

Recommendation to Auckland Transport following the hearing of notices of requirement under the Resource Management Act 1991

Proposal

Plan Amendment 76 (Manukau Section) and Plan Amendment 49 (Papakura Section) of the operative Auckland Council District Plan – Notices of requirement by Auckland Transport for the realignment, widening and improvement of the Redoubt Road – Mill Road corridor, and the southern portion of Murphys Road.

The Commissioners appointed by the Auckland Council to consider the proposal recommend to Auckland Transport that the notices of requirement **BE CONFIRMED** subject to conditions.

Reference Number(s):	PA 76 (Manukau Section), PA 49 (Papakura Section)
Site Address:	Redoubt Road from the eastern side of SH1 continuing along Mill Road, Papakura (to Phillip Road); Murphys Road from Redoubt Road to Flat Bush School Road.
Requiring Authority:	Auckland Transport
Hearing Dates:	31 August 2015, 1 September, 2 September, 3 September, 4 September 2015 and 18 September 2015
Hearing Panel:	Mr Kitt Littlejohn (Chair) Mr Michael Parsonson Mr Nigel Williams Mr Rebecca Skidmore Mr Basil Morrison
Appearances:	For Auckland Transport: Andrew Beatson/Sarah Anderton (Counsel) Theunis Van Schalkwyk (Auckland Transport) Richard Black (Auckland Transport) Dawie Maritz (Engineering Design) Matthew Hinton (Transport Planning)

Andrew Foy (Traffic Modelling)

Rob Greenaway (Recreation/Open Space)

Dave Slaven (Ecology)

Karl Burgisser (Arboriculture)

Sally Peake (Landscape and Visual Effects)

Richard Knott (Urban Design)

Tama Hovell (Cultural Values)

Dr Rod Clough (Archaeology/Heritage)

Kelli Sullivan (Social Assessment)

Amelia Linzey (Social Impacts)

Don Harrington (Property)

Claire Drewery (Noise and Vibration)

James Hughes (Storm Water)

Emma Trembath (Contaminated Land)

Anthony Kirk (Hydrogeology)

David Burns (Geotechnical)

Andrew Curtis (Air Quality)

Craig Hind (Planning/Strategic)

Roger McDonald (Planning/Statutory)

For Auckland Council:

Leslie Vyfhuis (Team Leader)

Peter Reaburn (Consultant Reporting Planner)

Vrinda Moghe (Principal Planner)

Sean McBride (Arborist)

Andrew Gratton (Traffic Engineer)

Siiri Wilkening (Acoustic Consultant)

Bridget Gilbert (Landscape Architect)

Vanessa Wood (Ecologist)

Cheilo Manalo (Stormwater Engineer)

Dr Peter Phillips (Social Impact Assessment)

Steve Price (Geotechnical)

Lauren Windross (Contamination)

Paul Clark (Parks and Open Space)

Dr Caroline Phillips (Archaeology)

Carol McSweeny (Air Quality)

James Mather (Democracy Advisor – Hearings)

Submitters:

Royal Forest and Bird Protection Society, South Auckland Branch (Peter Anderson, Legal Counsel; Lindsay Britton; Nicholas Goldwater, Ecologist)

Graham Falla

Simon McConney

Deepthi Veerla

Papakura Local Board (Michael Turner, Bill McNee)

D E Nakhle Investment Trust (Alan Webb, Legal Counsel; Daniel Nakhle; Brian Putt, Planning; Leo Hills, Traffic)

Ransom Smyth

F P Williams and S R Williams Trust (Russell Bartlett QC, Legal Counsel; Sam Williams; Renee Fraser-Smith, Planning; Ryan Pitkethley, Engineering; Leo Hills, Traffic; Jon Styles, Acoustics; Dennis Scott, Landscape)

Peter Finn

Land Solutions Limited (Jon Mapelsden)

Grant Sleeman

Murray Palmer

Graham Cheesman (Haare Williams)

Jill Whitmore

Redoubt Ridge Environmental Action Group (David Price; Yvonne Osbourne; Dr Alison Davis, Ecologist; Dr John Harger, Ecologist)

Dr John Harger

Donald & Eve Osborne (Dr John Harger, Ecologist; Lahiru Wijewardhana, Planning)

Annabel Haddrell

The Tree Council (Dr Alison Davis, Ecologist)

National Road Carriers (Grant Turner)

Alfriston Village Limited (Joanna Beresford, Legal Counsel; John Parlane, Traffic; Nigel Hosken, Planning)

Papakura-Hunua Branch of the Green Party of NZ (Caroline Conroy)

Hugh Green Limited/Murphys Development Limited (Asher Davidson, Legal Counsel; Renee Fraser-Smith & Mark Tollemache, Planning; Ida Dowling, Traffic; Andrew Hunter, Engineering)

Site visits:

31 August 2015, 11 September 2015

Hearing Closed:	14 October, 2015

Preliminary

- This recommendation is made on behalf of the Auckland Council (Council) by Independent Hearing Commissioners Kitt Littlejohn, Michael Parsonson, Nigel Williams, Rebecca Skidmore and Basil Morrison, appointed and acting under delegated authority under sections 34 and 34A of the Resource Management Act 1991 (RMA).
- 2. This recommendation contains the findings from our deliberations on the proposal comprising three Notices of Requirement (**NoRs**) by Auckland Transport (**AT**) for the Redoubt Road Mill Road corridor upgrade. It has been prepared in accordance with section 171(3) of the RMA.

Introduction

- 3. AT is a Council Controlled Organisation constituted under the Local Government (Auckland Council) Act 2009. Section 45 of that Act records that "the purpose of Auckland Transport is to contribute to an effective and efficient land transport system to support Auckland's social, economic, environmental, and cultural well-being." AT's Statement of Intent 2015-2018 states its overarching vision for Auckland as: "Auckland's transport system is effective, efficient, and safe."
- 4. AT is a deemed requiring authority under s167 of the RMA.² It has lodged three NoRs for designations to enable the construction of a combined redevelopment of existing road and new roading to create a 4 lane plus cycleways arterial route between Redoubt Road in Manukau and Mill Road in Alfriston. The project involves associated major intersection and interconnecting road works including a 1.8km length realignment and upgrade of Murphys Road, extending north from the intersection of that road with Redoubt Road.
- 5. The proposal is a significant roading project covering a new arterial road distance of 8.9km. Its expected cost is in the order of \$300m. The project requires full acquisition of 59 properties and partial acquisition of a further 258 properties.
- 6. There are three NoRs proposed:
 - NoR 1 consists of the urban section of the corridor commencing at the Redoubt Road SH1 on/off ramps and terminating east of the Hilltop Road/Redoubt Road intersection. This NoR also includes upgrading of a number of adjoining roads where they connect with Redoubt Road;
 - NoR 2 commences approximately 100 metres east of the Hilltop Road/Redoubt Road intersection and includes most of the roadway adjacent to Totara Park.

¹ Auckland Transport Statement of Intent 2014-2017 at [2.2].

² Section 47 Local Government (Auckland Council) Act 2009

This NoR also includes widening and realignment of Murphys Road between Redoubt Road and Flat Bush School Road (a length of 1.8km);

- NoR 3 commences approximately 570m south-east of the current Redoubt Road/Murphys Road intersection and includes the remainder of the 8.9km corridor. This section of the corridor includes a new greenfields alignment and involves substantial cuts and fills. The alignment requires the construction of two bridges over bush clad gullies and two new intersections, at Ranfurly Road and Alfriston Road. These intersections are currently proposed as roundabouts. NoR 3 terminates north of the Mill Road/Popes Road intersection.
- 7. At the close of the hearing, AT indicated that it would be content with a 10-year lapse period for NoRs 1 and 2,³ retaining a 15-year lapse period only for NoR 3.
- 8. The NoRs are intended to protect the proposed designated corridor for the planned future road upgrading works (refer s 176 of the RMA). Accordingly, although the NoR documentation includes a relatively detailed design of the road works, no doubt to enable AT to evaluate its feasibility, effects and the extent of private land required, the NoRs themselves do not designate for a final design of the road. Considerably more detailed engineering design work and planning will occur as part of the outline plan and regional resource consenting phases to follow. The conditions on which the NoRs have been put forward have been designed to accommodate these processes. They also envisage a detailed suite of management plans to be prepared to control the final implementation of the project works enables by the NoRs.
- 9. The Council engaged an extensive team of expert reviewers to assess all aspects of the NoRs. By the end of the hearing there was significant agreement between the Council experts (who also provided detailed evidence to us) and AT's expert witnesses on matters of detail, effects management and condition wording, with only a handful of issues unresolved.

Existing Route Description and Zoning

10. A map showing the approximate location of the proposed designations is shown below in Figure 1. Figure 2 illustrates the approximate location of the three NoRs.

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³ AT originally applied for a 15-year lapse date for NoR 2.

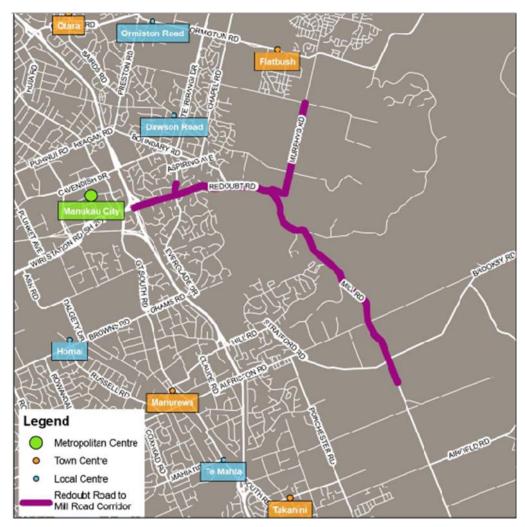


Figure 1: Approximate locality of proposed works



Figure 2: Approximate locality of the NoRs

11. A comprehensive description of the site and the surrounding environment is set out in Part 3.0 of the NoR documentation. We summarise it below. Figure 3 identifies the various areas described.

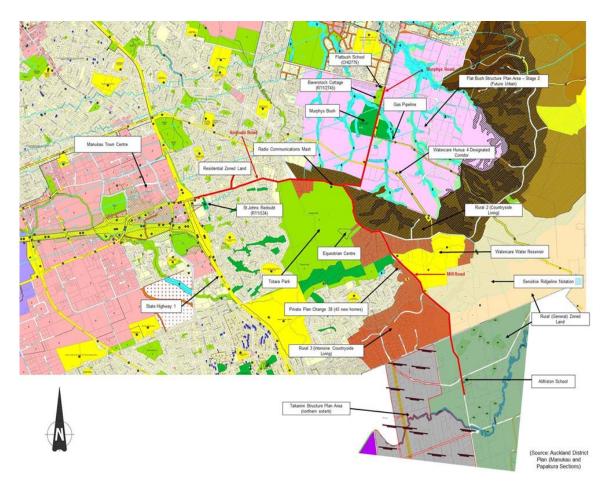


Figure 3 - Area Map

- 12. The South Western Motorway-State Highway 20 (designation 284) extends up Redoubt Road to approximately adjacent St Johns Redoubt. The western end of Redoubt Road is zoned Main Residential in the District Plan and Mixed Housing Suburban in the PAUP and is predominantly in medium density residential development. The exceptions are 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.
- 13. Moving east the land use pattern then transitions into lower density countryside living development (Rural 3 and Flatbush Countryside Transition in the District Plan and Countryside Living (Flat Bush Precinct) in the PAUP). Totara Park, a significant public open space of approximately 216ha, adjoins the southern side of Redoubt Road for a length of 1.3km. Totara Park is zoned Open Space 2 in the District Plan and Public Open Space Informal Recreation in the PAUP. The park has bridle trails, mountain bike trails and an equestrian centre located at 251 Redoubt Road (the Pony Club).
- 14. A telecommunications mast (designation 116) is located on the southern side of Redoubt Road at the northern edge of Totara Park approximately 200m west of the

Redoubt Road/Murphys Road intersection. An overhead power line with high tension cables crosses Redoubt Road in the vicinity of No. 181 with a pylon located approximately 10m from the road edge.

