

Appendix V

Policy Analysis



Redoubt - Mill Road Corridor Project: Statutory Assessment

1.0 Statutory Assessment

1.1 Introduction

- 1.1.1 The proposed Redoubt Road - Mill Road Corridor project is considered to be supported by the existing national, regional and local policy documents. The proposed road corridor realignment will provide sufficient capacity for private vehicles, passenger transport, pedestrians and cyclists to accommodate and unlock planned growth over the next 30 year planning horizon for the areas of Flat Bush, Papakura, Takanini and Drury. The proposed corridor upgrade will also address existing congestion and safety issues within the corridor.
- 1.1.2 The proposed road corridor realignment includes provision for cyclists, pedestrians and passenger transport. This will provide travel choice, improve accessibility to Manukau city transport facilities and connections, and also promote a mode shift from the car. This will help to reduce private car travel and thereby fuel consumption and emissions.
- 1.1.3 The existing road corridor has a high fatal and serious crash rate, particularly loss of control crashes. The upgraded corridor will help to reduce the number of crashes and also improve personal safety and security through providing pedestrian and cyclist facilities.
- 1.1.4 The following sections provide a detailed assessment of the proposed Redoubt Road - Mill Road corridor against the relevant statutory framework.

1.2 Statutory Framework

The statutory framework against which this planning assessment has been undertaken is set out below:

- 1.2.1 Legislative Framework
- Resource Management Act (RMA) 1991
- 1.2.2 Local Government Statutory Planning Documents
- Auckland Council Regional Policy Statement
 - Auckland Council Regional Plan: Air, Land, Water
 - Auckland Council District Plan: Manukau Section and Papakura Section
 - Proposed Auckland Unitary Plan



1.2.3 Other Relevant Strategic Documents

- Auckland Plan (2013)
- Auckland Long Term Plan 2012 – 2022
- Auckland Regional Land Transport Strategy 2010 – 2040
- Auckland Regional Land Transport Programme 2012 – 2022
- Auckland Regional Public Transport Plan

1.2.4 Transportation documents

- Auckland Integrated Transport Plan
- Auckland Transport Network Plan (2009)
- Auckland Passenger Transport Network Plan (2006 – 2016)
- Auckland Regional Public Transport Plan

1.2.5 Iwi Management Plans

1.2.6 Urban Design Documents

- New Zealand Urban Design Protocol



2.0 Legislative Framework

2.1 Resource Management Act 1991 *(Reprint as at 1 February 2013)*

2.1.1 Purpose

Set out below is an assessment of the proposed Redoubt Road-Mill Road corridor in relation to the purpose and principles of the RMA. The Resource Management Act (RMA) promotes the sustainable management of natural and physical resources, and is the principle legislation for environmental management. Part 2 of the Act sets out the principles for the sustainable management of natural and physical resources.

Section	Policies and Objectives	Comment
Section 5: Purpose	<ol style="list-style-type: none"> 1. The purpose of this Act is to promote the sustainable management of natural and physical resources. 2. In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while— <ol style="list-style-type: none"> (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment. 	<p>The proposed road corridor will be constructed and operated in a manner that ensures that any actual and potential effects of the proposal on the local community and natural and physical resources can be effectively avoided, remediated or mitigated. Section 15 of the AEE – Mitigation Conditions - sets out the proposed mitigation and remediation. All effects arising from the project will be managed by applying appropriate standards for and the preparation and implementation of the proposed Environmental Management Framework (EMF). This process will determine how and when effects are managed in conjunction with objectives and standards in conditions. The EMF will also ensure that conditions placed on the designation are complied with. A number of delivery work plans sit under the framework including but not limited to:</p> <ul style="list-style-type: none"> - Transport, access and parking - Construction noise and vibration - Historic character - Urban design and landscape - Social and business disruption - Air quality - Contamination - Ecological management and restoration <p>Implementation of these plans is required under the proposed conditions (see section 15 of this report) that will attach to the designation and be recorded in the District Plans. Adverse effects will be either avoided, remedied or mitigated so that they are either minor or moderate in scale.</p> <p>The existing Mill Road – Redoubt Road corridor is located within a mix of low-medium density urban residential land use and rural landscapes with</p>

Section	Policies and Objectives	Comment
		<p>agricultural land use. A significant level of growth is planned within the areas around the corridor over the next 30 years. The proposed corridor realignment and widening is therefore necessary to provide capacity for future growth and development in the areas of Flat Bush, Takanini and intensification around Papakura Town Centre over a 30 year planning horizon. The proposed urban section of the corridor realignment and upgrade makes provision for all transport modes, including private vehicles, walking, cycling and passenger transport. The rural section makes provision for vehicles and cycles via a dedicated cycleway and is “future proofed” in terms of the possibility of accommodating future bus only lanes. These measures will provide social, economic and cultural wellbeing by allow for the development of safe and connected communities with access to open space, employment and community facilities.</p> <p>The corridor upgrade will improve the alignment of the corridor which will have the benefit of reducing the likelihood of fatal and serious cashes thus having health and safety benefits.</p> <p>Overall the proposed corridor realignment and widening will enable the community to better provide for their social, economic and cultural well-being through enabling future growth and providing an improved transport environment.</p>
<p>Section 6: Matters of National importance</p>	<p>In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:</p> <ul style="list-style-type: none"> (a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development: (b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development. (c) the protection of areas of significant indigenous vegetation and 	<p>The road corridor is drained by headwater streams within two main catchments being the Totara Creek (which drains into Puhinui Creek) and Papakura Creek. A headwater stream which forms part of the Otara Creek catchment is located at the northern extent of Murphy’s Bush. Nine indigenous freshwater species and one freshwater crustacean (koura) are known to occupy the catchments. Appropriate stormwater treatment and construction methodologies are available and will need to be employed in proximity to these waterways. Erosion and sediment control methodologies and construction methodologies will be prepared and included as part of the CEMP (see section 15 of this report).</p> <p>The corridor is not located in an outstanding landscape as defined in the Auckland Regional Policy Statement or the PAUP. The corridor does however pass through a sensitive ridgeline notation as identified in the Auckland District Plan (Manukau Section) and the PAUP A landscape assessment has been</p>

Section	Policies and Objectives	Comment
	<p>significant habitats of indigenous fauna:</p> <ul style="list-style-type: none"> (d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers: (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (f) the protection of historic heritage from inappropriate subdivision, use, and development: (g) protection of protected customary rights. 	<p>undertaken which assess the effects of the corridor on the landscape (refer Section 11 of the AEE).</p> <p>The proposed corridor realignment passes through the upper slopes of Totara Park, however the ecological impact is considered minor. The indigenous vegetation within this footprint is either recent re-vegetation plantings or heavily grazed indigenous tree land. Plantings will be re-established post construction works to offset the loss of plantings.</p> <p>The proposed corridor will also pass through pockets of good quality remnant native bush and well established exotic landscape plantings which are likely to support indigenous fauna. It is proposed to offset this loss of mature trees by planting appropriate quantities of replacement plantings. The recommended quantities and densities are set out in Section 11 of the AEE.</p> <p>There is no impact on public access to or along coastal marine areas, lakes or rivers. Bridge structures will be designed in a manner that public access along waterways is not precluded. Public access to stream margins will be enhanced to a limited degree by enabling public access via the shared path and cycleways proposed along the corridor.</p> <p>The designation will not adversely impact on historic heritage items recorded in the Auckland District Plan (Manukau and Papakura section) or the PAUP. Three sites (R11/2074 Alfriston Meeting Hall (The Meeting House), R11/2069 John de Carteret Homestead and Post Office/Store site and R11/2063 Alfriston Presbyterian Church/Stables/Block House site) are recorded in the New Zealand Archaeological Association's (NZAA) Site Record File and are located within and immediately adjacent to Section 4d and Section 5 of NoR 3. An application will be made to Heritage New Zealand under Section 44(a) of the HNZPTA for an archaeological authority to modify or destroy any sites that might be affected by the project prior to any development works being carried out on any of the NoR areas within the proposed corridor. An Authority would establish procedures to ensure that any archaeological remains affected by the project would be investigated or recorded to recover information relating to the history of the area</p> <p>There is also potential for buried archaeological remains associated with early European occupation and activity, and unknown Maori artefacts / taonga being</p>



Section	Policies and Objectives	Comment
		<p>unearthed during construction.</p> <p>The Construction Environmental Management Plan (CEMP) and archaeological DWPs include protocols for dealing with recorded sites and any previously unidentified potential archaeological features or sites.</p> <p>The proposed corridor realignment will not impact on any customary rights.</p>
<p>7: Other Matters</p>	<p>In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—</p> <p>(a) kaitiakitanga: [(aa) the ethic of stewardship:]</p> <p>(b) the efficient use and development of natural and physical resources: [(ba) the efficiency of the end use of energy:]</p> <p>(c) the maintenance and enhancement of amenity values:</p> <p>(d) intrinsic values of ecosystems:</p> <p>(e) Repealed</p> <p>(f) maintenance and enhancement of the quality of the environment:</p> <p>(g) any finite characteristics of natural and physical resources:</p> <p>(h) the protection of the habitat of trout and salmon:</p> <p>(i) the effects of climate change:</p> <p>(j) the benefits to be derived from the use and development of renewable energy.</p>	<p>The participation and contribution of tangata whenua in the project to date, and the input they will be able to have in the future as proposed by the proposed conditions of the designation, allows for kaitiakitanga to be exercised.</p> <p>The proposed corridor realignment is an efficient use of natural and physical resources in that it provides necessary capacity for future growth and development of Flat Bush, Takalani, Hingaia and intensification around Papakura Town Centre. The proposal accommodates multi-modal transport through providing space for private cars, passenger transport, walking (in urban and future urban sections) and cycling. This will encourage a mode shift away from private vehicles and in turn reduce fuel use and consumption.</p> <p>Designating the corridor now is also considered an efficient use of natural and physical resources. The interim effect of a designation is to prevent any use and development of the designated land in a manner that would otherwise prevent or hinder the implementation of the public work for which the designation is held. The corridor is subject to development pressure which is particularly evident on Redoubt Road with the recent construction of a number of new dwellings along this section of the corridor. Unless the route for the corridor is protected now for an extended period, the development of road improvements in the corridor in a rational manner in the future is likely to be precluded or be severely hampered by land use changes. Such changes would result in an increase in property acquisition costs for the project if designations were sought in the future, and an increase in the number of landowners upon which the effects of the network would need to be avoided, remedied or mitigated with attendant potentially significant financial cost to the project.</p> <p>In addition for certain sections the alignment largely follows the pre-existing road alignment. This will reduce the need for extensive earthworks, bush removal and other inefficiencies in terms of the use of natural and physical</p>



Section	Policies and Objectives	Comment
		<p>resources.</p> <p>The proposal will maintain the amenity values of the area by providing appropriate landscaping and remediation to ensure adverse effects on the amenity of the area are not compromised and mitigated where necessary. The proposed designation conditions require preparation of an urban design and landscape plan. The objective of the Urban Design and Landscape DWP is to enable the integration of the Mill Road corridor’s permanent works into the surrounding landscape and urban design context.</p> <p>The impacts upon owners and dwellings within proximity to the proposed corridor realignment will be mitigated where possible. The corridor widening and realignment will have effects in terms of loss of homes and the physical presence of the corridor moving closer to existing dwellings in some instances.</p> <p>Directly affected landowners have the ability to apply to the Environment Court under section 185 of the RMA for an order obliging the requiring authority responsible for the designation or requirement to acquire or lease all or parts of the owner’s interest in the affected land under the Public Works Act 1981 with compensation payable as if the designation or requirement had not been created.</p> <p>In addition, the proposed designation conditions require preparation of a Social Impact and Business Disruption DWP. The objective of the Social Impact and Business Disruption DWP is to avoid, remedy or mitigate the adverse effects arising from disruption to businesses, residents and community services/facilities so far as reasonably practicable. Social and community adverse effects need to be considered relative to the overall major long term improvements, including social and environmental that the proposed corridor realignment will bring.</p> <p>The project will generate adverse effects on ecosystems within the designation that provide habitat for species such as lizards and the Long Tailed Bat. If indigenous lizard species (which are protected under the Wildlife Act 1953) are confirmed as present, a plan for their capture and translocation to suitable habitats nearby will be designed and implemented. The Proposed designation conditions require that prior to the commencement of construction, Auckland Transport submit an Ecological Management and Restoration DWP. The objective of the Ecological Management and Restoration DWP is to avoid,</p>



Section	Policies and Objectives	Comment
		<p>remedy or mitigate the adverse effects arising from loss of biodiversity values or natural habitat along the corridor as a result of its construction and operation. Details of measures to avoid, minimise and monitor roost removal and habitat loss for Long Tailed Bats will be addressed by the Ecological Management and Restoration DWP. Appropriate restorative native plantings will also be undertaken to ensure there is no net loss of biodiversity. Construction activities will also be carefully managed. It should also be noted that all corridor alignment options previously examined have adverse impacts on localised remnant pockets of bush.</p> <p>The corridor is not affected by the effects of climate change. It will however reduce vehicle emissions which are implicated in climate change.</p> <p>There will be no impacts on the habitat of trout and salmon as a result of the proposed corridor realignment.</p>
<p>8: Treaty of Waitangi</p>	<p>In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).</p>	<p>Auckland Transport (the applicant) is committed to the Treaty of Waitangi and meeting the relevant statutory obligations under the Resource Management Act (1991).</p> <p>AT has adopted a partnership approach where both tangata whenua and AT participate in the resource management process. In this regard, four MVA's have been prepared by Te Akitai Waiohua, Ngati Te Ata Waiohua, Ngai Tai ki Tamaki and Ngāti Tamaoho (refer appendix J). The MVA's set out a number of matters that Iwi would like to see addressed as part of the project in terms of traditional, cultural and heritage matters and the sustainable management of natural and physical resources. The majority of the matters can be addressed as part of the detailed design process. The special relationship that these iwi have with the land, waterways, waahi tapu and taonga will be recognised and provided for through involvement of tangata whenua in developing and implementing various mitigation measures and mitigation plans at the time of detailed design. The proposed designation conditions require mana whenua involvement in the preparation of a number of DWPs such as the urban design and landscape DWP and the tree and vegetation DWP.</p>



3.0 Local Government Statutory Planning Documents

3.1 Auckland Council Regional Policy Statement (Operative August 1999)

3.1.1 Purpose

This section provides an assessment of the relevant objectives and policies of the Auckland Regional Policy Statement (ARPS). The purpose of the ARPS is to set out the principles of the sustainable management of the region's natural and physical resources, in accordance with the purpose and principles of Part 2 of the Act.

An assessment of the Notice of Requirement for the Redoubt Road-Mill Road corridor relative to the Strategic Objectives and Policies of the ARPS is set out below.

Section	Summary	Comment
2.6.1 Strategic Objectives	<ol style="list-style-type: none"> To ensure that provision is made to accommodate the Region's growth in a manner which gives effect to the purposes and principles of the Resource Management Act 1991 and Section 40 of the Local Government (Auckland) Amendment Act 2004, and is consistent with these strategic objectives and with the provisions of this RPS. To maintain and enhance the overall quality of the environment of the Auckland Region, within and outside the urban area, including its unique maritime setting, volcanic features, significant landscapes, cultural and natural heritage values, and public open space. To achieve a compact well designed more sustainable urban form served by an integrated multimodal (private vehicles, public transport, walking and cycling) transport system To develop and manage the region's transport system including road, rail, ferry, bus, cycling and pedestrian networks and services in a manner that supports urban development and land use intensification. To achieve a built environment within the region's metropolitan area and rural and coastal settlements that has a sense of identity and character, has a range of densities and uses, maintains or enhances its amenity values, and is visually pleasant, functionally efficient, environmentally sustainable and economically vibrant. To achieve a high level of mobility and accessibility within the Region that provides for an integrated, responsive, sustainable, safe, affordable and efficient movement of goods and people. 	<p>The proposed road corridor will maintain and enhance the overall quality of the environment via appropriate mitigation measures such as landscape planting appropriate urban design treatments and native vegetation replanting to offset the effect of native bush removal. The proposed designation conditions require preparation of an Urban Design and Landscape DWP and an Ecological Restoration and Management DWP. The overall quality of the living environment will also be enhanced by improving the level of mobility and accessibility.</p> <p>The proposed road corridor includes necessary provision for private vehicles to adequately cater for forecast growth in Manukau, Flat Bush, Papakura and Takapani over the next 30 years. The corridor also includes bus priority measures (bus priority and bus only lanes), cycle and pedestrian facilities, including on-road cycle lanes and shared facilities. The proposed corridor will therefore provide the necessary infrastructure to achieve a compact and sustainable urban form. By being multi modal the proposal will also provide a high level of mobility and accessibility.</p> <p>The proposed corridor realignment is located within an area undergoing significant growth and development, and falls within the Auckland Plan Southern Initiative which plans to deliver a long term programme of coordinated investment. The desire to grow business and jobs within the area is likely to increase travel demand within the corridor. The proposed corridor will provide multi-modal transport facilities to provide for this demand along the corridor. This will also help to increase usage of sustainable transport and support the efficient use of energy resources.</p>



Section	Summary	Comment
	<ul style="list-style-type: none"> 7. To protect regionally significant mineral resources from the adverse effects of inappropriate subdivision, use or development. 8. To protect the rural land resources from the diverse effects of inappropriate subdivision, use or development. 9. To protect amenity values, rural character, and landscape values of rural areas, including volcanic cones, from the adverse effects of inappropriate subdivision, use or development. 10. To preserve the natural character of the coastal environment, whilst ensuring that the use of the coastal environment by those industries and activities which serve the needs of the Region and which depend on a coastal location is appropriate and efficient. 11. To protect the intrinsic values of the Region's natural resource base, within and outside the urban area, and to make appropriate provision for the avoidance, remediation or mitigation of adverse effects on the Region's environment, including the identification of significant natural features and landscapes, and areas of significant indigenous vegetation and habitat, and protection of these from inappropriate subdivision use and development. 12. To encourage the efficient use of natural and physical resources, including urban land, infrastructure, and energy resources. 13. To preserve and protect a diverse and representative range of the Region's heritage resources. 14. To manage the Region's natural and physical resources in an integrated manner. 15. To involve the Tangata Whenua as kaitiaki of the Region's natural resources. 16. To improve the overall health, well-being and quality of life of the people of the Region. 17. To enable the redevelopment, operation and maintenance of existing and provision of new regionally significant infrastructure. 	<p>The proposal does not affect mineral resources.</p> <p>There will be a number of short-term adverse effects in terms of urban design impacts and landscape as a result of the construction of the corridor. However this should be balanced against the major positive long term improvements including social and environmental. The proposed designation conditions require preparation of a Social Impact and Business Disruption DWP and an Urban Design and Landscape DWP, which will assist with mitigating landscape effects, effects on existing properties and the urban environment. Mitigation includes:</p>



Section	Summary	Comment
	<p>18. To develop a network of High Density Centres and Intensive Corridors as the focus for the region’s urban growth.</p>	<p>For urban sections:</p> <ul style="list-style-type: none"> - Recognising the suburban character and enhancing the pedestrian users experience; - Carefully considering the alignment to minimise impacts on buildings that front the street; - enhancing and strengthening the ecological value of the corridor; - Carefully considering implications for safety created by cuttings, orphaned roading sections and planting through CPTED analysis and recommendations; - Distant views and vistas from this section of the corridor (to the south and North) have been carefully considered and retained where possible. <p>For Murphy’s Road which will transition from rural to urban over time:</p> <ul style="list-style-type: none"> - Recognising and coordinating with the objectives being developed by Auckland Council for the extended Murphy’s Bush; - Enhancing and strengthening the ecological value of Murphy’s Road in relation to Murphy’s Bush; - Creating an appropriate entrance experience to Murphy’s Bush; - Avoiding creation of land parcels which are difficult to develop; - Carefully considering the various roadside cut and fill slopes and how these relate to adjacent pedestrian activity and land uses. <p>For rural sections:</p> <ul style="list-style-type: none"> - Emphasising the rural character of the area; - Narrowing the perceived width of road corridor to slow down drivers; - Low impact engineering to suit the rural environment (such as swales); - Integrated design solutions for cut and fill slopes to reduce visual impacts and provide ecological benefits; - Consideration of softer lighting for bridge structures; - Considering CPTED analysis and recommendations; - Considering design options for the new roundabouts which reflect the local identity, heritage and rural character.



Section	Summary	Comment
		<p>A detailed heritage assessment has been undertaken by Clough and Associates and Maori Values Assessments have been received from Te Akitai Waiohua, Ngati Te Ata Waiohua, Ngai Tai ki Tamaki and Ngāti Tamaoho. It is noted that the designation will not adversely impact on historic heritage items recorded in the Auckland District Plan (Manukau and Papakura sections) or the PAUP. The heritage assessment notes that three sites (R11/2074) Alfriston Meeting Hall (The Meeting House), R11/2069 John de Carteret Homestead and Post Office/Store site and R11/2063 Alfriston Presbyterian Church/Stables/Block House site) are recorded in the New Zealand Archaeological Association's (NZAA) Site Record File and are located within and immediately adjacent to Section 4d and Section 5 of NoR 3. An application will be made to Heritage New Zealand under Section 44(a) of the HNZPTA for an archaeological authority to modify or destroy any sites that might be affected by the project prior to any development works being carried out on any of the NoR areas within the proposed corridor. An Authority would establish procedures to ensure that any archaeological remains affected by the project would be investigated or recorded to recover information relating to the history of the area</p> <p>In addition there is a possibility of unknown Maori artefacts / taonga being unearthed during construction. The Construction Environmental Management Plan (CEMP) and archaeological DWPs include protocols for dealing with recorded sites and any previously unidentified potential archaeological features or sites.</p>
2.6.5 Strategic Policies – urban Structure	<p>High Density Centres and Intensive Corridors</p> <ol style="list-style-type: none"> Urban intensification is to be encouraged to occur in specified locations (being those areas identified in Schedule 1 and other High Density Centres and Intensive Corridors identified in district plans) to provide the primary focus for the Region's residential and commercial growth. Pending the development of a classification framework for and identification of further High Density Centres and Intensive Corridors through changes to Schedule 1 of the ARPS, and the resulting change or review, urban intensification (including retail activities) may occur in locations other than those listed in Schedule 1, if it can be demonstrated that it will not compromise the achievement of Policies 	<p>The proposed corridor will provide the necessary capacity to provide for planned growth in Flatbush, Papakura and Takalani as envisaged by the ACRPS.</p> <p>The road corridor also falls within the Auckland Plan Southern Initiative which plans to deliver a long term programme of coordinated investment and actions to bring about social, economic and physical change. As a result of a desire to grow business and jobs within the initiative area it is likely that travel demand will increase within the corridor. The Murphy's Road section of the corridor is located within the Flat Bush Structure Plan, one of New Zealand's largest and most comprehensively planned new towns.</p>



Section	Summary	Comment
	<p>2.6.5.3 – 2.6.5.10.</p> <ol style="list-style-type: none"> 3. To develop a network of High Density Centres and Intensive Corridors which are linked by high quality public transport ranging from frequent local bus services supplemented by express buses to rapid transit (rail, ferry, or bus) on separate rights-of-way. 4. Development within High Density Centres and Intensive Corridors should primarily be of a character and form that supports or serves Compact Mixed Use Environments. 5. The structure and sequencing of urban development in the High Density Centres and Intensive Corridors should support and be coordinated with the development, implementation and operation of the transport and infrastructure networks serving or traversing the area. 6. <ol style="list-style-type: none"> i High Density Centres identified in Schedule 1 or in district plans, should be developed for a range of uses, (including high density residential activities). The widest range, and greatest intensity of uses, including a primary focus on enabling Commercial Activities, shall be within the Commercial Core. ii Intensive Corridors identified in Schedule 1 or in district plans, should provide for Compact Mixed Use Environments and other appropriately located employment areas, where this is compatible with the principal focus of the movement function of the corridor, and does not detract from maintaining public transport network efficiency and effectiveness. 7. Commercial Activities shall be encouraged in High Density Centres identified in Schedule 1 or in district plans to the extent that such activities serve the function, role and amenity of High Density Centres, and would not compromise the achievement of development pursuant to Policies 2.6.5.1, and 2.6.5.3 to 2.6.5.6. 8. To encourage the outward expansion of the Commercial Core of High Density Centres which are suitable for growth, subject to having regard 	<p>As a consequence of this planned growth there will be an increased travel demand. The propose corridor realignment and widening will provide additional capacity for private vehicles (on a 30 year planning horizon), walking and cycling, and also high frequency passenger transport.</p>

Section	Summary	Comment
	<p>to the following matters:</p> <ul style="list-style-type: none"> i the effects on the existing distribution of business activity and population, in order to facilitate an efficient and sustainable distribution of such centres; ii the effects on High Density Centre function and their role; iii the provision of a greater level of access by a community to a wide range of facilities, goods and services in a convenient and efficient manner; iv the traffic effects associated with the expanded Commercial Core and the ability to maintain the safety and efficiency of the road network, in a way that promotes integrated transport through: <ul style="list-style-type: none"> (a) providing a strong connection to a range of transport modes to an adjoining Compact Mixed Use Environment, including ease of accessibility for walking and cycling; and (b) enabling efficient connections to the existing public transport network to link with adjoining High Density Centres and Intensive Corridors. <p>9. Commercial Activities are, where appropriate, to be enabled in business and mixed use zones along Intensive Corridors (being those areas identified in Schedule 1 or as identified in district plans) having regard to the following matters:</p> <ul style="list-style-type: none"> i any effects on High Density Centre function and their role; ii social and economic enablement and accessibility; iii the efficient use and provision of Infrastructure; iv the impacts on transport efficiency, including but not limited to effective public transport through the region; v the effects on the road network; 	

Section	Summary	Comment
	<ul style="list-style-type: none"> vi the impacts of the development on the efficient use of any scarce industrial land resource; vii the effects on residential activity and planning for residential intensification along Intensive Corridors; and viii reverse sensitivity effects. <p>10. To enable new High Density Centres to be develop in locations where they:</p> <ul style="list-style-type: none"> i contribute to a distribution of High Density Centres with close proximity to living areas (specifically areas of moderate to high density housing); ii provide a diverse function and role which complements the established network of High Density Centres and Intensive Corridors; iii provide transport choices and improve travel behaviour, through fostering resilient, attractive and integrated transport options by: <ul style="list-style-type: none"> (a) providing a strong connection to a range of transport modes to an adjoining Compact Mixed Use Environment, including ease of accessibility for walking and cycling; and (b) enabling efficient connections to the existing public transport network to link with adjoining High Density Centres and Intensive Corridors; iv avoid adverse effects at a regional level, both individually and cumulatively with other High Density Centres, on: <ul style="list-style-type: none"> (a) the distribution, function and amenity of High Density Centres; and (b) existing and planned Infrastructure (including the classified road network and public transport systems networks). 	<p>As noted above the proposed corridor supports the high density centres of Flat Bush, Takanini and Papakura.</p>
<p>2.6.8 Strategic Policies -</p>	<p>1. The design of Future Urban Areas and the management and promotion of change in existing urban areas is to occur so that:</p>	<p>The upgraded corridor will provide improved access between the residential areas of Botany Downs, Flat Bush, Takanini and Papakura and the employment centre of Manukau city through improved public transport,</p>



Section	Summary	Comment
Urban Design	<ul style="list-style-type: none"> v Public transport, roading, cycling and walking networks are integrated with each other and the land uses they serve; vi Roads (including new roads) and road improvements within higher density areas should be designed to provide a pleasant environment for cyclists, pedestrians and residents and minimise adverse effects on urban amenities; vii There is long term protection of public open space, and improvement in the quality, quantity and distribution of local open space; viii Iconic and outstanding Auckland landscapes are protected; and in existing urban areas other urban landscapes that contribute to local character and identity are managed to ensure critical values remain; ix Natural features and their relationship with built elements are recognised and protected, and, where appropriate, enhanced; xv The health and wellbeing of communities is maintained, and where appropriate, enhanced. 	<p>walking and cycling, and general traffic infrastructure. This will lead to a reduction in the need for car travel by enabling a greater proportion of trips to be made by public transport, walking and cycling. The planned intensification and development of existing and future urban residential areas justifies the need for this infrastructure.</p> <p>The road corridor will provide a pleasant environment via the implementation of appropriate urban design treatments and landscaping.</p> <p>Totara Park is a significant public open space which adjoins the southern side of Redoubt Road. Realignment and widening of the corridor will result in the reduction of the land area of the park. It is proposed that where possible residual land from residential property purchases immediately adjacent the park will be amalgamated with the park. In addition the realignment of the corridor will be designed in a manner that provides a more attractive interface with the park. It is also proposed to improve access arrangements to the park through the provision of an improved car park entrance and a re-aligned entrance into the horse riding facility.</p> <p>The corridor does not traverse through iconic Auckland landscapes identified in the Regional Policy Statement or PAUP.</p> <p>The health and wellbeing of communities will be provided for via enhanced connectivity and multi modal choices as well as the reduction in vehicle collisions.</p>
2.6.11 Strategic Policies - Land Use and Transport Integration	<ol style="list-style-type: none"> 1. Land Use and Transport shall be integrated throughout the region to ensure that: <ul style="list-style-type: none"> i within urban areas land use patterns provide communities with improved access to a range of services and activities and opportunities to work locally; ii within urban areas new urban development and subdivision provides for improved connectivity for all transport modes including walking and cycling; iii within urban areas new development and redevelopment provides for safe and attractive walking and cycling environments; 	<p>The proposed road corridor realignment and widening will provide improved access between the existing and proposed residential areas of Botany Downs, Flat Bush, Takanini, Papakura and the Manukau city employment centre.</p> <p>The corridor makes use of existing road infrastructure where it is practical, safe and efficient to do so.</p> <p>The existing corridor does not provide dedicated passenger transport or cycling facilities. The proposed corridor will provide safe and integrated capacity for private vehicles, high frequency passenger transport and walking and cycling. This includes over 6km of on-road cycle lanes on either side of the road and a shared path facility. In terms of passenger transport there will be bus only lanes and bus priority intersections through the urban section of Redoubt Road. The proposed corridor upgrade will also enhance pedestrian</p>



Section	Summary	Comment
	<ul style="list-style-type: none"> <li data-bbox="394 370 1100 451">iv the transport network is not compromised by inappropriate land use and subdivision and is planned and developed to support land uses; <li data-bbox="394 472 1100 586">v high traffic generating activities, where not located within High Density Centres or on Intensive Corridors, locate on transport corridors served by public transport appropriate to the particular activity; <li data-bbox="394 607 1100 721">vi within rural areas Countryside Living avoids, remedies or mitigates adverse effects on the regional roading network including limiting its provision and only providing for Countryside living in selected locations (refer to Policies 2.6.17); <li data-bbox="394 742 1100 823">vii urban activities shall be located in urban areas, except as provided for in Strategic Policies 2.6.2.1 and 2.6.2.2, as well as Methods 2.6.3; <li data-bbox="394 844 1100 925">viii the roading system is developed and managed to be an efficient, safe and sustainable network utilising, to its full extent, existing roading infrastructure; <li data-bbox="394 946 1100 1076">ix land use development along existing and proposed regional arterial roads identified in Appendix K or in District Plans, is to be managed to ensure that adverse effects on the transport function, or functions, and safety of these routes are avoided, remedied or mitigated; <li data-bbox="394 1097 1100 1179">x so far as is consistent with their statutory authority the funding processes of the RLTS and ARTA shall give effect to the strategic direction and strategic policies set out in this ARPS; <li data-bbox="394 1200 1100 1346">xi all Future Urban Areas can be: <ul style="list-style-type: none"> <li data-bbox="457 1235 884 1260">(a) effectively served by public transport; <li data-bbox="457 1281 1062 1346">(b) provide attractive walking and cycling opportunities and environments; and 	<p data-bbox="1125 370 1850 427">connectivity in the urban sections of the corridor via extended footpaths, shared path facilities and pedestrian crossings at intersections.</p> <p data-bbox="1125 448 1822 529">The proposed corridor upgrade will contribute to an efficient, safe and sustainable network utilising to the extent possible, existing roading infrastructure.</p> <p data-bbox="1125 550 1913 631">Construction of the corridor is consistent with the funding processes of the RLTS and will give effect to the strategic direction and strategic policies set out in the ARPS.</p>



Section	Summary	Comment
	<p>(c) item (xi)(a) above shall not apply for the expansion of existing coastal and rural settlements that cannot be efficiently served by public transport;</p> <p>xii existing urban areas within the MUL are better served by public transport;</p> <p>xiii industrial land uses are located where they have good access to freight corridors;</p> <p>xiv reverse sensitivity effects on the transport network are considered in land use development;</p> <p>xv opportunities for urban intensification at Passenger Transport Nodes within urban areas may be enabled where these:</p> <p>(a) are integrated with and supported by rapid, frequent and integrated transit services; and</p> <p>(b) provide for the medium to high density intensification of residential activities within walking distance of the Passenger Transport Node to support public transport.</p>	
2.6.11 Strategic Policies - Land Use and Transport Integration	<p>2. Land use and Transport shall be integrated within High Density Centres and Intensive Corridors (refer to Policies 2.6.5) to ensure that:</p> <p>i High Density Centres and Intensive Corridors are able to be served by an efficient and effective public transport network;</p> <p>ii High Density Centres on the rail rapid transit network and on the bus rapid transit system are served by a fast, frequent and reliable public transport service;</p> <p>iii High Density Centres and Intensive Corridors are planned to develop to a density which supports planned transport infrastructure and service improvements (refer to Appendix H);</p> <p>iv provision is made for transport improvements which deliver a multi-modal transport system (including walking and cycling) in a manner which supports quality, compact and contained High Density Centres and Intensive Corridors;</p>	<p>The proposed road corridor realignment and widening will provide improved access between the residential areas of Botany Downs, Papakura, Flatbush, Takanini and Manukau city. It will also provide necessary capacity for significant planned growth and development in Manukau, Papakura and Takanini.</p> <p>The current corridor does not provided dedicate passenger transport or cycling facilities. Following construction the corridor will provide safe and integrated capacity for private vehicles, high frequency passenger transport and walking and cycling. The corridor will include footpaths, on-road cycle lanes and shared path facilities for less confident cyclists. f In terms of passenger transport there will be bus only lanes and bus priority intersections in the Redoubt Road urban section. The proposed corridor upgrade will also increase pedestrian connectivity.</p>



Section	Summary	Comment
	<ul style="list-style-type: none"> v central and local government services, as well as associated support services and facilities (consistent with Policy 2.6.5.6), should locate within High Density Centres and Intensive Corridors; vi High Density Centres and Intensive Corridors are not compromised by inappropriate transport infrastructure. This includes avoiding, remedying or mitigating the severance of communities; vii High Density Centres and Intensive Corridors and major public transport interchanges and stops should, where possible, develop as multipurpose destinations; viii the road network within all residential development areas should ensure: <ul style="list-style-type: none"> (a) good access by buses; (b) the facilitation of good, direct pedestrian access routes to bus stops; and (c) the Region's parking issues are planned and managed in a way that supports integrated land use and transport. 	<p>Construction of the corridor will not compromise high density centres or corridors. Construct of the corridor will in fact support construction of higher density centres in Papakura, Flatbush and Takanini.</p>
2.6.14 Strategic Policies - Infrastructure	<ol style="list-style-type: none"> 1. The operation of existing regionally significant infrastructure and the provision of new or upgraded regionally significant infrastructure shall: <ol style="list-style-type: none"> i be consistent with the Strategic Direction of the Regional Policy Statement; ii support and reinforce the Regional Growth Strategy and the proposed outcomes of that strategy; and iii ensure that any adverse effects of those activities on the environment (including human health) are avoided, remedied or mitigated in a manner consistent with the relevant provisions of this RPS. 	<p>The proposed corridor realignment and widening gives effect to the strategic direction of the Regional Policy Statement (see sections above).</p> <p>The proposal supports the planned development set out in the Regional Growth Strategy through providing multi-modal capacity for planned growth in Takanini and Flatbush, as well as intensification around Papakura Town Centre and its associated urban area.</p> <p>The proposed Environmental Management Framework (EMF) will ensure that effects are avoided remedied or mitigated in a manner consistent with the relevant provisions of the RPS.</p> <p>The proposed corridor realignment and widening has been designed to allow safe and efficient operation, maintenance and development. The corridor will provide acceptable operational performance without excessive capacity or</p>

