatible with the Wiri Oil Terminal and its ongoing use and development, and that risks arising from the Terminal's operations are taken into account in the design, location and management of development within the Wiri North area, two Emergency Management Areas are identified within the Wiri North Structure Plan. In order to ensure the appropriate management of emergency scenarios, sensitive activities should not locate within the Emergency Management Areas.

As part of the Restricted Discretionary land use consent process the design of buildings and their surrounds within Wiri North Emergency Management Area A is required to ensure that risks posed to the occupants of the buildings are minimised, while achieving good urban design outcomes within this locality.

All activities within Wiri North Emergency Management Areas A and B are required to complete a Site Emergency Management Plan in accordance with the template contained in Appendix 14C.

16.15.11.4 Roading

An internal road is proposed with full cross intersections at the existing intersections of Vogler Drive and Roscommon Road, and Langley Road and Wiri Station Road. Analysis of the carrying capacity of Roscommon and Wiri Station Roads post the opening of the State Highway 20 extension has shown that the development of the Wiri North Structure Plan Area will not compromise the safe and efficient operation of the road network. However, the signalised intersection at Langley Road and Wiri Station Road cannot be formed until such time as the speed limit on that localised section of Wiri Station Road is reduced to at most 60 kilometres per hour. The statutory process for the reduction of the speed limit will be undertaken by Auckland Transport once it assumes responsibility for the road following revocation of its State Highway status by the New Zealand Transport Agency. As development of the Wiri North Structure Plan Area proceeds, consideration will need to be given to whether the proposed accumulative level of development requires one or both of the intersections and traffic signals onto Roscommon Road and/or Wiri Station Road to be in place as indicated in the Wiri North Structure Plan. One and ultimately both of these intersections will have to be formed as significant development proceeds within the Structure Plan Area.

Vehicle access, in addition to the signalised intersection, can be established to Roscommon Road, after revocation of its State Highway status, to service the sites fronting this road. As both roads are listed as







part of the Primary Road network, any secondary access onto Roscommon or Wiri Station Road will require resource consent under Rule 8.10.3(b). Specific outcomes in relation to access are included within section 8.A1.3.2.14A of the Plan.

16.15.11.5 Stormwater Disposal and Inundation

As at 2012, the level of the quarry floor is lower than the level of the surrounding water table. Stormwater and ground water is presently being pumped from the quarried are to sediment control ponds, before being discharged to the Puhinui Stream.

The former quarry will gradually be rehabilitated through the importation of clean fill material, with the ground level being gradually raised. Rehabilitation of the quarry may result in differing ground levels throughout the Wiri North Structure Plan Area. In line with District Plan expectations, the area will slope towards the Puhinui Stream to ensure gravity operation of the land drainage network, and to ensure that Rule 9.9.1.2(c) is met in relation to the Puhinui Stream. This would create a natural draining topography, and result in sound stormwater and groundwater management, while appropriately protecting people, property and the environment. It would support the Business 6 zoning and industrial activities in the Wiri North Structure Plan Area by minimising the threat of flooding, and risks associated with the use and storage of hazardous substances and their potential contamination of water if any flooding occurred.

This approach will ensure development is not located on the existing quarried area at levels which require ongoing reliance on pumping in perpetuity, to dispose of stormwater and groundwater and which result in ongoing risks of flooding, if the pumping system, for any reason, failed. It avoids issues associated with the appropriate location of any pumping system, including backups, access to these during flooding, and pond storage capacity matters. It also avoids ongoing costs for the owners of lots at risk of flooding, including the need, in perpetuity, to fund the ongoing capital, operating and maintenance costs to manage and mitigate stormwater and groundwater disposal, including for any required consents, and contamination risks and liabilities.

There is a drainage reserve alongside the Puhinui Stream.

The location, size and functioning of stormwater detention ponds will be determined through the network discharge consent process. In addition to the stormwater management requirements, the locational aspects should also consider the relationship of the ponds to buildings, roads and the Puhinui Stream reserve network from an amenity and open space perspective. The area located between the Puhinui Stream and the indicative road (along the northern boundary of the Wiri North Structure Plan) is the preferred location of the stormwater pond.

16.15.11.6 Wiri North Stonefileds Waahi Tapu Area, Cliff Hazard Area and Wiri Lava Cave

The scheduled Wiri North Stonefields Waahi Tapu (Waahi Tapu) area immediately adjoins the Wiri North Structure Plan Area (Figure 16.13). It is important that development within the Wiri North Structure Plan Area integrates with and, where possible, enhances the cultural values of this feature.

The Wiri North Structure Plan Area contains near vertical basalt cliff face of up to 20 metres in height. The location of the cliff face is shown on the Wiri North Structure Plan as a Cliff Hazard Area. Any development within this area must give consideration to safety issues in relation to the stability of the cliff face and any associated effects on the structural integrity of the adjoining Waahi Tapu area. As the cliff abuts as scheduled Waahi Tapu area, any invasive remediation or mitigation works may also require discretionary activity resource consent under Rule 6.9.2 of the Plan.