- The Murphys Road section of the alignment is poised for significant development over 15. the next 5 to 10 years. This section of the corridor sits within the Flat Bush Structure Plan area. Development in Flat Bush is anticipated to be equivalent to that of a moderately sized town. 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. A significant portion of Murphys Road is zoned Future Urban in the District Plan and the PAUP in recognition of its future transition from rural to an urban environment. The Flat Bush Structure Plan shows land adjacent Murphys Road as being re-zoned to residential. The area has also been identified as a Special Housing Area (SHA) under the Housing Accords and Special Housing Areas Act (HAASHA). The top (southern end) of Murphys Road is zoned Flatbush Countryside Transition in the District Plan and Countryside Living in the PAUP and contains typical semi-rural lifestyle development. The road corridor passes in close proximity to Murphys Bush, one of the largest remnants of indigenous forest remaining in the north of the Manukau Ecological District.
- 16. A high pressure gas pipeline (designation 290) joins Murphys Road at the southern extent of Murphys Bush. This pipeline follows Murphys Road beyond Flat Bush School Road. Watercare's Hunua 4 pipeline (designation 307) crosses beneath Murphys Road at the intersection of Hodges Road and Thomas Road. This designation falls in the path of proposed NOR 2. Watercare has a pump station (designation 147) at the intersection of Thomas and Murphys Road.
- 17. On the southern side of Redoubt Road, south-east of Totara Park, a pocket of Rural 3 zoned land (Countryside Living zone in the PAUP) extends from the equestrian centre to 300m south of the intersection of Mill and Redoubt Roads. A sliver of Totara Park (zoned Open Space 1 in the District Plan and Open Space-Conservation in the PAUP) separates this Rural 3 zoned land from a pocket of Main Residential zoned land (Mixed Housing Suburban under the PAUP) with an approximate frontage of 300m to Mill Road. This residential enclave was extended up to the current Mill Road alignment under Plan Change 38 to the District Plan and is shown as such on the PAUP planning maps. Although this pocket of residentially zoned land has frontage to the current Mill Road alignment, access to this residential area is gained via Hill Road or Stratford Road (via Alfriston or Ranfurly Roads).
- 18. A sensitive ridge notation applies to countryside living and rural zoned land either side of Redoubt and Mill Roads. The notation commences adjacent to the eastern side of Hilltop Road and ends approximately 500m north of the intersection of Mill Road and Ranfurly Road. The notation seeks to protect the rural character and landscape quality of the area and to ensure that activities are carried out in a sensitive manner.
- 19. Watercare has a water reservoir facility (designation 150) on a large land holding commencing approximately 400m south of the intersection of Redoubt and Mill Road.

- 20. The road corridor passes in close proximity to three forest areas to the east of the current Mill Road alignment.
- 21. From the southern edge of the Main Residential zone to Ranfurly Road the land is zoned Rural 3 (Countryside Living in the PAUP). From the southern side of Ranfurly Road to the end of the corridor the land is zoned Rural under the District Plan (Papakura Section) and Future Urban in the PAUP. This zone is applied to land located on the periphery of existing urban areas within the rural urban boundary (the RUB). The Council has determined this land is suitable for future urban development. 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.
- 22. 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 Rural 1 (Mixed Rural in the PAUP) which provides for a mix of rural production and other rural-related activities. The Mixed Rural zone in the PAUP is assigned to sites which are generally smaller than in the Rural Production zone, and which are used for rural lifestyle development and tourism as well as rural activities.
- 23. Alfriston School is situated on the corner of Mill Road and Alfriston Road at the southern end of the corridor area. A recently established childcare centre is located just to the south of this. Other schools close to the corridor area include Tyndale Park Christian School, Everglade School, Chapel Downs School, Redoubt North Primary School and Everglade Primary School.

Project Background

- 24. The background to the NoRs is given in Parts 2.0 and 3.0 of the NoR AEE (Volume 2.1). Upgrading of the Redoubt Road/Mill Road corridor has been anticipated for some time with numerous planning studies carried out over an extended period. We summarise the background below.
- 25. The Southern Sector Strategic Transport Study (2006) commenced in 2004 and was a collaborative project involving the former Franklin District Council, Papakura District Council, Manukau City Council, Transit New Zealand, Auckland Regional Transport Authority and the Auckland Regional Council. The Study identified deficiencies in Auckland's Southern Sector including:
 - The Southern Motorway (SH1), both in terms of the number of lanes from north of Takanini to Drury and the pressure on a number of interchanges;
 - The lack of a strategic alternative to the Southern Motorway and the low number of north south routes;
 - Conflicts along Great South Road, where it seeks to provide both a strategic north-south route, while at the same time passing through a number of growth centres. In these centres the study noted that consideration was required of the

needs of pedestrian/cycle activity, and to the needs of traffic (especially buses) serving the rail stations; and

- A lack of arterial capacity serving key growth centres, such as Takanini.
- 26. The Study noted that the Mill Road corridor will play an increasingly important role for north/south traffic to the east of the motorway. It recommended that the Mill Road route between Drury, Papakura and Manukau/Flatbush needed to be upgraded and that the form of the upgrade should be examined further as part of a corridor study. The study recommended that Manukau City and Papakura District undertake corridor studies between Flat Bush and Papakura, and possibly to Drury.
- 27. Following on from the Southern Sector Strategic Transport Study, additional studies were advanced by the former Papakura District Council and Manukau City Council. These studies identified options to address the increasing pressures on the existing and adjacent routes, particularly arising from the planned economic growth in Flat Bush, Takanini and Papakura. A brief summary of these studies is set out in Part 2.0 of the NoR documentation.
- 28. Of particular relevance is the Manukau City Council Mill Road Corridor Study, 2011 which considered ten separate options for the Redoubt Road/Mill Road corridor and four options for Murphys Road, which were then shortlisted to two options.
- 29. All of these studies were reviewed and the findings considered as part of the preparation of the Scheme Assessment Report prepared by AECOM, consultants acting on behalf of AT, to select the preferred corridor alignment that is now the subject of these NoRs.
- 30. More recently, AT advise that land use growth in the Flat Bush, Takanini and Papakura growth areas, combined with decreasing levels of service on alternative north-south routes, has led to a significant increase in traffic along the Redoubt Road Mill Road Corridor.⁴ This growth has not been matched by improvements in route quality and capacity, with resulting congestion, particularly during peak hour traffic.⁵ As a result of the Auckland Housing Accord, an estimated 39,000 new homes and sections will be consented throughout Auckland between 2013 and 2016, including 4,467 houses in Flat Bush and 1,770 houses in Takanini.⁶ A further 4,500 houses are anticipated to be constructed in the Takanini Future Urban Zone under the Proposed Auckland Unitary Plan.⁷ The Proposed Auckland Unitary Plan also introduces further employment growth within the vicinity of the corridor, with approximately 35,000 jobs expected by 2040 in the additional development areas in Drury, north of Paerata and South Pukekohe.⁸ With this anticipated future growth and absent the proposed network

⁴ Assessment of Effects on the Environment at [3.1.1].

⁵ Assessment of Effects on the Environment at [3.1.1]. Notice of Requirement for Designation Volume 1.0 – Notices of Requirement at [2.0].

⁶ Evidence of Theunis Van Schalkwyk at [24]-[25].

⁷ Evidence of Theunis Van Schalkwyk at [26].

⁸ Assessment of Effects on the Environment at [11.3.4].

upgrade, the corridor is predicted to reach an unsatisfactory congestion level between 2020 and 2024.9

- 31. The existing corridor also has a poor traffic safety record which can be attributed to its substandard horizontal and vertical curvature. ¹⁰ In the period between 2009 and 2013, there were four fatalities and 283 crashes on this corridor. ¹¹ The route also does not support multimodal use, as the road cross section is too narrow for the forecasted traffic flows, cycle facilities, public transport facilities, and pedestrian facilities. ¹²
- 32. For all of these reasons, the Project is identified as a priority project in the Auckland Plan.¹³

Project Objectives

- 33. AT's specific objectives for the Project are as follows: 14
 - (a) Improve transport access in the area of Manukau / Takanini / Papakura to support the growth identified within the Takanini Structure Plan area and wider southern growth area identified in the Auckland Plan;
 - (b) Improve the efficiency, resilience and safety of the transport network between Manukau and Papakura; and
 - (c) Provide a sustainable transport solution that contributes positively to a liveable city.
- 34. The NoRs would enable the 8.9km road upgrade project between Redoubt Road in Manukau and Mill Road in Alfriston to be moved one further step closer to realisation. The upgraded road would form part of a planned extended corridor providing an arterial road connection east of State Highway 1 between Manukau, Papakura, Takanini and Drury. The road would include a 4 lane plus cycleway arterial route with associated major intersection and interconnecting road networks, including a 1.8km length realignment of Murphys Road. The project would increase corridor capacity, improve the horizontal and vertical alignment of the road and upgrade its intersections to result in less congestion, improved travel times, improved traffic safety and greater route security. It would also provide for bus priority measures, on- road cycle and shared path facilities, new footpaths and designated, safe pedestrian crossing opportunities, thereby increasing the provision of multi-modal facilities in the corridor. In the corridor.
- 35. AT's evidence was that the new roading infrastructure would be designed to meet the Auckland Transport Code of Practice (ATCOP), promulgated by Auckland Council and

⁹ Assessment of Effects on the Environment at [3.1.6].

¹⁰ Assessment of Effects on the Environment at [16.0].

¹¹ Assessment of Effects on the Environment at [3.1.2];

¹² Assessment of Effects on the Environment at [3.1.1].

¹³ Auckland Plan (Auckland's Priority Transport Projects (2012 – 2042) at Map 13.2; Evidence of Roger McDonald at [25]; Evidence of Craig Hind at [86].

¹⁴ Assessment of Effects on the Environment at [4.1.2]; Evidence of Theunis van Schalkwyk at [33].

¹⁵ Assessment of Effects on the Environment at [7.2].

¹⁶ Assessment of Effects on the Environment at [7.2].

AT representatives (with external input as required). ATCOP defines the design of assets to be built for AT or for vesting in Auckland Council for management by AT.¹⁷ We understood from other evidence that the proposed design would also meet the AUSTROADS standard, which is a nationally accepted standard for the design of such facilities.

36. The project involves a substantial investment, with an estimated cost of \$297 million¹⁸.

Description of Route and Proposed Works

37. The extent of the proposed designations is shown on the Land Requirement Plans contained within the NoR Volume 1, labelled NoR 1, NoR 2 and NoR 3. Land to be designated is shown in blue on those plans. The NoRs are fully described in the NoR AEE (Volume 2.1). The following is a summary.

Urban Section - Redoubt Road from SH1 to Murphys Road

- 38. This section of the proposed designation affects the existing Redoubt Road corridor between the southern motorway on and off ramps and the eastern extent of urban development along Redoubt Road. This section comprises all of NoR 1 and part of NoR 2. It includes land designated for motorway purposes (designation 284 in the District Plan and designation 6716 in the PAUP) which extends up Redoubt Road to approximately adjacent St Johns Redoubt; private land on both the northern and southern side of the existing road corridor; parts of the Council owned land at St Johns Redoubt and Totara Park; parts of Diorella Drive, Hollyford Drive, Everglade Drive, Santa Monica Place, Goodwood Drive and Alexia Place.
- 39. There is medium density residential development on both sides of Redoubt Road between SH1 and Totara Park. Closer to Totara Park the housing density reduces as the road passes through the Countryside Living zone. There are motels at 21 and 104 Redoubt Road, and a church at 19 Redoubt Road. The topography over the urban section varies from flat to steep, with some existing steep driveways affected by the designation. Further to the east Redoubt Road is bordered by larger residential sections or countryside living and reserves (Totara Park). The road runs along a ridge with the residential grades generally falling away from the outer berms or road corridor.
- 40. Redoubt Road is proposed to be widened to a 32.4m corridor (25.4m to 29m wide over lengths with existing property constraints), and to be classified as a Regional Urban Arterial (50km/h to 60km/h). Land to be acquired is focused on the area to the south of the existing Redoubt Road. The northern kerbline will be generally on the current alignment. If possible the significant number of mature trees on this side of the road will be retained so they can continue to contribute to the landscape quality of the corridor and to visually offset the wide road width required to carry the anticipated increased traffic flows.

¹⁷ AT Closing Submissions 18 September 2015, paragraph [70].

¹⁸ Evidence of Theunis Van Schalkwyk at [36].

- 41. There will be an additional eastbound lane with cycle lanes on both sides and pedestrian crossing improvements. The high number of right turns into and out of adjacent properties, especially along the Urban Section, is catered for with a 3.5m flush median, allowing a safe refuge for turning traffic. Potential exists within the median area to incorporate future pedestrian crossing facilities.
- 42. Hollyford Drive is proposed to be widened, with a Bus Priority lane at the existing Redoubt Road signalled intersection, a bus-only right turn lane, and land acquisition off Everglade Drive to align the intersection with Hollyford Drive. Existing traffic signals at Hollyford are to be upgraded to cater for future traffic flows. New traffic signals at Diorella and Murphys Road will cater for existing and future traffic flows while minimising travel times on Redoubt Road.
- 43. The proposed work will affect a number of existing infrastructure resources along the Mill Road corridor. A Chorus UFB tower on light pole and cabinet existing in the berm at Chainage 740m outside No 89 Redoubt Road will require relocation to the new berm. Watercare's Wiri Bulk Supply main has valves / spindles and chambers at the Redoubt Road/Hollyford Drive intersection. Relocating or altering this service has significant cost and operational impacts. A Transpower tower / pylon at No 181 Redoubt Road will be on the route of the new carriageway approximately 10m from the road edge.
- 44. The proposed layout which will be enabled by the designation at the Hollyford / Redoubt and Diorella / Redoubt intersections and along Redoubt Road will significantly improve bus travel speeds. It is intended that (in the mean-time) bus stops remain in their current locations, with future additional stops considered on a case by case basis to accommodate demands from adjacent developments. It is noted that buses are expected to stop in the 'live travel lane' nearest to the kerb supported with appropriate line marking. Recessed bus bays are not favoured due to delays imposed on the service due to the difficulty of merging into live travel lanes.