Section	Summary	Comment
	<p>2. Provision is to be made to enable the safe and efficient operation, maintenance and development of regionally significant infrastructure which is necessary for the social and economic wellbeing of the region's people.</p> <p>3. Land use change should avoid significant reverse sensitivity effects on regionally significant infrastructure. Refer also to Strategic Policies 2.6.2(2) (viii), 2.6.11(1) (n), 2.6.17(e) (i) and 2.6.17(4) (ii).</p> <p>4. The provision and operation of infrastructure, including transport infrastructure should support the development of high quality urban amenity.</p> <p>5. In the operation of existing regionally significant infrastructure and the provision of new infrastructure consideration and appropriate provision is to be made for the following matters:</p> <ul style="list-style-type: none"> i the avoidance of significant adverse effects (including cumulative adverse effects) on: <ul style="list-style-type: none"> (a) the environmental values protected by defined limits to metropolitan Auckland and defined limits of rural or coastal settlements; (b) significant and outstanding coastal and natural landscapes, vegetation and fauna areas; (c) amenity values throughout the whole of the region and the rural character of rural areas in the Region; (d) human health; <p>where significant adverse effects cannot be avoided they shall be remedied or mitigated;</p> ii avoiding prematurely foreclosing, or compromising options for future urban and rural and coastal town growth including areas identified in Schedule 1; iv environmental enhancement and/or remediation opportunities 	<p>implementation costs.</p> <p>The proposed corridor realignment will support the development of high quality urban amenity through providing capacity for private vehicles as well passenger transport, walking and cycling. The Urban Design and Landscape DWP will ensure that the corridor integrates with surrounding landuses. The proposed corridor realignment will support and enable the planned growth and development surrounding the corridor.</p> <p>The proposed road corridor realignment will not adversely affect outstanding coastal and natural landscapes. In terms of vegetation and fauna, appropriate mitigation measures (including re-plantings) will be implemented via the Ecological Management and Restoration DWP. The objective of the Ecological Management and Restoration DWP is to avoid, remedy or mitigate the adverse effects arising from loss of biodiversity values or natural habitat along the corridor as a result of its construction and operation.</p> <p>The proposal will improve amenity through providing increased accessibility and mobility to regional centres. As above, Implementation of the Urban Design and Landscape DWP will ensure that the corridor integrates with surrounding landuses.</p> <p>Implementation of the Social Impact and Business Disruption DWP and consideration of appropriate measures for dealing with the possibility of contaminated soil will ensure there will be no significant effects on human health.</p> <p>The eastern section of the corridor is located within a rural area (as zoned in the Papakura section of the Auckland District Plan). However there is significant development planned around the corridor, as set out in the Regional Growth Strategy, Auckland Plan and PAUP. In addition Private Plan Change 38 re-zones 5.1 hectares of land at 49, 57 and 71 Mill Road from Rural 3 to Main Residential. The Drury South Structure Plan proposes the industrial zoning of 201 hectares supported by 22 hectares of commercial services development. The proposed corridor will therefore provide the necessary capacity to support urban growth aspirations in the southern area of the Auckland region.</p>



Section	Summary	Comment
		Environmental enhancement and remediation is proposed as is set out in detail in the AEE that accompanies the NOR's.
Section 4.3 Transport Objectives	<ol style="list-style-type: none"> 1. To develop a transport network that supports a compact sustainable urban form. (The policies which give effect to this Objective are found in Chapter 2 (2.6.11)). 2. To avoid, remedy, or mitigate the adverse effects of transport on the environment and, in particular: <ol style="list-style-type: none"> i to avoid, remedy, or mitigate the adverse effects of transport on air quality, water quality and heritage; ii to reduce the need for the transport system to use non-renewable fuels; iii to avoid, remedy, or mitigate the adverse effects of the transport system on community well-being and amenity. 3. To develop a transport network which provides an acceptable level of accessibility for all sections of the community within and across the region, by encouraging transport choices that are efficient, convenient or practical. 4. To develop a transport network which is as safe as is practicable and which promotes better physical health for the community. 	<p>Manukau City Centre, Botany Centre and Papakura are in proximity to the corridor and are defined as Metropolitan Centres in the Auckland Plan. The proposal will assist with the regional directives of the ACRPS by achieving a compact urban form by providing the necessary infrastructure (including multi modal capacity) to accommodate the proposed growth.</p> <p>The manner in which the corridor avoids, remedies and mitigates adverse effects is set out in section 11.0 of the AEE.</p> <p>Facilities for walking, cycling and passenger transport will improve accessibility along the corridor and encourage a modal shift away from private vehicles which will help to reduce fuel use.</p> <p>The widening and re-alignment has implications for the community in terms of loss of homes and the physical presence of the corridor moving closer to some dwellings. The effects of this need to be balanced against the wider project benefits for the south Auckland community including improved road safety and travel time, reduced congestion and enhanced walking, cycling and public transportation infrastructure.</p> <p>The proposed corridor realignment provides facilities for cycling, walking and passenger transport and private vehicles which will increase accessibility along the corridor and provide efficient, convenient and practical choices of transport.</p> <p>The multi-modal capacity of the corridor will promote active transport. In addition the upgraded corridor will improve safety along the corridor.</p>
Section 5.3 Energy Objectives	<ol style="list-style-type: none"> 1. The sustainable use of energy resources (excluding minerals), and the efficient use and development of energy resources. 2. To avoid, remedy, or mitigate any adverse effects of development proposals relating to the production, distribution and use of energy. 	<p>The proposed corridor will promote multi-modal travel choices through providing walking, cycling and passenger transport facilities, which will reduce private vehicles trips and fuel consumption.</p> <p>The proposed road corridor will also reduce current congestion and provide sufficient vehicle capacity for a 30 year planning horizon. Reduced congestion will also reduce fuel consumption and emissions caused as a result of congestion.</p>



Section	Summary	Comment
6.3 Heritage Objectives	<ol style="list-style-type: none"> 1. To preserve or protect a diverse and representative range of the Auckland Region's heritage resources. 2. To maintain, enhance or provide public access to the Region's heritage resources consistent with their ownership and maintenance of their heritage value. 3. To protect and restore ecosystems and other heritage resources, whose heritage value and/or viability is threatened. 4. To protect Outstanding Natural Landscapes from inappropriate subdivision, use and development. 5. To maintain the overall quality and diversity of character and sense of place of the landscapes of the Auckland Region. 6. To recognise some Outstanding Natural Landscapes as working landscapes and to enable appropriate activities that are consistent with the Strategic Direction in this RPS. 7. To protect and where practicable enhance the visual and physical integrity and values of the volcanic features of the Auckland Region of local, regional, national and/or international significance including social, cultural, historical, geological, archaeological, scientific, ecological, amenity, iwi, open space and landscape values. 8. To protect significant views to and between Auckland's volcanic cones. 9. To manage heritage resources in an integrated way to ensure their contribution to the variety of heritage values is protected and enhanced. 	<p>An archaeological assessment that has been prepared for the NoR's considers that the likelihood of undetected Maori archaeological sites being discovered is considered low.</p> <p>The assessment notes that there are a number of early European buildings and sites located within close proximity of the proposed road corridor upgrade that are identified as archaeological sensitive. This includes early European buildings and sites located at the intersection of Mill Road and Alfriston Road, potentially buried archaeological remains at the intersection of SH1 and Redoubt Road and also at the intersection of Murphy's Road and Flat Bush School Road.</p> <p>There are potentially remains of old hedges, ditches and banks, post and wire fences to the south and north of Redoubt Road however these are not considered in the assessment to contribute greatly to the history of New Zealand beyond a record of location and dimensions.</p> <p>To mitigate potential adverse impacts on the identified heritage sites the proposed designation conditions require preparation of a Historic Character DWP. The objective of the Built Heritage section is to avoid, remedy or mitigate adverse effects on built heritage as far as reasonably practicable. The objective of the Archaeology section of the Historic Character DWP is to avoid, remedy or mitigate adverse effects on archaeological remains during construction, as far as reasonably practicable.</p> <p>The corridor upgrade will not preclude access to heritage resources or adversely affect volcanic features of the Auckland Region. The corridor is not located within an outstanding natural landscape as shown on the maps that attached to the Regional Policy Statement.</p>
8.3 Water Quality Objectives	<ol style="list-style-type: none"> 1. To maintain water quality in water bodies and coastal waters which have good water quality, and to enhance water quality which is degraded particularly for the following purposes: <ol style="list-style-type: none"> i Estuaries and harbours: protection of aquatic ecosystems, recreation, fishing and shellfish gathering, cultural and aesthetic purposes. 	<p>Appropriate erosion and sediment control and stormwater measures such as stormwater wetlands will be implemented to ensure that:</p> <ul style="list-style-type: none"> - The proposed corridor realignment and widening will not affect aquatic ecosystems, recreation, fishing and shellfish gathering, cultural and aesthetic purposes. - Coastal waters will not be affected by the proposal. - Ground water and water supply will not be affected by the proposal.

Section	Summary	Comment
	<ul style="list-style-type: none"> ii Open coastal waters, including parts of the Hauraki Gulf: its natural state. iii Groundwater: water supply. iv Lakes, rivers and streams: protection of aquatic ecosystems, recreation, food gathering, water supply, cultural and aesthetic purposes. v Wetlands: protection of aquatic ecosystems. 	<ul style="list-style-type: none"> - Lakes, rivers and streams will not be adversely affected by the proposals. - Wetlands will not be affected. <p>Resource consents will be required for earthworks under the Auckland Regional Plan: Erosion and Sediment Control and under the PAUP. The detail as to how erosion and sediment runoff will be managed will be set out in detail in these applications.</p>
<p>10.3 Air Quality Objectives</p>	<ol style="list-style-type: none"> 1. To avoid, remedy, or mitigate deterioration of air quality in the Region. 2. To avoid, remedy, or mitigate the adverse effects that arise from the discharge of contaminants to air, including those from: <ul style="list-style-type: none"> i motor vehicles; ii industrial or trade premises; iii open burning of waste; iv domestic fireplaces and solid fuel burning appliances; v the application of agrichemicals. 3. To reduce the discharge to air of: <ul style="list-style-type: none"> i (contaminants which are known to deplete stratospheric ozone, including chlorofluorocarbons, halons, methyl chloroform and carbon tetrachloride; ii Greenhouse gases which contribute to global warming, including carbon dioxide, methane and chlorofluorocarbons. 	<p>To mitigate adverse impacts with regards to the construction works disturbing particulate matter and impacting on local air quality. An Air Quality DWP is required to be prepared by the proposed designation conditions. The objective of the Air Quality DWP is to detail the best practicable option to avoid dust and odour nuisance being caused by construction works and to remedy any such effects should they occur. It will most likely include:</p> <ol style="list-style-type: none"> a) Description of the works, anticipated equipment/processes and durations; b) Periods of time when emissions of odour, dust or fumes might arise from construction activities; c) Identification of highly sensitive air pollution land uses likely to be adversely affected by emissions of odour, dust or fumes from construction activities; d) Methods for mitigating dust emitted from construction yards, haul roads, stock-piles and construction site exits used by trucks, potentially including the use of vacuum sweeping, watersprays or wheel washes for trucks; e) Methods for mitigating odour that may arise from ground disturbing construction activities; f) Methods for maintaining and operating construction equipment and vehicles in order to seek to minimise visual emissions of smoke from exhaust tailpipes; g) Methods for undertaking and reporting (to council) on the results of daily inspections of construction activities that might give rise to odour, dust or fumes; h) Methods for monitoring and reporting (to council) on the state of air quality during construction, including Total Suspended Particulate, wind speed, wind direction, air temperature and rainfall;



Section	Summary	Comment
		i) Procedures for maintaining contact with stakeholders, notifying of proposed construction activities and handling complaints about odour, dust or fumes; j) Construction operator training procedures on mitigation odour, dust or fumes; k) Contact numbers for key construction staff, staff responsible for managing air quality during construction and council officers. The proposed road corridor realignment includes facilities for walking, cycling and passenger transport. This will encourage a modal shift away from the private vehicles and promote multi-modal transport which will help to reduce emissions from motor vehicles.
11.3 Natural Hazard Objective	To avoid, remedy, or mitigate the adverse effects of natural hazards on human life, property, infrastructure and the environment, while minimising the adverse effects of measures implemented to reduce the risks of natural hazards.	A geotechnical assessment has revealed deep and shallow slope instability associated with the southern landslide zone. Where possible areas of instability will be avoided. Where this is not possible engineering measures such as retaining/slope stabilisation, fill foundation improvements and cut slope design will be required to ensure land stability.
12.3 Soil Conservation Objectives	<ol style="list-style-type: none"> 1. To protect the versatility and productive potential of the region's soil resource. 2. To protect the natural long-term health, stability and potential productivity of soils in the Region. 3. To avoid, remedy, or mitigate adverse effects of activities that result in soil degradation. To minimise the effects of soil degradation on the water quality of receiving environments. 	<p>It is noted that the southern end of the corridor will traverse soil types 2s4, 2w3 and 2e4 which are of good productive quality but generally have slight limitations to intensive arable use. The corridor will therefore remove some soil resource from productive use. The extent of land that will be removed from potential production is not extensive and the effects will be offset by an improved road corridor which will enhance access to markets for primary produce growers in the vicinity of the corridor.</p> <p>It is noted that this section of the corridor is currently not being used for intensive horticultural uses instead being grazed by stock and horses.</p> <p>The geology beneath much of the proposed alignment is indicated to generally comprise alternating sandstone and mudstone of Waitemata Group and their soil equivalents, within the unstable terrain known as the Southern Landslide Zone. The southern end of the proposed alignment traverses the Manukau lowlands and is generally underlain by recent alluvium and alluvial soils of the Puketoka Formation. Based on the findings from geotechnical investigations specific areas have been identified which will require retaining/slope stabilisation, fill foundation improvements and cut slope design. These</p>



Section	Summary	Comment
		<p>measures will ensure the long-term stability of the soils within the site area.</p> <p>Appropriate construction and operational stormwater treatment devices will be implemented to reduce sediment run-off into receiving environments. The detail around these treatment devices will be submitted as part of earthworks resource consent applications.</p>
17.3 Contaminated Sites Objectives	<ol style="list-style-type: none"> 1. To remedy or mitigate any adverse effects of existing contaminated sites 2. To ensure that appropriate remediation standards are achieved for contaminated sites. 3. To avoid sites becoming contaminated in the future. 	<p>The project will comply with the requirements of the 2012 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES). Appropriate measures will be implemented under a Contamination DWP which is required to be prepared under the proposed designation conditions. The objective of the Contamination DWP is to avoid, remedy or mitigate the adverse effects of construction on human health which may result from the disturbance of contaminated materials during construction.</p>



3.2 Auckland Council Regional Plan: Air, Land, Water

3.2.1 Purpose

The Auckland Council Regional Plan: Air, Land and Water (ALW Plan) was prepared by the Auckland Regional Council to assist in carrying out its functions in order to achieve the purpose of the Resource Management Act 1991 (RMA). The Plan is now maintained and administered by the Auckland Council. The ALW Plan applies to all of the area within the Auckland Region, which is under the jurisdiction of the Auckland Council. The Plan provides for the management of air, land and water resources in the region including: air, soil, rivers and streams, lakes, groundwater, wetlands and geothermal water.

Section	Summary	Comment
1.1 Natural Values 2.1.4 Policies	<p>Natural Character - Policies</p> <p>Policy 2.1.4.1 - The natural character of wetlands, lakes and rivers and their margins shall be preserved and protected from inappropriate use and development by avoiding, remedying or mitigating adverse effects on the qualities, elements and features that contribute to the natural character of these areas. (See also Introduction or Planting of Plants provisions in Chapter 7: Beds of Lakes and Rivers).</p> <p>Policy 2.1.4.2 - In assessing the actual or potential effects of use and development on the natural character of wetlands, lakes, rivers and their margins, particular regard shall be had to:</p> <ul style="list-style-type: none"> (a) Maintaining high levels of natural character in Natural Lake, Natural Stream and Wetland Management Areas; (b) Maintaining appropriate remaining elements of natural character in: <ul style="list-style-type: none"> i Other Permanent rivers or streams in rural areas; ii Permanent rivers and streams in Greenfield Areas that have been assessed as having high ecological, habitat or water quality values; and iii Urban Lake Management Areas. (c) Retaining as far as practicable remaining elements of natural character in other Type 2 and 3 Urban Streams, consistent with the management objectives for these streams in Section 3.6. (d) Protecting the natural character of wetlands and Permanent rivers and streams in Water Supply Management Areas as far as practicable, while providing for the use of these areas as water supply areas. When determining the qualities, elements and features that contribute to natural character for the purposes of Policy 2.1.4.2 (a) and (b), regard should be had to <p>When determining the qualities, elements and features that contribute to natural character for the purposes of Policy 2.1.4.1 and 2.1.4.2 (a) to (d), regard should be had to the matters listed in Policy 2.1.4.9.</p>	<p>The road corridor is drained by headwater streams within two main catchments; the Totara Creek (which drains into Puhinui Creek) and Papakura Creek. A headwater stream which forms part of the Otara Creek catchment is located at the northern extent of Murphy's Bush. Nine indigenous freshwater species and one freshwater crustacean (koura) are known to occupy the catchments.</p> <p>Appropriate construction and operational stormwater control measures will be put in place to ensure that sediment runoff does not compromise the health of the river systems. Earthworks resource consents will be required which will include detailed measures to avoid, remedy or mitigate construction erosion and sediment control. Stormwater discharge resource consent will also be required which will detail how operational stormwater will be managed.</p> <p>The road corridor passes in close proximity to four areas of indigenous forest and scrub (Murphy's Bush and three forest areas to the east of the current Mill Road alignment). Murphy's Bush is one of the largest remnants of indigenous forest remaining in the north of the Manukau Ecological District and is regarded as the best remaining example of dense Kahikatea forest in Auckland. Appropriate mitigation planting will be undertaken to compensate for native and exotic bush that is lost as a result of construction of the road corridor. An Ecological Management and Restoration</p>

Section	Summary	Comment
	<p>Policy 2.1.4.3 - When determining the qualities, elements and features that contribute to natural character for the purposes of Policy 2.1.4.1 and 2.1.4.2 (a) to (d), regard should be had to the matters listed in Policy 2.1.4.9.</p> <p>Policy 2.1.4.4 - When use and development gives rise to actual or potential adverse effects on the natural character of wetlands, lakes and rivers and their margins, where appropriate these effects shall be remedied or mitigated by restoration or rehabilitation of the natural character of these areas.</p> <p>Policy 2.1.4.5 - In determining whether any adverse effects on natural character can be remedied or mitigated by restoration and rehabilitation that is to be carried out, regard shall be had to:</p> <ul style="list-style-type: none"> (a) the extent to which the qualities and features of natural character in the area of the proposed use and development will be adversely affected, and the ability to restore or rehabilitate natural character in the area subject to the proposal; (b) where restoration or rehabilitation is not practicable in the area subject to the proposal, the potential to mitigate any adverse effects by the rehabilitation or restoration of natural character in another area of wetland, lake or river and their margins; (c) Where restoration plantings are carried out, preference shall be given to the use of indigenous species with a further preference for local genetic stock. When determining how rehabilitation or restoration of natural character should be carried out, regard should be had to Policy 2.1.4.9. <p>Ecosystems and Habitats</p> <p>Policy 2.1.4.6 - The values of ecosystems and habitats shall be managed by:</p> <ul style="list-style-type: none"> (a) Outside Urban Areas <ul style="list-style-type: none"> i Avoiding inappropriate use and development in Natural Lake, Natural Stream and Wetland Management Areas which will result in more than minor modification of their values and ecological and physical processes; ii Ensuring that as far as practicable, change in the extent, quality and diversity of habitats in these areas arise only from the functioning of natural processes; iii Avoiding, remedying or mitigating adverse effects on the ecological, habitat and water quality values of rivers and streams in rural areas that are classified as <i>Permanent rivers and streams</i>; 	<p>DWP is required to be submitted prior to construction. The objective of the Ecological Management and Restoration DWP is to avoid, remedy or mitigate the adverse effects arising from loss of biodiversity values or natural habitat along the corridor as a result of its construction and operation.</p> <p>The proposed road corridor realignment and widening is consistent with the Auckland Policy Statement and Auckland Regional Growth strategy; see pages 6-20 of this policy assessment.</p> <p>The proposal will provide appropriate infrastructure to accommodate growth anticipated by the Regional Growth Strategy and the Regional Policy Statement.</p> <p>Adverse effects will be appropriately avoided, remedied and mitigated.</p> <p>Efficient use is made of the land. The corridor will provide a strategic arterial route linking major development centres of Papakura, Takanini, Flatbush with Manukau City. Efficient use will be made of the corridor in that it will be multi modal thus reducing reliance on private motor vehicles.</p> <p>The proposal will remedy or mitigate adverse effects on water quality via appropriate construction and operational stormwater treatment. If works within watercourses is required this will need resource consents under the Auckland Council Air, Land and Water Plan.</p> <p>An Outline Plan of Works (OPW) along with regional consents for earthworks, discharges and contaminants will be required under the Manukau and Papakura District Plans and the PAUP.</p>

Section	Summary	Comment
	<p>iv Maintaining and enhancing the high ecological, habitat and water quality values of the Waitakere and Hunua Ranges while recognising their regional importance for water supply purposes by their inclusion in Water Supply Management Areas.</p> <p>(b) Inside Urban Areas</p> <p>i Maintaining as far as practicable <i>Permanent rivers and streams</i> in <i>Greenfield Areas</i> where these rivers and streams are assessed as having significant ecological, water quality and habitat values, or are identified for protection in structure plans or appropriate catchment based planning processes;</p> <p>ii implementing the provisions for Urban Lakes and Urban River and Stream Management Areas in accordance with Chapter 3 of this Plan.</p> <p>Policy 2.1.4.8 Where areas of terrestrial indigenous vegetation and habitats of terrestrial indigenous fauna have been identified as being significant, the ARC will have regard to the adverse effects on the ecological values and significance of these areas, of land disturbance, the discharges of contaminants or other activities affecting water quality or quantity.</p> <p>Policy 2.1.4.9 In assessing the effects of use and development on natural character and terrestrial and aquatic ecosystems in terms of Policies 2.1.4.1 to 2.1.4.8, regard shall be had to maintaining and where practicable enhancing the matters listed in clauses (a) to (n) below, or preventing or minimising the adverse effects of any discharge of contaminants where a Best Practicable Option approach is used, where these are relevant:</p> <p>(a) The physical or ecological integrity of the ecosystem and the continuation of the physical, biological or chemical processes necessary to ensure its proper functioning;</p> <p>(b) Vegetation patterns (ecotones) and connections between habitats;</p> <p>(c) Riparian vegetation bordering lakes, rivers and wetlands;</p> <p>(d) Natural biodiversity, productivity and biotic patterns;</p> <p>(e) Access, migratory and dispersal pathways for terrestrial and aquatic fauna;</p> <p>(f) The physical characteristics of the lake or wetland, including its shape, size and natural substrate composition;</p> <p>(g) The physical characteristics of a stream channel, including dimension (width, depth), pattern (meander wavelength) and profile (slope);</p>	<p>The corridor will traverse over 5 designations with the designating authorities being NZTA, Watercare, Vodafone, Telecom and Vector. The corridor can be constructed in a manner that will not adversely impact on the underlying infrastructure.</p> <p>The corridor will have positive social and economic effects in that it will provide enhanced vehicle connectivity between the current and planned development areas of Drury, Papakura, Takanini and Flatbush. In addition, the proposed corridor will be multi modal providing bus lanes and bus priority measures (urban sections) and cycleways for the entire corridor. The horizontal and vertical alignment will also improve traffic safety when compared to the current alignment.</p> <p>On-going consultation is occurring in relation to cultural values.</p> <p>Cumulative adverse effects are being considered and either avoided, remedied or mitigated.</p> <p>A precautionary approach is not required as the environmental effects arising from the proposal are known and can be appropriately avoided, remedied or mitigated through application of the Environmental Management Framework.</p> <p>The project has been assessed against and gives effect to the relevant provisions of the Auckland Regional Policy Statement.</p> <p>Project mitigation will include undertaking construction at times which will avoid, remedy or mitigate adverse effects on aquatic and terrestrial flora and fauna, recreational uses and existing lawfully established uses. Effects will be managed under the EMF. Such measures include the preparation and implementation of a CEMP and DWPs.</p>

Section	Summary	Comment
	<p>(h) Aquatic habitat structure, including in the case of rivers and streams, pools, riffles and runs;</p> <p>(i) Flow regimes, water levels and hydraulic processes of a wetland, <i>lake</i> or river;</p> <p>(j) The natural sediment processes in a river channel, including bank erosion, sediment transport and sediment deposition;</p> <p>(k) The natural substrate composition in <i>lakes</i>, rivers and wetlands, by:</p> <ul style="list-style-type: none"> i avoiding the addition of material not found naturally in the area; ii maintaining natural processes of erosion, movement and deposition of substrate; iii avoiding disturbance and deposition that could have significant or irreversible effects on substrate composition; <p>(l) The physical characteristics of the floodplain of a stream or river;</p> <p>(m) Water and air quality necessary to protect human and ecological health.</p> <p>(n) The significance of the ecosystem, having regard to:</p> <ul style="list-style-type: none"> i whether it is listed in the Schedules of this plan; ii whether it is identified in Appendix B of the Auckland Regional Policy Statement, the Department of Conservation’s Auckland Conservation Management Strategy or as a significant area in any district plan; iii whether it has been identified in any published Protected Natural Area report; iv whether it is the habitat of any nationally or regionally threatened rare or endangered species. <p>Environmental Compensation Policy 2.1.4.10 The adverse effects of use and development in one area or on one type of resource may, having regard to the benefits and adverse effects of the activity and Part 2 of the RMA be offset by mitigation measures elsewhere within the Region, to compensate for adverse effects that cannot be avoided, or directly remedied or mitigated. However, any adverse effects on areas of high natural character or significant ecosystems identified in Policy 2.1.4 9(n) should be avoided to the fullest extent practicable in the first instance, with offset mitigation being implemented where adverse effects on those resources are unavoidable.</p>	<p>There are a few recorded archaeological sites in proximity to the proposed road corridor realignment. Much of the Redoubt Road - Mill Road area has been modified by 20th century agricultural practices and development, which is likely to have eliminated most evidence of earlier historic farming and European settlement sites. The proposed designation conditions require preparation of a Historic Character DWP. The objective of the Built Heritage section is to avoid, remedy or mitigate adverse effects on built heritage as far as reasonably practicable. The objective of the Archaeology section of the Historic Character DWP is to avoid, remedy or mitigate adverse effects on archaeological remains during construction, as far as reasonably practicable.</p> <p>An accidental discovery protocol will be established and implemented on discovery of a previously unidentified potential archaeological sites or features.</p> <p>Four Maori Values Assessments have been undertaken as part of corridor studies. Consideration has been and will continue to be given to the matters raised in these assessments. Consultation with Iwi will be ongoing.</p>



Section	Summary	Comment
	<p>Policy 2.1.4.11 Where offset mitigation measures referred to in Policy 2.1.4.10 are to be implemented by way of works or services, the scope of any necessary works or services and associated conditions of consent imposed under section 108(2)(c) of the RMA, shall be determined having regard to the following matters:</p> <ul style="list-style-type: none"> (a) that as far as practicable offset mitigation should be of the same kind or scale as and should remedy or mitigate effects caused at least in part by the activity being granted consent; (b) any mitigation shall restore, create or enhance natural or physical resources in order to compensate the adverse effects created by the activity at the original location; or (c) the offset mitigation should be applied as close as possible to the site where the adverse effects occur; and where this is not practicable, the ARC will work with the applicant to identify an alternative site, preferably in the same catchment or receiving environment as the consented activity, having regard to the nature of the environment including the community adversely affected by the consented activity; (d) whether the activity is located inside or outside of Urban Areas and is an existing or new activity; (d) the extent to which the works or services are practicable and effective to remedy or mitigate adverse effects. <p>Policy 2.1.4.12 Where the offset mitigation measures determined by Policy 2.1.4.10 are to be implemented by way of a financial contribution paid to the ARC, then the actual level of financial contribution shall be determined in accordance with the provisions of Chapter 8 of this Plan.</p> <p>Use and Development</p> <p>Policy 2.2.4.1 Use and development of air, land and water within Urban Areas (the Metropolitan Urban Limits and rural and coastal settlements) is appropriate where:</p> <ul style="list-style-type: none"> (a) it is consistent with the strategic directions of the Auckland Regional Policy Statement and the Auckland Regional Growth Strategy; and (b) adverse effects are avoided, remedied or mitigated. <p>Policy 2.2.4.2 Use and development of air, land and water within Greenfield is appropriate where:</p> <ul style="list-style-type: none"> (a) efficient use is made of available land; (b) Permanent rivers and streams with significant ecological, habitat and water quality values are maintained where practicable; 	



Section	Summary	Comment
	<p>(c) adverse effects on other Permanent rivers and streams and on water quality are remedied or mitigated.</p> <p>Policy 2.2.4.3 District and regional planning and consent processes should be integrated as far as practicable to ensure full consideration of the matters outlined in Policy 2.2.4.2.</p> <p>Policy 2.2.4.6 Use and development of air, land and water shall avoid giving rise to reverse sensitivity conflicts, particularly in relation to effects on network utility operators.</p> <p>Policy 2.2.4.8 The positive social, economic and cultural effects and benefits arising from any proposal for use and development shall be considered when assessing the overall effects of a proposal on air, land or water resources.</p> <p>Policy 2.2.4.9 Cumulative adverse effects of new use and development of air, land and water bodies shall be avoided as far as practicable, or remedied or mitigated.</p> <p>Policy 2.2.4.10 A precautionary approach shall be taken to proposals for use and development where there are potentially significant adverse effects, that cannot be fully assessed due to a lack of scientific or technical knowledge and where there is a threat of serious or irreversible harm to the environment. In assessing any applications, the ARC or its agents may consent to an application and impose conditions that will ensure that the effects of the activity are avoided, remedied or mitigated. These conditions may include but are not limited to any or all of the following:</p> <ul style="list-style-type: none"> (a) That consent conditions be reviewed in order to avoid, remedy or mitigate any adverse effects that may be generated by the activity; and (b) That the consent holder be required to regularly monitor the effects of any activity at an appropriate frequency; and (c) That bonds be imposed to ensure that any works or actions required by any consent are undertaken; and (d) That the duration of any consent is limited to a period that is appropriate to the circumstances. <p>Policy 2.2.4.11 Proposals to use or develop air, land or freshwater resources shall have regard to:</p> <ul style="list-style-type: none"> (a) The relevant provisions of the Auckland Regional Policy Statement; (b) The relevant provisions of the Auckland Regional Plan: Coastal where the proposal may directly affect the coastal marine area; 	



Section	Summary	Comment
	<p>(c) The relationship between the use of air, land and freshwater and the provisions of district plans and other relevant resource management strategies.</p> <p>Policy 2.2.4.12 Use and development shall be undertaken at times of the day, week or year which will avoid, remedy or mitigate adverse effects on:</p> <p>(a) The growth and reproduction of terrestrial and aquatic vegetation and the feeding, breeding and migratory patterns of fauna, including bird roosting, nesting and feeding; and/or</p> <p>(b) Lawful recreational use of air, land and freshwater bodies; and/or</p> <p>(c) Other lawful established activities in the locality that are likely to be adversely affected by any proposal.</p> <p>Cultural Heritage</p> <p>Policy 2.2.4.16 Use and development of, air, land and freshwater shall consider any effects on sites, buildings, places or areas which have cultural heritage values and which are identified in the ARC's Cultural Heritage Inventory, and should avoid, remedy or mitigate, adverse effects on these resources.</p> <p>Policy 2.2.4.17 In assessing applications for use and development which will adversely affect sites, buildings, places or areas identified in the ARC's Cultural Heritage Inventory, regard shall be had to:</p> <p>(a) The significance of the historical or cultural values of the site, building, place or area including the relationships that people have with the site, building, place or area and to the extent to which these will be maintained;</p> <p>(b) The integrity of the site, building, place or area, including in the case of a structure its physical appearance, and the extent to which it will be maintained;</p> <p>(c) The ability to record the values by means of:</p> <ul style="list-style-type: none"> i photographic and/or written record; ii identification at or near the site by a plaque, sign or other method; iii archaeological investigation and recording. iv silent files 	



Section	Summary	Comment
Part 2: Air Quality 4.4 Policies	<p>4.4.1 To have regard to the Objectives and Policies of Chapters 2.1, 2.2 and 2.3 in assessing any resource consent to discharge contaminants into air. <i>(This Policy relates to Objectives 4.3.1 to 4.3.11)</i></p> <p>4.4.2 The relevant provisions of the Auckland Regional Plan: Coastal shall be considered in the assessment of any proposal to discharge contaminants into air within the Coastal Marine Air Quality Management Area. <i>(This Policy relates to Objectives 4.3.1 to 4.3.11. See also the following Objectives of the Regional Plan: Coastal 3.3.1, 3.3.2, 4.3.1, 4.3.2, 5.3.1, 5.3.2, 5.3.3, 6.3.1, 6.3.2, 8.3.1, 9.3.1, 9.3.2, 10.3.1, 10.3.2 and 10.3.3)</i></p> <p>4.4.3 Significant adverse effects from the discharge of contaminants into air from any source shall be avoided; where this is not practicable for the cumulative effects from small sources, the effects of such discharges shall be minimised.</p> <p>4.4.5 The discharge of contaminants into air shall be considered inappropriate where:</p> <ul style="list-style-type: none"> (a) It causes, or is likely to cause, noxious, dangerous, offensive or objectionable odour, dust, particulate, smoke or ash, beyond the boundary of the premises on which the discharge is occurring; or (b) It causes, or is likely to cause, noxious, dangerous, offensive or objectionable visible emissions; or (c) It is a hazardous air pollutant and causes, or is likely to cause, adverse effects on human health or the environment, beyond the boundary of the premises on which the discharge is occurring; or (d) It causes, or is likely to cause, spray beyond the boundary of the premises on which the discharge is occurring (overspray) from the application of paint or powder coatings 	<p>Enhanced public transportation facilities and cycleways will mean that there may be a reduction in vehicle emissions from private motor vehicles.</p> <p>To mitigate adverse impacts with regards to the construction works disturbing particulate matter and impacting on local air quality, an Erosion and Sediment Control Plan will be produced and include mitigation measures for dust control, which is likely to include such measures as the spray application of water. Earthworks resource consents will be required and the erosion and sediment control plans will form part of this application.</p>
Part 3: Land and Water Resources 5.4 Policies	<p>General Policies</p> <p>5.4.1 The adverse effects of the discharge of contaminants on the values of the Wetland, Natural Stream and Type 2 Urban Stream, High Use Stream, High Use <i>Aquifer</i>, Quality Sensitive <i>Aquifer</i>, and Natural and Urban Lake Management Area shall be avoided where practicable, or remedied or mitigated. <i>(This Policy relates to Objectives 5.3.1, 5.3.3, 5.3.9, 5.3.10, 5.3.12, 5.3.14, 5.3.15, 5.3.17 and 5.3.18)</i></p>	<p>Appropriate construction and operational sediment control measures will be utilised for the project. As above and erosion and sediment control plan will be prepared and lodged as part of earthworks resource consent applications. Contaminated land will be carefully managed to ensure that contaminants are not discharged into receiving environments. A Contamination DWP is required to be prepared under the proposed designation conditions. The objective of</p>