There is a scheduled lava cave, the Wiri Lava Cave, extending into the site off the Wiri Station Road boundary within the Waahi Tapu area. It is important that the structural integrity of this lava cave is not compromised. Development of the Wiri North Structure Plan Area is unlikely to have any effect on the Wiri Lava Cave, given that it has withstood the previous quarrying activities on the site. However, potential damage to the lava cave has been included as a matter for consideration in the establishment of new buildings on the site. In the unlikely event that any new development could give rise to effects on the lava cave, discretionary activity resource consent will be required under Rule 6.9.2 of the District Plan.



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16.15.11.7 Wiri North Geological Feature

Geological investigations have determined that the Wiri North Structure Plan Area contains features which provide insight into past geological and volcanic activity. The southern quarry faces have exposed a sequence of lava flows (formed by jointed basalt and scoria) which are considered to be significant both at a local and regional level.

In order to protect a representative section of the geological features present within the Wiri North Structure Plan Area, the Structure Plan identifies the "Wiri North Geological Feature" along part of its southern boundary, adjoining the Waahi Tapu area. Any land modification, development or subdivision within the Wiri North Structure Plan Area must give consideration to the protection of the Wiri North Geological Feature. A minimum of 60 metres continuous length and 20 metre vertical height, including the highest part of the cliff exposure should be protected. Development within the Wiri North Structure Plan Area and enhance this geological feature for public appreciation.

While it is desirable to achieve the above outcome, it is acknowledged that the rehabilitation of the quarried area, depending on the extent of filling, has the potential to cover parts of the geological exposures and reduce the opportunity to preserve these features for educational purposes.

16.15.11.8 Archaeological Matters

The Wiri North Structure Plan (Figure 16.13) contains an "Archaeological Warning Area" along its western boundary, adjoining Roscommon Road. Archaeological investigations have determined that the Archaeological Warning Area may contain archaeological evidence of pre-European activities. The bund within the Archaeological Warning Area was constructed on top of the original ground surface. Under the provisions of Chapter 9 (Land Modification, Development and Subdivision), any earthworks within the Archaeological Warning Area are at least a Restricted Discretionary Activity. Any land modification or development within the Archaeological Warning Area requires archaeological investigations to be undertaken and will require a separate authority from the New Zealand Historic Places Trust.

16.15.11.9 Urban Design

The Wiri North Structure Plan Area is located in a prominent location, abutting Roscommon Road and Wiri Station Road, which is one of the main access routes from Auckland International Airport to Manukau City Centre. Appropriate measures are required to ensure that the development of business activities along these important road frontages produce good visual amenity outcomes.

From an urban design perspective, the key sensitive areas within the Wiri North Structure Plan Area are those fronting Roscommon and Wiri Station Roads; those that have a boundary with the Waahi Tapu area; and the Puhinui Stream and its margins. In order to ensure the appropriate design, location and integration of development in these areas a Restricted Discretionary Activity resource consent is required for the construction of new buildings (as indicated in Figure 16.13), except for the area identified as "Controlled Activity Status Area" in Figure 16.13, where such development has a Controlled Activity status. To avoid overly tall buildings abutting Roscommon and Wiri Station Roads, a height limit of 15 metres is applied to the higher level land abutting those roads, within a Height Overlay Area identified in the Wiri North Structure Plan (Figure 16.13).

A Controlled Activity resource consent is required for the construction of new buildings within the remaining, less sensitive, parts of the Structure Plan Area, as indicated on Figure 16.13.

Control is reserved over design, scale, location, and orientation of buildings and landscaping to ensure that buildings relate well to the surrounding environment (including the Wiri North Stonefields Waahi Tapu area), achieve high amenity values, and overall a spacious character.

Due to the lower level of the majority of the Wiri North Structure Plan Area in relation to the surrounding road network, and as the site is under an airport approach, the design and appearance of roofs is also a matter of control.



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16.15.11.10 Puhinui Stream

The Wiri North Structure Plan Area adjoins the Puhinui Stream which is a significant stream to local iwi and to the Manukau community. The stream and the abutting land forming the esplanade reserve is in Council ownership. A Puhinui Stream Restoration Concept Plan was developed by the Council in 2002 to provide for the enhancement of the stream, although work in the vicinity of the Wiri North Structure Plan Area has been very limited to date. Development of any future reserve areas within the Wiri North Structure Plan Area alongside the Puhinui Stream esplanade reserve should be developed to be compatible with the restoration plan for the stream, while also being of a size and design to appropriately treat stromwater flows from the future development of the Structure Plan Area.