Future Urban Section – Murphys Road

- 45. NoR 2 affects the existing Murphys Road corridor from Redoubt Road down to its intersection with Flatbush School Road. From the bottom end the road (Flat Bush School Road end) is currently surrounded by flat farm land. However, this area is within the Flat Bush Structure Plan area which proposes significant rezoning of the land to residential.
- 46. From this bottom end (Flat Bush School Road end), the road is proposed to be substantially widened and upgraded with a more gentle slope (about 9%), affecting private land on both the northern and southern sides of Murphys Road, together with Council owned land on the northern and southern side of Murphys Road (Murphys Bush Reserve).
- 47. The terrain quickly changes as the alignment tracks up the hill to the intersection with Redoubt Road on the ridge. At this upper end, the road will be realigned from the current alignment to follow a spur to the west up to a new intersection with Redoubt Road to be located 50m west of the existing intersection. This alignment includes an

- at-grade intersection with Redoubt Road, designed to improve pedestrian connectivity. Toward the intersection the alignment will require significant earthworks resulting in high cuts either side of the road. The alignment will also result in the removal of mature, large scale trees within existing residential properties.
- 48. Murphys Road is proposed to be a District Arterial (60km/h) route with a 30.8m to 35.8m wide corridor to provide adequate capacity for projected growth. New traffic signals at Murphys Road will cater for existing and future traffic flows while minimising travel times on Redoubt Road.
- 49. Watercare bulk mains (4) and associated valves at the Thomas Road intersection are affected by the proposal. Watercare also has a 700mm diameter East Tamaki No 3 watermain on the eastern side of Murphys Road which is to be replaced with a 1700mm diameter watermain on the western side of Murphys Road. A Nova Energy gas main will also require replacement clear of the new carriageway.

Rural Section – Redoubt Road and Mill Road south of Murphys Road

- 50. The rural section is currently characterised by low density development along Redoubt Road, leading to a few rural dwellings along the length of Mill Road. The proposed designation (a small part of NoR 2 and all of NoR 3), envisages that this section will be designed as a Regional Rural Arterial route (60km/h to 80km/h) with a 32.4m wide corridor which widens at intersections and approaches. Land affected includes Council owned land (Totara Park) on the western side of the current Redoubt Road alignment; private land on the south-western side of the current Redoubt Road alignment and on the eastern and western side of the current Mill Road alignment, and Watercare designated land on the eastern side of the current Mill Road alignment.
- 51. Improved access will be provided to the Totara Park Pony Club and the southern entrance to Totara Park from Redoubt Road, including turning lanes and a design which will accommodate vehicles with horse floats.
- 52. A significant feature of this section is that the designation deviates from the existing Redoubt Road and Mill Road alignments, with both to be retained as local service roads. From Chainage 3500 to Chainage 5200 Redoubt Road/Mill Road runs through generally steep terrain and crosses the existing Mill Road and two stream gullies. The alignment passes through two areas of established native bush.
- 53. From Chainage 5200 to the end at Chainage 6900 the surrounding terrain is generally flat with deep open roadside drains while land use is predominantly open paddocks with isolated residences.
- 54. South of the Ranfurly Road intersection, including the junction with Alfriston Road, the proposal includes allowance for a dual roundabout at Alfriston Road. A number of historic heritage feature are located in this area.
- 55. Watercare has a water reservoir facility (designation 150) on a large land holding commencing approximately 400m south of the intersection of Redoubt and Mill Road.

There are significant Watercare bulk water mains (4) including the Waikato and Manurewa trunk mains running to and from this reservoir.

Proposed Designation Conditions

- 56. The NoR's have been sought on the basis that they would be subject to a detailed suite of conditions which would have to be met in the design, implementation and operation of the Project. As is to be expected (and endorsed) the condition set evolved throughout the application and hearing process as AT endeavoured to ensure various drafting and substantive concerns raised by Council, submitters and the Commissioners were accommodated.
- 57. The proposed conditions are an important part of the overall Project concept and our assessment of it. This is because they are relevant to our assessment and consideration of the effects on the environment of the NoR's. Where conditions avoid, remedy or mitigate adverse effects, or provide positive effects (e.g., compensation planting), it is those ameliorated or beneficial effects that we are considering.
- 58. For the purposes of this decision, references to conditions are to the final set filed with AT's final closing legal submissions on 2 October 2015 (**Final Conditions**). As noted in those final submissions, prepared after the end of the hearing, further engagement and discussions with Council witnesses resulted in a set in which only one matter remained unresolved (as between those parties at least). Alternative wording for the conditions contended for by AT and the Council were identified within this document. We address this unresolved condition issue later in this recommendation, as well as a concern with the proposed lapse dates for the NoRs.
- 59. The need for resource consents under the various regional rules that would apply to the construction of the project were recognised, such as those required for earthworks and the diversion and discharge of stormwater. With respect to the latter, AT did outline the general approach to stormwater management, based on the relevant regional guidelines and design standards. Such consents will be sought prior to works commencing. We are broadly satisfied that the relevant matters covered by those consents can appropriately addressed at a technical level, and we do not consider that we need to be presented those technical details to form our recommendations on the NoRs.

Statutory framework

Part 8 (Designations)

60. Section 171 of the RMA sets out the framework for our assessment and consideration of the NoRs. When considering the requirements and any submissions received, we must, subject to Part 2, consider the effects on the environment of allowing the requirements, having particular regard to:

- Any relevant statutory planning instruments: 19 (a)
- Whether adequate consideration has been given to alternative sites, routes, or (b) methods of undertaking the work;²⁰
- (c) Whether the work and designation are reasonably necessary for achieving Auckland Transport's objectives:²¹ and
- (d) Any other matter considered reasonably necessary in order to make a recommendation.22
- We have structured our analysis and findings consistent with this statutory framework and addressed issues in contention (as between AT and the Council, and AT and various submitters) as they arise in that analysis. We have described the existing and future anticipated environment, the NoRs and AT's objectives above. We will now summarise the issues raised in the submissions received, then consider the effects on the environment of allowing the NoRs and then turn to the particular matters in s171(1)(a) - (d) of the RMA.
- 62. Finally, we will revert to Part 2 and consider the project against its provisions before making our recommendation.

Submissions Received

- The NoRs were publicly notified on 17 April 2015 under ss95A to 95F of the RMA. Submissions closed on 26 May 2015.
- A total of 287 submissions were received. Five submissions were in support and the 64. remainder were in opposition. Many of the written submissions made were the same (i.e. the same submission from multiple submitters). A summary of submissions was included with the Officer's Report (prepared by Mr Reaburn). Full copies of all submissions received were also made available to the Commissioners. The submissions raise a combination of general and site-specific issues.
- 65. Twenty-three submitters attended the hearing. Seven of those submitters called expert evidence in support of their submissions. The expert evidence was either focussed on concerns with ecological effects at two locations on the route (242 Redoubt Road and 146 Mill Road), or was focussed on specific outcomes sought by individual landowners affected by the NoRs (D E Nakhle Investment Trust - 310 Mill Rd; F P Williams and S R Williams Trust – 116 Ranfurly Rd; Alfriston Village Limited – 1345 Alfriston Rd; Hugh Green Limited/Murphys Development Limited - 64 and 84 Thomas Rd, Flat Bush and 125 Murphys Rd, Flat Bush).
- A number of the submissions raised issues with the project that were generic in their criticism, rather than being focussed on effects on the environment or the other

¹⁹ Resource Management Act 1991, s 171(1)(a).

²⁰ Section 171(1)(b). ²¹ Section 171(1)(c). ²² Section 171(1)(d).

statutory matters to be considered. In some cases, these issues were picked up by the Council processing team and adopted as issues for which an explanation or resolution from AT was sought, or were raised by the Council's experts following their review. Mr Reaburn itemised these matters as follows:

- (a) Need for the Road.
- (b) Perceived over-engineering of the Road.
- (c) Traffic Effects.
- (d) Provision for public transport, pedestrians and cyclists.
- (e) Effects on private property.
- (f) Effects on Ecology / Biodiversity / Trees (including Totara Park, Murphys Bush, Graham's Bush/Cheesman's Bush)
- (g) Effects on Landscape and Character.
- (h) Social Effects.
- (i) Effects on Heritage.
- (j) Effects on Parks.
- (k) Murphys Road Alignment.
- (I) Other Effects Geotechnical, Noise and Air.
- 67. We address the environmental effect matters in our assessment of effects below, but comment now on a few of the other issues identified for our consideration.

Need for the project/Perceived over-engineering

68. Although it is not strictly necessary for AT to demonstrate a 'need' for the project, invariably the objective of a significant infrastructure project such as this is to address existing infrastructural deficiencies or inefficiencies, and so public 'need' is an implicit premise upon which they are based. The background to the project we have summarised above and the land use changes anticipated in the surrounding area have led us to the overwhelming conclusion (even though this is not a threshold requirement) that the project is needed. It follows, furthermore, that it is also not overengineered for the objectives it wishes to achieve.

A longer route?

69. The fact that AT has not sought to designate a full future route of a similar quality and capacity though to Drury (as is identified in long term planning documents) is not a matter relevant to our consideration of the NoRs. We have no power to designate land for which no NoR has been lodged (even if we thought it had merit); and it would be non-sensical to refuse the NoRs that have been sought on the basis that they only

provide for, say, 75% of the future anticipated corridor upgrade. We take this issue no further.

Public transport services

- We are in a similar position when it comes to the complaint that public transport services (as distinct from public transport capacity (i.e., bus priority lanes etc)), are not a required component of the project from its date of completion.
- 71. Firstly, the project or work proposed here is an upgraded road corridor to provide additional capacity for multi-modal transport options. In our view, bus services are not projects or works in the sense contemplated by s 168(2) of the RMA for which a designation could be issued.
- 72. Secondly, even if they were, their provision in this case is not a direct objective of the project. Rather, they are an indirect objective enabled by the capacity of the corridor proposed, but to be developed in conjunction with other public transport policies and initiatives within AT's broader Statement of Intent and organisational objectives, over which we have no influence.
- 73. Thirdly, we are not convinced on the evidence we have heard that the potential adverse effects of public transport services not being established in due course is significant enough in any event to outweigh the other significant public benefits of the project. On this matter we respectfully part company with Mr Reaburn.²³ Based on our findings on effects set out below we are satisfied that the adverse effects resulting from the design standard proposed, implemented in accordance with the Final Conditions, are acceptable, "even if the road is simply used for private motor vehicle use".²⁴ Again, even if we had jurisdiction to recommend otherwise, it would be nonsensical to recommend withdrawal of the NoRs because we were not satisfied that the existing corridor provided sufficiently for public transport services. To do so would be to prefer the current situation over the project implemented as proposed. Suffice to say that we are satisfied that the four-lane route, as proposed, will provide an opportunity for the implementation of dedicated bus priority lanes should AT deem those appropriate at some future time.
- We acknowledge that should AT adopt a different overall public transport provision (e.g, significantly increasing the capacity of the public transport system in the area), then the project objective of providing for private motor vehicle travel may be affected, which could in turn delay the need for the works. While we did not receive evidence on the highest possible public transport capacity of the route as proposed in the NORs, it would seem to us that the route as designed could embody specific public transport priority lanes such that it would have the ability to accommodate significantly more public transport activity than that identified in the modelling work presented to us. Thus we are satisfied that the objective is clearly sound if the route is principally to carry private motor vehicles, while at the same time we are likewise satisfied that essentially the same objective would be achieved if the route was to carry somewhat

Peter Reaburn, Summary Statement at Hearing, at [10]Ibid.

lower private motor vehicle volumes complemented by significantly higher public transport volumes on public transport priority lanes, as proposed.²⁵

Effects of land acquisition

- On a final matter, we wish to comment briefly on the issue of effects on private properties of the project. Mr Reaburn concluded in his s42A report that there will be significant adverse effects on private properties.²⁶ AT accepts this conclusion but says that this is not unusual for a large scale infrastructure project where land takes are required.²⁷ It notes that while this process will inevitably cause some stress and inconvenience to those who hold affected interests in land, this societal 'cost' is part of living in a modern and evolving city.²⁸ The required land acquisitions will be undertaken in accordance with the Public Works Act 1981 (PWA), which sets out the process to ensure that compensation is paid to affected landowners that is fair, reasonable and appropriate.²⁹
- Mr Reaburn also expressed the view that the social effects of 'marginal calls' in terms of partial vs full property acquisition can best be minimised by taking the full property.³⁰ We agree with AT that this reasoning is contrary to the reasonable necessity test in terms of the land footprint required to give effect to the project or work and would therefore not be in accordance with the PWA.³¹ In addition, as noted by Mr Beatson, such a course of action could potentially make the overall land acquisition prohibitively expensive in the context of the overall project.³²
- This issue was discussed in the recent decision of *Tram Lease v Auckland Transport*.³³ 77. In that case, the Court stated:

We consider that Parliament has deliberately created a framework for compensation under the RMA and PWA, in particular s 185 of the former and s 62 of the latter. This legislative framework contemplates that compensation is not available until a taking occurs or works commence. We discern a number of reasons for this regime. First, losses caused by possible anxiety would be extremely difficult to calculate objectively. Secondly, the "public purse" is involved, and is to be protected from payments being sought beyond compensation expressly ordained by statute. Thirdly, if designations could be successfully attacked and cancelled in the absence of provision for preconstruction compensation, it is conceivable that many major infrastructural projects would never get off the ground, particularly those that require some years of detailed planning and implementation.