Section	Summary	Comment
	<p>5.4.2 To have regard to the objectives and policies of Chapters 2.1, 2.2 and 2.3 in assessing any resource consent to discharge contaminants, into water or onto or into land. <i>(This Policy relates to Objectives 5.3.1, 5.3.3, 5.3.4, 5.3.9, 5.3.10, 5.3.12, 5.3.14, 5.3.15, 5.3.17 and 5.3.18)</i></p> <p>5.4.3 To have particular regard to the Urban Stream Management Framework (Table 3.1) of this Plan when assessing any proposal to discharge contaminants within an <i>Urban Area</i>. [ENV-2006-AKL-000120/11 Auckland City Council & Metrowater Ltd] <i>(This Policy relates to Objectives 5.3.3, 5.3.4, 5.3.6, and 5.3.8)</i></p>	<p>the Contamination DWP is to avoid, remedy or mitigate the adverse effects of construction on human health which may result from the disturbance of contaminated materials during construction.</p>
<p>Part 3: Land and Water Resources 5.4 Policies</p>	<p>Stormwater Diversions and Discharges</p> <p>5.4.4 When processing consent applications for non-network <i>Stormwater</i> diversions and discharges under Rules 5.5.2 to 5.5.5 the ARC shall require the applicant to adopt the Best Practicable Option (BPO) for the diversion and discharge, which shall have regard to:</p> <ul style="list-style-type: none"> (a) The BPO statutory criteria in the RMA; (b) That, outside <i>Urban Areas</i>, the scale and intensity of the development shall be consistent with the Regional Growth Strategy and Sector agreements or is part of the state highway network; (c) The level of adverse effects on the environment, including in particular adverse effects on: <ul style="list-style-type: none"> i the <i>receiving environment</i> due to the quality of the discharge; ii the health and safety of people and communities from flooding; iii aquatic habitat from erosion and sedimentation, particularly for <i>Natural Stream Management Areas</i> and Type 2 Urban Streams; and (d) The level of adverse effects arising from the cumulative effects of stormwater discharges and diversions at the discharge point(s) for existing and proposed land uses within the site or in the case of a State highway, that part of the highway within the same stormwater catchment. In particular, this includes any existing or redeveloped impervious areas, draining to the same discharge point as new impervious areas. <i>(This Policy relates to Objective 5.3.1 and 5.3.8)</i> 	<p>Stormwater discharge consents will be applied for either at the same time or following Outline Plan of Works approval. Indicative designs have been prepared for avoiding, remedying and mitigating stormwater effects including use of detention devices to restrict stormwater flows to estimated existing flows and the construction of stormwater wetlands areas for those sections of the corridor that are currently unserved. The following standards will be implemented as part of detailed stormwater drainage design:</p> <ul style="list-style-type: none"> - Peak flow and volume estimation: ARC TP108 Guidelines for Stormwater Modelling in the Auckland Region - Stormwater Management System Design: ARC TP10 Design Guideline Manual: Stormwater Treatment Devices (2003) - Collection and Conveyance: Austroads Guide to Road Design Part 5: Drainage Design. - PAUP guidelines



Section	Summary	Comment
	<p>5.4.4A When processing consent applications for stormwater diversions and discharges under Rules 5.5.2 to 5.5.5 the ARC shall recognise the strategic importance of stormwater systems owned or operated as part of regionally significant infrastructure in achieving sustainable management and enabling people and communities to meet their needs for economic, social and cultural well-being.</p> <p>5.4.4B In addition to the matters listed in Policy 5.4.4, consent applications for non-network <i>stormwater</i> diversions and discharges under Rules 5.5.2 to 5.5.5 will also be assessed against the following matters:</p> <p>(a) The extent to which:</p> <ul style="list-style-type: none"> (i) the scale and intensity of the land use activity is consistent with that provided for in the District Plan; or (ii) the application adopts the outcomes of any <i>Structure Plan</i> (that has been incorporated into a District Plan); or (iii) the application adopts the outcomes of any <i>Integrated Catchment Management Plan</i> (for the area within which the discharge occurs or will occur) to ensure an integrated approach; or <p>(b) Outside <i>Urban Areas</i>, whether the development is located in a growth area and is in accordance with the Regional Growth Strategy, and Sector agreements, or is part of the State highway network, including the timing of such development, so as to avoid cumulative adverse effects of <i>stormwater</i> discharges outside <i>Urban Areas</i>;</p> <p>(c) The outcomes of any consultation undertaken with any potentially adversely affected parties;</p> <p>(d) The extent to which a wide range of management options have been considered to prevent or minimise the adverse effects of any existing and maximum potential landuse and any consequential diversions and discharges, and associated river and <i>lake bed</i> activities to ensure the most appropriate option is selected;</p> <p>(e) The level of <i>stormwater</i> quality management identified by the relevant <i>Integrated Catchment Management Plan</i> to prevent or minimise the adverse effects of <i>stormwater</i> contaminants;</p>	



Section	Summary	Comment
	<ul style="list-style-type: none"> (f) If an <i>ICMP</i> has not been prepared, the assessment criteria will include the extent to which <i>stormwater</i> quality management: <ul style="list-style-type: none"> i adopts the Best Practicable Option; ii adopts methods (<i>source control</i>, traditional or <i>innovative</i>) to prevent or minimise the adverse effects of contaminants on the <i>receiving environment</i>, including <i>total suspended solids (TSS)</i> loads anticipated to arise on a long term basis from the proposed <i>impervious area</i>; (g) Whether the proposal: <ul style="list-style-type: none"> i avoids exacerbating or causing flooding of the floor level (authorised by a local authority) of a <i>habitable building(s)</i>, or a State highway; ii avoids the use of flood storage volume below the 100 year <i>ARI</i> flood level; (h) The extent to which there is the potential for local scour and downstream channel erosion, particularly for Natural Stream Management Areas and Type 2 Urban Streams and that this is managed to prevent or minimise adverse effects; (i) The extent to which the activity incorporates low impact design and non-structural methods to prevent or minimise adverse effects (including minimising the extent of impervious area and stormwater runoff volumes); (j) The extent to which operation and maintenance programmes are provided to ensure the effective ongoing functioning of the discharge; (k) The extent to which <i>stormwater</i> quality treatment and quantity control are, or will be, provided for existing and proposed land uses within the same <i>Stormwater</i> catchment or <i>site</i> to reduce existing and potential adverse effects. In particular, this includes any existing or redeveloped <i>impervious areas</i>, draining to the same discharge point as new <i>impervious areas</i>; (l) Where assets are to be vested to another organisation, whether a financial bond is required (from the applicant to that other organisation) for the purposes of ensuring effective ongoing operation and <i>maintenance</i> of the <i>stormwater</i> management methods proposed; 	



Section	Summary	Comment
	<p>(m) With respect to existing discharges and diversions, the extent to which any prioritised programme for implementing upgrades and improvements to infrastructure considers and balances environmental effects, operational needs, physical constraints, practicality, timing issues, and financial considerations; and</p> <p>(n) Having regard to Policy 5.4.4C, the extent to which monitoring and reporting may be required. <i>(This policy relates to Objectives 5.3.1, 5.3.4, 5.3.5, 5.3.6 and 5.3.8)</i></p>	

3.3 Auckland Council District Plan: Manukau Section

3.3.1 Purpose

The Manukau section of the Auckland Council District Plan provides the statutory framework to manage the natural and physical resources of the former Manukau District. The District Plan was developed in accordance with the RMA and RPS, and assists the Council carry out its responsibilities under the RMA.

3.3.2 Summary

The proposed corridor is located predominantly within the boundaries of the former Manukau District. The corridor enters the former Papakura District at the intersection of Ranfurly and Mill Road. The corridor provides an alternate north-south route to SH1 between Manukau, Papakura and Drury and covers a total of 8.9km. The corridor has District Arterial status in the Manukau section of the Auckland Council District Plan.

The land adjacent the western end of Redoubt Road is zoned Main Residential and is predominantly medium density residential development with the exception of motels located at 21 Redoubt Road and 104 Redoubt Road, and a Church of Jesus Christ of Latter Day Saints located at 19 Redoubt Road. Further east along Redoubt Road to the north the land zoning is Flat Bush Countryside Transition Zone, which includes lower density countryside living development. Totara Park (zoned Open Space) to the south of Redoubt Road is a significant public open space of approximately 216ha and adjoins the southern side of Redoubt Road. Totara Park has approximately 1.3km of road frontage.

The Murphy's Road section is located within the Flat Bush Structure Plan area. Development in Flat Bush is anticipated to be equivalent to that of a small to moderately sized city. Based on population growth forecasts, it is expected that development of the area will be substantially complete by 2025 and will have reached a population of approximately 40,000. The majority of Murphy's Road is currently zoned Future Urban in the Auckland Plan (Manukau Section) in recognition of its future transition from rural to an urban environment. The Flat Bush Structure Plan shows land adjacent Murphy's Road as being re-zoned to residential. The top (southern end) of Murphy's Road is zoned Countryside Living and contains typical semi-rural lifestyle development. To the West along the Mill Road section the land is zoned Rural 3 (intensive countryside living) up to the former Papakura City boundary. The corridor with regards to the policies contained in the Manukau section of the Auckland Council District Plan is assessed in greater detail in the table below.

Having regard to District Plan objectives and policies relating to the underlying zonings over which the proposed corridor traverses, the purpose of a designation is to consent works which do not typically fall within the zoning provisions of a District Plan. The current zoning provisions of the District Plan do not provide for such an activity and therefore the majority of the policies and objectives relating to zones over which the corridor traverses are not relevant to the assessment of the NoR's.

Section	Summary	Comment
Chapter 4 – The City's Environment	<p>4.2.1 Objectives</p> <p>Objective 4.2.1.2 To integrate land use, transport and infrastructure provisions to support a compact and contained urban form including mixed use.</p> <p>Objective 4.2.1.3 To achieve a high level of mobility and accessibility within the district that provides for an integrated, responsive, sustainable, safe, affordable and efficient movement of goods and people.</p>	<p>The proposed corridor will support the objective for a compact and contained urban form through providing increased capacity for future development in Flat Bush, one of the largest mixed-use developments currently planned in Auckland. The upgraded corridor will also include provision for private vehicles, public transport, walking and cycling.</p>



Section	Summary	Comment
	<p>Objective 4.2.1.4 To encourage urban intensification in High Density Centres and Intensive Corridors to provide the primary focus for the District’s residential and commercial growth, and enabling intensification in other locations (in particular in neighbourhood centres and along other corridors) where appropriate, that will not compromise the achievement of 2.6.5 Strategic Policies Urban Structure of the Auckland Regional Policy Statement.</p> <p>Objective 4.2.1.5 To create attractive urban environments which enhance the identity and character of identified High Density Centres and Intensive Corridors, including with quality well designed buildings, mixed uses, lively streetscapes, safe and attractive public spaces, convenient pedestrian linkages and good access to transport facilities.</p> <p>Objective 4.2.1.7 To protect and enhance the values of the natural environment and built heritage.</p> <p>Objective 4.2.1.8 To manage residential intensification and other sensitive land uses within identified High Density Centres, Intensive Corridors and other areas already identified or that may be considered for accommodating urban growth, in a way that avoids conflicts or incompatibilities (including reverse sensitivity effects) between those land uses and both existing and planned future regionally significant infrastructure. For the purposes of this objective "planned future regionally significant infrastructure" is regionally significant infrastructure which is the subject of a Notice of Requirement, designation or resource consent, or which otherwise has statutory planning approval.</p> <p>4.2.2 Policies</p> <p>Policy 4.2.2.1 Greenfield development for residential and mixed use purposes should be limited to the Flat Bush area in East Tamaki as identified in the Planning Maps of the District Plan, and to any remaining undeveloped land with existing residential and/or business zoning. This policy does not apply to rural and coastal settlements which are outside of metropolitan urban limits.</p> <p>Policy 4.2.2.5 New residential development within identified High Density Centres and Intensive Corridors should provide for population densities that are supportive of public transport having regard to Appendix H of the Auckland Regional Policy Statement.</p> <p>Policy 4.2.2.7 New development within identified High Density Centres and where appropriate in Intensive Corridors should feature high quality, sustainable architecture, urban design and landscape design.</p>	<p>The proposed road corridor will provide increased future corridor capacity with less congestion, improved travel times and greater route security. The route also provides on-road cycle lanes and off-road pedestrian and shared cycle routes, and public transport which will improve safety and accessibility, and will provide a sustainable and integrated corridor.</p> <p>The design of the road corridor facilitates urban intensification in centres and will give effect to section 2.6.5 strategic policies of the Auckland Regional Policy Statement.</p> <p>The Murphy’s Road section of the proposed road corridor is located within the Flat Bush structure plan area and will provide capacity to cater for the proposed growth in Flat Bush, including cycling, walking and public transport.</p> <p>The corridor can appropriately avoid, remedy or mitigate adverse effects on the natural environment. An authority to modify will be sought if built heritage items (i.e. the meeting house) at the proposed Alfriston Road intersection are affected by the project.</p> <p>The proposed road corridor realignment will impact on flora and fauna within the Hunua Ecological District. Mitigation is proposed through a native planting scheme within the designation footprint which will compensate for the loss of mature native vegetation and enhance the natural environment in some places.</p> <p>The proposed corridor will traverse 5 designations administered by NZTA, Telecom, Vodafone, Watercare and Vector. The corridor can be constructed in a manner that will not adversely impact on the ability of the designating authority’s ability to use their designations for their stated purpose.</p>



Section	Summary	Comment
	<p>Policy 4.2.2.8 New development within identified High Density Centres and Intensive Corridors should be coordinated with the provision of new and upgraded transport infrastructure, the upgrading programmes for regionally significant water, waste water and stormwater infrastructure and with the planning of new education and health facilities where required.</p> <p>Policy 4.2.2.9 New development within identified High Density Centres and Intensive Corridors must take into consideration existing and planned regionally significant infrastructure and planned opportunities for future transport improvements or investment.</p>	<p>The proposed road corridor is located within Flat Bush (re-named Ormiston in the Auckland Plan) and will provide capacity for the planned development of it. In addition, the corridor is identified as a regional arterial route in the Flat Bush Structure Plan and Proposed Plan Change 20 (recently approved by consent order) which is implementing the structure plan.</p> <p>The proposed corridor realignment does not include a request for changes to the Metropolitan Urban Limits.</p> <p>The proposed road corridor will provide capacity for the planned growth in Flat Bush which includes provision for high frequency public transport to provide for future growth.</p> <p>Having regard to urban design and landscaping, appropriate urban design and landscape treatments will be applied in accordance with the Urban Design and Landscape DWP. The objective of the Urban Design and Landscape DWP is to enable the integration of the Mill Road corridor’s permanent works into the surrounding landscape and urban design context. The Urban Design and Landscape DWP will ensure that the areas within the designation footprint used during the construction of the Mill Road Corridor Project are restored and the permanent works associated with the Mill Road Corridor Project are developed in accordance with urban design principles.</p> <p>The Redoubt Road/ Mill Road / Murphy’s Road corridor upgrade is planned to be completed within a 20 year planning horizon and will be phased and developed in line within the Flat Bush Structure Plan development and other growth within the relevant policy zoning.</p> <p>The proposed road corridor is in line with the required infrastructure and service works provision set out in the Flat Bush Structure Plan and Chapter 9 of the Manukau</p>



Section	Summary	Comment
		District Plan. In addition, Flat Bush Plan Change 20 includes provision for Murphy's Road to be upgraded from a rural to an urban arterial as the surrounding development proceeds.
Chapter 6 Heritage Policies and objectives	<p>6.3 Objectives</p> <p>Objective 6.3.1 To preserve or protect the heritage values of a diverse and representative range of natural, physical and cultural resources within Manukau.</p> <p>Objective 6.3.2 To actively protect tangata whenua taonga from being damaged destroyed or desecrated.</p> <p>6.4 Policies</p> <p>Policy 6.4.1 Those heritage resources preserved or protected should reflect the variety of contexts and communities within the City. <i>(This policy relates to objective 6.3.1.)</i></p> <p>Policy 6.4.3 Adverse effects on tangata whenua taonga and their relationship with taonga should be avoided, remedied or mitigated. <i>(This policy relates to Objective 6.3.2).</i></p> <p>Policy 6.4.4 Public awareness of the City's heritage resources should be increased and the public encouraged to contribute to the protection of these. <i>(This policy relates to objective 6.3.1).</i></p> <p>Policy 6.4.5 Heritage resources should be used in a manner that ensures that the essential heritage qualities are not damaged or destroyed. <i>(This policy relates to objective 6.3.1).</i></p> <p>Policy 6.4.6 The assessment of effects on tangata whenua should occur in a way that respects tikanga Maori (Maori customary values and practices).</p> <p>Policy 6.4.7 Tangata whenua should be actively consulted where activities have the potential to adversely affect taonga or tangata whenua's relationship to taonga and in particular where development involves:</p> <ul style="list-style-type: none"> - "greenfield" subdivisions; - coastal areas; - activities near scheduled waahi tapu and archaeological sites; - activities near identified archaeological sites; - activity in the vicinity of papakainga areas; - activities that can adversely affect inland waterways; - public open space that contains heritage resources of value to tangata whenua. 	<p>Cultural Heritage</p> <p>An archaeological assessment prepared by Clough and Associates identifies that there are a number of early European buildings and sites located within close proximity of the proposed road corridor that are archaeologically sensitive. This includes early European buildings and sites located at the intersection of Mill Road and Alfriston Road, potentially buried archaeological remains at the intersection of SH1 and Redoubt Road and also at the intersection of Murphy's Road and Flat Bush School Road.</p> <p>There are potentially remains of old hedges, ditches and banks, post and wire fences to the south and north of Redoubt Road however these are not considered to contribute greatly to the history of New Zealand beyond a record of location and dimensions.</p> <p>Maori Cultural Values Assessments have been prepared by Te Akitai Waiohua, Ngati Te Ata Waiohua, Ngai Tai ki Tamaki and Ngāti Tamaoho. The findings of these assessments have been considered and will continue to be taken into consideration as the project progresses. Iwi consultation is on-going.</p> <p>The proposed designation conditions require preparation of a Historic Character DWP which will contain both a built heritage and archaeology section. The objective of the Built Heritage section is to avoid, remedy or mitigate adverse effects on built heritage as far as reasonably practicable. The objective of the Archaeology section of the Historic Character DWP is to avoid, remedy or mitigate adverse effects on</p>



Section	Summary	Comment
	<p><i>(This policy relates to objective 6.3.2).</i></p> <p>Policy 6.4.8 Options for the Council and tangata whenua to co-manage taonga in the Council's ownership should be investigated when assessing applications for development on Council land. <i>(This policy relates to objective 6.3.2).</i></p>	<p>archaeological remains during construction, as far as reasonably practicable.</p>
<p>Chapter 8: Transportation 8.3 objectives</p>	<p>8.3.1 To minimise or mitigate any adverse effects on the environment arising from the development, maintenance and use of the transportation system. <i>(This objective relates to Issues 8.2.2, 8.2.3 and 8.2.5)</i></p> <p>8.3.2 To maximise energy efficiency and accessibility within the transportation network and encourage the use of energy efficient modes of transport. <i>(This objective relates to Issues 8.2.1, 8.2.3, 8.2.5, 8.2.7 and 8.2.8)</i></p> <p>8.3.3 To co-ordinate land use and transportation planning and decision making so as to achieve a transport system that provides for the safe, efficient and convenient movement of people and goods. <i>(This objective relates to Issues 8.2.1, 8.2.4, 8.2.5, 8.2.6 and 8.2.7)</i></p> <p>8.3.4 To provide for appropriate roading improvements in growth areas to support all transport modes.[AM123] <i>(This objective relates to Issues 8.2.1, 8.2.2, 8.2.5, 8.2.6 and 8.2.7)</i></p>	<p>Adverse effects on the environment will be minimised or mitigated (refer section 7 of the AEE)</p> <p>The corridor is located within an area of high growth, including the Flat Bush Structure Plan Area (stage 2 - future urban) and rural zoning for intensive countryside living to the west. The Redoubt Road-Mill Road corridor will provide capacity to accommodate future residential and commercial growth and reduce travel times for private vehicles.</p> <p>The proposal includes the following facilities for walking, cycling and public transport:</p> <ul style="list-style-type: none"> - Dedicated on-road cycle lanes with additional off-road shared pedestrian/cycle paths which will form part of the Auckland Cycle Network. - Pedestrian connectivity and access will be improved through the provision of designated and safe pedestrian crossing opportunities at Diorella / Redoubt, Hollyford / Redoubt, and Murphy's / Redoubt traffic signals. - New footpaths both sides of Redoubt Road and Murphy's Road. - Improved pedestrian and cycle access to Totara Park. - Bus only lanes are also proposed at Diorella Drive/ Hollyford Drive/Redoubt Road intersections. These have been designed to provide bus priority measures to support a 15-minute bus headway, including a westbound bus-only lane between Hollyford Drive and the motorway interchange. The

Section	Summary	Comment
		<p>bus lane develops immediately north of the Hollyford Drive/Redoubt Road intersection, providing a bus only right turn lane at the signalised intersection with a dedicated bus only phase in the signal timing. All existing bus stop locations are to remain.</p> <p>The potential exists within the 3.5 flush median area (for vehicles turning right) to incorporate future pedestrian crossing facilities as desire lines alter over time.</p>
<p>Chapter 8: Transportation 8.4 Policies and Methods – 8.4.1</p>	<p>8.4.1 The transportation network should be managed in such a way that:</p> <ul style="list-style-type: none"> (a) transport generated carbon dioxide and noxious gas emissions and the consumption of non-renewable fuels is reduced; (b) ensures a pattern of development and supporting infrastructure which permits the City to be efficiently and effectively served by passenger transport services; (c) caters for the movement of people and goods; (d) traffic-generating activities in sensitive environments are discouraged where these would have significant adverse effects; (e) the adverse environmental effects of any new and existing transportation network facilitates are avoided, remedied or mitigated. 	<p>Operation</p> <p>Reducing private car travel and reducing journey times will lead to a reduction in fuel use and emissions, and shorter travel times.</p> <p>The corridor promotes a shift from use of private cars to sustainable modes through providing safe facilities for alternative transport modes and improving choice.</p> <p>Passenger transport services will be efficiently and effectively accommodated through bus only lanes at Diorella Drive/ Hollyford Drive/Redoubt Road, with intersections that provide bus priority measures to support 15-minute bus headway and westbound bus-only lane between Hollyford Drive and the motorway interchange.</p> <p>The corridor will provide sufficient capacity to accommodate planned growth effectively and address current and future predicted congestion issues as well as capacity for local freight traffic.</p> <p>The adverse effects of the proposed corridor can be appropriately avoided, remedied or mitigated.</p>

Section	Summary	Comment
<p>Chapter 8: Transportation 8.4 Policies and Methods 8.4.2</p>	<p>8.4.2 The continued development of the transportation network should:</p> <ul style="list-style-type: none"> (a) achieve acceptable levels of accessibility, mobility, safety and convenience for all sections of the community; (b) provide convenient and safe road and cycle/footpath linkages to activity centres and local facilities; (c) have clear physical distinctions between the primary and secondary road network, based on function, traffic volumes, vehicle speeds, public space and environmental amenity; (d) minimise the adverse effects of adjacent activities on the operation of the roading network and ensure that all access and egress to and from roads is suitable for and compatible with the function and amenity of the road; (e) avoid, remedy, or mitigate the adverse effects of the roading network and transportation activities on the environment; (f) make provision for the likely future transport and development needs of the City, in particular ensuring high density centres are not compromised by inappropriate transport infrastructure;[AM123] (g) ensure transport effects, traffic generating characteristics and demand for various modes of transport are taken into account when providing for land use activities. (h) not be compromised by inappropriate land use or subdivision and supports and takes into account the anticipated land uses;[AM123] (i) ensure land use and transport integration;[AM123] (j) direct high trip generating activities to corridors with good public transport when such activities are unable to locate within high density centres and corridors;[AM123] (k) ensure that in growth centres all transport modes are considered when roading improvements occur.[AM123] 	<p>The corridor will provide multi-modal transport infrastructure, including facilities for private vehicles, pedestrians, cyclists and passenger transport. This will provide an acceptable level of accessibility, mobility, safety and convenience for all users of the corridor.</p> <p>There are no cycle paths on the existing corridor. The proposed corridor will provide continuous and safe cyclist paths (on and off-road) along the whole corridor and provide pedestrian footpaths in the urban sections.</p> <p>The proposed corridor is an arterial route between Redoubt Road and Mill Road. The design of the corridor incorporates clear distinctions in form based on the adjacent land use, ranging from full urban, with a public transport requirement, to semi-rural regional arterial.</p> <p>The Redoubt Road-Mill Road corridor is identified as a Proposed Regional Arterial Road under the RARP, with the exception of Murphy’s Road which is identified as a District Arterial. The corridor is identified as having a key role in providing access between Flat Bush and the Manukau CBD, especially for passenger transport. The corridor will support proposed land use changes in Drury, Papakura, Takanini and Flat Bush.</p> <p>The upgraded corridor will also improve road safety via improved vertical and horizontal alignments. It is expected that this will lead to the reduction in fatal and serious crashes. Improved urban design and public space (road corridor) lighting in urban and future urban areas increases opportunities for passive surveillance and personal security.</p> <p>Adverse environmental effects can be appropriately avoided, remedied or mitigated.</p>



Section	Summary	Comment
Chapter 8: Transportation 8.4 Policies and Methods 8.4.3	<p>8.4.3 The development of new or existing urban areas should give regard to:</p> <ul style="list-style-type: none"> (a) the ability to effectively service new and existing urban areas with passenger transport (b) the provision of safe and convenient pedestrian and cyclist access to community facilities, places of work and shopping areas; (c) facilitating improved cyclist and pedestrian linkages within neighbourhoods; and (d) the provision of cycleways in the construction or reconstruction of primary network roads. <p><i>(This policy relates to objective 8.3.2)</i></p>	<p>The proposed corridor will effectively service the planned land use growth and development around the corridor with high frequency passenger transport.</p> <p>Safe and convenient cyclist facilities will also be provided along the whole of the corridor and pedestrian footpaths will be provided in all urban sections of the corridor. Pedestrian connectivity and access will be improved by the corridor realignment through the provision of designated and safe pedestrian crossing opportunities at Diorella / Redoubt, Hollyford / Redoubt, and Murphy's / Redoubt traffic signals.</p>
Chapter 15: Public Open Space 15.4 Policies	<p>Policy 15.4.4 Landscape design and planting of public open space should occur in such a way that:</p> <ul style="list-style-type: none"> (a) enhances personal safety; (b) enhances visual amenity of the public open space, neighbouring streetscape and landscape; (c) does not impede the predominant function of the public open space; (d) assists in improving water quality in streams located on public open space and adjacent water bodies where possible; (e) assists in preserving the genetic purity of indigenous vegetation according to ecological districts identified by the Department of Conservation; (f) does not cause damage to archaeological sites. 	<p>Totara Park is a significant public open space on Redoubt Road, which includes bridle trails, mountain bike trails and an equestrian centre.</p> <p>It is proposed to plant the upper catchments within the park with appropriate native species. The proposed stormwater wetlands will also be planted with appropriate native species. Overall the proposed landscape plantings are not of a scale that will detract from the overall open space "farm park" feel of Totara Park.</p>



3.3.3 Plan Change No. 20 Flat Bush (27th October 2010) [Manukau District Plan]

Background

Plan Change 20 is now operative. . Set out below is an assessment of the proposed road corridor realignment and widening in relation to Plan Change 20.

Section	Proposed Plan Change	Relationship to Mill Road
Chapter 17.10 Flat Bush	<p>17.10.3 Objectives</p> <p>Objective 17.10.3.5 To achieve a well-connected, adaptable, safe, attractive, healthy and pleasant environment for living and working and travelling with an emphasis on the importance of the public realm including parks, streets, civic areas, roads and the natural environment. <i>(This objective relates to Issue 17.10.2.3, Issue 17.10.2.4, Issue 17.10.2.5, Issue 17.10.2.6 and Issue 17.10.2.7).</i></p> <p>Objective 17.10.3.7 To ensure the establishment of an appropriate range of physical and social infrastructure and facilities required to enhance the resulting urban environment and address any adverse effects of urbanisation within Flat Bush. <i>(This objective relates to Issue 17.10.2.7).</i></p> <p>Objective 17.10.3.8 To protect, sustain, restore and enhance where practicable the remaining terrestrial and aquatic ecology of remnant native vegetation and waterways. <i>(This objective relates to Issue 17.10.2.3, Issue 17.10.2.4, Issue 17.10.2.5, Issue 17.10.2.6 and Issue 17.10.2.7).</i></p> <p>Objective 17.10.3.9 To achieve a safe, efficient, well connected, and integrated transport system within and beyond the Flat Bush area that provides a choice of travel modes including pedestrian, cycling, passenger transport and motor vehicles. <i>(This objective relates to Issue 17.10.2.2, Issue 17.10.2.3 and 17.10.2.4).</i></p>	<p>The project will upgrade Murphy's Road to improve the vertical and horizontal alignment and will also include provision for pedestrians and cyclists as well as vehicles thus achieving a well-connected and integrated transport system within and beyond the Flat Bush area.</p> <p>The project will include enhancement native vegetation plantings at the top end (southern end) of Murphy's Road. There are a few trees which will need to be removed from the edge of Murphy's bush to accommodate the road corridor. These trees will be more than compensated for by the proposed additional native plantings.</p> <p>Appropriate construction and operational stormwater measures will be implemented to avoid adverse impacts on aquatic ecology.</p>
17.10.9.6 Public Open Space 6 — Environmental Corridor Zone	<p>17.10.9.6.1 Objective</p> <p>To integrate the management of stormwater runoff with the maintenance and enhancement of natural waterways, native forest and wetlands, provision of passive recreational opportunities and pedestrian and cycle access.</p> <p>17.10.9.6.2 Policies</p> <p>(a) Riparian planting along waterways is encouraged to maintain and enhance water quality and aquatic habitats and to enhance existing native forest and wetland areas within the catchment within the catchment and to reduce stream</p>	<p>The proposed footpaths and cycleways will facilitate access to Murphy's Bush – an open space zoned public amenity.</p> <p>Stormwater run-off will be appropriately treated prior to discharge to waterways.</p>



Section	Proposed Plan Change	Relationship to Mill Road
	<p>bank erosion, in addition to improving general bio diversity of the catchment.</p> <p>(b) Activities, buildings and structures should be sited and designed in a manner that maintains and enhances the natural functioning of waterways, mitigates potential natural hazards and reflects the natural values and character of the zone.</p> <p>(c) Activities and buildings that seek to locate within the Public Open Space 6 Environmental Corridor zone shall enhance passive informal recreation and leisure opportunities, relate to the surrounding public open space and streetscape and where possible be integrated with the network of walkways and cycle ways. In addition activities and buildings shall avoid, remedy and mitigate any adverse effects on neighbouring properties and communities.</p> <p>(d) Pedestrian & cycle ways are to be designed and located to enable safe and convenient access within the zone.</p> <p>(e) Residential activities and activities which are not in keeping with the objectives and policies of the Public Open Space 6 — Environmental Corridor zone shall be restricted.</p>	

3.4 Auckland Council District Plan: Papakura Section

3.4.1 Purpose

The Papakura section of the Auckland Council District Plan provides the framework to manage the natural and physical resources within the boundaries of the former Papakura District.

3.4.2 Summary

The proposed corridor is partly located within the Papakura Section of the Auckland District Plan (former Papakura District) beginning at Ranfurly Road and carrying through to the end of the proposed road corridor realignment beyond the intersection of Alfriston and Mill Road. This part of the corridor will be constructed over land zoned rural under the Papakura section of the Auckland Council District Plan. A number of the objectives and policies of the Rural zone do not apply to the proposed corridor project as they relate to managing the effects of rural based activities.

Section	Summary	Comment
<p>Section 1, Part 6: Objectives and Policies</p> <p>6.1 Rural Areas</p>	<p>6.1.1 Objectives</p> <p>6.1.1.(a) To retain the rural character of Papakura.</p> <p>6.1.1.(b) To avoid, mitigate and remedy any adverse effects of rural activities on the natural and physical environment.</p> <p>6.1.1.(c) To conserve and enhance the natural and physical resources of the rural area.</p> <p>6.1.2.(b) The Council will encourage the retention of all significant indigenous vegetation and appropriate non indigenous vegetation throughout the District and particularly along the margins of the coast, creeks and streams.</p> <p>6.1.2.(e) The Council will require that topsoil is retained wherever possible and particularly in areas where subdivision is being carried out in order to promote the sustainable management of the land.</p> <p>6.1.2.(f) The Council will not permit development in the rural areas of the District, and particularly in the Hunua foothills and the Takanini area, unless it has been satisfied that potential geo-technical concerns have been investigated and that the design of the development has made proper provision for the geo-technical conditions of the area.</p> <p>6.1.2.(g) The activities permitted in the rural area will ensure that:</p> <ul style="list-style-type: none"> i The groundwater resources in the area are able to sustain such activities, and ii Groundwater resources will be protected from infiltration of pollutants or any deterioration of groundwater yield or quality. 	<p>The project will remove rural zoned land from productive purposes. However in the context of enabling enhanced connectivity between the centres of Papakura, Takanini and Manukau including enhanced access to markets for goods produced in the rural areas the project has positive benefits.</p> <p>No indigenous or non-indigenous vegetation of any significance is affected by the section of corridor that falls within the former Papakura District.</p> <p>There is no reason that stripped top soil cannot be re-used within the localised area.</p> <p>Appropriate geotechnical studies have been undertaken which take into consideration the geotechnical constraints of the area.</p> <p>Appropriate construction and operational sediment control measures will be adopted to ensure that groundwater is not polluted. Comprehensive earthworks resource consents will be required which will detail earthworks methodologies and include appropriate erosion and sediment control plans.</p>



Section	Summary	Comment
	6.1.2.(h) Outside the area of the District which is supplied with urban services, on-	
Section two: rural Papakura Part 6 – Policies and Objectives 6.1 Rural Areas	Objective 6.1.3 To ensure that development does not increase the risk or the consequence of flooding. Policies 6.1.4.(a) The Council will control the intensity and nature of development and land management practices within the catchments of the Slippery Creek, Papakura Stream and Hingaia Stream in order to minimise the effects of flooding.	Stormwater wetlands will be utilised to attenuate stormwater in this section of the corridor.
Section two: rural Papakura Part 6 – Policies and Objectives 6.1 Rural Areas	Objective 6.1.7 To conserve and enhance the features of the rural environment that contribute to the natural character of the area. Policies 6.1.8.(b) Significant indigenous and exotic trees and areas of bush which contribute to the rural character of the area shall be retained. 6.1.8.(c) The Council will impose controls on activities so to avoid, minimise, remedy or mitigate off-site impacts of land management practices and activities and to protect and enhance the major components of the natural framework of Papakura District which are waterways, remnant indigenous vegetation and landform.	<p>The corridor alignment will not adversely impact on any features that contribute to the natural character of the area.</p> <p>The proposed corridor will not adversely impact on any significant indigenous or exotic trees through the section of the alignment located in the former Papakura District.</p> <p>No waterways will be adversely affected by the section of corridor located in the former Papakura District. Wetlands will be constructed adjacent the proposed intersections of Mill and Ranfurly and Mill and Alfriston Road. These will assist with attenuation and treatment of stormwater prior to discharge to connecting waterways.</p> <p>No significant land forms will be affected in this section of the corridor.</p>
Section two: rural Papakura Part 6 – Policies and Objectives	Objectives 6.1.5.(a) To achieve sustainable primary production in the rural areas of Papakura District. 6.1.5.(b) To retain land having a high actual or potential value for food production for a range of agricultural activities.	The corridor will remove land from primary productive purposes (class 2 soils). The corridor will however potentially enhance connectivity to markets thus improving the economic efficiency of primary production. It is noted that the Rural zoned land through which the corridor traverses is not used extensively for horticultural food production being predominantly used for grazing purposes. There is a horse stud located near the end of



Section	Summary	Comment
6.1 Rural Areas	<p>Policies</p> <p>6.1.6.(a) The Council will encourage the continuing productive use of the rural lowlands of Takanini East, Ardmore, Drury, Karaka and Hingaia by permitting a wide range of rural farming activities, and establishing a relationship between the nature of farming activities and minimum subdivision size.</p> <p>6.1.6.(b) The Council will, in evaluating any application for an activity which is not a permitted activity, require that the effects of the activity on the physical and cultural environment of the rural area of Papakura are identified. The Council may grant its consent subject to conditions which will, where possible, avoid, mitigate, remedy and minimise its effect on the environment. The Council may also require, in respect of any application which is not a permitted activity, that the feasibility of the activity is demonstrated.</p> <p>6.1.6.(c) The Council, in providing for small holdings and part-time farming activities, will do so in such a way as will promote a variety of lot sizes but prevent the possibility of wholesale fragmentation of rural land.</p> <p>6.1.6.(d) Home enterprises have been provided for and the Council will impose stringent standards on noise generation particularly at night by home enterprises in the rural area. This is to ensure that this activity does not unduly impinge on the amenity of the rural area.</p> <p>6.1.6.(e) The Council in providing for residential activities in the Rural Papakura and Rural Takanini/Drury Zones takes the approach that placement of new dwellings should be such that the productive potential of the rural land is generally not compromised. A residential cartilage area of 2000m² which is to include the placement of the dwelling, associated ancillary buildings and the access ways is provided for in the Rural Papakura and Rural Takanini / Drury Zones.</p>	<p>the alignment.</p>
Section two: rural Papakura Part 6 – Policies and Objectives	<p>Objective</p> <p>6.1.7 To conserve and enhance the features of the rural environment that contribute to the natural character of the area.</p> <p>Policies</p> <p>6.1.8.(a) The Council will establish a variable minimum size of subdivision in different parts of the rural area of the District which will recognise its existing use, ownership pattern and character, and will help to ensure that the rural character can be retained in future.</p>	<p>The corridor will not impact on any features that contribute to the natural character of the rural environment in the former Papakura district.</p> <p>The corridor will not affect significant indigenous and exotic trees or bush in that part of the alignment which falls within the former Papakura District.</p>



Section	Summary	Comment
6.1 Rural Areas	<p>6.1.8.(b) Significant indigenous and exotic trees and areas of bush which contribute to the rural character of the area shall be retained.</p> <p>Note that, in respect of this policy, significant trees and bush are defined as trees which are over 6 metres tall, and/or bush which contributes to the visual amenity of the area and ecological diversity and which have value because of their age, location and relative scarcity.</p> <p>6.1.8.(c) The Council will impose controls on activities so to avoid, minimise, remedy or mitigate off-site impacts of land management practices and activities and to protect and enhance the major components of the natural framework of Papakura District which are waterways, remnant indigenous vegetation and landform.</p> <p>6.1.8.(d) Subdivision of land should have regard to existing natural landscape features and where practicable these features should be retained and enhanced.</p> <p>6.1.8.(e) In order to protect the rural character of the District the Council will require a reasonable distribution of smaller lots throughout subdivisions and a pattern of subdivision which does not concentrate the smaller lots as front lots on existing roads.</p>	<p>Appropriate construction and operational stormwater treatment measures will be implemented to reduce adverse effects on waterways.</p>
<p>Section two: rural Papakura Part 6 – Policies and Objectives</p> <p>6.2 Maori Concerns</p>	<p>Objective</p> <p>6.2.1 To recognise and provide for the relationship of the Maori people with their ancestral land, culture and traditions.</p> <p>Policies</p> <p>6.2.2.(a) The Council will, in line with its duties and responsibilities under the Resource Management Act 1991 consult with tangata whenua on a regular basis. The Council will also consult with the tangata whenua and any other Maori interest group prior to any planning initiatives being taken which may affect their interests.</p> <p>6.2.2.(b) The Council will require to be satisfied that consultation where appropriate has been carried out with Maori people in respect of any subdivision or development which may affect their interests.</p>	<p>AT is committed to the principals of the Treaty of Waitangi and meeting their relevant statutory obligations under the Land Transport Management Act and the RMA. Iwi consultation has occurred on the project since 24 May 2012. Maori Values Assessments have been prepared by Te Akitai Waiohau, Ngati Te Ata Waiohau, Ngai Tai ki Tamaki and Ngāti Tamaoho. The matters raised in the assessments have been considered and will continue to be considered as the project progresses. Iwi will continue to be consulted as part of all phases of the project. Designation conditions require the involvement of Iwi in the preparation of a number of Delivery Work Plans.</p>

Section	Summary	Comment
	<p>6.2.2.(c) In accordance with the Resource Management Act 1991 the Council recognises and will provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga. Similarly, the Council will also take into account the principles of the Treaty of Waitangi in exercising its functions and powers under the Resource Management Act 1991.</p> <p>6.2.2.(d) The Council recognises Ngai Tai, Ngati Tamaoho, Ngati Akitai, and Ngati Paoa as having particular interests in the area administered by Papakura District Council. It also recognises the Huakina Development Trust as the main point of contact in respect of issues which affect these iwi, with the exception of Ngati Paoa who have asked to be consulted separately and will consult Huakina Development Trust and Ngati Paoa on resource management issues as appropriate.</p>	
<p>Section two: Rural Papakura Part 6 – Policies and Objectives</p> <p>6.7.1 Preservation and Conservation of Places, Areas, Buildings and Objects</p>	<p>Objective</p> <p>6.7.1.1 To preserve, protect and retain places, areas, buildings and objects of architectural, historic, cultural, archaeological, scientific or other interest or of visual appeal in accordance with the Historic Places Act 1993.</p> <p>Policies</p> <p>6.7.1.2.(a) The Council will promote the identification and management of places and areas of historic and cultural significance and will include these in schedule 6.7.1.3.</p> <p>6.7.1.2.(b) All significant buildings and objects of architectural, historic, scientific or other interest or of visual appeal are listed in a schedule for protection and preservation in this Plan. This schedule may be added to from time to time.</p> <p>6.7.1.2.(c) In some cases the question of public acquisition or partial financial compensation may arise and will be considered by Council as part of its decision on the application.</p>	<p>The project will not adversely impact on heritage items listed in the District Plan or PAUP. The heritage assessment notes that three sites (R11/2074) Alfriston Meeting Hall (The Meeting House), R11/2069 John de Carteret Homestead and Post Office/Store site and R11/2063 Alfriston Presbyterian Church/Stables/Block House site) are recorded in the New Zealand Archaeological Association’s (NZAA) Site Record File and are located within and immediately adjacent to Section 4d and Section 5 of NoR 3. An application will be made to Heritage New Zealand under Section 44(a) of the HNZPTA for an archaeological authority to modify or destroy any sites that might be affected by the project prior to any development works being carried out on any of the NoR areas within the proposed corridor.</p> <p>In addition, the proposed designation conditions require preparation of a Historic Character DWP which will contain both a built heritage and archaeology section. The objective of the Built Heritage section is to avoid, remedy or mitigate adverse effects on built heritage as far as reasonably practicable. The objective of the Archaeology section of the Historic Character DWP is to avoid, remedy or mitigate adverse effects on</p>



Section	Summary	Comment
		archaeological remains during construction, as far as reasonably practicable.
Section two: rural Papakura Part 6 – Policies and Objectives 6.7.3 Conservation of the Landscape	Objective 6.7.3.1 To conserve those features of the physical landscape which contribute significantly to the visual amenity of the District.	That part of the corridor within the boundaries of the former Papakura District will not impact on any physical features which contribute to the visual amenity of the District.
Section two: rural Papakura Part 6 – Policies and Objectives 6.7.5 Landscape Design	Objective 6.7.5.1 To ensure, where appropriate, that landscaping is undertaken as an integral part of development and re-development so as to enhance the appearance of the property. Policies 6.7.5.2.(a) Where required by this Plan a Landscape Plan will accompany the general development plan for a property. 6.7.5.2.(b) The Landscape Plan will provide details of the layout, types of plants and a maintenance plan. 6.7.5.2.(c) The Landscape Plan shall be to the satisfaction of the Director of Regulation and Planning. Where the Director does not approve the Landscape Plan, the applicant shall have the right of appeal to the Council and may make submissions thereto. 6.7.5.2.(d) Where appropriate, the applicant may be required to provide some trees that will grow to a height in excess of 6 metres.	The proposed designation conditions require preparation of an Urban Design and Landscape DWP. The objective of the Urban Design and Landscape DWP is to enable the integration of the Mill Road corridor's permanent works into the surrounding landscape and urban design context. The Urban Design and Landscape DWP will ensure that the areas within the designation footprint used during the construction of the Mill Road Corridor Project are restored and the permanent works associated with the Mill Road Corridor Project are developed in accordance with urban design principles. The Principles from the Urban Design and Landscape study submitted as part of the Notice of Requirement documents will be used to inform the Urban Design and Landscape Plan.

3.5 Proposed Auckland Unitary Plan

3.5.1 Purpose

The Proposed Auckland Unitary Plan (PAUP) was notified on 30 September 2013. Under section 171 (1A) (a) of the RMA consideration is required of the PAUP objectives and Policies.

3.5.2 Summary

The western end of Redoubt Road is zoned for residential use (Mixed Housing Suburban) in the PAUP. The land use pattern then transitions to the east into lower density countryside living development zoned Countryside Living . Totara Park, a significant public open space Public Open Space- Informal Recreation in the PAUP and has approximately 1.3km of road frontage. The Murphys Road section of the alignment is about to undergo significant change. The majority of Murphy’s Road is zoned Future Urban in the PAUP in recognition of its future transition from rural to an urban environment. The top (southern end) of Murphys Road is zoned Countryside Living in the PAUP and contains typical semi-rural lifestyle development.

On the southern side of Redoubt Road, south east of Totara Park a pocket of Countryside Living zone zoned land extends from the equestrian centre to 300m south of the intersection of Mill and Redoubt Road. A sliver of Totara Park zoned Open Space-Conservation separates this land from a pocket of Mixed Housing Suburban zoned land with an approximate frontage of 300m to Mill Road. From the southern edge of the Mixed Housing Suburban zone to Ranfurly Road the land is zoned Countryside Living in the PAUP. From the southern side of Ranfurly Road to the end of the corridor the land is zoned Future Urban in the PAUP. This zone is applied to land located on the periphery of existing urban areas within the RUB. The council has determined this land is suitable for future urban development, which will negate the need for urban development outside of the RUB. The Future Urban zone is a transitional zone which provides for the land to be used for rural activities until it is able to be developed for urban activities, via the structure plan and plan change process.

On the northern side of Mill Road, the Countryside Living zone terminates 300m south of the intersection of Mill Road and Redoubt Road. From here to the end of the corridor (north of Popes Road) the land is predominantly zoned Mixed Rural in the PAUP which is assigned to sites which are generally smaller than in the Rural Production zone, and which are used for rural lifestyle development, tourism as well as rural activities.. A number of the objectives and policies of the Rural environment do not apply to the proposed corridor project as they relate to managing the effects of rural based activities.

Having regard to objectives and policies relating to the underlying zonings over which the proposed corridor traverses, the purpose of a designation is to consent works which do not typically fall within the zoning provisions of an Operative or Proposed District Plan. The current zoning provisions of the Proposed Unitary Plan do not provide for such an activity and therefore the majority of the policies and objectives relating to zones over which the corridor traverses are not relevant to the assessment of the NoR’s.

Section	Summary	Comment
Part 1: Strategic direction, 1.2 Enabling Economic wellbeing	Transport and land use Transport and land use are closely interrelated and should be mutually supportive. The road network is the main interface of Auckland’s transport system with land use. The impacts of land use on the operation and management of the road should be considered as part of delivering an efficient transport system. Well-designed transport systems service growth and development, and reinforce urban development patterns. A key challenge for Auckland is the increase in traffic that will be caused by population growth and, historically, decades of underinvestment in public and	The proposed corridor upgrade will improve network resilience by providing a viable alternative route should the southern motorway be forced to close (for example as a result of an accident). This is consistent with the “one network approach” to managing Auckland transportation network.

Section	Summary	Comment
	<p>active mode transport networks (such as buses, trains, ferries, cycling and walking).</p> <p>Our current pattern of low density urban development and dependence on cars makes it difficult to provide more sustainable transport options such as public transport, walking and cycling. Low density development does not support an efficient public transport system. Segregated land use, where people live in one area and work or play in another, results in more and longer trips and restricts alternative transport choices like walking and cycling.</p> <p>Improving public transport options and connections along key transport corridors will encourage commuters to use public transport. Such a shift will help reduce congestion, and free up the roads for freight transport and other essential travel. Delivering an efficient public transport system and providing sustainable transport options across Auckland requires careful management of competing activities in the road through both regulatory and non-regulatory methods.</p> <p>A resilient transport network must be able to respond to changing transport requirements in the context of increased pressure from Auckland’s growing population while being maintained in a way to ensure it delivers the right levels of service.</p> <p>Building a resilient transport network, around a more compact urban form, will contribute to our success as an international city that attracts migrants, businesses, international trade and tourists.</p> <p>Physical infrastructure</p> <p>Decisions we make on physical infrastructure will have significant impacts, not just on Auckland but also on the wellbeing of neighbouring regions and on the country as a whole. Auckland’s future economic performance and general quality of life will rely on delivering high quality and cost effective physical infrastructure in a timely manner.</p> <p>We now face several development thresholds where we need to make crucial decisions around infrastructure investment, location and form. Our major utility services, such as wastewater and electricity transmission lines, and part of our transport network, are nearing capacity. At the same time, public attitudes to environmental quality are becoming more demanding; for example, the effects of contaminated overflows from our ageing combined stormwater and wastewater network.</p> <p>Auckland has invested heavily in areas such as Auckland Airport and the ports, together with supporting infrastructure such as public transport, energy supply and broadband. To provide for ongoing economic growth we need to ensure that freight can move across and through Auckland. We must continue to invest in our significant infrastructure assets, including adequate and reliable bulk water supply, wastewater reticulation and associated works, stormwater management, and transport networks to keep pace with our growth. We need to make significant investment to</p>	<p>The corridor has also been designed to cope with growth demands (and provide suitable levels of service based on this growth) as predicted in the Auckland Plan and as a result of proposed zoning patterns in the Auckland Unitary Plan.</p> <p>In addition, the corridor makes provision for other transportation modes such as public transport (in NoR 1), cycleways, shared paths and quality pedestrian walkways.</p>

Section	Summary	Comment
	<p>upgrade these networks to meet expectations of service reliability and quality, to adequately manage any adverse environmental effects, or meet new standards. We also need to manage the effects of more sensitive land use</p> <p>Response</p> <p>The strategic direction recognises the need to provide a resilient transport network which can respond to changing transport requirements in the context of increased pressure from Auckland's growing population while being maintained in a way to ensure it delivers the right levels of service. In addition, improving public transport options and connections along key transport corridors will encourage commuters to use modes other than private vehicles such as public transport and walking and cycling.</p>	
<p>Part 1, Strategic direction, 1.3 heritage, natural heritage</p>	<p>Heritage, Natural Heritage</p> <p>Protecting our historic and natural heritage contributes to our aspiration to be a world class city. Integrating our heritage with growth and development positively and authentically will contribute to attracting the visitors and investors on which our economic success depends.</p> <p>Indigenous biodiversity</p> <p>Maintaining indigenous biodiversity requires us to protect existing habitats, and enhance indigenous ecosystems. We have protected as much as 50 per cent of our remaining indigenous terrestrial vegetation by making it public land. We have five marine reserves, one marine park and one marine mammal sanctuary. Over 53,000ha is actively managed by community and landowner groups which are important as over half of Auckland's rare and threatened plant species are located on private property.</p> <p>Auckland contributes significantly to New Zealand's biodiversity, but development has resulted in loss of habitats and a reduction in biodiversity. Key challenges for the region are:</p> <ul style="list-style-type: none"> - Auckland has proportionally more threatened plant species than any other region - many of the most threatened plant species are herbs and shrubs adapted to disturbed, wetland or shrubland environments. They are often found in areas that appear degraded with little evident biodiversity value, and particularly vulnerable to loss through development - many of our terrestrial ecosystems are largely contained in small, isolated patches, making them vulnerable to edge effects such as weed invasion and wind damage - each year an estimated 9km of permanent stream length are lost through consented development. Further significant lengths of both permanent and non-permanent stream 	<p>Having regard to waterways, the road corridor is drained by headwater streams within two main catchments being the Totara Creek (which drains into Puhinui Creek) and Papakura Creek. A headwater stream which forms part of the Otara Creek catchment is located at the northern extent of Murphy's Bush. Nine indigenous freshwater species and one freshwater crustacean (koura) are known to occupy the catchments. Appropriate stormwater treatment and construction methodologies are available and will need to be employed in proximity to these waterways. Earthworks resource consent applications will be required. Erosion and sediment control plans will be prepared and submitted as part of these applications. The CEMP also requires details around earthworks and erosion and sediment control.</p> <p>The proposed corridor realignment passes through the upper slopes of Totara Park, however the ecological impact is considered minor. The indigenous vegetation within this footprint is either recent re-vegetation plantings or heavily grazed indigenous tree land. Plantings will be re-established post construction works to offset the loss of plantings.</p>



Section	Summary	Comment
	<p>(intermittent and ephemeral) are also lost through development occurring as permitted activities. This loss reduces habitat, degrades ecological values and contributes to the decline in native fish populations</p> <ul style="list-style-type: none"> - some ecosystem types, even if still relatively abundant, are commonly in poor ecological health - sedimentation has fundamentally changed the nature of coastal ecosystems in some areas and resulted in loss of coastal habitat diversity - coastal and marine habitats are vulnerable to invasion by exotic organisms, and a number of marine pests are well-established in Auckland - wetlands remain vulnerable to exotic plant invasion, stock trampling, and other adverse effects. Those under 1ha are particularly vulnerable to loss through drainage - biodiversity is still declining in the Hauraki Gulf Marine Park - enabling Mana Whenua participation and decision-making in regard to indigenous biodiversity. 	<p>The proposed corridor will also pass through pockets of good quality remnant native bush and well established exotic landscape plantings which are likely to support indigenous fauna. It is proposed to offset this loss of mature trees by planting appropriate quantities of replacement plantings within the designation footprint.</p>
<p>Part 1 Strategic direction, 1.4 Addressing issues of significance to Mana Whenua</p>	<p>Māori have a special relationship with natural and physical resources through whakapapa. Inherent in this relationship is kaitiakitanga which seeks to maintain the mauri of these resources, while allowing their use for social, cultural and economic wellbeing.</p> <p>The development of Māori land and Treaty settlement land needs to be enabled to ensure that these lands and resources contribute to significantly lifting Māori social, cultural and economic wellbeing.</p>	<p>AT is committed to the principals of the Treaty of Waitangi and meeting their relevant statutory obligations under the Land Transport Management Act and the RMA. Iwi consultation has occurred on the project since 24 May 2012. Maori Values Assessments have been prepared by Te Akitai Waiohau, Ngati Te Ata Waiohau, Ngai Tai ki Tamaki and Ngāti Tamaoho. A Cultural Values Assessment has also been prepared. The matters raised in the assessments have been considered and will continue to be considered as the project progresses. Iwi will continue to be consulted as part of all phases of the project. Several of the proposed designation conditions require Iwi involvement in the preparation of DWPs.</p>
<p>Part 1, Strategic direction, 1.5 Sustainably managing our natural resources</p>	<p>We expect natural resources to be available on demand and to use our coastal resources for a wide variety of purposes. However, the combination of decades of urban expansion, high private vehicle usage, and other factors such as poor land and water management practices, have placed increasing pressure on our land and water, reduced air quality, and increased risks from flooding and land instability.</p>	<p>The proposed corridor realignment is an efficient use of natural and physical resources in that it provides necessary capacity for future growth and development of Flat Bush and Takanini and intensification around Papakura Town Centre. The proposal accommodates multi-modal transport through providing space for private cars, passenger transport, walking (in urban and</p>



Section	Summary	Comment
		<p>future urban sections) and cycling (both on-road and shared path facilities). This will encourage a mode shift away from private vehicles and in turn reduce fuel use and consumption.</p> <p>The corridor will not exacerbate flood risk or land instability issues.</p>
<p>Part 1,</p> <p>2.6 Public open space and recreation facilities</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. A high quality network of public open spaces and recreation facilities that enhances quality of life for the diverse communities of Auckland, and contributes positively to Auckland's unique identity. 2. The protection and enhancement of the natural environment of public open spaces and cultural heritage places. 3. The recreational needs of Aucklanders are met through the provision of sufficient public open space, particularly in intensified urban areas. 4. Public access to Auckland's coastline, foreshore, beaches and special natural areas is maintained and enhanced. 5. Mana Whenua values and associations with public open space are identified and enhanced. <p>Policies</p> <ol style="list-style-type: none"> 1. Enable a wide range of public open spaces and recreation facilities to deliver a variety of activities, experiences and functions for Auckland's residents and visitors to enjoy. 2. Increase the public open space network and recreation facilities in areas where there is an existing deficiency, particularly in areas of intensification or growth, or where there is a future identified need. 3. Ensure the public open space network contains representative examples of the diverse landscapes, heritage (archaeological, historic and cultural) and natural values (ecological and biodiversity) of the Auckland region, and provides opportunities for people to interact with and appreciate this heritage. 4. Ensure Auckland has high quality and diverse public open space and recreation facilities sufficient to meet the needs of its growing and changing population. 	<p>Totara Park is a significant public open space on Redoubt Road, which includes bridle trails, mountain bike trails and an equestrian centre. Realignment and widening of the corridor will result in the reduction of the land area of the park. It is proposed that where possible residual land from residential property purchases immediately adjacent the park will be amalgamated with the park. In addition the realignment of the corridor will be designed in a manner that provides a more attractive interface with the park. It is also proposed to improve access arrangements to the park through the provision of an improved car park entrance and a re-aligned entrance into the horse riding facility.</p> <p>It is proposed to plant the upper catchments within Totara park with appropriate native species. The proposed stormwater wetlands will also be planted with appropriate native species. Overall the proposed landscape plantings are not of a scale that will detract from the overall open space "farm park" feel of Totara Park.</p> <p>Planting will be undertaken in consultation with Mana Whenua.</p>

Section	Summary	Comment
	<ul style="list-style-type: none"> 5. Ensure public open space and recreation facilities are in locations accessible to users. 6. Connect public open spaces physically and visually, to create a network that enables people and wildlife to move around efficiently and safely. 7. Protect and enhance the landscape, heritage (archaeological, historic and cultural) and natural values(ecological and biodiversity) of Auckland’s public open spaces. 11. Develop public open spaces which reflect Mana Whenua values, including: <ul style="list-style-type: none"> (a) providing for cultural institutions, including marae (b) restoring and enhance ecosystems and indigenous biodiversity, particularly taonga species (c) providing natural resources for customary use (d) providing opportunities for residents and visitors to experience Māori cultural heritage, while protecting Māori cultural heritage and sites and features of significance to Mana Whenua. 12. Require land use or development on surrounding land does not compromise the natural and cultural heritage values, landscape values, or recreational opportunities of public open space or recreation facilities, or access to them. 	
<p>Part 1, 3.2 Significant infrastructure and energy</p>	<p>Objectives</p> <ul style="list-style-type: none"> 1. Resilient infrastructure and a high quality service. 2. The benefits of significant infrastructure which service the wider community, Auckland or New Zealand are recognised, including: <ul style="list-style-type: none"> (a) the essential services provided by infrastructure networks, which provide for the functioning of communities, businesses and industry (b) enabling economic growth (c) providing for public health, safety and the wellbeing of people and communities (d) contributing to a well- functioning and liveable Auckland (e) protecting the quality of the natural environment (f) enabling interaction and communication. 	<p>The proposed corridor upgrade will improve network resilience by providing a viable alternative route should the southern motorway be forced to close (for example as a result of an accident). This is consistent with the “one network approach” to managing Auckland transportation network.</p> <p>The proposed road corridor is integrated and coordinated with landuse taking into consideration planned residential and business growth. The corridor includes necessary provision for private vehicles to adequately cater for forecast growth in Manukau, Flat Bush, Papakura and Takanini over the next 30 years. The corridor also includes bus priority measures (bus priority and bus only lanes), cycle and pedestrian facilities, including on-road cycle lanes and segregated</p>

Section	Summary	Comment
	<p>3. Development, operation, maintenance, and upgrading of significant infrastructure is provided for and enabled, while managing any adverse effects it may have on:</p> <ul style="list-style-type: none"> (a) areas with significant landscape, cultural and historic heritage, and natural ecological and biodiversity values (b) the health, safety and amenity of communities. <p>4. Renewable electricity generation is enabled, and energy efficiency and conservation promoted.</p> <p>5. Infrastructure planning and development is integrated and coordinated at an early stage with land use and development to support residential and business growth.</p> <p>6. Auckland’s significant infrastructure is protected from reverse sensitivity effects and incompatible subdivision, use and development.</p> <p>7. The locational or function based requirements of significant infrastructure are recognised.</p> <p>Policies</p> <p>1. Provide for the efficient development, use, operation, maintenance and upgrading of secure and reliable infrastructure.</p> <p>2. Increase the resilience and security of infrastructure through work that:</p> <ul style="list-style-type: none"> (a) enhances the reliability of networks and services (b) improves Auckland’s ability to respond and recover from unexpected and adverse events (c) manages the risks associated with natural hazards and the effects of climate change. <p>3. Integrate significant infrastructure with land use development by ensuring it is:</p> <ul style="list-style-type: none"> (a) planned and funded at an early stage with land use provisions to provide for growth (b) provided to service land use development within the RUB (c) located in a way that does not fragment or limit planned land development within the RUB (d) timed to avoid the inefficiencies and costs associated with servicing unplanned development or development that has occurred out of sequence. 	<p>shared facilities. The proposed corridor will therefore provide the necessary infrastructure to achieve a compact and sustainable urban form. By being multi modal the proposal will also provide a high level of mobility and accessibility. This will assist with providing for public health, safety and the wellbeing of people and communities.</p> <p>The proposed corridor will pass through an area with natural ecological and biodiversity values. Having regard to waterways, the road corridor is drained by headwater streams within two main catchments being the Totara Creek (which drains into Puhinui Creek) and Papakura Creek. A headwater stream which forms part of the Otara Creek catchment is located at the northern extent of Murphy’s Bush. Nine indigenous freshwater species and one freshwater crustacean (koura) are known to occupy the catchments. Appropriate stormwater treatment and construction methodologies are available and will need to be employed in proximity to these waterways. Erosion and sediment control methodologies and construction methodologies will be prepared and included as part of Outline Plan of Works applications and earthworks resource consent and stormwater discharge consent resource consent applications. The proposed designation conditions also require thought to be given to erosion and sediment control measures in the CEMP.</p> <p>The proposed corridor realignment passes through the upper slopes of Totara Park, however the ecological impact is considered minor. The indigenous vegetation within this footprint is either recent re-vegetation plantings or heavily grazed indigenous tree land. Plantings will be re-established post construction works to offset the loss of plantings.</p>



Section	Summary	Comment
	<ol style="list-style-type: none"> 4. Recognise and provide for the operational and technical requirements of significant infrastructure. 5. Provide for the locational requirements of significant infrastructure by recognising that it often has a functional need to be located in certain places. 6. Require integration and coordination between the council, transport agencies and infrastructure providers on the maintenance, upgrade, and future development, of significant infrastructure. 	<p>The proposed corridor will also pass through pockets of good quality remnant native bush and well established exotic landscape plantings which are likely to support indigenous fauna. It is proposed to offset this loss of mature trees by planting appropriate quantities of replacement native plantings within the designation footprint.</p> <p>Iwi consultation has occurred on the project since 24 May 2012. Maori Values Assessments have been prepared by Te Akitai Waiohau, Ngati Te Ata Waiohau, Ngai Tai ki Tamaki and Ngāti Tamaoho. A Cultural Values Assessment has also been prepared and is included as appendices to the NoR. The matters raised in the MVAs have been considered and will continue to be considered as the project progresses. Iwi will continue to be consulted as part of all phases of the project.</p> <p>The project may affect a heritage item (such as the meeting house) in NoR 3. If this is the case, an application will be required to be made to Heritage New Zealand under Section 44(a) of the HNZPTA for an archaeological authority to modify or destroy any sites that might be affected by the project prior to any development works being carried out on any of the NoR areas within the proposed corridor.</p> <p>An Authority would establish procedures to ensure that any archaeological remains affected by the project would be investigated or recorded to recover information relating to the history of the area.</p> <p>In addition, the proposed designation conditions require preparation of a Historic Character DWP which will contain both a built heritage and archaeology section. The objective of the Built Heritage section is to avoid, remedy or mitigate adverse effects on built heritage as</p>



Section	Summary	Comment
		<p>far as reasonably practicable. The objective of the Archaeology section of the Historic Character DWP is to avoid, remedy or mitigate adverse effects on archaeological remains during construction, as far as reasonably practicable.</p> <p>The alignment is located in a corridor that will not fragment or limit planned land development within the RUB.</p>
	<p>Reverse sensitivity</p> <p>7. Avoid reverse sensitivity effects by requiring subdivision, use and development to not occur in a location or form that constrains the use, operation, maintenance and upgrading of existing and planned significant infrastructure.</p> <p>Managing adverse effects</p> <p>8. Where new or major upgrades to significant infrastructure are proposed within those overlays identified to protect landscapes, natural and historic heritage, ecological, biodiversity values, and scheduled sites and places of significance to Mana Whenua, the following matters must be considered when balancing the development against the protection of these places:</p> <ul style="list-style-type: none"> (a) the economic and social benefits derived from significant infrastructure (b) whether the significant infrastructure has a functional need to be located in the proposed location (c) the need for utility connections across or through such areas to enable an effective and sustainable network (d) whether there are any reasonably practicable alternative locations, routes or designs, which would reduce any adverse effects (e) the extent of existing adverse effects (f) the type, scale and extent of adverse effects on the values of the area, taking into account: <ul style="list-style-type: none"> i scheduled sites and places of significance to Mana Whenua 	<p>Designating the corridor will reduce reverse sensitivity effects by identifying the location of the corridor on District/ Unitary Plan planning maps thus reducing the likelihood of sensitive land use activities establishing in close proximity to it.</p> <p>The corridor will pass through overlay areas identified in the Proposed Unitary Plan Planning Maps. Those matters set out in 8. a.-f. and 9. have been considered as part of the Scheme Assessment Report which examined a number of alignment options for the Mill Road corridor and as part of the AEE which forms part of the NoR document set.</p> <p>Consultation has been undertaken with other utility providers in terms of managing co-location and siting of infrastructure.</p>

Section	Summary	Comment
	<ul style="list-style-type: none"> ii significant public open space areas, including harbours hilltops and high points that are publicly accessible scenic lookouts, particularly where the infrastructure involves tall structures, such as towers and poles iii highuse recreation areas iv natural ecosystems and habitats v the extent to which the adverse effects can be avoided, remedied or mitigated. <p>9. Manage the adverse effects on the health and safety of communities and amenity values from new and/or major upgrades to significant infrastructure.</p> <p>10. Encourage the colocation and co-siting of infrastructure in existing and new urban areas, and the use of existing infrastructure corridors, subject to operational and technical feasibility.</p>	
<p>Part 1, 3.3 Transport</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. An effective, efficient and safe transport system that supports the integrated movement of people, goods and services throughout Auckland and to other regions and nations. 2. An effective, efficient and safe integrated transport system that is integrated with, and supports, a quality, compact form of urban growth and associated land use. 3. A well developed, operated and maintained transport system that manages potential adverse effects on the natural environment and the health, safety and amenity of people and communities. 4. A transport system that facilitates transport choices and enables accessibility and mobility for all sections of the community. <p>Policies</p> <p>Provision of an integrated transport system</p> <ol style="list-style-type: none"> 1. Enable the effective, efficient and safe development, operation and maintenance of an integrated intraregional and interregional transport system including: <ul style="list-style-type: none"> (a) state highways and all other roads, including the rural road network (b) the rail network 	<p>The corridor will provide multi-modal transport infrastructure, including facilities for private vehicles, pedestrians, cyclists and passenger transport. This will provide an acceptable level of accessibility, mobility, safety and convenience for all users of the corridor.</p> <p>There are no cycle paths on the existing corridor. The proposed corridor will provide continuous and safe cyclist paths (on and off-road) along the whole corridor and provide pedestrian footpaths in the urban sections.</p> <p>The proposed corridor is an arterial route between Redoubt Road and Mill Road. The design of the corridor incorporates clear distinctions in form based on the adjacent land use, ranging from full urban, with a public transport requirement, to semi-rural regional arterial.</p> <p>The NoR will protect the Mill Road- Redoubt Road corridor which is identified as a Proposed Regional Arterial Road under the RARP, with the exception of Murphy’s Road which is identified as a District Arterial. The corridor is identified as having a key role in providing access between Flat Bush and the Manukau CBD, especially for passenger transport. The corridor will support proposed land use changes in Drury,</p>



Section	Summary	Comment
	<p>(c) Auckland Airport and Auckland and Onehunga ports, including their local, national and international trade, freight and visitor connections</p> <p>(d) smaller airports, airfields and port facilities</p> <p>(e) the public transport network, including the development and operation of bus and train stations and stops, bus way, park and rides, ferry wharves and terminals</p> <p>(f) pedestrian and cycle networks.</p> <p>2. Support the management of Auckland’s transport system to optimise, in an effective, efficient and safe manner, the people and/or goods carrying capacity of transport routes recognising the full range of trips being undertaken throughout Auckland by all sections of the community.</p> <p>3. Require activities sensitive to noise to be located or designed to avoid, remedy or mitigate potential adverse effects arising from the use and operation of strategic transport infrastructure.</p> <p>4. Identify and protect areas and routes critical for developing Auckland’s future transport infrastructure including:</p> <p>(a) high quality transport corridors that improve connections between:</p> <ul style="list-style-type: none"> i Auckland and Northland ii .Auckland and the Waikato iii east Auckland to west Auckland iv The city centre, the Auckland International Airport and Manukau Metropolitan centre (including State Highway 1) v The North Shore and the city centre, and the city centre to the Auckland Isthmus <p>(b) improvements to the rapid and frequent service network</p> <p>(c) regional and interregional walking and cycling connections.</p> <p>Transport infrastructure and growth</p> <p>5. Recognise the arterial road network needs to be managed to provide priority to public transport and freight movements.</p>	<p>Papakura, Takanini and Flat Bush.</p> <p>The upgraded corridor will also improve road safety via improved vertical and horizontal alignments. It is expected that this will lead to the reduction in fatal and serious crashes. Improved urban design and public space (road corridor) lighting in urban and future urban areas increases opportunities for passive surveillance and personal security.</p> <p>Sufficient space has been made available within the corridor should priority be required for public transport.</p> <p>Adverse environmental effects can be appropriately avoided, remedied or mitigated.</p> <p>The corridor provides additional road capacity to provide for increased vehicle movement and for the efficient and safe movement of cyclists and pedestrians and public transport.</p> <p>The proposed road corridor is integrated and coordinated with landuse taking into consideration planned residential and business growth. The corridor includes necessary provision for private vehicles to adequately cater for forecast growth in Manukau, Flat Bush, Papakura and Takanini over the next 30 years.</p> <p>Operational and construction noise will be appropriately mitigated to protect sensitive receivers against adverse noise effects.</p> <p>The transport needs of people with special mobility requirements, including the young, aged and those with disabilities has been adequately considered in the corridor design. A segregated cycleway has been included in the design which will enable young cyclist to use the corridor safely. Adequate footpath widths have been included in the design to accommodate mobility</p>