²⁵ Mr Gratton (Traffic Engineer for Auckland Council) noted in response to the panel's questions that shifting the modal split from say 4% to 8% is probably not enough to eliminate the need for the 4-lane layout as proposed. Thus it seems to us that regardless of PT modal split (within plausible bounds), it would appear that there would be a need for a four-lane facility (including provision for PT priority lanes) as proposed in the NORs in any event. ²⁶ Peter Reaburn Section 42A Report at [8.5].

²⁷ Evidence of Don Harrington at [19]. ²⁸ Evidence of Don Harrington at [19].

²⁹ Evidence of Don Harrington at [21].

³⁰ Peter Reaburn Section 42A Report at [8.5].

³¹ Section 24(7)(d) of the Public Works Act 1981.

³² Evidence of Don Harrington at [65].

³³ Tram Lease v Auckland Transport [2015] NZEnvC 137 at [62].

78. We agree with Mr Beatson that this clearly establishes that the PWA and s185 of the RMA provide the mechanisms whereby landowners can receive compensation for land taken for public works.

Assessment of effects not in contention

- 79. There was no evidence that the project would not have positive effects on the environment. Although it was submitted that the project should be abandoned in favour of other options which would have better positive effects (e.g., Papakura Branch of the Green Party; Murray Palmer), or that changes ought to be made to the project to achieve additional positive effects (e.g., requiring AT to provide public transport services), we heard no evidence that diminished the positive effects of the project identified by AT in its evidence.
- 80. Accordingly, we find that the project will result in a number of positive effects on the environment including:
 - (a) Reduced travel times;³⁴
 - (b) Increased network resilience;³⁵
 - (c) Improved traffic safety;³⁶
 - (d) Improved facilities for active and public transport modes;³⁷
 - (e) Improved sustainability;³⁸
 - (f) Facilitation of urban growth.
- 81. Despite the scale of the project and the inevitable effects on natural and physical resources that it would cause, there was also considerable agreement by the experts who gave evidence as to the adverse effects on the environment of the NoRs and the measures (including conditions) that could be incorporated to appropriately avoid, remedy or mitigate those effects. To avoid unnecessarily lengthening this recommendation we simply propose to list those areas of effects assessment where we were presented with a common view on the evidence. We express our gratitude to the respective experts for their careful consideration, assessments and recommendations in these areas, including in relation to conditions, which we adopt. These areas were:
 - Effects on Maori cultural values (Tama Hovell).
 - Effects on recreation/open space values and parks (Rob Greenaway; Paul Clark).

³⁶ Evidence of Dawie Maritz at [17] et seq; Assessment of Effects on the Environment at [11.3.1].

Assessment of Effects on the Environment at [11.3.3].

³⁴ Assessment of Effects on the Environment at [11.3.7].

³⁵ Evidence of Dawie Maritz at [18].

³⁷ Evidence of Dawie Maritz at [15] and [18]; Assessment of Effects on the Environment at [11.3.2]; Evidence of Roger McDonald at [26]-[29].

- Archaeological and heritage effects (Dr Rod Clough; Caroline Phillips).
- Stormwater (James Hughes; Zheng Qian).39
- Air Quality (Andrew Curtis; Carol McSweeney).
- Land stability effects (Geothechnical) (David Burns; Steven Price).
- Hydrogeology (Anthony Kirk).⁴⁰
- Contaminated land (Emma Trembath; Lauren Windross).
- Noise and vibration effects (Claire Drewery; Siri Wilkening).⁴¹

Assessment of effects in contention

- 82. The adverse effects of the project that were in contention (on the basis of the submissions and evidence we received) were:
 - (a) Ecological/arboriculture effects (particularly at 242 Redoubt Road; 38 and 146 Mill Road; Totara Park; Murphys Bush);
 - (b) Potential economic effects on the child care centre at 310 Mill Road;
 - (c) Traffic/access and land take effects for land at 64 and 84 Thomas Road and 125 Murphys Road (within the Flat Bush Structure Plan Area):
 - (d) Traffic/access effects at 1345 Alfriston Road;
 - (e) Noise and other effects at 116 Ranfurly Road:
 - (f) Landscape and visual effects/urban design issues;
 - (g) Social effects.
- We heard evidence from other submitters that was cast as concern with the effects of the project on them (e.g., 11 Everglade Drive; 208 Redoubt Road). We consider that these concerns are related to the impact on these properties of the loss of some of their land area to enable the project to proceed. We will consider these issues later in this recommendation as 'other effects'.

³⁹ We note that Andrew Hunter gave stormwater engineering related evidence for Hugh Green Limited/Murphys Development Limited, but this evidence was focussed on stormwater infrastructure design and the necessity for the area of land identified for that purpose at one specific location across from the intersection of Thomas and Murphy Road rather than adverse effects arising from stormwater from the project (which would be the subject of a regional discharge consent in due course anyway).

⁴⁰ Dr Harger presented us with detailed evidence on hydrological issues (i.e., potential effects on groundwater as a consequence of the proposed earthworks adjacent to Totara Park). However, despite his experience in environmental assessment we prefer the specialist hydrogeological evidence of Mr Kirk on this matter.

41 Excludes site specific noise effect issues raised by Jon Styles for F P Williams and S R Williams Trust.

242 Redoubt Road - Ecological/Arboriculture Effects

- 84. 242 Redoubt Road is a property proposed for full acquisition by AT for the realignment of Murphys Road with Redoubt Road. A group of 15 substantial pin oaks and one Algerian oak will need to be removed to enable the earthworks cut and road layout proposed. As mitigation for the loss of these mature trees, AT proposes to plant a similar number of trees of a large size-grade in a similar location and to provide for their long term establishment and protection into maturity (see proposed condition 32.2).
- 85. Although Mr Burgisser and Mr McBride agree that the mitigation proposed for the mature tree removal is appropriate, they note that it will only be fully achieved in the longer term (perhaps 30 to 40 years after establishment). This aspect of the project will therefore have a temporary adverse effect, diminishing over time as the replacement trees establish.
- 86. Mr and Mrs Osborne, the owners of 242 Redoubt Road, also implored us to consider the impact the project would have on the native planting and seedling regeneration occurring at their property. Dr Harger provided evidence that biodiversity values were increasing at this location as a consequence of the Osbornes' recent land management practices. We acknowledge that development, but note that no other expert witness considered that the indigenous vegetation at this property was significant or provided significant native habitat that required recognition and protection by way of avoidance. We empathise with Mr and Mrs Osborne at the loss of the garden they have worked to develop, but we are bound to observe that compensation for that loss is statutorily provided under the PWA.
- 87. We find that the exotic and native vegetation at 242 Redoubt Road is of insufficient significance to warrant avoidance by the project. We are satisfied that the mitigation proposed is appropriate and will achieve the sustainable management purpose of the RMA.

38 and 146 Mill Road; Totara Park; Murphys Bush - Ecological Effects

- 88. NoR 3 traverses across native bush at 146 Mill Road and native bush and scrub at 38 Mill Road. It also impacts on the heads of a few vegetated gullies at the northern end of Totara Park and also involves minor intrusion into Murphy's Bush.
- 89. Mr Slaven's evidence described these areas and their ecology in detail.⁴² The native bush at 146 Mill Road is a 4.2ha remnant of old growth taraire-kahikatea forest, and the road would traverse across it by way of a bridge at its most narrow point. The direct adverse effects would include 1,500m² of vegetation clearance (constituting 3.6% of the forest area), the topping or felling of emergent trees in the 500m² of bush beneath the bridge superstructure, and loss of vegetation in close proximity to the two abutments as a result of rain shadow and shading. It is estimated that six or seven large trees are likely to require removal, together with a few other less sizeable canopy trees.

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⁴² Evidence of Dave Slaven.

- 90. In relation to the affected area, Mr Slaven's opinion was that the vast majority of the sub-canopy, mid- and ground tier vegetation beneath the bridge should continue to survive on the basis that these plants have all grown in the shade beneath the existing dense tree canopy and are all shade-tolerant species. The use of the bridge will also result in an intact vegetated corridor being retained beneath it. Due to the limited extent of clearance proposed, the small number of old growth trees affected (with the majority retained), and the retention of ecological corridors, Mr Slaven assessed the significance of the ecological effects at this site is being low.
- 91. An area of native bush and scrub at 38 Mill Road will also be bridged. As a result of an ecological assessment undertaken in mid-2014, the bridge was moved 13m eastward to retain the densest pocket of mature kahikatea trees present in the area, including some of the largest specimens in this bush remnant.
- 92. As a result of the bridge structure, the tallest of the canopy trees within the bridge footprint will need to be felled. It is estimated that the extent of tree loss at this site is a total of ten mature native trees although some additional losses may also eventuate. However, as is the case for 146 Mill Road, Mr Slaven's evidence is that the vast majority of the sub-canopy, mid- and ground tier vegetation beneath the bridge should continue to survive, given that these plants have all grown in the shade beneath the existing dense tree canopy and are all shade-tolerant species.
- 93. It is also likely that there will be rain-shadow effects in a small portion of bridge footprint, where precipitation will be unable to drift underneath the bridge and water the underlying soil. However, these effects should be limited to around the two abutments in Mr Slaven's opinion. Some temporary habitat fragmentation will also occur during construction since some bush clearance is necessary to build the bridge piers, but this effect will be mitigated during construction by approaching the pier construction sites from both sides of the stream to retain a central habitat linkage beneath the bridge that connects the bush on either side. The area cleared for these works will also be revegetated after construction is completed.
- 94. As an off-set (or compensation) for the intact bush areas affected, AT proposes to undertake 2.2 hectares of restoration planting and legally protect 1.9 hectares of significant native bush at 38 Mill Road. It will also undertake weed and pest control at 38 Mill Road. Replacement planting will be undertaken to achieve a ratio that for every 1m² of canopy trees lost, AT will undertake 7-8:1 of replacement planting. If the area of bush that will be legally protected at 38 Mill Road is taken into account, the ratio increases to 15:1 13:1, so that for every 1m² of canopy trees lost as a result of the project, 15-13m² of vegetation will be protected or replanted to compensate for that loss. Consequently, AT submitted that although the effects at 38 Mill Road will be significant, mitigation measures will offset these effects.
- 95. In relation to the other areas identified, at Murphy's Bush the exact extent of vegetation clearance is currently unclear but will be no more than a 3m intrusion and therefore ecological effects are low in Mr Slaven's opinion. Similarly, vegetation removal

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⁴³ Evidence of Dave Slaven at [78].

required at Totara Park will involve relatively young plants only and is considered by Mr Slaven to be a less than minor effect.

Freshwater Communities

- 96. Four permanent streams will be impacted by the project two to be crossed by bridge, one where an existing culvert will be extended, and one where a new culvert will be required.
- 97. As the bridge crossings will leave the streams concerned intact, effects on freshwater communities at these locations will can be avoided, other than through the discharge of treated sediment laden runoff during construction. This is subject to appropriate management of work areas during construction. The culvert works required for the other crossings will require specific resource consent as the NoRs will not authorise activities regulated by s13 of the RMA. Mr Slaven's evidence is that any loss of aquatic habitat as a result of the new culverts will need to be mitigated via use of an Environmental Compensation Ratio employed at the time of that consenting process. Calculations will be undertaken at that stage which will determine the extent of riparian restoration required to offset the permanent loss of stream bed.

Wildlife

- 98. AT's evidence is that the project poses little direct risk to native birds, but that adverse effects may occur if required vegetation clearance occurs during their nesting season. To reduce the risk of these adverse effects occurring, AT will undertake any clearance of vegetation outside of October to February if practicable, or, if this is not practicable, undertake field verification of the absence of nesting native birds prior to the felling of bush and trees. This is provided for in the Final Conditions.
- 99. Although no bats were detected during the survey work completed by AT, it is acknowledged that bats may use the area. Similarly, no native skinks were detected during the survey periods, although it cannot practically be determined with certainty that no such skinks are present in the area. AT therefore proposed that Bat Management and Lizard Management Plans be prepared to avoid, remedy or mitigate any potential adverse effects on bats or lizards.⁴⁴

Submitter evidence

100. Ecological effects evidence was presented for various submitters by ecological experts as well as lay advocates. The evidence was focussed almost exclusively on the effects of the project on the bush remnant at 146 Mill Road. We also note that the concerns raised by submitters related to the ecological effects on the remnant bush. No particular concerns were raised regarding the landscape, visual and amenity effects of structures and land modification in relation to the stands of bush. Primary briefs of evidence were filed by Dr John Harger for the Redoubt Ridge Environmental Action Group (RREAG), Ms Alison Davis on behalf of the Tree Council and RREAG, and by Mr Nicholas Goldwater for the Royal Forest and Bird Protection Society of New

⁴⁴ Evidence of Dave Slaven at [46] and [49]; See Final Conditions 36 and 37.