Section	Summary	Comment
	<p>7. Manage the increase in transport movements associated with development which is in accordance with the quality compact form of urban growth provided for in the Unitary Plan while recognising that there may be increased delays in some locations and during some periods of the day.</p> <p>8. Provide for the development of additional road capacity along those corridors where:</p> <ul style="list-style-type: none"> (a) the management of travel demand alone is not able to provide for increased movement (b) the effective, efficient and safe movement of public transport services and/or freight is required (c) there is a need to provide priority to cyclists and pedestrians. <p>9. Improve the integration of land use with transport by:</p> <ul style="list-style-type: none"> (a) the delivery of a transport system that is planned, funded, staged to enable the delivery of quality urban growth as outlined in section 2 Enabling quality urban growth. (b) ensuring activities likely to generate significant trip numbers support, and can be serviced by the rapid and frequent service network (c) managing activities along freight routes, other heavily trafficked roads, rail lines, or adjacent to ports and airports so that they do not compromise the effective, efficient and safe operation of these routes or give rise to reverse sensitivity effects (d) requiring proposals for high trip generating developments, located outside of centres and/or not provided for in the Unitary Plan, to demonstrate integration with the transport network and mitigate adverse effects on that network <p>Managing the adverse effects of transport infrastructure on communities</p> <p>10. Avoid, remedy or mitigate the potential adverse effects associated with the use or operation of transport infrastructure on community health by:</p> <ul style="list-style-type: none"> (a) developing an urban form which supports more energy efficient and active modes of transport, such as buses, walking and cycling, and provides opportunities to reduce both the number and length of vehicle trips (b) requiring new roads to incorporate noise mitigation to protect sensitive activities from adverse noise effects. 	<p>scooters.</p> <p>Construction of the corridor will be carefully managed and consented via Outline Plan of Works applications and CEMPs and DWPs (to manage conflict with pedestrians, cyclists and vehicles).</p>



Section	Summary	Comment
	<p>11. Avoid, remedy or mitigate potential adverse effects from the transport system on community safety by:</p> <ul style="list-style-type: none"> (a) ensuring all transport infrastructure (including new vehicle access) is designed to facilitate the safe movement of people and goods by managing potential conflicts between pedestrians, cyclists and vehicles (b) ensuring safe and secure environments for transport projects (c) providing for the transport needs of people with special mobility requirements, including the young, aged and those with disabilities (d) providing for maintenance and construction works to be undertaken in a manner that reduces conflict with the movement of pedestrians, cyclists and vehicles. <p>12. Avoid, remedy or mitigate the potential adverse effects of transport infrastructure on amenity values and ensure that transport infrastructure is designed, located and managed to:</p> <ul style="list-style-type: none"> (a) integrate with adjoining land uses taking into account their planned use, intensity, scale, character and amenity (b) effectively provide pedestrian and cycle connections. <p>Managing travel demand and travel choices</p> <p>13. Support land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods.</p> <p>14. Improve the attractiveness and efficiency of more sustainable transport options, such as buses, trains, ferries, cycling and walking, by:</p> <ul style="list-style-type: none"> (a) enabling an integrated public transport network to service all urban areas (b) limiting parking supply in locations served by the rapid and frequent service network (c) incorporating pedestrian and cycle networks and facilities in public and private developments (d) providing for improved integration between public transport and the pedestrian and cycle networks. <p>15. Recognise that where access to activities cannot be made effectively, efficiently or safely by public transport, walking or cycling, trips will continue to be made by private vehicle.</p>	



Section	Summary	Comment
Part 1, 4.3.3 Trees and vegetation	<p>Objectives</p> <ol style="list-style-type: none"> 1. Auckland's sense of place and identity is maintained and enhanced through the recognition and protection of the contribution of trees and vegetation to our cultural and natural heritage. 2. The contribution of trees and vegetation to the maintenance of indigenous biodiversity, and the provision of ecosystem services including soil conservation, water quality, stormwater control and the mitigation of natural hazards is recognised and enhanced. 3. The retention of trees and groups of trees in urban areas which contribute to neighbourhood amenity and character are promoted. Promote the values that trees provide in urban areas and neighbourhoods. <p>Policies</p> <ol style="list-style-type: none"> 2. Identify and protect areas where vegetation contributes significantly to the maintenance of indigenous biodiversity and to ecosystem services including soil conservation, water quality and quantity management and the avoidance and mitigation of natural hazards. 3. Promote the appropriate planting and maintenance of trees on public and private land. <p>Recognise the benefit public trees provide within streets and public open space while acknowledging the multiple uses of these spaces</p> <ol style="list-style-type: none"> 4. Promote the appropriate planting and maintenance of trees on public and private land. 5. Recognise the benefit public trees provide within streets and public open space while acknowledging the multiple uses of these spaces 	<p>The proposed corridor will pass through pockets of good quality remnant native bush and well established exotic landscape plantings both in the road corridor and on private land which are likely to support indigenous fauna and enhance the amenity of the area. A pocket of native bush through which the corridor will traverse approximately south of the intersection of Redoubt Road and Mill Road is noted as a Significant Ecological Area in the Proposed Auckland Unitary Plan overlays. The majority of mature trees within this bush have been avoided by moving the position of a proposed bridge by 13 metres to the east. It is proposed to offset the loss of trees that need to be topped and stands of quality native bush by planting appropriate quantities of replacement plantings within the designation corridor. Planting will be undertaken in consultation with Mana Whenua.</p>
Part 1, 4.3.4 Biodiversity	<p>Mana Whenua</p> <ol style="list-style-type: none"> 3. Recognise the relationship of Mana Whenua with Auckland's indigenous biodiversity through engagement on the identification and evaluation of indigenous biodiversity. 4. Provide for the role of Mana Whenua as kaitiaki in decision making affecting indigenous biodiversity, particularly in those areas affected by Treaty Settlements. 5. Provide for the cultural practices and cultural harvest where the mauri of the resource is sustained. <p>Managing effects on biodiversity</p> <ol style="list-style-type: none"> 6. Manage the effects of activities on significant indigenous biodiversity by: 	<p>Four Maori Values Assessments have been undertaken and a Cultural Values Assessment completed as part of corridor studies. Consideration has been and will continue to be given to the matters raised in these assessments relating to biodiversity. Consultation with Iwi will be ongoing.</p> <p>The road corridor is drained by headwater streams within two main catchments; the Totara Creek (which drains into Puhinui Creek) and Papakura Creek. A headwater stream which forms part of the Otara Creek catchment is located at the northern extent of Murphy's</p>

Section	Summary	Comment
	<ul style="list-style-type: none"> (a) avoiding and minimising adverse effects on: <ul style="list-style-type: none"> i areas identified in the SEA overlay, particularly those identified as significant when assessed against the 'threat status and rarity' or the 'uniqueness or distinctiveness' criteria and within SEA–Marine 1 areas in the coastal environment set aside for full or partial protection of indigenous biological diversity under other legislation ii indigenous ecosystems and habitats found only in the coastal environment and which are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and salt marsh (b) requiring remediation where adverse effects cannot be avoided (c) requiring mitigation where adverse effects on the areas identified above cannot be avoided or remediated (d) requiring any residual adverse effects that are more than minor are offset through restoration and enhancement actions that achieve no net loss and preferably a net gain in indigenous biodiversity values. 7. Manage the effects of activities on other biodiversity by avoiding significant adverse effects, and avoiding, remedying, mitigating and offsetting adverse effects on indigenous species and ecosystem. 8. Adverse effects on indigenous biodiversity to be avoided, remedied, mitigated or offset in accordance with Policies 6 and 7 may include: <ul style="list-style-type: none"> (a) fragmentation of, or a reduction in the size and extent of, indigenous ecosystems and habitats (b) fragmentation or disruption of connections between ecosystems or habitats (c) changes which result in increased threats from pests on indigenous biodiversity and ecosystems (d) loss of buffering of indigenous ecosystems (e) the loss of a rare or threatened species or its habitat (f) loss or degradation of wetlands, dune systems, lava forests, coastal forests 	<p>Bush. Nine indigenous freshwater species and one freshwater crustacean (koura) are known to occupy the catchments.</p> <p>The road corridor also passes either in close proximity to or through four areas of indigenous forest and scrub (Murphy’s Bush and three forest areas to the east of the current Mill Road alignment). Murphy’s Bush is one of the largest remnants of indigenous forest remaining in the north of the Manukau Ecological District and is regarded as the best remaining example of dense Kahikatea forest in Auckland. Bush clad gullies will be bridged rather than filled and a stand of mature native trees within a SEA on Watercare land has been avoided by shifting the proposed bridge 13m to the east.</p> <p>Replacement native plantings will be undertaken within the designation footprint.</p> <p>The proposal will remedy or mitigate adverse effects on water quality via appropriate construction and operational stormwater treatment. Resource consents will be required to undertake earthworks and for stormwater discharges. If works within watercourses is required this will need resource consents under the Auckland Council Air, Land and Water Plan.</p> <p>Appropriate mitigation planting will be undertaken to compensate for native and exotic bush that is lost as a result of construction of the road corridor. The proposed type and scale of mitigatory planting is set out in section 11 of the assessment of environmental effects.</p>



Section	Summary	Comment
	<p>(g) a reduction in the abundance or natural diversity of indigenous vegetation and habitats of indigenous fauna</p> <p>(h) significant loss of ecosystem services</p> <p>(i) effects which contribute to a cumulative loss or degradation of habitats and ecosystems</p> <p>(j) impacts on species or ecosystems that interact with other activities, or impacts that exacerbate or cause adverse effects in synergistic ways</p> <p>(k) significant loss of, or damage to, ecological mosaics, sequences, processes, or integrity downstream effects on wetlands, rivers, streams, and lakes from hydrological changes further up the catchment</p> <p>(l) a modification of the viability or value of indigenous vegetation and habitats of indigenous fauna as a result of the use or development of other land, freshwater, or coastal resources</p> <p>(m) a reduction in the value of the historical, cultural, and spiritual association with significant indigenous biodiversity held by Mana Whenua</p> <p>(n) a reduction in the value of the historical, cultural, and spiritual association with significant indigenous biodiversity held by the wider community</p> <p>(o) the destruction of, or significant reduction in, educational, scientific, amenity, historical, cultural, landscape, or natural character values</p> <p>(p) disturbance to indigenous fauna that is likely or known to increase threats, disturbance or pressures on indigenous fauna.</p> <p>9 Allow property owners reasonable use and enjoyment of their land through the:</p> <p>(a) trimming of vegetation</p> <p>(b) maintenance of existing open areas including tracks</p> <p>(c) establishment and maintenance of a reasonable area of clearance around a building</p> <p>(d) the maintenance of lawfully established activities, structures and buildings</p> <p>(e) provision of one dwelling per site.</p> <p>10. Prevent the establishment and avoid the spread of pest species that threaten indigenous biodiversity by:</p>	

Section	Summary	Comment
	<ul style="list-style-type: none"> (a) developing, and providing for, pest management plans and programmes to exclude, contain or control pests (b) managing activities such as aquaculture, shipping or moorings and marinas in the CMA to avoid or reduce opportunities for the establishment and spread of pest species (c) managing works in the vicinity of kauri, such as deadwood removal or earthworks, to control kauri dieback disease by preventing the spread of soil and kauri plant material. <p>11. Avoid the clearance or damage of areas of significant indigenous biodiversity for buildings, access and infrastructure by:</p> <ul style="list-style-type: none"> (a) using any existing cleared areas on the site to accommodate new development in the first instance (b) minimising the loss of native vegetation by retaining all native vegetation within SEAs except where loss is unavoidable to create a single building platform per site for a dwelling and associated services, access and car parking (c) designing and locating dwellings and other structures to future reduce needs, such as clearing additional vegetation to provide sunlight or protect property (d) avoiding any changes in hydrology which could adversely affect indigenous biodiversity values maintaining existing water quality with no increase in the amount of sediment entering natural waterways, wetlands and groundwater <p>Protecting and Enhancing Indigenous Biodiversity</p> <p>12. Enhance and restore indigenous biodiversity values and remedy, mitigate or offset adverse effects including by the:</p> <ul style="list-style-type: none"> (a) provision of further opportunities for threatened ecosystems and additional habitats for rare or threatened indigenous species (b) control and where possible eradicate plant and animal pests (c) fencing of significant ecological areas to protect them from stock impacts (d) legal protection of significant ecological areas and areas of value to kaitaki and the wider community through covenants or similar mechanisms (e) improvement in the ecological quality of areas of indigenous biodiversity in the Waitākere Ranges Heritage Area and the Gulf and its islands. 	



Section	Summary	Comment
	<p>(f) development and implementation of management plans to address adverse effects on SEAs use, where possible, indigenous species sourced from naturally growing plants in the vicinity of the revegetation site, and from places which match the climactic and environmental conditions</p> <p>(g) provision of opportunities for the practical expression of kaitiakitang.</p>	
Part 1, 5.1 Recognition of Te Tiriti o Waitangi partnerships and participation	<p>Objectives</p> <p>1. The principles of the Treaty are recognised and provided for in the sustainable management of ancestral lands, water, air, coastal sites, wāhi tapu and other taonga, and natural and physical resources. The Treaty is articulated in law through an evolving set of principles. These include:</p> <ul style="list-style-type: none"> (a) reciprocity (b) rangatiratanga (c) partnership (d) shared decision making (e) active protection (f) mutual benefit (g) right of development (h) redress <p>2. Mana Whenua can exercise Tino Rangatiratanga through participation in resource management processes and decisions.</p> <p>The relationship of Mana Whenua with Treaty settlement land is provided for, recognising:</p> <ul style="list-style-type: none"> (a) Treaty settlements provide redress for the grievances arising from the breaches of the principles of Te Tiriti o Waitangi by the Crown (b) the historical circumstances associated with the loss of land by Mana Whenua and resulting inability to provide for Mana Whenua wellbeing (c) the importance of cultural redress lands and interests to Mana Whenua identity, integrity, and rangatiratanga 	<p>AT is committed to the principals of the Treaty of Waitangi and meeting their relevant statutory obligations under the Land Transport Management Act and the RMA. Iwi consultation has occurred on the project since 24 May 2012. As set out previously Maori Values Assessments have been prepared by Te Akitai Waiohua, Ngati Te Ata Waiohua, Ngai Tai ki Tamaki and Ngāti Tamaoho. A Cultural Values Assessment has also been prepared. The matters raised in the assessments have been considered and will continue to be considered as the project progresses. Iwi will continue to be consulted as part of all phases of the project.</p>



Section	Summary	Comment
	<p>(d) the limited extent of commercial redress land available to provide for the economic wellbeing of Mana Whenua.</p> <p>Policies</p> <ol style="list-style-type: none"> 1. Provide opportunities for Mana Whenua to actively participate in the sustainable management of ancestral lands, water, air, coastal sites, wāhi tapu and other taonga, and natural and physical resources in a way that: <ol style="list-style-type: none"> (a) recognises the role of Mana Whenua as kaitiaki and provides for the practical expression of kaitiakitanga (b) builds and maintains partnerships and relationships with iwi authorities (c) provides for timely, effective and meaningful engagement with Mana Whenua at appropriate stages in the resource management process including development of resource management policies and plans (d) recognises the role of kaumātua and pūkenga (e) recognises Mana Whenua as specialists in the tikanga of their hapū or iwi and as being best placed to convey their relationship with their ancestral lands, water, sites, wāhi tapu and taonga (f) acknowledges historical circumstances and impacts on resource needs (g) recognises and provides for mātauranga and tikanga (h) recognises the role and rights of whānau and hapū to speak 3. Involve Mana Whenua specialists in mātauranga and tikanga in resource management decisions where Mana Whenua values are affected. 4. Recognise and take into account partnership arrangements and agreements between Mana Whenua and the council when making resource management decisions. 5. Enable the transfer of powers and/or establishment of joint management agreements for certain functions relating to the development and management of ancestral lands, water, air, coastal sites, wāhi tapu and other taonga, and the sustainable management of natural and physical resources, where an iwi authority: <ol style="list-style-type: none"> (a) has an ancestral connection or mana over a resource 	



Section	Summary	Comment
	<ul style="list-style-type: none"> (b) has a clear mandate to represent the interests of that iwi or hapū (c) can demonstrate the ability to fulfill the requirements of the RMA, whether directly or by outsourcing. 	
Part 1, 5.2 Recognising Mana Whenua values through integrating mātauranga and tikanga in the sustainable management of Auckland's natural and physical environment	<p>Objectives</p> <ol style="list-style-type: none"> 1. Mana Whenua values, mātauranga and tikanga are properly reflected and accorded sufficient weight in resource management decision making. 2. The mauri and the relationship of Mana Whenua with freshwater, geothermal, land, air and coastal resources is enhanced. 3. Mana Whenua are involved and empowered in the management of natural resources. 4. The relationship of Mana Whenua and their customs and traditions with areas scheduled for natural heritage or historic heritage values is recognised and provided for. <p>Policies</p> <ol style="list-style-type: none"> 1. Enable Mana Whenua to identify and articulate their values associated with: <ul style="list-style-type: none"> (a) ancestral lands, biodiversity, water, air, coastal sites, wāhi tapu and other taonga (b) freshwater, including rivers, streams, aquifers, lakes, wetlands and associated values (c) air, geothermal and coastal resources 2. Integrate Mana Whenua values, mātauranga and tikanga: <ul style="list-style-type: none"> (a) in the management of natural and physical resources within the ancestral rohe of Mana Whenua, including ancestral lands, biodiversity, waters, sites, wāhi tapu and other tāonga (b) in the management of freshwater and coastal resources, such as the use of rāhui to enhance ecosystem health (c) to find innovative solutions to remedy the longterm adverse effects on historical, cultural and spiritual values from discharges to freshwater and coastal water (d) in resource management processes and decisions relating to freshwater, geothermal, land, air and coastal resources. 	<p>As above, AT is committed to the principals of the Treaty of Waitangi and meeting their relevant statutory obligations under the Land Transport Management Act and the RMA. Iwi consultation has occurred on the project since 24 May 2012. Maori Values Assessments have been prepared by Te Akitai Waiohū, Ngāti Te Ata Waiohū, Ngai Tai ki Tamaki and Ngāti Tamaoho. A Cultural Values Assessment has also been prepared. The matters raised in the assessments have been considered and will continue to be considered as the project progresses. Iwi will continue to be consulted as part of all phases of the project.</p>



Section	Summary	Comment
	<ol style="list-style-type: none"> 3. Ensure that resource management decisions take into account relevant iwi and hapū resource management plans. 4. Promote the preparation of a cultural impact assessment for activities that may adversely affect the values of Mana Whenua. 5. Provide opportunities for Mana Whenua to be involved in the integrated management of natural and physical resources in ways that: <ol style="list-style-type: none"> (a) recognise the holistic nature of the Mana Whenua world view (b) Recognise any protected customary right in accordance with the Marine and Coastal Area (Takutai Moana) Act 2011 (c) restore or enhance the mauri of freshwater and coastal ecosystems. 6. Ensure that resource management decisions take into account relevant iwi and hapū resource management plans. 7. Promote the preparation of a cultural impact assessment for activities that may adversely affect the values of Mana Whenua. 8. Provide opportunities for Mana Whenua to be involved in the integrated management of natural and physical resources in ways that: <ol style="list-style-type: none"> (a) Recognise the holistic nature of the Mana Whenua world view (b) Recognise any protected customary right in accordance with the Marine and Coastal Area (Takutai Moana) Act 2011 (c) Restore or enhance the mauri of freshwater and coastal ecosystems. 8. Establish: <ol style="list-style-type: none"> (a) minimum water quality standards for freshwater, including groundwater, and coastal water (b) maximum allocation limits for freshwater resources, including groundwater that incorporates ManaWhenua values in addition to the ecological values of the water resource. 9. Require resource management decisions to have particular regard to potential impacts on: <ol style="list-style-type: none"> (a) the exercise of kaitiakitanga 	

Section	Summary	Comment
	<ul style="list-style-type: none"> (b) customary activities, including mahinga kai (c) places, sites and areas with significant spiritual or cultural heritage value to Mana Whenua. <p>10. Identify, define and set goals for ecosystem health from a Mana Whenua perspective using tools such as:</p> <ul style="list-style-type: none"> (a) the Ministry for the Environment's Māori environmental performance indicators (b) specific environmental or cultural indicators based on mātauranga and tikanga Māori. mauri, particularly in relation to freshwater and coastal resources 	
<p>Part 1, 5.4 Protection of Mana Whenua culture and heritage</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. The tangible and intangible values of Mana Whenua cultural heritage are identified, protected and enhanced. 2. The relationship of Mana Whenua with their cultural heritage is provided for. 3. Mana Whenua cultural, spiritual and historical values associated with their cultural landscapes are recognised, protected and enhanced. 4. The knowledge base of Mana Whenua cultural heritage in Auckland continues to be developed, giving priority to areas where there is a higher level of threat to the loss or degradation of Mana Whenua cultural heritage. 5. Mana Whenua cultural heritage and related sensitive information and management approaches are respected. <p>Polices</p> <ol style="list-style-type: none"> 4. Protect the values and associations of Mana Whenua with their sites and places of significance or value, which are identified in the Unitary Plan, where subdivision, use and development may result in the loss or degradation of those values and associations by avoiding: <ul style="list-style-type: none"> (a) the destruction in whole or in part of the site or place and its extent (b) adverse cumulative effects on the site or place (c) adverse effects on the location and context of the site or place 	<p>As above, AT is committed to the principals of the Treaty of Waitangi and meeting their relevant statutory obligations under the Land Transport Management Act and the RMA. Iwi consultation has occurred on the project since 24 May 2012. Maori Values Assessments have been prepared by Te Akitai Waiohua, Ngati Te Ata Waiohua, Ngai Tai ki Tamaki and Ngāti Tamaoho. A Cultural Values Assessment has also been prepared. The matters raised in the assessments have been considered and will continue to be considered as the project progresses. Iwi will continue to be consulted as part of all phases of the project. Several of the proposed designation conditions require Iwi involvement and consultation in the preparation of DWPs.</p>



Section	Summary	Comment
	<p>(d) the lack of assessment of and provision for mātauranga and tikanga Māori when making decisions</p> <p>(e) significant adverse effects on the values and associations Mana Whenua have with the site or place.</p> <p>5. Recognise, enhance and protect Mana Whenua values associated with their cultural landscapes by developing an agreed methodology to:</p> <p>(a) identify and record, assess and map the values within a spatial context in accordance with tikanga and mātauranga Māori</p> <p>(b) determine the most appropriate mechanisms to recognise, enhance and protect Mana Whenua values and associations</p> <p>(c) prioritise areas where there is a higher level of threat to the loss or degradation of Mana Whenua cultural heritage such as the coastal and freshwater environments, and areas subject to structure planning.</p> <p>6. Provide opportunities to reflect the context provided by Māori cultural landscapes in public open space.</p> <p>7. Manage the impact on unidentified sites and places of significance to Mana Whenua that are uncovered during subdivision, use and development by:</p> <p>(a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin</p> <p>(b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori</p> <p>(c) undertaking appropriate measures to avoid adverse effects.</p> <p>8. Recognise that Mana Whenua are specialists in determining their values and associations with their cultural heritage.</p> <p>9. Recognise that Mana Whenua cultural heritage may be significant to whānau, hapū or iwi.</p> <p>10. Enable Mana Whenua to practice their customs and traditions in relation to their cultural heritage by having regard to cultural impact assessments undertaken during a resource consent and during the exercise of accidental discovery protocols.</p> <p>11. Require a cultural impact assessment where subdivision, use or development may affect Mana Whenua cultural heritage.</p>	



Section	Summary	Comment
	<ol style="list-style-type: none"> 13. Encourage best practice in the provision of infrastructure in areas near the coast and around natural waterways and bush environments because of the known historic settlement and occupation patterns of the tupuna of Mana Whenua. 14. Recognise that some information surrounding the values and associations of Mana Whenua to their cultural heritage may be sensitive and put a site or place at risk of destruction or degradation, meaning it may not be appropriate to make it public. 15. Develop, together with Mana Whenua the knowledge base and methods, systems and protocols for recording, managing and protecting information relating to Mana Whenua cultural heritage. 16. Recognise that information may be held in various forms and may be in Te Reo Māori in accordance with the tikanga of the iwi or hapū. 	
Part 1, 6.1 Air	<p>Objectives</p> <ol style="list-style-type: none"> 1. Air discharges and the use and development of land are managed to improve air quality, enhance amenity values and reduce reverse sensitivity in Auckland's urban areas and to maintain air quality at existing levels in rural and coastal marine areas. 2. The Auckland Ambient Air Quality Standards and National Environmental Standards are met, and in particular priority is given to meeting the annual average standards for fine particles (PM10 and M2.5) and hourly and 24 hourly standards for nitrogen dioxide 3. The directives of the National Environmental Standard for Air Quality to reduce PM10 contaminant levels are implemented through Unitary Plan provisions and other relevant techniques available to the council. 4. Adverse effects of air discharges on human health, property and the environment are avoided, remedied or mitigated including those from: <ol style="list-style-type: none"> (a) domestic solid fuel burning (b) outdoor burning (c) industrial and trade premises (d) application of chemicals (e) motor vehicles. 	<p>Potential air quality impacts arising from construction activities will be mitigated using best practice management measures. The appointed contractors will be required to produce a Construction Environmental Management Plan (CEMP), and an Air Quality DWP. The objective of the Air Quality DWP is to detail the best practicable option to avoid dust and odour nuisance being caused by construction works and to remedy any such effects should they occur. The Air Quality DWP will set out all of the steps to be taken to control and mitigate the effects of construction dust. The air quality assessment states that most of the identified dust emitting activities respond well to appropriate dust control/mitigation measures and adverse effects would be greatly reduced. These measures typically involve water suppression and reducing surface wind speeds using windbreaks/enclosures. Effective dust mitigation measures prevent dust becoming airborne or contain dust within enclosures to prevent dispersion beyond the emission source. The CEMP and associated DWPs will also include likely traffic routing, site access points and hours of operation, to ensure the potential for adverse</p>



Section	Summary	Comment
	<p>Policies</p> <p>1. Manage discharges to air and the use and development of land to:</p> <ul style="list-style-type: none"> (a) avoid significant adverse human health effects and reduce exposure to adverse air discharges (b) regulate activities that use or discharge noxious or dangerous substances (c) minimise reverse sensitivity conflicts by avoiding or mitigating land use conflict between air discharges and activities that are sensitive to air discharges (d) enable the operation and development of light and heavy industrial activities and rural production activities, that have air discharges (e) protect activities that are sensitive to the adverse effects of air discharges (f) reduce the adverse effects of emissions from domestic fires and motor vehicles (g) minimise actual and potential risk to people and property (h) protect flora and fauna from the adverse effects of air contaminants <p>4. Reduce the impacts of air contaminant discharges from motor vehicles on human health and the environment by:</p> <ul style="list-style-type: none"> (a) promoting patterns of land use that minimise the need to travel by motor vehicle (b) promoting urban design that minimises the adverse effects of air discharges from motor vehicles (c) supporting the development of passenger transport, ride sharing, cycling, walking, working from home and other measures to reduce the need to use motor vehicles to move people and goods around Auckland (d) avoiding and mitigating the adverse effects on human health associated with high traffic generating activities and major new transport projects (e) encouraging heavyduty diesel vehicles to use routes that are part of the strategic freight network and to avoid routes that are not part of this network (f) encouraging public transport to meet appropriate emission standards including the preferred use of electric and low emission vehicles 	<p>environmental effects on local receptors is avoided.</p> <p>Having regard to operational air quality effects, no exceedances of the National Environmental Standards for Ambient Air Quality are predicted to occur at any of the modelled worst-case receptor locations in any of the future assessment scenarios, along the Mill Road upgrade corridor, based on the air quality assessment methodology and assumptions.</p> <p>The PM2.5 24-hour mean Auckland Regional Air Quality Target (25 µg/m3) is predicted to be exceeded at all modelled worst-case receptors and in all assessment scenarios, however this is due to the default urban background concentration used in the assessment (29.8 µg/m3). All other Regional Air Quality Targets are predicted to be met in all scenarios and at all identified worst-case receptors.</p> <p>As the predicted impacts at all identified worst case receptors and for all modelled pollutants are considered to be less than minor, no mitigation measures are suggested in the air quality assessment in relation to the operation of the Mill Road upgrade.</p>

Section	Summary	Comment
	(g) supporting the use of low emission motor vehicles (both light and heavy duty).	
<p>Part 1, 6.3 Freshwater and Geothermal Water</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. The natural, social, economic and cultural values of freshwater and geothermal water resources are safeguarded when land, freshwater and geothermal water is used and developed. 2. The quality of freshwater and the natural and cultural values of freshwater systems are maintained and restored and enhanced where they have been degraded below levels necessary to safeguard life supporting capacity and meet community values. 3. Freshwater and geothermal resources are managed and allocated to support their natural and cultural values and to make efficient use of available water for economic, social and cultural purposes. 4. The amount of freshwater used by Auckland is progressively reduced on a per head basis. 5. The adverse effects of stormwater runoff and wastewater discharges on communities, freshwater systems and coastal waters are minimised and existing adverse effects are progressively reduced. 6. Mana Whenua values, mātauranga and tikanga associated with freshwater resources are recognised. 7. Mana Whenua actively participate in freshwater management processes and decision making. <p>Policies</p> <p>Integrated management of land use and freshwater</p> <ol style="list-style-type: none"> 1. Integrate the management of use and development and freshwater systems by: <ol style="list-style-type: none"> (a) ensuring water supply, stormwater and wastewater collection and treatment infrastructure is adequately provided for in areas of new growth or intensification (b) requiring greenfield and brownfield development to be supported by comprehensive and integrated land use and water management planning processes, and adopt sensitive design and green infrastructure as a core development approach 	<p>Having regard to waterways, the road corridor is drained by headwater streams within two main catchments being the Totara Creek (which drains into Puhinui Creek) and Papakura Creek. A headwater stream which forms part of the Otara Creek catchment is located at the northern extent of Murphy’s Bush. Nine indigenous freshwater species and one freshwater crustacean (koura) are known to occupy the catchments. Appropriate stormwater treatment and construction methodologies are available and will need to be employed in proximity to these waterways. Stormwater in rural sections will be either piped or conveyed via swales to wetland areas for treatment prior to disposal to pre-existing waterways. The wetlands will be planted with appropriate native species. Stormwater in the urban sections will be appropriately attenuated and treated before discharge to the pre-existing stormwater network. The proposed stormwater treatment methodology takes into consideration freshwater species in the catchment including the ability for fish to navigate waterways.</p> <p>Erosion and sediment control methodologies and construction methodologies will be prepared and included as part of the CEMP. In addition resource consents will be required for earthworks and operational stormwater discharges. These applications will include detailed measures to manage erosion and sediment during construction and operational stormwater management measures.</p> <p>Bridges will be used on the Mill Road section of the alignment to avoid the piping and infilling of streams along this section of the corridor.</p> <p>A minor extension will be required to the pre-existing culvert under the Murphys Road section of the</p>

Section	Summary	Comment
	<p>(c) controlling the use of land to minimise the adverse effects of stormwater runoff on freshwater systems and coastal waters, and reduce existing adverse effects where those systems or waters are degraded</p> <p>(d) avoiding development where it will increase existing adverse effects, unless these adverse effects can be adequately mitigated.</p> <p>Freshwater systems</p> <p>2. Manage land use, development and subdivision to:</p> <p>(a) avoid the permanent loss of lakes, rivers, streams and wetlands and their margins, particularly through the piping and infilling of streams and their headwaters</p> <p>(b) minimise the erosion and modification of stream beds and banks</p> <p>(c) protect and enhance the supporting elements and natural, social and cultural values of remaining rivers and streams including their headwaters, riparian margins and vegetation, flood plains and wetland areas</p> <p>(d) retain and enhance the connectivity between land, freshwater systems and the coast</p> <p>(e) avoid the permanent diversion of rivers and streams unless necessary for public health and safety or significant infrastructure only where other alternatives are not practicable</p> <p>(f) manage stormwater flows to minimise adverse effects on stream channels and the natural, social and cultural values of freshwater systems</p> <p>(g) maintain and enhance as far as practicable, navigation along rivers and public access to and along rivers</p> <p>(h) maintain and enhance existing riparian vegetation located on the margins of streams in natural stream management areas</p> <p>(i) use opportunities provided by land use change, development and redevelopment to restore and enhance natural, social and cultural freshwater values where practicable.</p> <p>Managing freshwater quality</p> <p>3. Manage use and development, discharges and other activities to avoid where practicable, and otherwise minimise and reduce:</p>	<p>alignment.</p> <p>Iwi have been consulted in relation to the proposed stormwater treatment methodology.</p>



Section	Summary	Comment
	<ul style="list-style-type: none"> (a) adverse effects on the water quality and biodiversity values in identified natural lake, natural stream and wetland management areas and in SEAs (b) adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai (c) adverse effects on the quality of receiving water, including its ecology and mauri, where such water is subject to any new intercatchment (d) transfer or mixing of water (e) significant bacterial contamination of freshwater and coastal waters (f) the adverse effects of discharges on the quality of freshwater and coastal waters by: <ul style="list-style-type: none"> i reducing the potential for contaminants generated on or discharged to land at both point source and nonpoint sources to enter surface water and groundwater ii requiring management and treatment of discharges and contaminants managing land iii. managing land use activities that generate and discharge contaminants iv adopting the best practicable option for managing stormwater and wastewater network diversions and discharges. <p>4. Use opportunities provided by land use change, development and redevelopment to progressively improve the quality of freshwater and coastal waters.</p> <p>Mana Whenua mātauranga, values and tikanga in the sustainable management of freshwater</p> <p>5. Facilitate the identification, definition and goal setting for freshwater health from a Mana Whenua perspective using tools such as:</p> <ul style="list-style-type: none"> (a) the Ministry for the Environment’s Māori environmental performance indicators. (b) specific environmental or cultural indicators based on mātauranga and tikanga Māori for example the Cultural Health Index (c) iwi planning documents. 	

Section	Summary	Comment
	<p>Sediment runoff</p> <p>9. Minimise the loss of sediment from land use, development and manage sediment discharges into surface water bodies and coastal water by requiring land disturbing activities to be designed and undertaken to:</p> <ul style="list-style-type: none"> (a) retain soil and sediment on land and not discharge it to surface water bodies and coastal water, as far as practicable (b) use industry best practices and standards appropriate to the nature and scale of the land disturbing activity and the sensitivity of the receiving environment to minimise sediment discharges (c) limit the amount of land being disturbed at any one time to minimise the risk to receiving environments particularly where the: <ul style="list-style-type: none"> i nature of the soil type or topography is likely to result in increased sediment loss; or ii resulting sediment laden discharge is likely to adversely affect sensitive areas. <p>Urban stormwater</p> <p>10. Manage the adverse effects of use, development, and the discharge of contaminants from stormwater networks in urban areas on freshwater systems and coastal waters by:</p> <ul style="list-style-type: none"> (a) using land use change and development opportunities to reduce the adverse effects of existing land use (b) controlling the extent of impervious surfaces to minimise adverse effects on rivers and streams, the capacity of the stormwater network, flood risk and overflows from the sewer network; (c) controlling stormwater volumes and runoff from use and development in areas that discharge to rivers and streams that are identified as being susceptible to the adverse effects of increased stormwater flows (d) minimising the generation and discharge of stormwater and contaminants to the Stormwater network 	

Section	Summary	Comment
	<p>(e) adopting the best practicable option to manage discharges from public stormwater networks and enabling prioritised improvements to those networks and reduction in adverse effects on a catchment, network or receiving environment basis.</p>	
<p>Part 1, 6.5 Land contaminated</p>	<p>Objective</p> <ol style="list-style-type: none"> Human health and the quality of air, land and water resources in Auckland are protected by the identification, management and remediation of land containing elevated levels of contaminants. <p>Policies</p> <ol style="list-style-type: none"> Identify potential and confirmed land containing elevated levels of contaminants in Auckland based on the following priorities: <ol style="list-style-type: none"> sites known to have supported contaminating land use activities in the past sites with a significant potential risk to human health. Land that has not been investigated but which has a likelihood of contamination due to the type or nature of prior land uses will be noted by the council as being potentially contaminated. Remediate land containing elevated levels of contaminants where: <ol style="list-style-type: none"> the level of contamination renders the site unsuitable for its existing or potential use the contaminants are generating adverse effects on the environment there is a high risk of contamination spreading beyond the site development or subdivision of land is proposed. 	<p>The contamination assessment undertaken by AECOM identifies potential for contaminated soil from past activities conducted along the road corridor. Identified potential adverse effects relate to human or environmental exposure to contaminants. However provided that the proper controls are put in place and implemented, the assessment considers that adverse effects are readily mitigated. The proposed designation conditions require preparation of a Contamination DWP. The objective of the Contamination DWP is to avoid, remedy or mitigate the adverse effects of construction on human health which may result from the disturbance of contaminated materials during construction. The DWP requires implementation of dust and erosion control measures, stormwater management plans, and health and safety plans. Site investigation as part of future detailed design will also assist in further minimising these risks.</p> <p>On-site monitoring will be required of soil, surface water and groundwater quality during construction to ensure that waste is properly classified to also minimise risk to site workers, the public and the environment</p>
<p>Part 1, 6.7, Infrastructure</p>	<p>Objectives</p> <ol style="list-style-type: none"> Reduce risk to people, property and infrastructure from natural hazards while minimising any adverse effects on the environment. Protect the natural functions of floodplains and overland flow paths from the adverse effects of development and infrastructure. 	<p>The corridor will traverse over overland flow paths and the headwaters of streams. Care has been taken to ensure that overland flow paths and headwater streams can continue to function. For example bridges have been utilised at the south eastern end of the corridor.</p> <p>Geotechnical studies have also been undertaken to ensure that the corridor is located and constructed in a</p>



Section	Summary	Comment
	<p>Policies</p> <p>9. Minimise the risk to new significant infrastructure which functions as a lifeline utility by:</p> <ul style="list-style-type: none"> (a) assessing the risk from a range of hazard events including low likelihood, high consequence events such as tsunamis, earthquake and volcanic eruptions (b) utilising design, location and network diversification to minimise the adverse effects on that piece of infrastructure and to minimise the adverse effects on the community from the failure of that piece of infrastructure. 	<p>manner that reduces the likelihood of slips.</p> <p>The project assists with network diversification by providing an alternative route should State Highway 1 be closed as a result of an accident (for example).</p>
<p>Part 1, 8.1 Rural activities</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Rural areas are a significant contributor to the wider economic productivity of Auckland. 2. Rural communities undertake rural production and other activities that support them while rural character is maintained. 3. Auckland's rural areas outside the RUB, and rural and coastal towns and villages, are protected from inappropriate subdivision, urban use and development. <p>Policies</p> <ol style="list-style-type: none"> 10. Enable the location and operation of significant infrastructure, including renewable electricity generation, in rural areas. 	<p>The Mill Road corridor project is a significant piece of infrastructure that passes through rural zoned land. Policy 10 gives policy recognition to locating and operating significant infrastructure in rural areas.</p>
<p>Part 1, 9 Responding to climate change</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Auckland continually responds and adapts to the existing and future effects of climate change. 2. Auckland increases renewable energy use and maximises energy efficiency which will reduce emissions that contribute to the adverse effects of climate change. <p>Policies</p> <ol style="list-style-type: none"> 1. Increase energy efficiency, the use of renewable energy and carbon sinks to contribute to the mitigation of the adverse effects of climate change in Auckland by: <ul style="list-style-type: none"> (a) integrating land use and transport to enable an increase in the use of public transport networks and active modes such as walking and cycling. 	<p>The project assists with responding to climate change by providing a multi modal corridor which will promote the use of public transportation and active transportation modes such as cycling and walking.</p> <p>The project will result in the removal of areas of indigenous ecological value. Additional planting will take place with appropriate species to mitigate against the loss of bush with indigenous ecological value.</p> <p>The corridor will not be affected by sea level rise or other issues arising as a result of climate change</p>

Section	Summary	Comment
	<p>2. Increase the resilience of Auckland’s communities and natural and physical resources to the anticipated effects of climate change, such as sea level rise, increased risk from natural hazards, more frequent and extreme weather events, and increased drought conditions, by:</p> <ul style="list-style-type: none"> (b) preserving, protecting, and enhancing the extent and quality of areas with existing and potential indigenous ecological value, by developing an adaptive management response to climate change threats, such as pest and disease, as these become more evident (c) minimising the risk to urban development in areas vulnerable to sea level rise (d) ensuring development and associated infrastructure are designed and located taking into account most likely climate change predictions. 	<p>predictions.</p>
<p>Part 2, Auckland Wide Objectives and Policies: 1.1, Infrastructure</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. The benefits of infrastructure are recognised. 2. The adverse effects of infrastructure are managed. 3. Safe, efficient and secure development, operation and upgrading of infrastructure is enabled, to service the needs of existing and planned use and development 4. The resilience of Auckland’s infrastructure is improved. 5. Auckland’s significant infrastructure is protected from reverse sensitivity effects and incompatible subdivision, use and development. <p>Policies</p> <p>Benefits of infrastructure</p> <ol style="list-style-type: none"> 1. Recognise the positive social, economic, environmental and cultural effects that infrastructure provide, including: <ul style="list-style-type: none"> (a) enabling enhancement of the quality of life/standard of living for people and communities (b) protecting public health and safety (c) enabling the functioning of businesses 	<p>A significant level of growth is planned within the areas around the Mill Road corridor over the next 30 years. The proposed corridor realignment and widening is necessary to provide capacity for future growth and development in the areas of Flat Bush, Takanini and intensification around Papakura Town Centre over a 30 year planning horizon.</p> <p>The proposed urban section of the corridor realignment and upgrade makes provision for all transport modes, including private vehicles, walking, cycling and passenger transport. The rural section makes provision for vehicles and cycles via a dedicated cycleway and a shared path facility and is “future proofed” in terms of the possibility of accommodating future bus only lanes. These measures will provide social, economic and cultural wellbeing by allow for the development of safe and connected communities with access to open space, employment and community facilities.</p> <p>The corridor upgrade will improve the vertical and horizontal alignment of the corridor which will have the benefit of reducing the likelihood of fatal and serious</p>



Section	Summary	Comment
	<p>(d) enabling economic growth</p> <p>(e) protecting the environment</p> <p>(f) enabling the transportation of freight, goods, people</p> <p>(g) enabling interaction and communication</p> <p>Provision of infrastructure</p> <p>3. Provide for a range of infrastructure to operate throughout Auckland by recognising:</p> <p>(a) operational and technical requirements</p> <p>(b) location, route and design constraints</p> <p>(c) the complexity of infrastructure services and that infrastructure is generally managed as a connected network</p> <p>(d) the benefits of infrastructure to the wider community, Auckland and/or New Zealand</p> <p>(e) the need to respond quickly to service disruptions.</p> <p>4. Require the development, upgrading, operation, repair and maintenance of infrastructure to avoid or mitigate adverse effects on the:</p> <p>(a) health, wellbeing and safety of people as a result of nuisance from noise, vibration, dust and odour emissions and light spill</p> <p>(b) safe and efficient operation of other networks</p> <p>(c) visual amenity values of the streetscape and/or adjoining properties</p> <p>(d) natural and physical environment from temporary and ongoing discharges</p> <p>(e) intrinsic values of any scheduled sites or overlay areas.</p> <p>5. Assess the adverse effects of development of new infrastructure, considering:</p> <p>(a) the degree to which the environment has already been modified</p> <p>(b) the duration timing and frequency of the adverse effects</p> <p>(c) the impact on the network and levels of service if the new work is not undertaken</p> <p>(d) the need for the infrastructure in the context of the wider network</p>	<p>cashies thus having health and safety benefits.</p> <p>The proposed corridor upgrade will improve network resilience by providing a viable alternative route should the southern motorway be forced to close (for example as a result of an accident). This is consistent with the “one network approach” to managing Auckland transportation network.</p> <p>The proposed road corridor is integrated and coordinated with landuse taking into consideration planned residential and business growth. The corridor includes necessary provision for private vehicles to adequately cater for forecast growth in Manukau, Flat Bush, Papakura and Takapuna over the next 30 years.</p> <p>Operational and construction noise will be appropriately mitigated to protect sensitive receivers against adverse noise effects.</p> <p>Designation conditions require the preparation of an urban design delivery work plan inclusive of a landscape design philosophy statement based on the urban design statement submitted with the NoR which has the objective of enabling the integration of the Mill Road corridor into the surrounding landscape and urban design context The landscape statement envisages:.</p> <p>For urban sections:</p> <ul style="list-style-type: none"> - Recognising the suburban character and enhancing the pedestrian users experience; - Carefully considering the alignment to minimise impacts on buildings that front the street; - enhancing and strengthening the ecological value of the corridor; - Carefully considering implications for safety created by cuttings, orphaned roading sections

Section	Summary	Comment
	<p>(e) the benefits to the wider community and/or Auckland provided by the infrastructure.</p> <p>6. Encourage new linear infrastructure to be located in roads and other identified corridors where practical.</p> <p>Road network</p> <p>10. Provide for the construction, use, operation, maintenance and development of the road network in a manner which:</p> <p>(a) contributes to the operation of the single integrated multimodal transport system</p> <p>(b) provides for the transport movement and accessibility functions of the road</p> <p>(c) provides for the placemaking functions of the road</p> <p>(d) provides for a range of transport infrastructure, streetscape amenities, and network utility services within the road.</p> <p>11. Provide access to the road network which is safe and efficient and minimises conflict between the placemaking, movement and access functions of roads.</p> <p>12. Undertake or require works to be undertaken in an existing or planned road, in a manner which will achieve positive movement, access and placemaking outcomes taking into account:</p> <p>(a) the functions, priorities and operational characteristics of the road</p> <p>(b) the characteristics of the location</p> <p>(c) the place/context design typology which is appropriate to the design of a road in the particular location.</p> <p>(d) any historic heritage or special character context</p> <p>(e) the selection, location and installation of streetscape amenities, such as seating, cycle parking, plaques and memorials, public art, litter bins, public toilets and drinking fountains, to:</p> <p>i enhance the street environment</p> <p>ii avoid visual clutter</p> <p>iii avoid impeding or causing a hazard for people including those with mobility or</p>	<p>and planting through CPTED analysis and recommendations;</p> <p>For Murphy’s Road which will transition from rural to urban over time the urban design statement proposes:</p> <ul style="list-style-type: none"> - Recognising and coordinating with the objectives being developed by Auckland Council for the extended Murphy’s Bush; - Enhancing and strengthening the ecological value of Murphy’s Road in relation to Murphy’s Bush; - Creating an appropriate entrance experience to Murphy’s Bush; - Avoiding creation of land parcels which are difficult to develop; - Carefully considering the various roadside cut and fill slopes and how these relate to adjacent pedestrian activity and land uses. <p>For rural sections:</p> <ul style="list-style-type: none"> - Emphasising the rural character of the area; - Narrowing the perceived width of road corridor to slow down drivers; - Low impact engineering to suit the rural environment (such as swales); - Integrated design solutions for cut and fill slopes to reduce visual impacts and provide ecological benefits; - Consideration of softer lighting for bridge structures; - Considering CPTED analysis and recommendations; - Considering design options for the new roundabouts which reflect the local identity, heritage and rural character. <p>The corridor will traverse over overland flow paths and the headwaters of streams. Care has been taken to</p>

Section	Summary	Comment
	<p>visual impairments, aged people or children</p> <p>(f) design principles for streets and the street design process.</p>	<p>ensure that overland flow paths and headwater streams can continue to function. For example bridges have been utilised at the south eastern end of the corridor.</p> <p>Geotechnical studies have also been undertaken to ensure that the corridor is located and constructed in a manner that reduces the likelihood of slips.</p> <p>The project will result in the removal of areas of indigenous ecological value. Additional planting will take place with appropriate species in the designation footprint to mitigate against the loss of bush with indigenous ecological value.</p> <p>The contamination assessment undertaken by AECOM identifies potential for contaminated soil from past activities conducted along the road corridor. Identified potential adverse effects relate to human or environmental exposure to contaminants. However provided that the proper controls are put in place envisaged in the Contamination DWP. and implemented, the assessment considers that adverse effects are readily mitigated. The mitigation options proposed include implementation of dust and erosion control plans, stormwater management plans, and health and safety plans. Site investigation as part of future detailed design will also assist in further minimising these risks.</p> <p>Potential air quality impacts arising from construction activities will be mitigated using best practice management measures. The appointed contractors will be required to produce a Construction Environmental Management Plan (CEMP), together with an Air Quality DWP. The objective of the Air Quality DWP is to detail the best practicable option to avoid dust and odour nuisance being caused by construction works and to remedy any such effects should they occur.</p>

Section	Summary	Comment
		<p>Having regard to operational air quality effects, no exceedances of the National Environmental Standards for Ambient Air Quality are predicted to occur at any of the modelled worst-case receptor locations in any of the future assessment scenarios, along the Mill Road upgrade corridor, based on the air quality assessment methodology and assumptions.</p> <p>On-site monitoring will be required of soil, surface water and groundwater quality during construction to ensure that waste is properly classified to also minimise risk to site workers, the public and the environment.</p> <p>Appropriate lighting will be employed along the corridor to assist with safety and security for pedestrians and cyclists. Lighting in rural sections will comply with rural road lighting standards to reduce light spill onto adjacent sights and minimise the loss of night sky viewing.</p> <p>The transport needs of people with special mobility requirements, including the young, aged and those with disabilities has been adequately considered in the corridor design. A segregated cycleway and shared path facility has been included in the design which will enable young cyclist to use the corridor safely. Adequate footpath widths have been included in the design to accommodate mobility scooters.</p> <p>Construction of the corridor will be carefully managed and consented via Outline Plan of Works applications and associated delivery works plans and traffic management plans to manage conflict with pedestrians, cyclists and vehicles.</p>
<p>Part 2, Auckland Wide Objectives and Policies:</p>	<p>Objective</p> <p>1. Designations in the road corridor are used only where necessary, to protect existing and future infrastructure and provide for infrastructure development, while minimising restrictions on transport functions, utility services and other users of the corridor.</p>	<p>There has been significant planned and actual growth through the urban (and future urban) sections of the corridor. Growth and development of the area is planned to continue as evidenced by the Flatbush and Takarini Structure Plan areas, growth envisaged under</p>

Section	Summary	Comment
<p>1.3 Use of designations within the road corridor</p>	<p>Policies</p> <ol style="list-style-type: none"> 1. Encourage requiring authorities to designate within the road corridor only when there is no other effective alternative to: <ol style="list-style-type: none"> (a) protecting the route or locating infrastructure to enable construction and operation where it is likely that future development and uses may impose restrictions and/or result in reverse sensitivity concerns (b) protecting existing infrastructure that would present a serious public health and safety risk or result in significant loss of service and incur significant unplanned costs if damaged or interfered with (c) provide for complex projects or works where they cross multiple areas/zones/roads. 2. Encourage requiring authorities seeking designations in accordance with the policy above to: <ol style="list-style-type: none"> (a) explore other mechanisms enabling route or asset protection, such as the Utilities Access Act 2010 and the CAR process (b) where practical, minimise restrictions on other users, especially those involved in ongoing operation, maintenance, upgrading and improvement of the road corridor, and network utility infrastructure located in the road corridor; by: <ol style="list-style-type: none"> i specifying in the notice of requirement how any legal rights of access to the corridor, including those of the corridor manager and network utility operators, will be managed during/after construction ii. reducing the spatial extent of the designation—breadth, depth and height—to the minimum requirement for the relevant phase of development and considering uplifting the designation where practical. 	<p>the Auckland Plan, the PAUP and under Plan Changes in Drury South (plan changes 12 and 38) and Clevedon Village (Plan Change 32).</p> <p>Having designations in place for the corridor:</p> <ul style="list-style-type: none"> - Enables AT to have certainty, flexibility and the ability to construct, operate and maintain the corridor and undertake the project in accordance with the designation notwithstanding anything contrary with the relevant District Plans (for example rules that would ordinarily apply to underlying zonings) - Enables work to be undertaken in a comprehensive and integrated manner - Achieves certainty through identifying in the District Plan the location, nature and extent of the project and AT’s clearly intended use of the land - Ensures the security of the corridor in respect of separation from other network utilities and limits the potential for third parties to develop land in a manner that would hinder or prevent construction of the corridor within the designation footprint - Enables sufficient time to give effect to the construction of the corridor including undertaking detailed design, additional site investigations, undertaking property negotiations and construction <p>The designation of the corridor is reasonably necessary to achieve interim and long term protection for the land that will be subject to the future corridor.</p> <p>Proposed designation conditions specify the rights of access to the corridor for network utility operators during and after construction.</p>



Section	Summary	Comment
		<p>In accordance with Section 182 of the RMA, Auckland Transport will look to rationalise the extent of the designation following completion of the construction phase. Land not required for operation and maintenance will be available for appropriate redevelopment.</p>
<p>Part 2, Auckland Wide Objectives and Policies: 3 Historic heritage</p>	<p>Objective</p> <ol style="list-style-type: none"> Significant historic heritage places that are not scheduled in the Unitary Plan are protected from the adverse effects of use and development. <p>Policies</p> <ol style="list-style-type: none"> Require an assessment of effects on historic heritage for activities for which a resource consent is required where: <ol style="list-style-type: none"> the activity involves land disturbance or disturbance of the foreshore or seabed and has the potential to adversely affect archaeological sites the activity has the potential to adversely affect historic heritage in the coastal environment subdivision is proposed and has the potential to create or exacerbate adverse effects on historic heritage. Take a precautionary approach to the demolition of buildings in areas of early settlement. Manage effects on historic heritage places by: <ol style="list-style-type: none"> assessing the significance of the historic heritage place in relation to the values in the RPS Historic Heritage section undertaking appropriate measures to avoid adverse effects on significant historic heritage. Where adverse effects cannot be avoided, they are remedied or mitigated requiring a protocol for the accidental discovery of archaeological sites to be followed. Encourage protection and stewardship of significant historic heritage places that meet the criteria for scheduling by enabling appropriate use, subdivision or development that would 	<p>The meeting house (R11/2047) is located on the proposed corner of Alfriston and Mill Road. The archaeological assessment undertaken by Clough and Associates notes that this building has undergone restoration and as a result its heritage significance is unlikely to be high. It is not scheduled in the Papakura District Plan or the PAUP. The proposed road alignment may adversely impact on the meeting house. Appropriate archaeological protocols will be used when undertaking works in the vicinity of this building.</p> <p>An application will be required to Heritage New Zealand under Section 44(a) of the HNZPTA for an archaeological authority to modify or destroy any sites that might be affected by the project prior to any development works being carried out on any of the NoR areas within the proposed corridor. An Authority would establish procedures to ensure that any archaeological remains affected by the project would be investigated or recorded to recover information relating to the history of the area.</p> <p>In addition, the proposed designation conditions require preparation of a Historic Character DWP. The objective of the Built Heritage section is to avoid, remedy or mitigate adverse effects on built heritage as far as reasonably practicable. The objective of the Archaeology section of the Historic Character DWP is to avoid, remedy or mitigate adverse effects on</p>



Section	Summary	Comment
	<p>not otherwise be provided for in the plan, where:</p> <ul style="list-style-type: none"> (a) the long term future of the place, and where applicable, its continued use for a sympathetic purpose, is secured, and this would not otherwise necessarily be achieved (b) the benefits to the wider community of enabling use, subdivision or development to secure the future conservation of a historic heritage place outweigh any adverse effects of not conforming to other sections of the plan (c) the significant heritage values of the place or its setting are not on balance adversely affected (d) detrimental fragmentation of management of the place is avoided (e) it is necessary to resolve problems arising from the inherent needs of the place, rather than the circumstances of the owner, or the monetary value of the site (f) sufficient incentive mechanisms are not available from any other source (g) it is demonstrated that the effects associated with enabling development have been minimised. 	<p>archaeological remains during construction, as far as reasonably practicable.</p>
<p>Auckland Wide Objectives and Policies: 4 Natural heritage 4.1 Trees in streets and public open space</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Trees in streets and public open space that contribute to cultural amenity, landscape and ecological values are protected. 2. There is an increase in the quality and numbers of trees planted in streets and public open space particularly within areas identified for intensified living. 3. Enable the efficient maintenance and upgrading of utilities in streets provided there is not loss in the values of trees or groups of trees. <p>Policies</p> <ol style="list-style-type: none"> 1. Balance the efficient maintenance and upgrading of infrastructure and utilities with the protection of trees and groups of trees in streets. 2. Encourage ongoing planting and maintenance to enhance trees in public open space. 	<p>Widening and re-aligning the corridor will result in the loss of established street trees and relatively recent native plantings in Totara Park. Trees that are required to be removed and that cannot be re-used will be replaced with appropriate species and at an appropriate ratio.</p>



Section	Summary	Comment
	<ol style="list-style-type: none"> 3. Manage trees within streets and public open space to protect their ecological and amenity values while acknowledging that multiple uses occur in streets and public open space. 4. Encourage the use of indigenous trees and vegetation for planting within streets and public open space, where appropriate, to recognise and reflect cultural, amenity, landscape and ecological values. 	
Auckland Wide Objectives and Policies: 5 Natural resources 5.1 Air quality	<p>Objectives</p> <ol style="list-style-type: none"> 1. Air quality is maintained in those parts of Auckland that have excellent or good air quality, and air quality is enhanced in those parts of Auckland where it is poor. 2. Air discharges, including PM10 and PM2.5 (particle pollution, or particulate matter), are reduced to protect public health and amenity, and to meet national and Auckland Ambient Air Quality Standards (AAAQS) in Table 1. 3. Human health, amenity values, property and environment are protected from significant adverse effects of air contaminants. <p>Policies</p> <p>Human health</p> <ol style="list-style-type: none"> 1. Protect human health by requiring that air discharges do not cause air quality to exceed the AAAQS in Table 1 for the specified contaminants, and manage the discharge of other contaminants so that the adverse effects on human health, including cumulative adverse effects, are minimised. <p>Air discharges from transport</p> <ol style="list-style-type: none"> 9. Require applications for land use consent or designation for a high traffic generating activity to demonstrate that: <ol style="list-style-type: none"> (a) Any potential discharges of pollutants to air from vehicles have been assessed using best practice methods such as modelling and monitoring, appropriate to the scale of the discharge and any potential adverse effects (b) the combined concentrations of air discharges arising from the activity and background levels will not cause adverse effects on human health or on regional or local air quality, and will meet the AAAQS in Table 1 	<p>Potential air quality impacts arising from construction activities will be mitigated using best practice management measures. The appointed contractors will be required to produce a Construction Environmental Management Plan (CEMP), together with an Air Quality DWP. The objective of the Air Quality DWP is to detail the best practicable option to avoid dust and odour nuisance being caused by construction works and to remedy any such effects should they occur. The Air Quality DWP will set out all of the steps to be taken to control and mitigate the effects of construction dust. The air quality assessment states that most of the identified dust emitting activities respond well to appropriate dust control/mitigation measures and adverse effects would be greatly reduced. These measures typically involve water suppression and reducing surface wind speeds using windbreaks/enclosures. Effective dust mitigation measures prevent dust becoming airborne or contain dust within enclosures to prevent dispersion beyond the emission source. The CEMP would also include likely traffic routing, site access points and hours of operation, to ensure the potential for adverse environmental effects on local receptors is avoided.</p> <p>Having regard to operational air quality effects, no exceedances of the National Environmental Standards for Ambient Air Quality are predicted to occur at any of the modelled worst-case receptor locations in any of the future assessment scenarios, along the Mill Road</p>



Section	Summary	Comment
	<p>(c) easy access to public transport is available so that people have an alternative to private vehicles</p> <p>(d) access to and the layout and design of the land use or activity facilitates walking or cycling as a practicable alternative to the use of private motor vehicles for trips to/from the activity.</p> <p>10. Avoid or minimise adverse effects from motor vehicle emissions on activities sensitive to air discharges by separating these activities from significant motor vehicle emission sources.</p>	<p>upgrade corridor, based on the air quality assessment methodology and assumptions.</p> <p>The PM_{2.5} 24-hour mean Auckland Regional Air Quality Target (25 µg/m³) is predicted to be exceeded at all modelled worst-case receptors and in all assessment scenarios, however this is due to the default urban background concentration used in the assessment (29.8 µg/m³). All other Regional Air Quality Targets are predicted to be met in all scenarios and at all identified worst-case receptors.</p> <p>As the predicted impacts at all identified worst case receptors and for all modelled pollutants are considered to be less than minor, no mitigation measures are suggested in the air quality assessment in relation to the operation of the Mill Road upgrade.</p>
<p>Auckland Wide Objectives and Policies: 5.2 Earthworks</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Earthworks are undertaken in a manner that protects people and the environment. 2. The risk of natural hazards is not increased by earthworks. 3. Sediment generation from earthworks is minimised. <p>Policies</p> <ol style="list-style-type: none"> 1. Avoid, remedy or mitigate the adverse effects on the values or sites included in the Natural Heritage and Natural Resource overlays in the Unitary Plan. 2. Manage earthworks to: <ol style="list-style-type: none"> (a) retain soil and sediment on the land, and not discharge it to water bodies and coastal water by use of best sediment and erosion control practices (b) limit the amount of land being disturbed at any one time, particularly where the soil type, topography and location is likely to result in increased sediment runoff or discharge 	<p>Best practice methodologies will be employed when undertaking earthworks. Earthworks resource consent applications will also be required under the Auckland Council: Erosion and Sediment Control Plan and the PAUP. Earthworks methodologies and appropriate sediment control measures will be examined in detail as part of this process.</p> <p>Iwi have been consulted extensively as part of preparing the NoR applications. Iwi will continue to be consulted as part of all phases of the project.</p>

Section	Summary	Comment
	<ul style="list-style-type: none"> (c) not create or exacerbate the risk of natural hazards (d) avoid, remedy or mitigate noise, vibration, odour and other amenity effects, traffic and human health effects (e) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering (f) minimise the loss of sediment during rain events and its subsequent discharge into surface water bodies and coastal water (g) require the use of best industry practices and standards for onsite sediment treatment or removal (h) methods relative to the nature and scale of the activity to reduce the amount of sediment discharge. <p>4. Manage the impact on Mana Whenua cultural heritage that are discovered during development or land use by:</p> <ul style="list-style-type: none"> (a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori (c) undertaking appropriate measures to avoid adverse effects. Where adverse effects cannot be avoided, effects are remedied or mitigated. <p>Discharge Policies</p> <p>5. Require any proposal to discharge sediment laden water to a surface water body or to coastal water from the undertaking of earthworks for which resource consent is required, to demonstrate that:</p> <ul style="list-style-type: none"> (a) where the MCI in the receiving river or stream currently meets or exceeds the relevant guideline in Aucklandwide Water quality and integrated management, Table 1: MCI guidelines for Auckland, (b) the sediment discharge will not result in a longterm deterioration of the MCI where the MCI in the receiving river or stream currently does not meet the relevant guideline in Auckland wide Water quality and integrated management, Table 1: MCI guidelines for Auckland, 	



Section	Summary	Comment
	<p>(c) the sediment discharge has been minimised to the fullest extent that is reasonably practicable the receiving environment is able to assimilate the discharged sediment after reasonable mixing, with any significant adverse effects being avoided, and other effects remedied or mitigated, particularly within areas identified in the Unitary Plan as being sensitive because of their ecological values, including terrestrial, freshwater and coastal ecological values</p> <p>(d) any significant adverse effects on the present use of the receiving waters after reasonable mixing have been avoided, and other effects remedied or mitigated, particularly in areas where there is:</p> <ul style="list-style-type: none"> i high recreational use ii relevant initiatives by Mana Whenua, established under regulations relating to the conservation or management of fisheries, including taiāpure, rāhui or whakatupu areas iii the collection of fish and shellfish for consumption iv areas of maintenance dredging. 	
Auckland Wide Objectives and Policies: 5.3 Vegetation management	<p>Objective</p> <ol style="list-style-type: none"> The ecosystem services and indigenous biological diversity values of vegetation in sensitive environments and areas of contiguous native vegetation cover are recognised and maintained while providing for reasonable use and development. <p>Policies</p> <ol style="list-style-type: none"> Protect vegetation in sensitive environments including the coast, riparian margins, wetlands and areas prone to natural hazards. Protect areas of contiguous native vegetation cover including extensive areas on land which may be subject to instability and erosion in rural environments. Provide for activities which enhance the ecological integrity and functioning of areas of vegetation including the management and control of plant pests and unwanted organisms. Provide for the operation and routine maintenance of existing activities within areas of existing vegetation. Avoid, remedy or mitigate the adverse effects of vegetation removal on indigenous biological 	<p>The road corridor passes through and in close proximity to four areas of indigenous forest and scrub (Murphy's Bush and three native bush areas to the east of the current Mill Road alignment). Murphy's Bush is one of the largest remnants of indigenous forest remaining in the north of the Manukau Ecological District and is regarded as the best remaining example of dense Kahikatea forest in Auckland. A forest area east of the current Mill Road alignment and which the revised corridor alignment will pass through is notated as a Significant Ecological Area (SEA) in the PAUP. This SEA will be bridged rather than filled. The bridge has been shifted by 13m east from its originally proposed position to avoid a stand of mature native trees.</p> <p>Appropriate mitigation planting will be undertaken to compensate for native and exotic bush that is lost as a result of construction of the road corridor.</p>

Section	Summary	Comment
	<p>diversity and ecosystem services including soil conservation, water quality and quantity management, and the avoidance and mitigation of natural hazards.</p> <p>6. Minimise vegetation disturbance from activities, works, accessways and building platforms by assessing alternative locations and methods for the proposed works.</p> <p>7. Recognise and provide for the management and control of kauri dieback as a means of maintaining indigenous biodiversity.</p>	<p>The proposal will also bridge over two forest areas (in gullies) one of which is a SEA east of the current Mill Road alignment. This will reduce the volume of well-established native bush that will need to be removed. Careful construction methodologies will ensure that as much bush is retained as possible.</p>
<p>Auckland Wide Objectives and Policies: 5.6 Contaminated land</p>	<p>Objective</p> <p>1. Land containing elevated levels of contaminants is managed to protect human health and the environment and to enable this land to be used for suitable activities now and in the future.</p> <p>Policies</p> <p>1. Identify land containing elevated levels of contaminants by:</p> <ul style="list-style-type: none"> (a) requiring a site investigation of land being redeveloped or subdivided, having regard to the potential for contamination from past activities (b) recording the details of actual or potentially contaminated land in a public register. <p>2. Require any proposal to use or develop land containing elevated levels of contaminants to remedy or manage the contaminated land to a level that:</p> <ul style="list-style-type: none"> (a) protects human health to a level appropriate for the proposed land use (b) protects the environment to a level appropriate for existing and proposed land uses (c) allows contaminants to remain in the ground/groundwater, where it can be demonstrated that the level of residual contamination will not pose a significant adverse effect on human health or the environment (d) avoids adverse effects on potable water supplies (e) avoids, remedies or mitigates significant adverse effects from contaminated discharges to air, land and water on ecological values, water quality and amenity values. <p>3. Decisions on the use, development, management or remediation of land containing elevated</p>	<p>The contamination assessment undertaken by AECOM identifies potential for contaminated soil from past activities conducted along the road corridor. Identified potential adverse effects relate to human or environmental exposure to contaminants. However provided that the proper controls are put in place and implemented, the assessment considers that adverse effects are readily mitigated. The mitigation options proposed under the Contamination DWP include implementation of dust and erosion control plans, stormwater management plans, and health and safety plans. Site investigation as part of future detailed design will also assist in further minimising these risks.</p> <p>On-site monitoring will be required of soil, surface water and groundwater quality during construction to ensure that waste is properly classified to also minimise risk to site workers, the public and the environment</p>



Section	Summary	Comment
	<p>levels of contaminants must in addition to the matters in Policy 2 above, take into account the following:</p> <ul style="list-style-type: none"> (a) the physical constraints of the site and operational practicalities (b) the financial implications of the investigation, remediation, management and monitoring options (c) the requirement of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 (d) the provision of a detailed site investigation (contaminated land), remedial action plan (contaminated land), site validation report (contaminated land) and site management plan (contaminated land) that quantifies the adverse effects and the methods to avoid, remedy or mitigate these effects and to undertake monitoring of the site (f) the use of best practice contaminated land management for the identification, monitoring and remediation procedures (g) adequate measures are in place for the transport, disposal and tracking of soil and other material removed from the site to prevent adverse effects on the environment. <p>4. When considering Policies 2 and 3 above, the council will have regard to the following documents, where they are relevant to the type of land contamination:</p> <ul style="list-style-type: none"> (a) current edition of the Petroleum Guidelines October 2011 (b) current edition of the Contaminated Land Management Guidelines, No 1, 2 and 5 October 2011. 	
Auckland Wide Objectives and Policies: 5.12 Natural hazards	<p>Objectives</p> <ol style="list-style-type: none"> 1. Development on land subject to natural hazards only occurs where the risks to people, property and the environment are well managed. 2. Natural features and buffers are used in preference to hard engineering solutions where management of natural hazards is required. 3. Subdivision and development does not exacerbate the risks from natural hazard or its effects. 4. The risk of bushfire to life and property in existing developments is able to be managed and 	<p>Geotechnical studies have been undertaken to ensure that the corridor is located and constructed in a manner that reduces the likelihood of slips.</p> <p>Batters will be planted and steeper slopes retained to reduce the likelihood of future slips.</p> <p>The corridor will be located above the 1 per cent AEP coastal inundation plus 2m sea level rise area.</p>



Section	Summary	Comment
	<p>new subdivision and development is designed and located to avoid bushfire risk.</p> <p>5. The process of permanent coastal inundation from sea level rise and temporary inundation from storm tide events are managed to minimise risk to people, buildings and infrastructure.</p> <p>Policies</p> <p>Natural hazard risk management</p> <p>1. Classify land that may be subject to natural hazards as being:</p> <ul style="list-style-type: none"> (a) within a horizontal distance of 20m from the top of any cliff with a slope angle steeper than 1 in 3 (18 degrees) (b) on any slope with an angle greater than or equal to 1 in 2 (26 degrees) (c) at an elevation less than 3m above MHWS if the activity is within 20m of MHWS (d) any natural hazard area identified in the councils' natural hazard register, database, GIS viewer or commissioned natural hazard study. <p>2. Manage subdivision and development on land that may be subject to natural hazards by requiring an engineering assessment to confirm whether the land is or will be subject to erosion, inundation or instability over the next 100 years.</p> <p>3. Allow subdivision and development of land that is subject to natural hazards only where the proposed activity does not:</p> <ul style="list-style-type: none"> (a) accelerate or exacerbate the natural hazard and/or its potential impacts (b) expose vulnerable activities to the adverse effects of natural hazards (c) create a risk to human life (d) involve the use and storage of hazardous substances in commercial quantities (e) increase risk to neighbouring properties. <p>4. Consider, as part of a risk assessment of proposals to subdivide and develop land that is subject to natural hazards:</p> <ul style="list-style-type: none"> (a) the type, frequency and scale of the natural hazard and whether adverse effects on the development will be temporary or permanent. (b) the type of activity being undertaken and its vulnerability to natural hazard events 	

Section	Summary	Comment
	<ul style="list-style-type: none"> (c) the consequences of a natural hazard event in relation to more or less vulnerable activities (d) the possible effects on public safety and other property (e) any exacerbation of an existing natural hazard or creation of a new natural hazard (f) any adverse effects on landscape values (g) any adverse effects on public access (h) whether any building, structure or activity located on land subject to natural hazards near the coast can be relocated in the event of severe coastal erosion or shoreline retreat (i) the ability to use non structural solutions, such as planting or the retention of natural landform buffers to avoid, remedy or mitigate the hazard, rather than hard engineering solutions (j) the design and construction of buildings and structures to mitigate the effects of natural hazards, such as raising habitable floor levels (k) site layout and management to avoid the adverse effects of natural hazards, including access and exit during a natural hazard event. <p>6. Avoid hard engineering solutions in ONCs, HNCs and SEAs. Where it is appropriate for hard engineering solutions to be located in coastal areas, structures must be located as far landward as possible to retain as much natural beach buffer as possible.</p> <p>Coastal inundation and sea level rise</p> <p>16. Allow for the construction of new infrastructure in the 1 per cent AEP coastal inundation plus 2m sea level rise area only where:</p> <ul style="list-style-type: none"> (a) it is functionally required or cannot practically be located elsewhere (b) the infrastructure does not increase inundation risk, and (c) the infrastructure is designed to withstand 1 per cent AEP coastal inundation events. 	
<p>Auckland Wide</p>	<p>Objectives</p> <p>1. New development vulnerable to the adverse effects of flooding does not occur in areas at</p>	<p>The proposed road corridor sits above the 1 percent AEP floodplain. The corridor is therefore not vulnerable</p>