Zealand. The Council's ecologist, Ms Woods, also supplemented submitter evidence with her own assessment and presentation to us on the effects of the project at this location.

- 101. Despite the volume of evidence on this issue and the time it occupied for all parties, both before and during the hearing, we can state our findings on it relatively succinctly. This is because, despite differences of opinion as to the quality and values of the bush, there was a large measure of agreement as to the actual and potential effects that the project would cause to it.
- 102. All of the ecological evidence we heard assured us that the effects on the remnant bush at 146 Mill Road would be localised to the area of proposed clearance, and that the clearance (and construction and operation of the bridge over and within the cleared area) would not have any impact on the health and long term viability of the remaining bush area. This is important in our view. Although the value attributable to the bush as a consequence of its intactness (relatively speaking) would be diminished by the intrusion through it of an engineered structure, that intrusion will not adversely affect the bush area beyond its location, and nor would it lead to fragmentation of the ecological corridor.
- 103. In terms of the localised effects of the bridge, we find that these have been fairly described and assessed by Mr Slaven. Despite disagreement with his assessment as to the potential magnitude of rain shadow and shading effects on the mid- and low tier vegetation that would remain below the structure, we note that AT has proffered environmental compensation as if all of the vegetation areas affected by the bridge were destroyed.
- 104. As would be expected for any proposal that engages s6(c) of the RMA, which we find this one would at this location, we explored with all of the experts with knowledge of the site and its surroundings possible ways to avoid any adverse effects on this bush remnant. These included re-routing the proposed road to miss the site, or raising the bridge or modifying its design to reduce its effects. We set out our findings about the adequacy of the assessment of alternatives for the road at this location later in this recommendation. Our conclusion is that it has been adequate.
- 105. We find that complete lateral and vertical avoidance would come at significant costs for the community (additional project costs of approximately \$40,000,000), and the environment (adverse visual and landscape impacts from a structure elevated 40m above the ground), and that these costs are of greater impact than the effects on the bush remnant they would be endeavouring to avoid, even giving the highest value possible to the bush itself.
- 106. We have reached a similar conclusion in relation to the options of partial vertical avoidance (a 5m increase in height) and shifting the northern abutment further out of the gully to retain an area of 455m² of vegetation. Both design changes would also come with costs, albeit not to the same extent as complete avoidance. We have deliberated at length on whether the estimated cost of \$4.81million to increase the span of the bridge is warranted. As this redesign would have limited benefit in terms of avoiding impacts on the vegetation areas of most value in this remnant, including the

canopy trees, and potentially results in an area where edge effects and ongoing maintenance would be required to a greater degree, we have decided that the design option preferred by AT (rather than the one recommended by Mr Slaven) is appropriate and sustainable.

- 107. As noted, AT proposes compensation planting for the loss of bush areas affected by the proposed route through the bush remnants at 38 and 146 Mill Road. understand that such compensation or offset is an accepted resource management response to situations such as this. 45 The extent of compensation planting proposed by AT was criticised by Mr Goldwater for Forest and Bird and by Ms Woods for the Council. The compensation ratio of 7-8:1 proposed by AT and supported by Mr Slaven is somewhat arbitrary, albeit that it is based on Mr Slaven's experience in similar developments. Ms Woods described a methodology to determine compensation that could generate a significantly higher ratio. However, she could not offer a specific recommendation at this time. Consequently, we are inclined to agree with AT's closing and final submissions in this regard that neither Ms Woods or Mr Goldwater provided us with a specific basis on which we could confidently rely to accept their respective criticisms and identify a more appropriate level of compensation planting. As a result, we accept AT's submission that the amount of compensation proposed is appropriate and assists us to find that the sustainable management purpose of the RMA is achieved in relation to this aspect of the project and its effects on native vegetation.
- 108. It follows from this finding that we agree with AT's version of the Final Conditions on this aspect, and not the revised versions sought in the alternative by the Council.

310 Mill Road - Access/Economic Effects

- 109. The D E Nakhle Investment Trust has recently established a substantial child care centre at 310 Mill Road. Mr Nakhle advised us that its location on Mill Road for accessibility and visibility were factors that contributed to the choice of location. His concern was that the proposal to move the main Mill Road thorough fare to the west and retain the existing Mill Road at his frontage as a cul-de-sac would reduce the centre's accessibility for parents and staff and its visibility to passing motorists and thus adversely affect its economic viability.
- 110. Rather than oppose the NoR and seek that Mill Road not be relocated as proposed however, the submitter sought a south-facing merging lane from the end of the existing Mill Road (to be stopped), to enable parents to continue south on the new road without having to utilise the proposed roundabout, and signage within the new corridor identifying the location of the child care centre to motorists.⁴⁶
- 111. At the hearing AT proposed a condition to address the second item of relief sought by the D E Nakhle Investment Trust (see proposed condition 37.4). Its position on the first item (a south-bound merging lane), was that it was potentially feasible but that it

⁴⁵ Off site remediation or offsets that do not relate to effects which occur at the point of impact were held by the High Court in *Royal Forest & Bird Protection Soc of New Zealand Inc v Buller DC* [2013] NZHC 1346, [2013] NZRMA 293 to not be mitigation of an effect but rather involve a positive new effect or benefit, which may be taken into account under s 104(1)(a) and (c), and s 5(2).

⁶ Final Condition 40.4.

preferred not to commit to it (or be committed to it) until detailed design and access assessment was undertaken at the time of construction of this section of the road. It has proposed condition 40.7 to act as a prompt to investigate this option at the time of construction.

- 112. For us to be satisfied that a condition should be imposed now to require detailed design of the new corridor to provide a south-bound merging lane, we would require evidence that the economic effects on the submitter of not doing so would be significant. However, the evidence did not establish that such effects would occur to that degree, if at all. Rather, we were persuaded by the traffic evidence for AT (and Mr Hills for the submitter), that the Mill Road corridor re-alignment and roundabout development at this location would have access and safety benefits for the child care centre that would be an improvement on the current situation. On this point we find that those benefits may outweigh the inconvenience effects to users of the centre having to exit the main road to drop off their children and then re-enter to continue on their way.
- 113. In these circumstances, we find AT's approach is appropriate and reasonable and we are not persuaded to recommend the provision of a south-bound merging lane. AT has committed to signage and a detailed review of the situation prior to construction. As a stakeholder in the project, the submitter will have opportunities to engage with AT at that stage of the project to contribute to the final design solution.

Hugh Green Limited and Murphys Development Limited - Traffic/access and land take effects

- 114. Hugh Green Ltd and Murphy's Development Ltd seek a condition on the NoRs requiring the project to incorporate (at AT's expense) specific intersection types at the intersections of Thomas/Hodges/Murphys Road and Murphys Bush Scenic/Murphys Road (and in particular that the intersections should be signalised rather than roundabouts or Give Way controlled).
- 115. AT's modelling does not indicate that signalised intersections are required in these locations at this time. It submits that the intersection design that is currently proposed has been assessed to provide adequate capacity for expected traffic volumes,⁴⁷ and that is the most it should be required to ensure.
- 116. The evidence for these submitters though is that planning for the urbanisation of their land within the Flat Bush Structure Plan Area is well advanced, and that applications are presently with the Housing Project Office for their development as Special Housing Areas under HAASHA. Their simple proposition is that the design of the NoR intersections at this location should accommodate the future potential traffic flows as if the area were developed as proposed.
- 117. AT does not accept this proposition. It says that if traffic volumes exceed those predicted by its modelling following completion of this section of the route upgrade, then signalised intersections may be added a later time. This can occur without any

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⁴⁷ Executive Summary of Evidence and Response to Matters Raised of Andrew Foy at [11].

- further land take being required (i.e., within the designation footprint) and this fact was acknowledged by Ms Dowling, an expert traffic engineer called for the submitters.
- 118. In addition, AT submits that, as road controlling authority, it is the ultimate decision maker in this regard and that it is well placed to make decisions regarding the need for signalisation; indeed, makes these decisions across Auckland as part of its usual functions every day. It says that it is therefore appropriate for the designation to be enabling rather than mandatory in this regard.
- 119. Finally, it submits, that as a matter of law it is only required to do what is necessary to mitigate effects of the designation it is not required to enable third parties to undertake activities, citing *Sampson*, *DR* & *Others v Waikato Regional Council* which stated:⁴⁸

To impose a condition, requiring an applicant to take measures beyond what is required to mitigate effects caused by an activity, would in our view be unreasonable.

120. We accept ATs submissions in this regard and find that a condition requiring it to assist the future (but as yet unapproved) development of the submitters' land by providing signalised intersections would be inappropriate. The absence of such a condition does not preclude AT from providing such intersections at a future time if they were seen as necessary, or for private developers completing or contributing to the same outcome if traffic generation from their developments needed to be accommodated by such intersections. To ensure the appropriate integration of land use and infrastructure planning, AT has proposed condition 23.7 to require it to reconsider the need for signalised intersections at the time this portion of the route is constructed. We endorse that proposal. Moreover, the designation would not preclude any specific intersection type being constructed concurrently with the development of those Special Housing Areas, subject to engagement and approval by AT.

Stormwater

- 121. The submitters also considered that the area of land identified as required for the stormwater pond on the corner of Murphys and Hodges Road (unformed) is too large. Through counsel they submitted that the area set aside for the stormwater pond is not reasonably necessary, that alternatives to the land take had not been adequately considered and that the adverse effects of the potential land take were inappropriate.⁴⁹
- 122. AT's evidence is that the area for the stormwater ponds is required for the project, based on the following factors:⁵⁰
 - (a) Water quality treatment;
 - (b) Detention for SMAF 1; and

⁴⁸ EnvC Auckland A178/02, 2 September 2002 at [84]. See also *Horn v Marlborough District Council* EnvC Wellington W30/2005, 4 April 2005 at [118(c)].

 ⁴⁹ Legal Submissions on behalf of Hugh Green Ltd and Murphys Development Ltd at [26].
 ⁵⁰ Summary of Evidence and Response to Matters Raised of James Hughes at [11(a)].

- (c) Provision for peak flow attenuation.
- 123. A design to cater for 1 in 100 year attenuation was adopted following discussions with Auckland Council's stormwater team, who specifically sought that this be included. It is this design feature that drives the preliminary design of the pond and hence the extent of the NoR area concerned. However, we accept AT's evidence that if the 1 in 100 year attenuation is not required (and that may be the case see below) then the footprint for the wetland/pond could be reduced from 3000m² to approximately 2,000m² (but not down to the 650m² suggested by Mr Hunter).⁵¹
- 124. AT advises that further detail in relation to the size and design of the pond can and will be developed at later design stages, and that this may be influenced by region wide changes to stormwater attenuation design principles. It confirms that the designation area will be drawn back if land around the stormwater pond is found to no longer be required and has committed to a review, redesign and designation amendment process to enforce that commitment (see Final Conditions 40.8, 40.9 and 40.10). We agree with AT that these conditions address the issue raised by the submitters with this pond area, even if they do not adopt word for word the proposed condition put forward by counsel for the submitters, 52 and are reasonable and appropriate.

Lapse date

- 125. The submitters also request a 5 year lapse period, submitting that if AT really considered that the road would become unacceptable without the upgrade, "then it should, as a responsible public body charged with managing the local roading network, be taking steps to ensure that does not happen".⁵³
- 126. AT says in response that such a submission fails to recognise the real world situation in relation to funding availability for Auckland's roading network. Its evidence is that the current road is sub-standard and that the upgrade is required to provide for the forecasted increase in travel demand which will be placed on the corridor, but that these circumstances do not automatically dictate how and when funding for necessary projects will be available. AT submits that this does not mean that it is not acting as a responsible public body, but rather that it allocates funding based on a prioritisation system to meet the needs of all of Auckland to the best of its ability within its funding constraints.
- 127. We accept that setting an earlier lapse period would not alter Auckland's funding priorities or the amount of money available, and that in the absence of funding in the relevant period, AT would likely be required to seek an extension to the lapse period. This would potentially put AT to further expense. Accordingly, we find that there is no benefit (in terms of bringing the project construction date forward) achieved by shortening the lapse period, and we decline to do so. We find that AT's (revised) proposed 10 year lapse period for NoR 2 is appropriate.

⁵³ Legal Submissions on behalf of Hugh Green Ltd and Murphys Development Ltd at [29].

⁵¹ Summary of Evidence and Response to Matters Raised of James Hughes at [11(a)].

⁵² Memorandum of Counsel for Hugh Green Ltd and Murphys Development Ltd dated 18 September 2015.

1345 Alfriston Road

- 128. Alfriston Village Ltd seeks access to its site off Mill Road to be provided for now as a condition of NoR 3 so that a development it may undertake in future has access to the new route. We understand that a resource consent will be required to obtain access to this site at the time it is developed.
- 129. AT says that, in principle, it expects that access to and from the site could be provided (although not in all respects). Its inability to be less equivocal in this regard is hampered as details of the development proposal are not yet available,⁵⁴ detailed design of the road corridor is not yet complete, and no resource consent application has been lodged. Further details would cover such matters as the nature of the access, use, sightlines, markings etc. It submits (and we agree) that it would be inappropriate to seek to pre-determine the outcome of a later resource consent application as part of this project.
- 130. AT is prepared though to include an advice note as part of the designation conditions (see Final Condition 40.10), which records that it does not object to what has been proposed at a high level. Specific wording referencing this position has been proposed.

116 Ranfurly Road

- 131. FP Williams and SR Williams Trust own land at 116 Ranfurly Road. There is currently one dwelling on this site. The submitter has subdivision aspirations and has recently applied for consent to subdivide the title into 19 allotments. It is unclear from the information presented at the hearing whether this consent is intended to be implemented (as it was suggested that significantly more dwellings potentially up to 200 could be placed on the site). However, the proposed subdivision layout for which consent has been sought was provided to us at the hearing with the Mill Road corridor overlaid to show the relationship of the proposed subdivision to the road corridor.
- 132. At the hearing the submitter presented evidence from various disciplines including planning, engineering, traffic, noise and landscape. Despite the submitter's representation by experienced counsel, at times the evidence called was inconsistent, particularly in relation the relief actually sought.
- 133. For example, Mr Bartlett QC appeared to request that the designation area be extended into the gully on the property thereby increasing the land area requirement. Mr Scott sought that mitigation planting be provided, as a result of which Mr Bartlett suggested that the planting could form part of the mitigation ratio (whilst at the same time acknowledging that AT does not require any more land for mitigation planting and observing that a 7:1/8:1 ratio as proposed by AT is very high).
- 134. In addition, it was then sought that the proposed new intersection be moved. The rationale for this was difficult to understand if acquisition of all land to the edge of the

⁵⁴ Executive Summary of Evidence and Response to Matters Raised – Roger McDonald at [20].

- gully is actually what is sought. It was also accepted that this would have flow on effects for the landowners across the road from the 116 Ranfurly Road.
- 135. An additional matter raised was whether the proposed batter slopes could be a retaining wall (although it was again difficult to reconcile why this would be helpful if the site was to be acquired to the gully), or whether there could be a combination of retaining walls and batter slopes.
- 136. We will endeavour to address these various issues.

Extent of acquisition

137. AT submits that acquisition of the submitter's site to the edge of the gully is not appropriate and could not be justified. We agree with AT that in order to justify taking land under the PWA, the land must be reasonably necessary for the proposed works. We find that the land to the gully is not reasonably necessary to construct or operate the road. Nor is it necessary for mitigation of the effects on terrestrial vegetation we are required to consider, notwithstanding that the quantum of mitigation necessary for the installation of culverts is yet to be determined through the resource consent process. Therefore, the requested land take would be neither legally justifiable nor an appropriate use of public funds.

Intersection type, batter slopes and retaining walls

- 138. AT has considered the initial design of the road corridor adjacent to this site with a view to minimising the effects on this property. This included the use of a combination of both batter slopes and retaining walls at this location. AT also explored alternative intersection types. However, none of the options investigated resulted in a substantial reduction of the required designated area. That part of the designated area which could be avoided falls within the gully area in any event, an area which we understand could not be developed without resource consent. In addition, AT's evidence was that changing the roundabout to signals resulted in a loss of efficiency and reduced travel time benefits.
- 139. However, AT has proposed a condition (see Final Condition 23.8) which requires it to consider the use of traffic signals at the intersection of Mill Road with Ranfurly Road at the time that NoR 3 is constructed.

Noise

- 140. In addition to the above requests, FP Williams and SR Williams Trust also sought that AT meet noise standards at potential future dwellings (the number and location of which is uncertain) which have not yet been designed, consented or constructed.
- 141. We accept AT's submission that this proposal is inconsistent with well-established case law in relation to the existing environment. The Court of Appeal's decision in *Queenstown Lakes District Council v Hawthorn Estates Ltd* confirmed that granted, but unimplemented, resource consents could form part of the environment against which a proposal should be assessed where it is likely that those resource consents will be

- implemented. However, the Court rejected the proposition that resource consent applications not yet made, but which may conceivably be made, could be taken into account treated as part of the environment.
- 142. Accordingly, we have no power to consider the effects on potential future dwellings which have not yet been granted consent. It follows, that AT cannot be required to meet noise standards for buildings that do not yet exist. Rather, any noise conditions can relate only to existing receivers.
- 143. As such, any new development that wished to proceed on the site outside the designation footprint, would have to incorporate noise attenuation design to ensure a satisfactory internal noise environment and thereby avoid reverse sensitivity effects on the project. The economic consequences of any such restriction (if any) will be reflected in the value of the land and will potentially be compensable.
- 144. Compounding the uncertainty of potential future noise effects is that the site is zoned Rural 3 in the operative Manukau Section of the district plan and Countryside Living in the PAUP. On that basis, no reasonable estimate of density greater than that allowed by those zones can be made at this time. And the subdivision consent sought by the submitter has not yet commenced, as far as we are aware.
- 145. In any event, based on the evidence of Ms Drewery (supported by Ms Wilkening), it appears that even based on the "new" road standard (as was requested by Mr Bartlett), with the BPO in place, the future development area of this land will be within acceptable noise limits for dwellings. Any constraints on development of this site therefore arise from the need/desire for land for construction, rather than noise effects. As noted, that lost future opportunity is not an effect on the environment of the project that we can consider. Any land taken for the project, will be compensable.

Landscape and visual effects/urban design issues

- 146. Although we were ultimately presented with an agreed set of conditions (as between AT and the Council) which identified no disputes in relation to the conditions designed to mitigate the landscape and visual effects of the proposed new roads, and its urban design, it was not the case that the Council's specialist peer reviewer, Ms Gilbert, was in complete agreement with ATs assessment of effects on all matters. It is appropriate that we comment briefly on Ms Gilberts outstanding matters and record our findings.
- 147. Ms Gilbert helpfully summarised her outstanding concerns in her Summary Statement dated 18 September 2015 and suggested amendments to AT's proposed NoR conditions as tracked changes where she considered such amendments would address those concerns. We have carefully reviewed her suggested conditions changes against the Final Conditions supplied by AT and have identified only two differences. These relate to Ms Gilberts suggested inclusion of two matters for consideration in the preparation of the detailed Urban Design and Landscape DWP(s) at 32.2.b) ii and iii (renumbered 31.2.b) in AT's Final Conditions).
- 148. We agree with ATs (implicit) position that the two matters in question, namely focussing design of the road to buffer itself from adjacent urban land use and to

reinforce itself as a defensible edge to the city, are not appropriate for inclusion in this condition. While designing the road to ensure it buffers itself from adjacent usage may be appropriate in some cases, for example, where it is at the "edge" and does not provide for direct adjacent property access, it may not be in every case where those features do not exist. We prefer to leave these sorts of design issues to the appropriate experts at the time the DWPs are prepared. We are satisfied that the revised conditions provide a detailed suite of considerations that will optimise the design of the road to the environment it will traverse/serve at the time it is to be built.

- 149. Similarly, designing the road to reinforce a defensible edge may or may not be appropriate depending on the circumstances at the time. We are reluctant as well to foreclose or determine potential future locations for urban land uses by requiring a road to be designed in a certain way. We have no role in respect of that planning exercise.
- 150. The final issue with which Ms Gilbert remained dissatisfied was the lack of an explicit requirement for the provision of public transport services to be developed in conjunction with the opening of the road. For the reasons we have noted above, we are unable to address this concern by way of conditions.

Social Effects

- 151. AT completed a Social Impact Assessment (**SIA**) for the project in order to understand the potential social effects arising during its planning, construction and operational phases. The SIA ranked impacts of the project in five levels: Positive, Neutral, Minor (Adverse), Moderate (Adverse) and Significant (Adverse).⁵⁵ The key adverse social effects identified arise from the prolonged planning phase, property acquisition, construction, and changes to visual amenity.⁵⁶
- 152. To mitigate the identified social impacts of the project AT proposes by way of condition11 to prepare a Social Impact Management Plan (**SIMP**). The purpose of the SIMP is to enable review and confirmation of the social impacts identified in the SIA at the time of construction,⁵⁷ which will enable mitigation measures to be developed based on the community in place when construction commences.⁵⁸ The SIMP will then inform the preparation of a Social Impact and Business Disruption DWP to manage the identified effects.⁵⁹
- 153. Despite these proposals, the s42A Report concluded that the project would result in significant adverse social effects. AT disagrees with that assessment and submits that any social impacts arising from the project can be largely mitigated by the proposed designation conditions to result in moderate or minor effects. It says that the evidence of Dr Phillips (Council's social effects reviewer), on which the s42A Report conclusions are based, is the basis for this erroneous assessment of social effects. AT's criticisms of that evidence were several, namely that Dr Phillips' analysis did not factor in the

⁵⁶ Evidence of Kelli Sullivan at [19].

⁵⁵ Evidence of Kelli Sullivan at [20].

⁵⁷ Evidence of Amelia Linzey at [21].

⁵⁸ Evidence of Amelia Linzey at [6].

⁵⁹ Evidence of Amelia Linzey at [21] and Condition 16.1(e).

- social consequences of the existing substandard route or the social benefits of the upgrade, and presumed that all social effects had to somehow be compensated, failing which the project ought not to proceed.
- 154. We agree with Mr Beatson's legal submissions in relation to this matter. Safe and efficient infrastructure is a requirement for any modern society and its members, and the nature and extent of compensation payable for the taking of land to facilitate that infrastructure has been mandated by the PWA, which includes a solatium payment where such taking may be compulsory (i.e., against the wishes of the owner). Beyond that, we do not understand the RMA as requiring the avoidance of effects on peoples' feelings of loss or emotional distress.
- 155. In the end, despite the differences of approach evident between Dr Phillips and Ms Sullivan and Ms Linzey (for AT), after the close of the hearing agreement was achieved by them on the final wording of the conditions relating to social effects management and mitigation. These have been incorporated into the Final Conditions. We accept them as a reasonable and appropriate suite of conditions to address the identified social effects of the project.

Other 'Effects'

- 156. Mr Sleeman of 208 Redoubt Road attended the hearing to seek design changes to the alignment of the road corridor adjacent to his property, in essence to try and protect as much of the established planting, entranceway and other fixtures on his land presently identified as within the designation footprint. Based on ATs preliminary plans he identified that changes in the curvature of the road at this location seemed feasible and reasonable.
- 157. Although Mr Sleeman's complaint about the extent of the designation footprint is, strictly speaking, a compensation matter, AT fairly considered the issue and advised that a redesign to address the concern may be possible. It has volunteered a condition to investigate the matter at detailed design (Final Condition 40.6). We acknowledge that offer.
- 158. Mrs Veerla of 11 Everglade Drive spoke to her family's submission on the project, which was focussed on the impacts to their property from the extant of land take required for the road widening works proposed on Everglade Drive leading up to the intersection with Redoubt Road. The land to be taken is utilised as an outdoor play area for her young children, and her house was designed with a bedroom and living room on this frontage. Her evidence was that the land take would impact on the outdoor amenity available to her property, and any compensation was not enough for the house to be rebuilt or shifted to restore its amenity/set back from the road.
- 159. We empathise with the situation that the NoR and preliminary road design for the works on Everglade Drive seem to create for Mrs Veerla and her family, and have given this matter considerable thought. Our conclusion is that the implications of the proposed land take for the balance of Mrs Veerla's property are compensation matters. We are satisfied that AT, as a responsible requiring authority, will only take as much land as is necessary; and, that it is motivated to avoid, remedy and mitigate as many

impacts on the amenity of this property from the road works as far as practicable, as this has an indirect effect on the amount of compensation that it may have to pay for the land taking. We expect therefore that AT will undertake the same sort of investigation it has offered to do for 208 Redoubt Road for 11 Everglade Drive, even though it has not expressly recorded that in the Final Conditions.

Statutory planning instruments (Section 171(1)(a))

- 160. The statutory planning instruments contain a number of objectives and policies which have relevance to the project. As is commonly the case, tensions are apparent between objectives and policies in different chapters of the planning documents, but the statutory planning instruments themselves do not provide any guidance on how these tensions should be resolved. This situation was discussed in the Board of Inquiry's Final Report and Decision into the Basin Bridge Proposal (**Basin Bridge**). In that case it was agreed that:⁶⁰
 - (a) There were no objectives or policies that provided a strong direction that the application should be granted or declined;
 - (b) There were no inherent conflicts at the theme level between the different themes identified, although there were tensions that required relevant objectives and policies to be considered in forming an overall judgment in relation to the particular proposal; and
 - (c) There were tensions at a policy level between transportation and urban form, open space, amenity, and heritage, but the statutory planning instruments did not provide any direct guidance on how such tensions should be resolved.
- 161. In reaching its decision, the Board was mindful of the need not to conflate the themes raised by different objectives and policies (for example, by applying the transportation theme to its consideration of heritage effects). Rather, it considered that the correct approach was to evaluate the themes relevant to the NoRs under each effects topic and that conflict or tension between themes should then be resolved as part of the overall judgment approach.
- 162. In contrast to the Basin Bridge proposal, we observe that the statutory planning instruments in this case provide a clear direction that the project is an appropriate use and development and, subject to specific mana whenua, heritage and ecological effects management, would achieve the purpose of the RMA.
- 163. Specifically, we note that the Redoubt Road-Mill Road corridor is shown in Appendix K of the Auckland Regional Policy Statement as forming part of the proposed Regional Arterial Road network, being roads that link districts or urban areas within the region and that the Auckland Council District Plan (Manukau Section) anticipates a future multimodal link based on Redoubt Road and Mill Road to provide capacity for future

⁶⁰ Final Report and Decision of the Board of Inquiry into the Basin Bridge Proposal, 29 August 2014 at [202].