Section	Summary	Comment
<p>Objectives and Policies: 5.13 Flooding</p>	<p>risk of flooding.</p> <p>2. Development or redevelopment necessary in existing flood prone areas is designed and managed to prevent any increase in flood related risks.</p> <p>Policies</p> <p>Infrastructure</p> <p>15. Allow for the construction of new infrastructure in the 1 per cent AEP floodplain only where it is functionally required to locate in floodplains or cannot practically be located elsewhere, it does not increase flood risk to people, property and the environment, and it is designed to withstand flood damage.</p> <p>16. Locate, design and manage significant infrastructure, that are lifeline utilities that must function during a flood event, so continued operation is not disrupted by up to a 0.5 per cent AEP flood event.</p> <p>17. Enable the construction and maintenance of flood mitigation works to reduce flood risk to people, property, infrastructure and the environment, including stream bank and watercourse enhancement works.</p> <p>18. Require the maintenance, alteration, replacement and extension of existing infrastructure in floodplains to not increase existing flood risk and to reduce existing flood risk where possible.</p> <p>Overland flow paths</p> <p>19. Identify overland flow paths during subdivision, development and redevelopment that can accommodate stormwater flows from 1 per cent AEP storm events.</p> <p>20. Require overland flow paths to remain unobstructed by development and able to convey storm water runoff safely into the reticulated stormwater network, waterways or to the CMA.</p> <p>21. Require changes to overland flow paths to retain their capacity to pass stormwater flows safely without causing damage to property or the environment.</p> <p>22. Avoid building over, and the piping of, overland flow paths. Where piping is unavoidable, such as from placement of infrastructure, ensure an alternative overland flow path with capacity to carry 1 per cent AEP flows is provided to accommodate flows in excess of the capacity of the piped overland flow or reductions in capacity due to blockages or failure of the main flow path.</p>	<p>to the risk of flooding.</p> <p>The proposal will obstruct overland flowpaths. Overland flow paths will be changed but retain their capacity to pass stormwater flows safely without causing damage to property or the environment.</p> <p>Piping of some overland flow paths will be unavoidable. In this instance pipes will be suitably sized taking in to consideration possible blockages and failure of the main flow path.</p>

Section	Summary	Comment
<p>Auckland Wide Objectives and Policies: 5.14 Lakes, rivers, streams and wetland management</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Auckland's lakes, rivers, streams and wetlands with high natural values are protected from degradation and permanent loss. 2. Auckland's lakes, rivers, streams and wetlands are restored, maintained and enhanced. 3. Adverse effects on lakes, rivers, streams or wetlands that cannot be avoided, remedied or mitigated are offset in exceptional circumstances, where this will better promote the purpose of the RMA. 4. Structures in, on, under or over the bed of a lake, river, stream and wetland occur where there is a need for the structure to be in that location as opposed to on the land or it is necessary to provide access across a river or stream. 5. Activities in, on, under or over the bed of a lake, river, stream and wetland are managed to minimise adverse effects on the lake, river, stream or wetland. 6. Reclamation and drainage of the bed of a lake, river, stream and wetland is avoided. <p>Policies</p> <p>General</p> <ol style="list-style-type: none"> 1. Avoid any adverse effects of activities on lakes, rivers, streams or wetlands within the following overlays: <ul style="list-style-type: none"> - Natural Stream Management Areas - Natural Lake Management Areas - Urban Lake Management Areas - SEAs - Wetland Management Areas. 2. Manage the effects of activities on lakes, rivers, streams or wetlands outside Natural Stream Management Areas, Natural Lake Management Areas, Urban Lake Management areas, Significant Ecological Areas (SEAs) and Wetland Management Areas by: <ol style="list-style-type: none"> (a) avoiding where practicable or otherwise remedying or mitigating any adverse effects on lakes, rivers, streams or wetlands (b) where appropriate, restoring and enhancing the lake, river, stream or wetland. 3. Offset any residual or unavoidable adverse effects that are more than minor on lakes, rivers, 	<p>The road corridor is drained by headwater streams within two main catchments being the Totara Creek (which drains into Puhinui Creek) and Papakura Creek. A headwater stream which forms part of the Otara Creek catchment is located at the northern extent of Murphy's Bush. It is noted that the western end of the alignment sits within a High Use Stream Management Area under the Proposed Unitary Plan. The alignment also passes through a Significant Ecological Area just south of the current Redoubt Road/Mill Road intersection.</p> <p>Nine indigenous freshwater species and one freshwater crustacean (koura) are known to occupy the catchments through which the alignment passes. Two streams on the Mill Road section of the alignment will be bridged with bridge piers located outside of the streams and their margins. Bridging will limit adverse impacts on these streams. The upper Totara Creek headwater streams will be replanted following construction to maintain water quality in this part of the catchment.</p> <p>An extension of a culvert is required just south of Murphys Bush. The culvert extension has been examined by the project ecologist who considers that any adverse effects are negligible.</p> <p>Appropriate stormwater treatment and construction methodologies are available and will need to be employed in proximity to all waterways. Stormwater in rural sections will be piped to wetland areas for treatment prior to disposal to pre-existing waterways. The wetlands will be planted with appropriate native species. Stormwater in the urban sections will be appropriately attenuated and treated before discharge to the pre-existing stormwater network. The proposed stormwater treatment methodology takes into consideration freshwater species in the catchment</p>



Section	Summary	Comment
	<p>streams or wetlands through restoration and enhancement actions that:</p> <ul style="list-style-type: none"> (a) are located as close as possible to the subject site or within the same catchment are 'like for like' (b) achieve no net loss and preferably a net gain in the natural values including ecological function of lakes, rivers, streams or wetlands. <p>4. Avoid adverse effects of activities on lakes, rivers, streams or wetlands on:</p> <ul style="list-style-type: none"> (a) the mauri of the freshwater environment (b) Mana Whenua values in relation to the freshwater environment. <p>5. Manage the impact on Mana Whenua cultural heritage that is identified prior to, or discovered during, development or land use by:</p> <ul style="list-style-type: none"> (a) complying with the protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated <p>Structures and the Diversion of Surface Water</p> <p>6. Allow the use, erection, reconstruction, placement, alteration, extension, removal, or demolition of any structure or part of any structure in, on, under, or over the bed of a lake, river, stream or wetland, and any associated diversion of water, where:</p> <ul style="list-style-type: none"> (a) there is no reasonable or practicable alternative method or location for undertaking the activity outside the lake, river, stream or wetland, and (b) the structure is designed to be the minimum size necessary for its purpose to minimise modification to the bed of a lake, river, stream or wetland; and (c) the structure is designed to avoid creating or increasing a hazard; and d.the structure is: <ul style="list-style-type: none"> i required as part of an activity designed to restore or enhance the natural values of any lakes, rivers, streams or wetlands and their margins, or any adjacent area of indigenous vegetation or habitat of indigenous fauna; or 	<p>including the ability for fish to navigate waterways.</p> <p>Detailed resource consent applications for earthworks (and if required works within the beds of rivers or streams), and stormwater discharge consents will be lodged as part of the Outline Plan of Works process. These applications will set out in detail how earthworks construction and stormwater will be managed so as to avoid, remedy or mitigate adverse environmental effects on water bodies.</p> <p>Iwi have been consulted extensively as part of preparing the NoR applications. Iwi will continue to be consulted as part of all phases of the project.</p>

Section	Summary	Comment
	<ul style="list-style-type: none"> ii designed to maintain and/or enhance public access to, over and along any lake, river, stream or wetland and associated margins; or iii necessary to provide access across a lake, river, stream or wetland; or iv associated with the provision or maintenance of significant infrastructure; or v necessary for flood protection and the safeguarding of public health and safety <p>(e) the structure avoids adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai.</p> <p>Disturbance and Depositing of any Substance</p> <p>7. Allow the excavation, drilling, tunnelling or other disturbance, and the depositing of any substance in, on or under the bed of a lake, river, stream or wetland, where:</p> <ul style="list-style-type: none"> (a) there is no reasonable or practicable alternative method or location for undertaking the activity outside the lake, river, stream or wetland; (b) and the activity is required: <ul style="list-style-type: none"> i as part of an activity designed to restore or enhance the natural values of any lake, river, stream or wetland, or any adjacent area of indigenous vegetation or habitat of indigenous fauna; or ii to maintain and/or enhance public access to, over and along any lake, river, stream or wetland and associated margins; or iii to provide for or maintain significant infrastructure; or iv to restore, maintain or improve access to wharves and jetties or mooring areas, or to maintain the navigation and safety of existing channels; or v to reduce the risk of occurrence or the potential adverse effects of flooding, erosion, scour or sediment depositing. (b) the disturbance avoids adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai. <p>Planting of Plants</p> <p>7. Allow planting of any plant in, on, or under the bed of a lake, river, stream or wetland where it is suitable for habitat establishment, restoration or enhancement, the maintenance and</p>	



Section	Summary	Comment
	<p>enhancement of amenity values, flood or erosion protection or stormwater runoff control provided it does not create or exacerbate flooding.</p> <p>9. Encourage the incorporation of Mana Whenua mātauranga, values and tikanga in any planting in, on, or under the bed of a lake, river, stream or wetland.</p> <p>Riparian margins</p> <p>10. Protect and enhance riparian margins of lakes, rivers, streams, and wetlands to:</p> <ul style="list-style-type: none"> (a) support habitats for fish, plant and other aquatic species, particularly in rivers and streams with high ecological values (b) maintain and enhance aesthetic, landscape and natural character values of lakes, rivers and streams, and wetlands (c) maintain and enhance the contribution of natural freshwater systems to the biodiversity, resilience and integrity of ecosystems (d) avoid or mitigate the effects of flooding, surface erosion, stormwater contamination, bank erosion and increased surface water temperature. 	
<p>Auckland Wide Objectives and Policies:5.15.1 Water quality and integrated management</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Areas of high freshwater quality, ecosystem health, and areas of significant Mana Whenua values are protected from degradation. 2. Areas of degraded water quality and ecosystem health are protected from further degradation and they are enhanced where practicable. 3. The water quality, life supporting capacity and ecosystems of the CMA are protected from further degradation and enhanced where practicable. 4. Development is undertaken in a way that minimises adverse effects on freshwater and coastal marine ecosystems. 5. The mauri of freshwater and the relationship of Mana Whenua with freshwater is recognised and provided for. 6. Mana Whenua values, mātauranga and tikanga are reflected and given sufficient weight in water quality management processes and decisionmaking. 	<p>The proposed corridor does not pass through areas of high fresh water quality. However the corridor does pass through catchments in which it is desirable to enhance water quality or protect it from further degradation. The streams have been assessed in terms of their health by an ecologist.</p> <p>Appropriate stormwater treatment and construction methodologies will be employed in proximity to all waterways. Stormwater in rural sections will be either piped or conveyed via swales to wetland areas for treatment prior to disposal to pre-existing waterways. The wetlands will be planted with appropriate native species. Stormwater in the urban sections will be appropriately attenuated and treated before discharge to the pre-existing stormwater network. The proposed stormwater treatment methodology takes into</p>



Section	Summary	Comment
	<p>Surface water quality and ecosystem health interim guidelines</p> <ol style="list-style-type: none"> 1. Manage the cumulative effects of land use and development and control the discharge of water and contaminants to land and freshwater systems by using the Macroinvertebrate Community Index (MCI) as a measure of freshwater ecosystem health associated with different land uses within catchments. 2. Manage discharges, land use and development and activities that may affect freshwater systems to, as far as practicable: <ol style="list-style-type: none"> (a) maintain water quality, flows, stream channels and their margins and other freshwater values, where the MCI currently meets or exceeds the relevant guideline in Table 1: MCI guideline for Auckland rivers and streams; (b) restore or enhance water quality, flows, stream channels and their margins and other freshwater values where the MCI guideline in Table 1: MCI guideline for Auckland rivers and streams are not currently met; (c) retain, and where practicable enhance, existing freshwater values where there is a change to an urban land use. 3. Require freshwater values to be enhanced unless existing intensive land use and development and irreversible modification of stream channels practicably precludes enhancement occurring. <p>Integrated management</p> <ol style="list-style-type: none"> 6. Manage use, development and subdivision of land to: <ol style="list-style-type: none"> (a) protect freshwater systems and coastal waters with high ecological and cultural values from adverse effects as far as practicable (b) minimise new adverse effects on freshwater systems and coastal waters, and reduce existing adverse effects where practicable, having regard to the MCI guidelines in Table 1 and other indicators of water quality and ecosystem health. 7. Integrate land development and water management by: <ol style="list-style-type: none"> (a) planning for water infrastructure in areas of new growth or intensification as part of stormwater and wastewater network resource consents 	<p>consideration freshwater species in the catchment including the ability for fish to navigate waterways.</p> <p>Detailed resource consent applications for earthworks (and if required works within the beds of rivers or streams), and stormwater discharge consents will be lodged as part of the Outline Plan of Works process. These applications will set out in detail how earthworks construction and stormwater will be managed so as to avoid, remedy or mitigate adverse environmental effects on water bodies.</p> <p>Iwi have been consulted extensively as part of preparing the NoR applications. Iwi will continue to be consulted as part of all phases of the project.</p>



Section	Summary	Comment
	<p>(b) requiring greenfield development and major redevelopment to be supported by comprehensive and integrated land use and water management planning processes</p> <p>(c) aligning all phases of development, from earthworks to final construction, to give effect to Policy 9(b) below.</p> <p>8. Control land use activities, in conjunction with the management of discharges, to prevent or minimise adverse effects and achieve the objectives for freshwater systems and coastal waters.</p> <p>Stormwater management</p> <p>9. Avoid significant adverse effects and remedy or mitigate other adverse effects of stormwater runoff in greenfield areas on freshwater systems and coastal water by:</p> <ul style="list-style-type: none"> (a) the adoption of water sensitive design as a core development approach; (b) onsite management and the use of communal devices or facilities to reduce Stormwater contaminants, volumes and peak flows and minimise adverse effects, focussing in particular on: <ul style="list-style-type: none"> i activities that have the potential to generate high contaminant concentrations and loads ii managing stormwater runoff to achieve hydrological mitigation equivalent to that required in a Stormwater Management Area Flow 1 in areas discharging to rivers and streams; iii minimising the temperature effects of stormwater discharges on rivers and streams where practicable; iv providing for the management of gross stormwater pollutants, such as litter, in areas where the generation of these may be an issue; (c) the provision of public stormwater infrastructure that meets the council's requirements. (d) the use of green infrastructure for stormwater management where practicable <p>10 Minimise new, and reduce the existing, adverse effects of stormwater runoff on communities, freshwater systems and coastal waters from new development, intensification and redevelopment by:</p>	

Section	Summary	Comment
	<ul style="list-style-type: none"> (a) requiring measures to be adopted to reduce contaminant loads, with a focus on activities that have the potential to generate high contaminant concentrations and loads (b) implementing measures to reduce the discharge of gross stormwater pollutants, such as litter, in areas where the generation of these may be an issue (c) requiring measures to be adopted to reduce the peak flow rate and volume of stormwater flows: <ul style="list-style-type: none"> i within a Stormwater Management Area Flow; ii where development exceeds impervious thresholds for the relevant zone; iii from areas of impervious surface where discharges may give rise to flooding or adversely affect rivers and streams. (d) adopting water sensitive design principles and encouraging the restoration of freshwater systems and overland flow paths where practicable (e) ensuring intensification is supported by appropriate stormwater infrastructure (including natural assets such as overland flow paths, floodplains and streams). (f) adopting the best practicable option for preventing or minimising the adverse effects of Stormwater discharges from significant infrastructure including road, rail and the public stormwater network having regard to: <ul style="list-style-type: none"> i the Best Practicable Option (BPO) criteria as set out in s. 2 of the RMA ii integrated land and water management policies in 6 to 8 above iii the reasonable timeframes over which adverse effects can be prevented or minimised iv the scale and significance of the adverse effects v infrastructure investment priorities and the consequence of delaying infrastructural improvements in other areas vi the ability to prevent or minimise existing adverse effects having regard to the effectiveness and timeframes of other feasible methods, including land use controls vii opportunities to integrate with other major infrastructural projects or works 	

Section	Summary	Comment
	<p>including renewal and maintenance</p> <ul style="list-style-type: none"> viii the need to maintain and optimise existing public stormwater networks and provide for planned land use and development ix the operational requirements and space limitations of significant infrastructure. <p>11. In determining the extent to which adverse effects of stormwater diversions and discharges are prevented or mitigated, particular regard shall be had to:</p> <ul style="list-style-type: none"> (a) the nature, quality, volume and peak flow of the stormwater runoff (b) the sensitivity of freshwater systems and coastal waters, including the Hauraki Gulf Marine Park, to the adverse effects of stormwater contaminants and flows (c) the potential for the diversion and discharge to create or exacerbate flood risks; (d) options to manage stormwater onsite or the use of communal stormwater management measures (e) practical limitations in respect of the measures that can be applied. <p>12. Ensure the concentration of contaminants in stormwater runoff from new or redeveloped high Contaminant generating activities are managed to levels established to reduce existing and prevent or minimise new adverse effects on water and sediment quality in freshwater systems and coastal waters.</p> <p>13. Require stormwater quality controls to be applied to high contaminant generating activities at the time of their construction, initiation on an existing developed site, or site redevelopment.</p> <p>14. Manage activity areas on industrial sites to prevent or minimise contaminated discharges to the stormwater system, freshwater systems or coastal waters in accordance with the ITA provisions in the Unitary Plan.</p> <p>15. Require any necessary stormwater quality or flow management to be achieved onsite unless there is a downstream communal device or facility designed to cater for the site's stormwater runoff that will achieve the same or better level of stormwater management performance.</p> <p>16. Require land use and development to not exceed impervious area thresholds or, where this is not practicable, to mitigate stormwater hydrology to ensure the adequate functioning and performance of the stormwater network, contribute to retaining and enhancing stream health</p>	



Section	Summary	Comment
	<p>and values and not increase existing flood risk.</p> <p>Ground Soakage</p> <p>17. Utilise stormwater discharge to ground soakage in areas underlain by shallow or highly permeable aquifers provided that:</p> <ul style="list-style-type: none"> (a) ground soakage is available (b) any risk to people and property from land instability or flooding is avoided (c) stormwater quality treatment is implemented to minimise effects on the capacity and water quality of the underlying aquifer system. (d) discharge to ground soakage is the most effective and sustainable option. <p>18. Require land use and development and drainage systems within areas underlain by peat soils to provide for stormwater discharge to ground soakage that maintains underlying aquifer water levels and the geotechnical stability of the peat soils.</p>	
<p>Auckland Wide Objectives and Policies:7.2 Lighting</p>	<p>Objectives</p> <ul style="list-style-type: none"> 1. Appropriate levels of artificial lighting are allowed for night time working, recreation and entertainment activities, and security and safety. 2. Adverse effects of artificial lighting on the environment, amenity of surrounding areas, and the safety of road users are minimised. <p>Policies</p> <ul style="list-style-type: none"> 1. Recognise and provide for the necessity of artificial lighting for outdoor activities and security and safety. 2. Control the intensity, location and direction of artificial lighting to avoid significant glare and light spill onto adjacent sites, maintain safety for road users and minimise the loss of night sky viewing. 	<p>Appropriate lighting will be employed along the corridor to assist with safety and security for pedestrians and cyclists. Lighting in rural sections will comply with rural road lighting standards to reduce light spill onto adjacent sights and minimise the loss of night sky viewing.</p>
<p>Auckland Wide Objectives and Policies:</p>	<p>Objectives</p> <ul style="list-style-type: none"> 1. People are protected from unreasonable or unnecessary levels of noise. 2. Activities sensitive to noise are protected from the effects of high levels of noise, and other 	<p>A noise and vibration assessment addressing both construction and operational noise has been prepared by AECOM. The assessment recommends preparation of a Construction Noise and Vibration DWP. An</p>



Section	Summary	Comment
7.3 Noise and vibration	<p>activities within the same or adjacent zones.</p> <ol style="list-style-type: none"> 3. The amenity of residential areas is protected from unreasonable or unnecessary noise, particularly at night. 4. The strategic importance of transportation routes and significant infrastructure is recognised and protected from the potential reverse sensitivity effects of activities sensitive to noise. 5. Different levels of noise and vibration are experienced in different zones, with lower levels in predominantly residential areas and higher levels in predominantly business areas. 6. In each zone the noise and vibration allowed is compatible with the activities provided for. 7. Activities sensitive to noise are protected from unreasonable or unnecessary noise and vibration from the use and development of neighbouring lakes, rivers and the CMA. 8. The amenity of dwellings in rural areas is protected from unreasonable or unnecessary noise, recognising that farming and other activities may create high levels of noise. 9. Temporary activities that cannot meet the permitted activity noise controls are allowed to occur for short periods, while limiting adverse effects on any activities sensitive to noise on adjacent sites. <p>Policies</p> <ol style="list-style-type: none"> 1. Set noise standards to reflect the zone's function and permitted activities, recognising the potential adverse effects noise generation may have on more sensitive adjacent zones. 2. Minimise, where practical, noise at its source to mitigate adverse effects on adjacent sites. 3. Locate activities in zones where the noise generated is compatible with other activities and, where possible, adjacent zones. 4. Prevent significant noise generating activities from establishing in residential zones. 5. Prevent activities sensitive to noise from establishing in commercial and industrial zones. 6. Require activities sensitive to noise to be located and/or designed to mitigate or avoid any reverse sensitivity noise effects on airfields, high use roads, regionally significant quarries and rail lines. 7. Limit the level of noise and vibration from quarrying, construction, maintenance and 	<p>appropriate condition has been included in the proposed designation conditions requiring this to be prepared. The objective of the Construction Noise and Vibration DWP is to provide a framework for the development and implementation of identified best practicable option to avoid, remedy or mitigate the adverse effects of noise and vibration resulting from construction.</p> <p>The assessment notes that there are a number of options available for mitigating operational noise including such measures as specialised roading surfaces which reduce vehicle noise, double glazing of dwelling windows or a combination of both.</p> <p>The assessment notes that operational vibration effects will be negligible given the new smooth road surface.</p>



Section	Summary	Comment
	<p>demolition activities to protect activities sensitive to noise on adjacent sites from unreasonable or unnecessary levels of noise and vibration.</p> <p>Temporary activities</p> <p>10. Control the adverse effect of noise and vibration from construction and demolition activities, recognising the sensitivity of the receiving environment.</p>	
<p>Zone Objectives and Policies: Residential zones</p>	<p>Objectives</p> <p>1. Auckland's residential areas are attractive environments with quality development that positively responds to and enhances the street, public open space and neighbourhood and contributes to safety and a positive sense of place.</p> <p>3. Non-residential activities that locate in residential areas contribute to and support the amenity of the neighbourhood and provide opportunities for social, economic and cultural wellbeing.</p> <p>Policies</p> <p>1. Require developments to contribute positively to the visual quality and safety of streets, public open spaces and neighbourhoods.</p> <p>2. Recognise that the density of Auckland's residential areas will increase, to varying degrees, over time and apply controls to manage that change.</p>	<p>The proposed corridor upgrade will maintain the amenity values of the residential zoned land through which it traverses. Designation conditions require the preparation of an urban design delivery work plan inclusive of a landscape design philosophy statement which has the objective of enabling the integration of the Mill Road corridor into the surrounding landscape and urban design context.</p> <p>Construction effects will be mitigated via appropriate measures to ensure that amenity values are maintained during the construction phase of the project.</p> <p>A number of mitigation measures are available to manage operational noise including measure such as special asphalt surfaces and double glazing of dwelling windows.</p> <p>The new smooth road surface will ensure that operational vibration effects are minimal.</p> <p>The increase of residential densities within the sphere of influence of the Mill Road corridor has been taken into consideration as part of traffic modelling and preparation of the integrated transportation assessment.</p>
<p>Zone Objectives and Policies: Informal Recreation</p>	<p>Objectives</p> <p>1. Informal recreation and small scale community uses are catered for through a network of quality public open spaces.</p> <p>2. The open and spacious appearance of public open space is protected to maintain the amenity values, character and any historic and natural values of the public open space and</p>	<p>As a result of realigning the corridor, land will be acquired along the northern edge of Totara Park.</p> <p>Totara Park is a significant public open space on Redoubt Road, which includes bridle trails, mountain bike trails and an equestrian centre.</p>

Section	Summary	Comment
<p>zone</p>	<p>surrounding area.</p> <p>Policies</p> <ol style="list-style-type: none"> 1. Provide for a variety of informal recreation activities in the zone including small scale community uses and accessory activities. 2. Enhance the natural character of public open spaces by retaining significant exotic vegetation and native trees (where appropriate and practical) and undertaking weed removal, new planting and landscaping. 3. Require the development of public open space, including new buildings and structures located near scheduled sites or places of significance to Mana Whenua to demonstrate through design, Mātauranga Māori, tikanga, and Mana Whenua values and the relationship of Mana Whenua to ancestral lands, water, coastal sites, wāhi tapu and other taonga. 4. Minimise buildings and structures to those where there is a demonstrated need to enhance the ability for people to use and enjoy the public open space for informal recreation. 5. Require the location, scale and design of buildings and structures to complement the open and spacious character and function of the public open space, enable opportunities for passive surveillance, enhance amenity values, protect any natural or historic heritage values and be compatible with development in the surrounding area. 6. Use, where appropriate, the street network and internal roads for parking associated with the use of the public open space. 7. Provide adequate vehicle access and parking to meet the needs of users in a way that maintains the character of the public open space and encourages cycling and the use of public transport. 	<p>The corridor will be designed in a manner that provides a more attractive interface with the park. Access arrangements to the park will also be improved via the provision of an improved car park entrance and a re-aligned entrance into the Totara Park horse riding facility.</p> <p>Improved pedestrian and cyclist connectivity will be achieved to the park via new footpaths, a dedicated cycleway, shared path facilities and via controlled signalised pedestrian crossings at Hollyford and Murphy’s Road.</p> <p>The proposed stormwater detention treatment wetlands will also add amenity value as they tend to attract birdlife and will be attractively landscaped with appropriate native plantings. Landscape plantings will be managed under the Urban Design and Landscape DWP required by the proposed designation condition.</p> <p>It is proposed to plant the upper catchments within the park with appropriate native species. The proposed stormwater wetlands will also be planted with appropriate native species. Overall the proposed landscape plantings are not of a scale that will detract from the overall open space “farm park” feel of Totara Park.</p>
<p>Zone Objectives and Policies: Future Urban zone</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Rural activities and the functioning of the rural community continue until the land is rezoned to an urban zone. 2. Future urban development is not compromised by premature subdivision, use and development. 3. Structure planning determines future urban development form and timing. 	<p>The future growth anticipated within the Future Urban zones along the corridor have been accounted for in traffic modelling for the corridor and in the Integrated Transportation Assessment. The growth predictions have also been taken into consideration as part of the preliminary design of the corridor.</p>



Section	Summary	Comment
	<p>Policies</p> <ol style="list-style-type: none"> 1. Require a structure plan in accordance with the objectives and policies of the RPS Development capacity and supply of land for urban development section and Appendix 1.1 prior to the rezoning future urban zoned land for urban development. 2. Enable subdivision for network utilities, amendments to a cross lease and minor boundary adjustments and not for other types of subdivision. 3. Avoid activities that: <ol style="list-style-type: none"> (a) compromise the efficient and effective operation of the surrounding transport network (b) require the provision, or extension of the transport, wastewater, water supply, Stormwater networks or other infrastructure ahead of the time it is needed for urban development (c) create or extend infrastructure out of sequence or that is not contiguous with the existing network infrastructure (d) attract a high proportion of users beyond the local community (e) will give rise to reverse sensitivity issues when urban development occurs. 4. Enable activities that are reliant on the quality of the soil, require a rural location to operate or which provide for the day to day needs of the local rural community. 5. Require building development to maintain a spacious rural character, so that the natural environment is dominant to the built form. 6. Avoid additional dwellings on a site. 	
<p>Zone Objectives and Policies: Mixed Rural zone</p>	<p>Objectives</p> <ol style="list-style-type: none"> 2. Land with high productive potential for rural production is retained. 3. The rural character of the zone is maintained with good amenity values while continuing the mix of rural production, non-residential and rural lifestyle activities. 	<p>The project will remove rural zoned land from productive purposes. However in the context of enabling enhanced connectivity between the centres of Papakura, Takanini and Manukau including enhanced access to markets for goods produced in the rural areas the project has positive benefits.</p>



Section	Summary	Comment
	<p>Policies</p> <p>2. Avoid locating rural production and nonresidential activities that produce significant levels of odour, noise and traffic movement or significant discharges of contaminants to land or water that cannot be managed within the boundaries of the site in the zone.</p>	<p>The rural character of the area will be predominantly maintained recognising that structures such as bridges and retaining walls will be new manmade structures in the rural environment. Designation conditions require the preparation of an urban design delivery work plan inclusive of a landscape design philosophy statement which has the objective of enabling the integration of the Mill Road corridor into the surrounding landscape and urban design context.</p>
<p>Zone Objectives and Policies: Countryside Living zone</p>	<p>Objectives</p> <p>1. Amenity values are reflected in its primary use for rural living rather than rural production activities.</p> <p>3. The quality of the environment with respect to rural character, amenity values, water quality, ecological quality, historic heritage values and the efficient provision of infrastructure is maintained and enhanced in subdivision design and development outcomes.</p> <p>Policies</p> <p>5. Avoid or mitigate adverse effects in relation to reverse sensitivity, and the amenity values of the environment, by restricting the range of land use activities enabled in the zone.</p> <p>6. Prevent activities that will result in adverse effects such as noise, dust, traffic volumes, smell, visual effects, effects on health, safety and cultural values and significantly reduce the rural amenity values enjoyed in the zone.</p> <p>7. Acknowledge the amenity values in this zone reflect its predominant use for lifestyle living rather than for production activities.</p>	<p>The amenity values of the Countryside Living zone will mostly be maintained. As above, structures such as bridges and retaining walls and earthworks cuts and fills will be new manmade structures and elements in the environment. The effects will soften over time as landscaping and native bush plantings establish and mature. It is noted that the alignment of the corridor will also move closer to some rural residential dwellings.</p> <p>Proposed designation conditions require the preparation of an urban design delivery work plan inclusive of a landscape design philosophy statement which has the objective of enabling the integration of the Mill Road corridor into the surrounding landscape and urban design context.</p> <p>A Noise and vibration assessment has been undertaken by AECOM. The assessment notes that noise and vibration during construction will be managed via a Construction Noise and Vibration DWP. Operational noise can be managed via a range of mitigatory measures including special road surfaces and via double glazing dwelling windows. Operational vibration effects will not be an issue to due to the new smooth road surface.</p>

Section	Summary	Comment
		<p>Dust and other air quality matters will be addressed via the proposed designation conditions which require preparation of an Air Quality Delivery work plan.</p>
<p>Zone Objectives and Policies: Rural character and amenity values</p>	<p>Objective</p> <ol style="list-style-type: none"> The character and amenity values of rural areas is recognised and maintained while accommodating the localised character of different parts of these areas. <p>Policies</p> <ol style="list-style-type: none"> Enable subdivision and activities in rural areas only when the following characteristics are maintained: <ol style="list-style-type: none"> a predominance of rural working environments land in pastures, trees, crops or indigenous vegetation, and with a degree of naturalness a low density of buildings and structures land tenure with a diversity of site sizes and shapes few buildings and activities of an urban scale, nature and design, other than residential buildings, greenhouses and other approved rural production and rural commercial services a general absence of urban scale or type of infrastructure, such as roads with full kerb and channel, sealed footpaths and vehicle crossings, streetlights, bus shelters, sealed and demarcated car parking areas generally narrow roads with open drains, some unsealed, with low speed geometry and low traffic volumes, except for state highways and arterial roads the intensity of the activity, including the number of people using the site, hours of operation and number of vehicle trips generated, is compatible with the purpose of the zone in which it is located and avoids reverse sensitivity effects. 	<p>As above, The rural character of the area will be predominantly maintained via significant landscaping of batter slopes recognising however that structures such as bridges and retaining walls will be new manmade structures in the rural environment. It is noted that the Mill Road/Redoubt Road section of the corridor is a regional arterial and the Murphys Road section a District Arterial (refer policy 2.g which makes certain exceptions for arterial roads).</p> <p>Designation conditions require the preparation of an urban design delivery work plan inclusive of a landscape design philosophy statement based on the urban design statement submitted with the NoR which has the objective of enabling the integration of the Mill Road corridor into the surrounding landscape and urban design context.</p> <p>For Murphy’s Road which will transition from rural to urban over time the urban design statement proposes:</p> <ul style="list-style-type: none"> - Recognising and coordinating with the objectives being developed by Auckland Council for the extended Murphy’s Bush; - Enhancing and strengthening the ecological value of Murphy’s Road in relation to Murphy’s Bush; - Creating an appropriate entrance experience to Murphy’s Bush; - Avoiding creation of land parcels which are difficult to develop; - Carefully considering the various roadside cut and fill slopes and how these relate to adjacent



Section	Summary	Comment
		<p>pedestrian activity and land uses.</p> <p>For rural sections:</p> <ul style="list-style-type: none"> - Emphasising the rural character of the area; - Narrowing the perceived width of road corridor to slow down drivers; - Low impact engineering to suit the rural environment (such as swales); - Integrated design solutions for cut and fill slopes to reduce visual impacts and provide ecological benefits; - Consideration of softer lighting for bridge structures; - Considering CPTED analysis and recommendations; - Considering design options for the new roundabouts which reflect the local identity, heritage and rural character.
<p>Zone Objectives and Policies: Strategic Transport Corridor</p>	<p>Objectives</p> <ol style="list-style-type: none"> 1. Railway and state highway corridors are used safely, effectively and efficiently for the transportation of people and goods in an integrated manner. <p>Policies</p> <ol style="list-style-type: none"> 1. Provide for the operational requirements of transport activities and a range of appropriate transport related activities. 2. Provide for walking and cycling facilities where feasible. 4. Provide for works and measures such as noise mitigation, landscaping and artworks that enhance existing infrastructure and minimise its adverse effects on adjoining development. 	<p>There is an overlap at the western end of the corridor with the State Highway designation which extends up Redoubt Road to just past the entrance to St Johns Redoubt. This designation is zoned Strategic Transport Corridor. Consultation has been undertaken with NZTA in relation to the designation overlap. NZTA have issued a section 176 approval letter confirming that they agree to an overlap of the NZTA designation with the current proposed designation (refer Appendix X). The letter sets out the following expectations of AT:</p> <p><i>“With Redoubt Road being an important arterial we would anticipate that the traffic signals are operated as part of a coordinated system. We would expect that as the project progresses, Auckland Transport (and their nominated consultants/contractors) liaises with the Joint Traffic Operations Centre and The NZ Transport Agency to confirm that queuing does not affect the operation of</i></p>

Section	Summary	Comment
		<p><i>State Highway 1 either during or post construction.</i></p> <p><i>It is anticipated that more information will be made available to the Agency as the NORs and their associated AEE's are developed."</i></p> <p>Consultation with NZTA will be on-going through the life of the project. Information will be made available to NZTA including a copy of the documentation set following lodgement. AT propose to liaise with the Joint Traffic Operations Centre and NZTA to manage and confirm that queuing does not affect the operation of State Highway 1 either during or post construction.</p> <p>The corridor upgrade will not preclude the safe and efficient operation of the state highway. The roading layout has been designed to integrate with the through lane and on and off ramp lane configuration.</p> <p>Measures such as noise mitigation and landscaping for the corridor upgrade will most likely be undertaken within the Transport corridor zone.</p>

4.0 Other Relevant Strategic Documents

4.1 Auckland Plan (2011)

Section 79 of the Local Government (Auckland Council) Act 2009 requires Auckland Council to prepare a Spatial Plan, known as the Auckland Plan which was adopted at the end of 2011. The purpose of the Auckland Plan is to contribute to Auckland’s social, economic, environmental and cultural well-being through a 30 year vision for Auckland’s growth. It sets a strategic direction for Auckland and its communities that integrates social, economic, environmental, and cultural objectives. It also identifies the existing and future location of critical infrastructure facilities (such as transport, water supply, wastewater and stormwater disposal), other network utilities, open space, and social infrastructure.