⁶¹ Final Report and Decision of the Board of Inquiry into the Basin Bridge Proposal, 29 August 2014 at [201].

⁶² Final Report and Decision of the Board of Inquiry into the Basin Bridge Proposal, 29 August 2014 at [201].

⁶³ Final Report and Decision of the Board of Inquiry into the Basin Bridge Proposal at [201].

traffic growth in the corridor. This section of the District Plan recognises the corridor's current substandard geometry, and the future growth in the corridor that will be generated by planned development in Flatbush to the north and in Takanini/Papakura to the south. It also specifies that once the preferred scheme is selected, land requirements for its implementation will be protected by designations and acknowledges that the route will be reclassified to Regional Arterial status in the future.

164. In this sense, the NoRs (if confirmed) would give effect to this very specific intention contained in the operative District Plan.

Assessment of planning instruments

- 165. The relevant statutory planning instruments include:
 - National Policy Statements (Freshwater Management; Electricity Transmission);
 - The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES);
 - Auckland Council Regional Policy Statement (ARPS) Chapters 2, 4, 6 and 8;
 - Auckland Council Regional Plan: Air, Land, Water (ARP: ALW) Chapters 2 and 5;
 - Auckland Council District Plan (Manukau and Papakura Sections); and
 - Proposed Auckland Unitary Plan (PAUP).
- 166. We have considered these statutory planning documents and the helpful analysis of the relevant provisions provided by Mr Reaburn in his s42A Report. The key themes evident which are relevant to the project relate to:
 - (a) Infrastructure and Growth ensuring that provision is made to accommodate the Region's growth, with provision for appropriate roading improvements in growth areas to support all transport modes and the redevelopment, operation and maintenance of existing and new regionally significant infrastructure;
 - (b) Transportation achieving a compact well designed more sustainable urban form serviced by an integrated multimodal transport system that provides for a high level of mobility and accessibility within the district as well as providing for the integrated, responsive, sustainable, safe, affordable and efficient movement of goods and people;
 - (c) Urban Design and Landscape achieving environments that have a sense of identity and character and a range of densities and uses, which maintain or enhance amenity values, and which are visually pleasant, functionally efficient, environmentally sustainable and economically vibrant with good access to transport facilities;

- (d) Social – to improve the overall health, well-being and quality of life of the people of the Region; and
- Ecology protecting and enhancing the values of the Region's natural resource (e) base and to make appropriate provision for the avoidance, remediation or mitigation of adverse effects on the Region's environment.
- 167. We find that, in principle, the project is consistent with the objectives and policies of these plans for the reasons set out in the AEE⁶⁴ and the planning evidence for AT⁶⁵. and as summarised by Mr Reaburn. In summary, the project:
 - Provides for private vehicles so as to adequately cater for the forecasted growth in Manukau, Flat Bush, Papakura and Takanini over the next 30 years;
 - Provides for increased future corridor capacity with less congestion, improved travel times, and greater route security;
 - Provides for an on-road cycle lane, off-road pedestrian and shared cycle routes, and public transport including bus priority measures, which will improve the safety and accessibility of the corridor, and provides a sustainable and integrated corridor;
 - Provides for the health and wellbeing of communities via enhanced connectivity and multi-modal choices and the reduction in vehicle collisions as a result of improved vertical and horizontal alignments;
 - Will contribute to an efficient, safe and sustainable network utilising to the extent possible existing roading infrastructure;
 - Will improve network resilience by providing a viable alternative route should the southern motorway be forced to close;
 - Incorporates consultation and liaison with iwi prior to and throughout the lifetime of the project.
- 168. We also find that if exercised in accordance with the Final Conditions proposed by AT, the project will appropriately avoid, remedy or mitigate its adverse environmental effects and will enhance the overall quality of the environment via landscape planting, appropriate urban design treatments, and native vegetation replanting.
- 169. No other expert planner giving evidence on behalf of submitters identified to us provisions of the relevant statutory planning documents that would weigh against confirmation of the NoRs in principle. Nor did any point to any specific provisions that supported the relief they were recommending to address their clients' concerns. Their planning arguments were focussed on the avoidance or mitigation of alleged effects arising from the NoRs (s 5(2)(c) of the RMA), linked with criticisms of AT's assessment

 64 Assessment of Effects on the Environment at [13] and Appendix V. 65 Evidence of Craig Hind at [64]-[87]; Evidence of Roger McDonald at [16].

- of alternatives, at the submitter/landowner level. We have addressed the effects element of these arguments above and address alternatives shortly.
- 170. Overall, subject to situation specific effects management, we consider the project to be consistent with the relevant statutory planning documentation. An aspect of this finding is our understanding that before the NoRs can be exercised regional consents will need to be sought and obtained for various physical works under the relevant regional planning rules in operation at the time, and AT will have to submit and have approved Outline Plans of Work.

Consideration of Alternatives (Section 171(1)(b))

- 171. It is well established that a requiring authority is not required to demonstrate that it has considered all possible alternatives, or that it has selected the best of all available alternatives. It is sufficient that the requiring authority has adequately considered alternative sites, routes and methods for undertaking the proposed work. In this context, the meaning of "adequate" is not "meticulous" or "exhaustive", but "sufficient" or "satisfactory". But as noted in NZTA v Architectural Centre Inc & Ors, "what will amount to sufficient consideration of alternative sites will be influenced to some degree by the extent of the consequences of the scenarios".
- 172. In that case the High Court also found that there is no general requirement for the consideration of alternatives to be replicable in order to be adequate, ⁷⁰ nor for the decision-maker to gain access to the weightings in a multi-criteria analysis in order to be satisfied that adequate consideration has been given to alternatives. ⁷¹ However, if the decision maker does not have some understanding of the weightings which were applied, it may not be possible for that decision maker to determine that adequate consideration has been given to relevant alternative options. ⁷² The approach in each case is to be circumstances dependent. ⁷³

Project Alternatives Assessment

173. Details of the alternatives assessment undertaken for the project were set out in the AEE, and further detailed in evidence called by AT at the hearing (e.g., Mr Craig Hind,

⁶⁶ Assessment of Effects on the Environment at [13.0] and Appendix V; Evidence of Craig Hind at [65], [67] and [87]

^{[87].}This was clearly stated by the High Court in *Meridian Energy Ltd v Central Otago District Council* [2010] NZRMA 477 (HC) at [81] and has subsequently been cited with approval in the Draft Report and Decision of the Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal (Board of Inquiry into the New Zealand Transport Agency Waterview Connection Proposal, EPA 24, May 2011) at [996]. As noted in the Final Report and Decision of the Board of Inquiry into the Basin Bridge Proposal, 29 August 2014 at [1090], and affirmed in *NZTA v Architectural Centre Inc & Ors* [2015] NZHC 1991 at [154], it is for the requiring authority to establish an appropriate range of alternatives and properly consider them.

⁶⁸ Te Runanga O Ati Awa Ki Whakarongotai Inc v Kapiti District Council (2002) 8 ELRNZ 265 (EnvC) at [153]; affirmed in NZTA v Architectural Centre Inc & Ors [2015] NZHC 1991 at [137].

⁶⁹ NZTA v Architectural Centre Inc & Ors [2015] NZHC 1991 at [140].

⁷⁰ NZTA v Architectural Centre Inc & Ors [2015] NZHC 1991 at [182].

⁷¹ NZTA v Architectural Centre Inc & Ors [2015] NZHC 1991 at [186].

⁷² NZTA v Architectural Centre Inc & Ors [2015] NZHC 1991 at [186].

⁷³ NZTA v Architectural Centre Inc & Ors [2015] NZHC 1991 at [186].

Mr Matt Hinton, Mr Dawie Maritz). In summary, the process undertaken by AT's consultants, AECOM, was as follows:74

- Collation of all available data, studies and investigations in order to identify all potential options - This included consideration of topographical survey and geotechnical testing, the sourcing of traffic information, crash statistics and utility services information, ecological studies, an historical assessment, and an investigation of traffic noise along the corridor. Significant communication and consultation was also undertaken to inform the investigation⁷⁶:
- Screening of all potential options to eliminate the unsuitable options Once options had been identified, constraints and opportunities were identified to inform the options.⁷⁷ These included physical constraints, including topography. geotechnical issues, public open space and remnant strands of native bush.⁷⁸ In relation to NoR 1, it was quickly concluded that the corridor alignment was generally fixed due to existing road network limitations, meaning that private property could not be avoided.⁷⁹
- Eleven possible other alignment options for the route were identified.80 These options were further investigated, and the positive and negative aspects of each were considered.⁸¹ As a result of this screening, some options were eliminated, leaving three options for each of the Redoubt Road to Mill Road alignment and three options for the Murphy's Road alignment⁸²;
- Technical analysis and assessment, leading to a preferred option A multicriteria analysis of the identified options was then used to provide a qualitative assessment of the alignment options, with the aim of removing any options which scored significantly worse than the others or which were identified as having a fatal flaw.⁸³ Specific objectives of the project provided a platform against which indicators were developed.84 Equal weighting was given to each of these

AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21

AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21

⁷⁹ Notice of Requirement 1 – Redoubt Road – Mill Road Corridor Project at [6]; AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [6.2].

⁸⁰ AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [6.1] and [6.3]-[6.5].

AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [6.1] and [6.3]-[6.5].

AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [6.6].

Sufficiency Study Scheme Assessment Report" 21 June 2013 at [7.8].

⁸⁴ AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [7.8.2].

⁷⁴ AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [1.1].

June 2013 at [4.0].

76 AECOM New Zealand Limited "Redoubt Road – Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [5.0].

Notice of Requirement 1 - Redoubt Road - Mill Road Corridor Project at [6]; AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [6.2].

factors. 85 The scoring of the options ultimately assisted with selection of the preferred option.86

- 174. Following the multi-criteria analysis and feedback from stakeholders on the preferred alignment, two further alternative alignment options were investigated to avoid native bush within the property at 146 Mill Road, 87 a property with a number of constraints for the proposed route including geotechnical constraints and route geometric issues.⁸⁸ A change in the alignment to avoid the bush area completely was tested but found to result in additional property land take requirements along Mill Road and Polo Prince Drive (specifically, 10 properties for option 1 and 15 properties for option 2, compared to only 2 properties for the recommended option).89 These two alternative options to avoid the bush at 146 Mill Road were also assessed as having a feasibility cost estimate of \$90 million and \$86 million respectively, in comparison to the preferred option cost of \$47million.90
- 175. At this stage of the process, Mr Dave Slaven, AT's ecologist was asked to provide further input into this alignment review. He identified that the preferred option could be amended at 38 Mill Road by redesigning the proposed Puhinui Bridge to shift the bridge by 13 metres to the east to avoid works within the drip line of a significant stand of indigenous trees without a significant effect on design guidelines.⁹¹ amendment was carried forward into the final preferred option. 92 However, a similar redesign was not achieved in relation to 146 Mill Road. This became one of the key issues at the hearing, and we address it below in further detail.
- 176. Finally, in terms of the alternatives assessment process, the preferred option was further refined based on technical assessment and public feedback. The option was overlaid on a 3D terrain model to accurately assess the implications of the layout. 93 This process reinforced that the most appropriate option was Northern B and Eastern C.⁹⁴ Further investigations of the preferred option determined that construction could take place in stages to maximise the economic efficiencies of the project, and a decision was therefore made to seek three separate NoR's to assist with this staged construction.95
- 177. From the submissions and evidence received at the hearing, there were two key localised challenges to AT's alternatives assessment process; 242 Redoubt Road and 146 Mill Road.

⁸⁵ AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [7.8.3].

AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [7.8].

Assessment of Effects on the Environment at [9.10].

⁸⁸ Evidence of Craig Hind at [103].

⁸⁹ Evidence of Craig Hind at [104] and [105].

⁹⁰ Evidence of Craig Hind at [104].

⁹¹ Assessment of Effects on the Environment at [9.10].

⁹² Assessment of Effects on the Environment at [9.10].

⁹³ AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21

June 2013 at [8.1].
⁹⁴ AECOM New Zealand Limited "Redoubt Road – Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [10.0].

⁹⁵ AECOM New Zealand Limited "Redoubt Road - Mill Road Corridor Study Scheme Assessment Report" 21 June 2013 at [10.4].