Section	Summary	Comment
<p>Key Priorities for Transport</p>	<ol style="list-style-type: none"> 1. A single system transport network approach that manages current congestion problems and accommodates future business and population growth to: <ul style="list-style-type: none"> - Improve and complete the existing road and rail network - Encourage a shift toward public transport - Support environmental and health objectives through walking and cycling. 2. Integrate transport planning and investment with land-use investment to: <ul style="list-style-type: none"> - Incorporate the transformational shifts and land-use directives of the AP - Align transport investment and services, especially public transport and regional arterial roads, with future growth and development - Give particular emphasis to freight movement and other related business travel on international, national and Auckland-wide transport corridors. 3. Prioritise and optimise investment across transport modes to: <ul style="list-style-type: none"> - Enable several critical transport projects for Auckland to cope with population growth - Manage \$25 billion worth of assets in the transport system to get best value from existing investment. This includes maintenance programmes, traffic optimisation and safety programmes - Manage demand for transport to ease congestion and potentially alleviate the need for expensive additional capacity, through school travel plans, possible time-related pricing mechanisms, smarter parking policies and other initiatives. 	<p>The Redoubt Road- Mill Road corridor project will improve transport access in the areas of Manukau, Flat Bush, Takarua, Papakura and Drury in order to support the growth identified in the Auckland Plan.</p> <p>The corridor project will:</p> <ul style="list-style-type: none"> - Enable route protection for an important arterial corridor which supports land use development as proposed in the Auckland Plan. - Provide public transport infrastructure to improve the efficiency and effectiveness of the network and its connectivity. - By providing improved public transport, walking and cycleway facilities this will lead to a reduction in reliance on private motor vehicles with associated savings in fossil fuels and positive health benefits. - The project supports the “one network” approach with positive benefits for SH1 travel times and congestion. <p>The Redoubt Road-Mill Road corridor is included in Map 13.2 of the Auckland Spatial Plan (Auckland’s Priority Projects (2012-2042)) as a priority network improvement.</p>



Section	Summary	Comment
Chapter 4” Auckland’s Historic Heritage	Priorities: <ol style="list-style-type: none"> 1. Understand, value and share our heritage 2. Invest in our heritage 3. Empower collective stewardship of our heritage 	<p>The project will not adversely impact on listed heritage items. Appropriate procedures for the discovery, including accidental discovery of archaeological remains are included in the proposed designation conditions.</p>
Chapter 13: Auckland’s Transport – Key Principles	<p>Manage Auckland’s transport system as a single system - Key Principles (Box 13.1) Use a single system approach in the planning, design, management and development of our transport system (motorways, state highways, arterial and local roads, freight, rail, bus and ferry services, walking and cycling, ports and airports).</p> <ul style="list-style-type: none"> - Use travel demand management techniques, such as travel plans for schools and businesses, to manage the growth in demand for private vehicle travel and improve the way existing infrastructure networks operate, before providing additional capacity to the transport system. - Achieve the appropriate balance between movement and place, considering capacity (incorporating the safe movement of people and goods), and character (recognising the role of road/street in the urban setting and types of buildings/landscape present or planned), and acknowledging the role of transport to assist in place-shaping (see paragraph 751 of this chapter and the design principles in Chapter 10: Urban Auckland). - Ensure that long-term land use and activities drive long-term transport functionality, (taking into account the existing and proposed transport network), and that transport investment aligns with growth as envisaged in this Plan. - Optimise existing and proposed transport investment. - Establish corridor management plans that account for place-shaping. - Recognise existing community investment and the need to enable connectivity between and within communities. - Align community expectations in urban areas with urban levels of service, particularly with realistic expectations around levels of congestion. - Align community expectations in rural areas with rural levels of service, particularly acknowledging limited opportunities for alternatives to motor vehicle travel. - Ensure that transport is sustainable in the long term, minimises negative impacts on people’s health and the built and natural environment, and reduces our dependence on fossil fuels (see Priority 2 Chapter 7: Auckland’s Environment). - Improve the capability of the transport system to withstand adverse events. (See Priority 4, Chapter 7: Auckland’s Environment, and Priorities 1 and 2, Chapter 8: Auckland’s Response to Climate Change) 	<p>The proposed corridor supports the “one network” approach to Auckland’s transport system.</p> <p>The project is necessary to facilitate significant current planned growth in the corridor.</p> <p>The project invests in alternative modes of transport other than reliance on the private motor vehicle (bus priority measures, cycle lanes, shared paths and footpaths) and hence reduces reliance on fossil fuels.</p> <p>The project has given careful consideration to achieving the appropriate balance between movement and place considering capacity and character of both the urban and rural settings through which the alignment passes and noting in particular the future development that will occur along Murphy’s Road. The road has been designed to a standard to accommodate future growth in Papakura, Flatbush, Takanini and Drury whilst being relatively sympathetic to the urban and rural settings through which it traverses.</p> <p>The project corridor will not be adversely impacted by the effects of climate change.</p> <p>The project aims to improve journey time reliability and ease severe peak hour congestion on Redoubt Road thus improving levels of service.</p> <p>The project will improve accessibility to community services and facilities and general connectivity via improved vehicle accessways and by provision of signalised pedestrian crossings.</p>

Section	Summary	Comment
	<p>Priority 2: Integrate Transport Planning and Investment in line with land-use development</p> <p>For the transport system to support Auckland's vision and future growth and development, it must support the six transformational shifts and the land-use directives of this Plan. The following must be effected:</p> <ul style="list-style-type: none"> - transport investment and services, especially public transport and regional arterial roads, must align with areas of future growth and development the system must be easily accessible and ensure reliable journey time - particular emphasis must be given to freight movement and other related business travel on international, national, and Auckland-wide transport corridors - public transport services, especially bus services, must be provided for communities most in need (see Chapter 1: The Southern Initiative) - the system must be designed for safe and universal access for all, including children, older persons and those with disabilities - the system must be designed to reduce exposure to poor air quality and to increase the use of renewable transport fuels - in particular, safe and convenient walking and cycling routes must be developed, to encourage those modes of travel for commuters and others - appropriate levels of service must be provided for those communities with limited public transport options, especially rural communities - transport projects must recognise and contribute to place-shaping - transport, particularly roads, walkways and cycleways, must create connections between and within communities - a change in parking strategy and standards is required to encourage intensification, mixed-use development, more efficient use of land, and shifts to walking, cycling and public transport (see Chapter 10: Urban Auckland) - a more rapid rate of investment is needed, requiring new forms of revenue. 	<p>The corridor upgrade is needed to support future growth and development. The route is coming under increasing pressure due to growth and traffic loading from commuter traffic which is expected to become more acute over time as the Flatbush, Takarua and Papakura areas develop.</p> <p>The corridor is included on Map 13.2 of the Auckland Spatial Plan (Auckland's Priority Transport Projects (2012-2042)) as a priority network improvement.</p> <p>Although not a recognised freight corridor, the upgraded corridor will be able to accommodate freight movement.</p> <p>The corridor includes provision for public transportation in the suburban sections. The remainder of the corridor is "future proofed" in terms of providing capability for public transport should it be required in the future.</p> <p>The corridor provides improved pedestrian and cyclist facilities. The entire corridor provides dedicated cycle lanes. Shared paths are also provided for the length of the corridor. Footpaths are provided in the urban sections of Redoubt Road and for the full extent of Murphy's Road.</p>



4.2 Auckland Long Term Plan (2012-2022)

Purpose

The Long Term Plan (previously known as the Long Term Community Plan - LTCCP) is produced by Auckland Council. It is a ten year strategic document reviewed every 3 years and covers all Auckland Council's functions including financial and economic development initiatives to social service provisions such as community facilities and housing. The Long Term Plan records and identifies community outcomes identified by the community and describes how the Council will contribute towards these. It is the Council's primary implementation tool which aligns services, projects and programmes to meet the strategic directions and community outcomes identified in the Auckland Plan and determines the Council's funding requirements over the next 10 years.

The overarching vision of Auckland as the world's most liveable city is supported by a number of outcomes transformational shifts and strategic directions. The seven outcomes describe what Auckland will look like in 2040 and are the basis for the community outcomes used in this LTP. The outcomes are:

- 1) a fair, safe and healthy Auckland
- 2) a green Auckland
- 3) an Auckland of prosperity and opportunity
- 4) a well-connected and accessible Auckland
- 5) a beautiful Auckland that is loved by its people
- 6) a culturally rich and creative Auckland
- 7) Te Hau o Te Whenua, Te Hau o Te Tangata – A Māori identity that is Auckland's point of difference in the world.

The six transformational shifts are the key changes required to achieve the outcomes and the Mayor's vision for Auckland. They are:

- 1) Dramatically accelerate the prospects of Auckland's children and young people.
- 2) Strongly commit to environmental action and green growth.
- 3) Move to outstanding public transport within one network.
- 4) Radically improve the quality of urban living.
- 5) Substantially raise living standards for all Aucklanders and focus on those most in need.
- 6) Significantly lift Māori social and economic well-being

The corridor upgrade will assist with achieving a well-connected and accessible Auckland by improving access between the growth areas of Botany Downs, Flatbush, Takanini and Papakura and Manukau City centre. As part of the corridor upgrade provision will be made for public transport and walking and cycling.

The corridor upgrade will facilitate the use of active modes of transport via provision of cycleway and pedestrian infrastructure. This will have consequential health related benefits for those who chose to take advantage of this infrastructure.



The corridor upgrade also aims to significantly reduce the actual crash risk. The project aims to:

- Reduce the number of loss of control type crashes through improved road alignment.
- Provide vulnerable users with safer facilities such as improved footpaths, safer crossing facilities and new cycle lanes.

The corridor will avoid, remedy or mitigate adverse effects on the environment.

4.3 Auckland Regional Land Transport Strategy (2010-2040)

3.4.1 The ARLTS is a statutory document prepared in accordance with the Land Transport Management Act. The strategy sets out the direction for managing the region's transportation system for the next 30 years, and specifically identifies the actions, policies, priorities and funding needed to achieve the regions transport system. It is a statutory document and prepared in accordance with the Land Transport Management Act 2003.

The main outcomes which the ARLTS seeks to achieve are:

- improved regional and interregional freight efficiency
- improved transport system safety
- improved public transport (PT) accessibility for all
- reduced exposure to the negative impacts of transport pollution on human health
- increased walking and cycling
- reduced greenhouse gas emissions from the transport network
- improved public transport links to and between identified higher density growth centres
- improved value for money from transport investment.

3.4.2 The objectives of the ARLTS are:

- Assisting economic development
- Assisting safety and personal security
- Improving access and mobility
- Protecting and promoting public health
- Ensuring environmental sustainability
- Integrate transport and land use supportive of the Auckland Regional Growth Strategy (ARGS) and Auckland Regional Policy Statement (RPS)
- Achieving economic efficiency



Although not a recognised freight corridor, the upgraded corridor will be able to accommodate freight movement.

The corridor upgrade also aims to significantly reduce the actual crash risk by reducing the number of loss of control type crashes through improved road alignment and providing vulnerable users with safer facilities such as improved footpaths, safer crossing facilities and new cycle lanes.

The Redoubt Road- Mill Road corridor project will improve transport access in the areas of Manukau, Flat Bush, Takanini, Papakura and Drury in order to support growth (including economic growth) identified in the Auckland Plan.

The project invests in alternative modes of transport other than reliance on the private motor vehicle (bus priority measures, cycle lanes, shared paths and footpaths) and hence reduces reliance on fossil fuels and associated vehicle emissions. Provision of cycleways and footpaths will have health benefits.

The proposed corridor realignment will provide multi-modal transport facilities, including facilities for private vehicles on and off-road cycle paths, pedestrian facilities and passenger transport. The proposed corridor realignment will therefore provide for transport movement and accessibility along the corridor and also contribute to a multi-modal transport system.

The project has given careful consideration to achieving the appropriate balance between movement and place considering capacity and character of both the urban and rural settings through which the alignment passes and noting in particular the future development that will occur along Murphy's Road.

The project corridor will reduce vehicle emissions by reducing reliance on private motor vehicles.

The project will improve accessibility to community services and facilities and general connectivity via improved vehicle accessways and by provision of signalised pedestrian crossings.

The project will improve urban design and lighting in urban and future urban areas thus increasing opportunities for passive surveillance and personal security.

Adverse ecological and water quality effects will be mitigated by enhancement plantings, appropriate construction techniques and construction and operational stormwater runoff treatment.

4.4 Auckland Regional Land Transport Programme (2012 – 2015)

The Regional Land Transport Programme (RLTP) 2012-2015 lists all the planned transport activities for the next three years and is used to priorities applications for government funding through the New Zealand Transport Agency (NZTA).

Section	Summary	Comment
<p>Chapter 4: Statement of Priorities</p>	<p>Areas of priority focus are to:</p> <ul style="list-style-type: none"> - Support greater integration between land use and transport - Improve the efficiency and effectiveness of the region’s transport networks - Make best use of the existing transport system - Improve transport safety and reduce the adverse impacts from transport on the surrounding environment. - The relevant priorities include <p>Support greater integration between land use and transport Land use/transport integration will involve multimodal projects supporting the development of mixed-use, high-density centres and growth areas identified in the Auckland Plan such as Northern Strategic Growth Area (NorSGA) and Flat Bush. The connection between the transport improvement project programme and new land use areas will be strengthened.</p> <p>Improve the efficiency and effectiveness of the region’s transport network To fulfil transport’s role as a key enabler of the Auckland Plan’s vision, it is imperative that this momentum be maintained. Several key regional links in the public transport network need to be investigated, protected, completed and/or upgraded to improve the performance of passenger transport. It is vital that the development of those projects, which integrate and enhance the system as a whole, is prioritised</p> <p>Improve transport safety and reduce the adverse impacts from transport on the surrounding environment. The Auckland Safe System approach requires road designers to take more responsibility for building a safer network by managing crash forces to a level that does not result in death or serious injury. A focus of the 2012/15 Auckland road safety programme therefore is a greater investment in safety engineering on local roads along with a focus on speed management. High-risk routes and locations on the transport network have been prioritised through crash reduction studies for improvements such as:</p>	<p>The existing road corridor performs poorly, with peak hour congestion, no passenger transport and cyclist facilities and poor pedestrian facilities. The proposed road corridor upgrade supports planned development and population growth by providing necessary road capacity for private vehicles, passenger transport, walking and cycling.</p> <p>The planned growth includes:</p> <ul style="list-style-type: none"> - Flat Bush which is New Zealand’s largest and most comprehensively planned new town of approximately 1,700 hectares. - Alfriston Road at the end of the corridor (within the former Papakura District) has considerable growth planned in the area. A substantial area of future urban zoned land is identified in the PAUP at the Alfriston end of the corridor and a new settlement in Hingaia is well advanced, as well as intensification around Papakura Town Centre and its associated urban area (contained in the Auckland Plan, Auckland Regional Growth Strategy, Southern Sector Agreements and PAUP). - To the south west of the road corridor the Drury South Structure Plan proposes the industrial zoning of 201 hectares supported by 22 hectares of commercial services development. - Private Plan Change 38 has re-zoned a section of land east of the current Mill Road corridor to Main Residential. - Further growth is also anticipated in Clevedon Village, which is approximately 12km to the east of the Mill Road / Alfriston Road intersection. <p>The corridor upgrade also aims to significantly reduce the actual crash risk. The project aims to:</p> <ul style="list-style-type: none"> - Reduce the number of loss of control type crashes through improved road alignment.



Section	Summary	Comment
	<ul style="list-style-type: none"> - Intersection upgrades - Speed re-zoning - Lighting and visibility improvements. Larger demonstration projects, including mixed-use arterials such as Tamaki Drive. 	<ul style="list-style-type: none"> - Provide vulnerable users with safer facilities such as improved footpaths, safer crossing facilities and new cycle lanes. Designating the corridor will protect it from inappropriate development until such time as it can be constructed.
Chapter 5: 2012/15 Programme Overview	Future activities of national or regional significance 2015/16 to 2017/18 The Land Transport Management Act requires the RLTP to provide an indication of any nationally or regionally significant activities that are likely to be recommended for inclusion in the National Land Transport Programme (NLTP) over the three financial years following this RLTP period (i.e. 2015/16 to 2017/18).	Mill Road is noted in the RLTP as likely to be recommended for inclusion in the 2015/16 to 2017/18 period.

4.5 Draft Auckland Regional Public Transport Plan (2012)

4.5.1 Purpose

The draft Auckland Regional Public Transport Plan seeks to develop an effective transport system which will allow for growth, help to attract and retain business, enhance the experience of passengers and get goods moving. It outlines the public transport services that Auckland Transport proposes for the region over the next 10 years. The plan envisages a transformational shift from the existing complex mix of public transport services to a mature city-wide network of connected, reliable and frequent services. The draft Auckland Regional Public Transport Plan has been prepared by Auckland Transport and will replace the existing 2010 Regional Public Transport Plan, and the Passenger Transport Network Plan prepared by the Auckland Regional Transport Authority in 2006.

Section	Summary	Comment
Chapter 6: Policies and Action	<p>1.1 Network structure</p> <p>Relevant Policies include:</p> <ul style="list-style-type: none"> 1.1 Provide a core network of frequent and reliable public transport services 1.2 Provide connections to the frequent network 1.4 Promote land use policies that support the public transport network 	<p>The corridor upgrade will assist with reliable and frequent public transport services. Bus only lanes are proposed at Diorella Drive/ Hollyford Drive/Redoubt Road intersections. These have been designed to provide bus priority measures to support a 15-minute bus headway, including a westbound bus-only lane between Hollyford Drive and the motorway interchange. The bus lane develops immediately north of the Hollyford Drive/Redoubt Road intersection, providing a bus only right turn lane at the signalised intersection with a dedicated bus only phase in the signal timing. All existing bus stop locations are to remain.</p> <p>The promulgation of land use policies that support the public transport network is the responsibility of Auckland Council.</p>
Chapter 6: Policies and Action	<p>6.5 Infrastructure</p> <p>Relevant Policies include:</p> <ul style="list-style-type: none"> 7.1 Integrate infrastructure and service provision 5.4 Provide bus priority measures on key corridors 5.6 Integrate public transport with cycling and walking 	<p>As above, bus only lanes are proposed at Diorella Drive/ Hollyford Drive/Redoubt Road intersections. These have been designed to provide bus priority measures to support a 15-minute bus headway, including a westbound bus-only lane between Hollyford Drive and the motorway interchange. The bus lane develops immediately north of the Hollyford Drive/Redoubt Road intersection, providing a bus only right turn lane at the signalised intersection with a dedicated bus only phase in the signal timing. All existing bus stop locations are to remain.</p> <p>The corridor upgrade will enhance the integration of public transportation with walking and cycling. Bus stops on Redoubt Road will be easier to access via the provision of designated and safe pedestrian crossing opportunities at Diorella / Redoubt, Hollyford / Redoubt, and Murphy's / Redoubt traffic signals.</p>

4.6 Auckland Integrated Transport Plan (2012 – 2041)

4.6.1 Purpose

- 4.6.1.1 Auckland's ITP sets out the 30 year investment programme to meet the transport priorities outlined in the Auckland Plan. The programme has been developed by Auckland Transport and the New Zealand Transport Agency in collaboration with Auckland Council. It aims for the management of transport in Auckland as One System. The programme covers state highways and local roads, railways, buses, ferries, footpaths, cycleways, intermodal transport facilities and supporting facilities such as parking and park-and-ride.

Section	Summary	Comment
Chapter 3: One System Approach	<p>3.3 Principles for One System approach</p> <p>The One System approach includes 11 principles from the AP that all transport planning and delivery partners are expected to implement when developing policy and priorities for initiatives and investment.</p> <ol style="list-style-type: none"> 1. Use a single system approach in the planning, design, management and development of our transport system 2. Use travel demand management techniques, such as travel plans for schools and businesses, to manage the growth in demand for private vehicle travel and improve the way existing infrastructure networks operate, before providing additional capacity to the transport system 3. Achieve the appropriate balance between movement and place, considering capacity (incorporating the safe movement of people and goods) and character (recognising the role of road/street in the urban setting and types of buildings/landscape present or planned), acknowledging the role of transport to assist in place-shaping 4. Ensure that long-term land-use and activities drive long-term transport functionality, taking into account the existing and proposed transport network, and that transport investment aligns with growth as envisaged in this Plan 5. Optimise existing and proposed transport investment 6. Establish CMPs that account for place shaping" 	<p>The development of policy is beyond the scope of this NOR.</p> <p>The Redoubt Road- Mill Road corridor project will improve transport access in the areas of Manukau, Flat Bush, Takanini, Papakura and Drury in order to support growth (including economic growth) identified in regional policy documents.</p> <p>The project has given careful consideration to achieving the appropriate balance between movement and place considering capacity and character of both the urban and rural settings through which the alignment passes and noting in particular the future development that will occur along Murphy's Road and in the Future Urban zoned land in Alfriston.</p> <p>The project is sustainable in that it will improve accessibility to community services and facilities, improve general connectivity via improved vertical and horizontal alignments and additional capacity and by provision of signalised pedestrian crossings. The project also invests in alternative modes of transport other than reliance on the private motor vehicle (bus priority measures, cycle lanes, shared paths and footpaths) and hence reduces reliance on fossil fuels and associated vehicle emissions. Provision of cycleways and footpaths will also have health benefits.</p> <p>The corridor uses the existing transport infrastructure where it is practical and safe to do so.</p>



Section	Summary	Comment
	<ol style="list-style-type: none"> 7. Recognise existing community investment and the need to enable connectivity between and within communities 8. Align community expectations in urban areas with urban LoS, particularly with realistic expectations around levels of congestion 9. Align community expectations in rural areas with rural levels of service, particularly acknowledging limited opportunities for alternatives to motor vehicle travel 10. Ensure that transport is sustainable in the long-term, minimises negative impacts on people's health and the built and natural environment, and reduces our dependence on fossil fuels 11. Improve the capability of the transport system to withstand adverse events. 	<p>The proposed corridor is designed in a manner that reduces the likelihood of natural hazard events (for example avoiding ground that is extremely prone to slips).</p> <p>Concerns have existed for some time regarding a lack of resilience in the transport network in the southern part of the Auckland Region. While SH1 is likely to remain the preferred north-south route, the Mill Road Corridor can provide an alternative route to SH1 south of the SH20 Western Ring Route in times of high demand or emergencies.</p>



4.7 Auckland Transport Plan 2009

4.7.1 Purpose

4.8.1.1 The Auckland Transport Plan is a 10-year transport planning document. It brings together projects to implement the transport policies of the Government and region, and aims to create a safe, affordable, integrated and sustainable transport system for people and freight.

The priorities outcomes of the plan include:

- Greater focus on regional arterial roads
- Emphasis on safety engineering for streets and roads
- Optimising the existing transport system to move people and goods
- Strong focus on transport investments that support the Regional Growth Strategy, and integrated land use and transport planning
- Completion of key elements of strategic roading, passenger transport, walking and cycling networks

The Redoubt Road-Mill Road corridor is shown in the Manukau Plan and the Auckland Plan as a Regional Arterial and thus warrants greater focus. In addition, Map 13.2 of the Auckland Spatial Plan (Auckland's Priority Projects (2012-2042)) shows the corridor as a priority network improvement.

The corridor upgrade aims to significantly reduce the actual crash risk by reducing the number of loss of control type crashes through improved road alignment and providing vulnerable users with safer facilities such as improved footpaths, safer crossing facilities and new cycle lanes.

The Redoubt Road- Mill Road corridor project aligns with the Regional Growth Strategy as it will improve landuse transport integration and transport access between the areas of Manukau, Flat Bush, Takanini, Papakura and Drury in order to support growth (including economic growth) identified in the strategy.

The proposed corridor realignment will optimise this section of the transport system by providing multi-modal transport facilities, including facilities for private vehicles on and off-road cycle paths, pedestrian facilities and passenger transport. The proposed corridor realignment will therefore provide for improved transport movement and accessibility along the corridor and also contribute to a multi-modal transport system.

Construction of the cycleway will assist with the goal of completing a regional cycling network.



4.8 Auckland Transport Passenger Transport Network Plan (2006 – 2016)

Purpose

The Auckland Transport Passenger Transport Network Plan aims to guide the delivery of improved passenger transport services and infrastructure in the Auckland region. The plan contains a 10-year plan for developing the transport network, standards for delivering passenger transport services and infrastructure through principles and service level guidelines and an outline of a reformed fare system.

The following operating principles have been developed for Auckland's passenger transport network:

- A fast, reliable and frequent alternative to car travel on congested corridors
- Meets customer needs
- Connects centres
- Efficient
- Four layered
- Integration
- Access to information
- Serving new urban areas
- Staged network development
- Beyond Auckland's CBD
- A guide to future development
- Supported by Travel Demand Management
- PTNP guides other plans

The corridor upgrade will assist with achieving the purpose of the Auckland Transport Network Plan by improving the public transportation infrastructure in the corridor. Bus only lanes are proposed at Diorella Drive/ Hollyford Drive/Redoubt Road intersections. These have been designed to provide bus priority measures to support a 15-minute bus headway, including a westbound bus-only lane between Hollyford Drive and the motorway interchange. The bus lane develops immediately north of the Hollyford Drive/Redoubt Road intersection, providing a bus only right turn lane at the signalised intersection with a dedicated bus only phase in the signal timing. All existing bus stop locations are to remain.



4.9 Iwi Management Plans

Iwi Management Plans are prepared by an iwi, iwi authority, rūnanga or hapū. They are an expression of rangatiratanga to help iwi and hapū exercise their kaitiaki roles and responsibilities. The RMA 1991 refers to Iwi Management Plans as 'planning documents recognised by an iwi authority.

The following Iwi Management Plans have been taken into account:

- Nagti Te Ata Tribal Policy Statement and,
- Ngai Tai Ki Tamaki.

4.9.1 Ngaati Te Ata Tribal Policy Statement, (22 July 1991)

The Iwi Management plan was prepared by Awaroa Ki Manuka for and on behalf of Te Iwi O Ngaati Te Ata. It covers a ten year planning period from the date declared operative by hui and iwi. The statement has not been prepared in accordance with nor recognises the mandate or authority (legislation or institution) outside the iwi. It has been prepared in accordance with the Declaration of Independence 1835 and is accorded status of authoritative tribal policy by all members of the iwi and any other persons or organisations who interact with Ngaati Te Ata.

The kaupapa for the policy statement and of all Ngaati Te Ata endeavour is NGAA TIAKANGA O NGAATI TE ATA – “The promotion enhancement, protection and implementation of Ngaati Te Ata Tikanga.

The purpose of the policy statement is:

1. To lay down the kaupapa of Ngaati Te Ata
2. To define procedures for negotiation between Ngaati Te Ata and external agencies
3. To articulate Ngaati Te Ata tribal policy for external agencies
4. To identify obligations of external agencies to Ngaati Te Ata.

As this is also the first written Ngaati Te Ata Tribal Policy Statement ever prepared, a formal process of full review will be initiated on 22 February 1992, culminating in the approval of the second Ngaati Te Ata Tribal Policy Statement on 22 July 1992.

The goals of Ngaati Te Ata are as follows:

1. Economic Independence as an iwi
2. Establishment of business and development opportunities which benefit the iwi
3. Achievement of high standards of iwi health, education, housing, general well-being.
4. Acquisition of all natural and physical resources confiscated from the iwi, including land, water, air, and resources therein.
5. Acquisition, retention and enhancement of all iwi taonga



The Kaitiaki approach to environmental management is holistic and provides for the following:

1. Restoration of damaged ecological systems
2. Restoration of ecological harmony
3. Ensuring that resources and their usefulness increases
4. Reducing risk to present and future generations
5. Providing for the needs of present and future generations.

The objectives of Ngaati Te Ata kaitiaki are as follows;

1. Restore mana of the iwi
2. Plan long term usage of taonga
3. Protect sensitive features of the environment
4. Plan for the provision of kai (including kaimoana) for future generations

4.9.2 Ngai Tai Ki Tamaki Management and Development Plan

The Ngai Tai ki Tamaki Management and Development Plan provides a systematic framework to deal with significant resource management and business development issues of Ngai Tai Ki Tamaki Whanau and Hapu reaffirming customary rights and responsibilities to manage and control tribal taonga according to Ngai Tai ki Tamaki needs and preferences.

Active Consultation

Before any decisions are made by the Crown (or those exercising statutory authority) on matters which may impinge upon the Rangatiratanga of Ngai Tai ki Tamaki over taonga, it is essential that full discussion take place with the Ngai Tai ki Tamaki Trust. Essential obligations of consultation include:

- provision of information for timely consideration
- full discussion and disclosure
- informed assessment and consideration
- genuine invitation and consideration of advice

Active Protection

Active protection includes a requirement to protect Ngai Tai ki Tamaki:

- from legislative or administrative constraints in the use of resources according to cultural preferences
- from the adverse effects of activities of others on our ability to use and enjoy our taonga whether in physical or spiritual terms
- in the development of strategies for managing our taonga and active involvement in matters of government affecting our interests



Active protection implies adequate resourcing for Ngai Tai ki Tamaki participation in resource management.

Decision Making

Rangatiratanga encompasses the making and implementation of decisions. It is necessary that provision be made for the full participation of Ngai Tai ki Tamaki in decision making and other processes involving matters that are significant to the Iwi.

Some of the policies and goals set out in the Ngai Tai Ki Tamaki Management and Development Plan are set out below.

NGA Wa Tupuna Policy and Goals

1. To seek restitution and redress of Treaty Grievances through settlement of Wai 423 and Wai 357- and actively enhance and protect the use, development and protection of ancestral lands for the well-being and collective interest of Ngai Tai ki Tamaki.
2. To ensure access to all ancestral sites and areas of significance, including the right to control the use and access of others.
3. To ensure that Public, Private and Crown development proposals do not inhibit the right of Ngai Tai ki Tamaki to use ancestral lands and other taonga according to Ngai Tai ki Tamaki customs, needs and preferences.
4. To ensure that Crown Agencies and Local Authorities actively recognise, protect, enhance and provide for Ngai Tai ki Tamaki relationships with our ancestral lands and other taonga.
5. That Crown, State Owned Enterprises, Crown Agencies and Local Authorities recognise the Treaty responsibilities not to permit further alienation (sale, gifting, long term leases) of lands within the Ngai Tai ki Tamaki rohe and that they return all Crown and ancestral lands to full Ngai Tai ki Tamaki care, management and control for the long term collective well-being of the Iwi.

Water - NGA Waf Tupuna Policy and Goals

1. To challenge Crown's "presumptive" ownership of Ngai Tai ki Tamaki taonga which have not been gifted, transferred or sold by Ngai Tai ki Tamaki and that any applications or income from coastal tendering, water use and extraction must account for Treaty obligations to Ngai Tai ki Tamaki.
2. That Crown Agencies acknowledge their responsibility to urgently prepare strategic management plans with Ngai Tai ki Tamaki to avoid, remedy or mitigate actual or potential adverse effects of future developments on nga wei tipuna ancestral taonga of Ngai Tai ki Tamaki.
3. To ensure that all remaining wetlands are actively protected and enhanced.
4. To ensure that all contaminants are adequately treated by passing through or over land before as a last resort being discharged into water.
5. To ensure active participation in setting policies, controls and conditions to avoid, remedy, or mitigate adverse effects of existing and proposed land or water based activities on water, marine life, fisheries and habitats.



Flora and Fauna Policy and Goals

1. Ngai Tai ki Tamaki require continued and unrestricted use and access to ngahere, taonga raranga, rongoa, their supporting habitats and other ancestral resources for health, education and cultural purposes.
2. Ngai Tai ki Tamaki are adverse to the clearing of native vegetation and seek that strict management controls are applied for all introduced species which pose a threat to native species or which contribute to soil or heritage destruction.
3. Ngai Tai ki Tamaki Trust seek to ensure customary rights and the sustainable management of flora and fauna in a way which contributes to the social, economic and cultural well-being of all members and families.
4. Ngai Tail Tamaki Tryst seek to develop programmes and contracts with Crown and Crown Agencies to control and eliminate noxious weeds and problematic introduced plant, animal and bird species, to protect traditional food resources and areas of cultural significance.
5. Ngai Tai ki Tamaki Trust actively promote the protection of intellectual and cultural property rights over traditional taonga inclusive of indigenous flora and fauna while acknowledging the importance of some introduced bird and animal species for our social economic and cultural well-being.
6. 6. Ngai Tai ki Tamaki Trust actively seek the recognition, protection and enhancement of indigenous flora and fauna within the NgaiTai kiTamaki tribal territories.

Consultation has been undertaken with iwi, recognising that Auckland Transport is committed to the principles of the Treaty of Waitangi and meeting the relevant statutory obligations under the Land Transport Management Act (2003), and the Resource Management Act (1991). In addition to consultation, to further identify significant sites and values within the project area requiring protection and careful management, Maori Values Assessments (MVA's) were prepared by mana whenua.

The MVA's set out a number of matters that lwi would like to see addressed as part of the project in terms of traditional, cultural and heritage matters and the sustainable management of natural and physical resources. The majority of the matters raised in the MVA's will be addressed as part of the detailed design process. The special relationship that these iwi have with the land, waterways, waahi tapu and taonga will be recognised and provided for through involvement of tangata whenua in developing and implementing various mitigation measures and mitigation plans (DWPs) at the time of detailed design and construction.

Consultation with lwi will be on-going throughout the lifecycle of the project.



5.0 Urban Design Documents

5.1 New Zealand Urban Design protocol

The New Zealand Urban Design protocol is a voluntary commitment to specific urban design initiatives by signatory organisations, which include central and local government, the property sector, design professionals, professional institutes and other groups.

The Protocol identifies seven essential design qualities:

- Context: seeing that buildings, places and spaces are part of the whole town or city
- Character: reflecting and enhancing the distinctive character, heritage and identity of our urban environment
- Choice: ensuring diversity and choice for people
- Connections: enhancing how different networks link together for people
- Creativity: encouraging innovative and imaginative solutions
- Custodianship: ensuring design is environmentally sustainable, safe and healthy
- Collaboration: communicating and sharing knowledge across sectors, professions and with communities.

(The Ministry for the Environment is currently undertaking a Review of the New Zealand Urban Design Protocol; however the vision, attributes of successful town and cities and the design qualities of the seven essential design qualities above are still valid).

Urban design has been carefully assessed in relation to the proposed corridor. An Urban Design Assessment was prepared to assess the proposed road corridor against the Seven C's of the New Zealand Urban Design Protocol along with the opportunities for social and environmental improvements and the negative impacts. The Urban Design and Landscape Report identifies the varied character that currently exists along the corridor and recommends a design response that provides a degree of continuity along the corridor. The recommendations in the MVA's have also been integrated in developing the road corridor realignment design.

The design for the corridor is focused on providing the following:

- Character: to provide a unique and identifiable character that is appropriate to the context of the corridor, and which includes the natural, suburban and rural character.
- Continuity: to achieve a consistent, legible design framework for the whole corridor.
- Flexibility: requires flexible design responses to accommodate multi-modal users; urban/rural character and the natural and topographical landscape features which the site presents.