- 178. For the owners of 242 Redoubt Road, Mr Wijewardhana considered that AECOM's approach to the assessment of alternatives was "highly favourable and flexible to Auckland Transport's purposes". His claims included that a number of positive effects of Northern 2 and Northern 3 were not considered, whilst the negative effects of Northern 4 were not given due consideration. However, when questioned regarding his claim that social impacts were not considered, Mr Wijewardhana conceded that these would have been considered as part of the assessment of effects on private land ownership. In the end, his actual criticism of the alternatives assessment was unclear, as was the relief sought in this regard.
- 179. We have considered the criticisms made but find nonetheless that the multi-criteria assessment took into account the impact on private properties (in addition to a significant number of other factors as described the evidence of Mr Craig Hind), with appropriate weighting given to each criterion. We agree with AT that the number of options and range of factors considered when arriving at the preferred option for this location makes it clear that this was not a cursory exercise. We find that the assessment of alternatives in relation to the route alignment as it affects 242 Redoubt Road was adequate.
- 180. As mentioned above, alternative road alignments that would avoid 146 Mill Road were considered by AT, but were not chosen as the preferred alignment due to:
 - (a) The physical constraints in the area, including geotechnical constraints and geometrical issues;
 - (b) The necessary additional property take along Mill Road and Polo Prince Drive (being 10 properties for Option 1 or 15 properties for Option 2 both of which avoided the bush at 146 Mill Road, compared to only 2 properties being required for the recommended option); and
 - (c) The costs of an altered alignment were \$90 million or \$86 million respectively for Options 1 and 2, compared to the recommended option cost of \$47 million.
- 181. In responding to the Commissioners interest in this aspect of the route, AT submitted that in order for us to recommend a different option for the 146 Mill Road alignment or bridge design, we would need to be satisfied that the ecological effects of the alignment were such that the additional cost and adverse effects on private property were warranted. AT's further submission in closing was that its assessment of the various alignment options for this location was comprehensive and more than adequate, and that there was no credible basis on the evidence to conclude that the ecological effects at this location are such that society should incur an additional cost in the order of \$40,000,000 to avoid them.
- 182. At the hearing the prospect of raising the bridge or altering the location and design of the bridge abutments to avoid or reduce the need for clearance and topping of the trees within Cheesman's Bush was discussed. These options were investigated

⁹⁶ Evidence of Mr Wijewardhana at [12].

⁹⁷ Evidence of Mr Wijewardhana at [13].

⁹⁸ Executive Summary of Evidence and Response to Matters Raised at [16]-[17].

further and considered in supplementary evidence by Dawie Maritz and Dave Slaven for AT.

Moving the abutments

- 183. The vegetation to the south of the southern abutment consists only of trees with grazed pasture with no sub-canopy, mid-tier or ground cover. As these trees will need to be removed to accommodate the bridge regardless of the location of the abutments, we accept that moving the southern abutment will not result in any improved ecological outcome.
- 184. Moving the northern abutment further north would enable the mid-tier and ground cover vegetation to the north-east of the present abutment to be retained (although the canopy trees would still need to be removed). This would avoid the need to remove approximately 45m² of vegetation. In order to achieve this additional 27m distance that would be required for this increased span, an alternative type of bridge would need to be built at an increased cost of approximately \$4.81million. Following on from our assessment of the ecological effects of the proposed route at this location, we find that this additional cost is not warranted to avoid this limited area of bush, particularly given the mitigation planting ratio that is proposed by AT.

Raising the bridge

- 185. Mr Maritz has also assessed the implications of raising the bridge by 5m. This would have effects for a significant distance to the north of the alignment, requiring approximately 100,000m³ more fill and acquisition of an additional 18,945m² of private property. Any further height will have even greater effects for the remainder of the alignment.
- 186. In his supplementary evidence, Mr Slaven noted that any raising of the bridge would need to be to a height above the eventual tree growth (rather than above the height of the existing canopy) as some of the relevant trees are not yet fully grown. As an example, Kahikatea (which is one of the species within the bridge footprint) can reach approximately 60m in height. The bridge would therefore need to be at least 40m high across the gully. This would have additional effects because the raising of the bridge would result in adverse visual effects for the surrounding properties. These impacts in relation to design and visual effects were acknowledged by other experts (e.g., Dr Allison Davis, who noted her recommendation was solely from an ecological perspective). We agree with AT that the raising of the bridge to avoid the felling of the canopy trees is not a practicable option.
- 187. We record our gratitude to AT in investigating these matters further. They have added to our understanding of the multiple issues that need to be integrated to achieve an optimal solution at this location. It has also enabled us to conclude without reservation that the assessment of alternatives in relation to the route location at 146 Mill Road has been more than adequate.
- 188. More generally, we find that the assessment of alternatives routes and methods for achieving the objectives of the project as a whole has been adequate.

Reasonable necessity (Section 171(1)(c))

- 189. In determining whether the work is reasonably necessary to achieve AT's objectives, it is not for us to evaluate the merits of those objectives. Rather, we are to have particular regard to whether the proposed work and designations are reasonably necessary to achieve those objectives. 99 In determining whether the reasonably necessary threshold is met, the Environment Court has noted that the test is "an objective, but qualified one" where necessary falls between expedient or desirable on the one hand and essential on the other, and the epithet "reasonably" qualifies it to allow some tolerance. 100
- 190. We have set out AT's objectives for the project above. We have considered Mr Reaburn's assessment and opinions in relation to this matter and find that the designation and works are reasonably necessary to achieve AT's project objectives for the following reasons:
 - (a) The designation is the only available means of protecting the land from other development which could hinder or prevent the Project being constructed or operated;
 - Other mechanisms, such as obtaining resource consent are not practicable (b) because:
 - The project covers numerous separate land parcels and two District Plans and a number of District Plan zones and would result in a complex array of consents:
 - The construction, operation and maintenance of the Project is not a typical activity provided for by a zone in a District Plan and is therefore not generally contemplated by plan provisions; and
 - Approved resource consents are not shown in the District Plan and therefore would not provide certainty for landowners and the community;
 - The designation will provide certainty to affected landowners and the community (c) as to the nature of the work and the alignment of the corridor through inclusion in the appropriate district plans:
 - The project will improve transport access in the area of Manukau / Takanini / Papakura to support the growth identified within Flat Bush and the Takanini Structure Plan area and the wider southern growth area identified in the Auckland Plan as it future proofs road infrastructure to meet the expected growth and demand;
 - The project is necessary to improve the efficiency, resilience and safety of the transport network between Manukau and Papakura as it:

⁹⁹ Babington v Invercargill City Council (1993) 2 NZRMA 480 at 486 (PT).
¹⁰⁰ Gavin Wallace Ltd v Auckland Council [2012] NZEnvC 120 at [183].

- provides an alternate north/south corridor that improves network resilience by providing an alternative route to State Highway 1;
- provides an upgraded road corridor that addresses current and future network constraints identified on the transport network and improved journey time, frequency and reliability for road users; and
- provides an upgraded road corridor that improves safety for all road users.
- (f) The project will provide the opportunity to achieve a sustainable transport solution that contributes positively to a liveable city as it provides an upgraded road corridor which supports public transport infrastructure and services, and access to local community facilities. The upgraded corridor will also provide for walking and cycling connectivity to open spaces and community services.
- 191. We find that the project and NoRs are consistent with AT's objectives and are reasonably necessary to achieve them. No other expert planning witness contended otherwise in their evidence to us.

Other matters (Section 171(1)(d))

- 192. The project is relevant to a number of other planning and strategic instruments, including:
 - Auckland Plan;
 - Auckland Regional Land Transport Strategy 2010-2040 (the ARLTS);
 - Auckland Long Term Plan 2012-2022;
 - Auckland Regional Land Transport Programme 2012-2015 (the RLTP); and
 - Auckland Regional Transport Plan 2009.
- 193. Although it is well settled that such instruments should be given less weight than RMA statutory instruments, they still need to be given appropriate regard, and are helpful in understanding the strategic framework within which the Project sits. 101

Auckland Plan

194. The key objective set out in the Auckland Plan, is to make Auckland the world's most liveable city. 102 This includes ensuring that Auckland has a well-connected and accessible transport network. 103 In identifying routes required to achieve this vision, the Redoubt Road - Mill Road corridor is included as a priority network

¹⁰¹ Final Report and Decision of the Board of Inquiry into the Basin Bridge Proposal at [206], [207].

¹⁰² Auckland Council *The Auckland Plan* (Auckland Council, 2013), at [18]. ¹⁰³ Auckland Council *The Auckland Plan* (Auckland Council, 2013), at [32].

improvement. 104 In particular, we find that it is consistent with the strategic transport priorities identified for Auckland including: 105

- Managing Auckland's transport networks as a single system;
- Integrating transport planning and investment with land development; and
- Prioritising and optimising investment across transport modes.
- 195. We note that (in line with comments made by a number of witnesses) para 755 of the Auckland Plan observes that '...public transport services, especially bus services, must be provided for communities most in need (see Chapter 1: The Southern Initiative). As we have observed above, the actual provision of public transport services is beyond the scope of this hearing. We are satisfied, however, that the NORs provide a facility which will allow AT to provide public transport services for the communities in the area in a way which is consistent with current best practice.
- 196. The localities served by the NORs are within the area identified in the Auckland Plan as the 'Southern Initiative'. This initiative recognises the comparatively high proportion of residents in the area who are transport-disadvantaged in comparison with those in the wider city. Key priorities of that initiative include:
 - Promoting economic development and jobs for local people.
 - Increasing public transport services and encouraging increased use of public transport.
- 197. The NORs make provision for a significant increase in public transport services on the route, which when supported by the actual provision of such public transport services will encourage increased use of public transport.
- 198. While we agree with submitters that the early provision of public transport services (somewhat in advance of demand) would assist in minimising the need for travel using private motorcars, as we note (elsewhere) this not a matter which we can consider in our decision.

Auckland Regional Land Transport Strategy 2010-2040

199. We consider that the project is consistent with the objectives of the ARLTS including by improving transport system safety, access and mobility, and providing an opportunity for increasing the use and provision of alternative forms of transport, including those that will contribute to environmental sustainability. 106 The project aims to improve the safety of the corridor by reducing crash risk through improved road alignment and providing vulnerable users such as cyclists and pedestrians with safer facilities. 107 We also find that transport access in the areas of Manukau, Flat Bush,

Assessment of Effects on the Environment, Appendix V at [4.3].

Assessment of Effects on the Environment, Appendix V at [4.3].

¹⁰⁴ Map 13.2 of the Auckland Spatial Plan (Auckland's Priority Transport Projects (2012-2042)).

¹⁰⁵ Auckland Council *The Auckland Plan* (Auckland Council, 2013), at [745].

Takanini, Papakura and Drury will be improved by the corridor, supporting both population and economic growth. 108

Auckland Long Term Plan 2012-2022

200. Auckland's Long Term Plain includes the overarching vision of Auckland as the world's most liveable city. This is supported by a number of outcomes, transformational shifts, and strategic directions within the Plan. Of these, key outcomes include a well-connected and accessible Auckland and a fair, safe and healthy Auckland. We find that the corridor upgrade will assist with achieving a well-connected and accessible Auckland by improving access between the growth areas of Botany Downs, Flat Bush, Takanini, Papakura and Manukau City centre. The corridor upgrade aims to improve the safety of the existing corridor by significantly reducing crash risk and the risk to vulnerable users such as cyclists and pedestrians, and also encourages those alternative modes that have consequential health benefits for their users.

Regional Land Transport Programme

201. The Land Transport Management Act 2003 requires the RLTP to provide an indication of any nationally or regionally significant activities that are likely to be considered for funding in the National Land Transport Programme over the three financial years following the current RLTP period (2012-2015). We note that Mill Road is noted in the RLTP as likely to be recommended for inclusion in the 2015/16 to 2017/18 period. 114

Auckland Regional Transport Plan 2009

202. The Auckland Transport Plan 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. Priority outcomes of the Plan include a greater focus on regional arterial roads, an emphasis on safety engineering for streets and roads, and a strong focus on transport investments that support the Regional Growth Strategy, and integrated land use and transport planning. 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 accordance with the priority outcomes of this plan. As noted, it has significant safety benefits for all users. We find that it also aligns with the Regional Growth Strategy as it will improve land use transport integration and transport access between the

 $^{^{108}}$ Assessment of Effects on the Environment, Appendix V at [4.3].

¹⁰⁹ Assessment of Effects on the Environment, Appendix V at [4.2].

Assessment of Effects on the Environment, Appendix V at [4.2].

¹¹¹ Assessment of Effects on the Environment, Appendix V at [4.2].

Assessment of Effects on the Environment, Appendix V at [4.2].

Land Transport Management Act 2003, s 19C.

¹¹⁴ Auckland Transport Regional Land Transport Programme 2012/2015 at [5.3].

Assessment of Effects on the Environment, Appendix V at [4.7].

¹¹⁶ Assessment of Effects on the Environment, Appendix V at [4.7].

¹¹⁷ Assessment of Effects on the Environment, Appendix V at [4.7].

Assessment of Effects on the Environment, Appendix V at [4.7].

- areas of Manukau, Flat Bush, Takanini, Papakura and Drury in order to support growth (including economic growth) identified in the strategy.¹¹⁹
- 203. Overall, we find that the project would assist in achieving the outcomes, principles and policies of these plans, programmes and strategies.

Proposed conditions

- 204. We have referred earlier to the Final Conditions put forward by AT and have addressed condition issues raised by submitters and the Council in the course of our analysis of the effects on the environment of the project. One remaining issue remains for comment the lapse periods sought by AT.
- 205. The s42A report considered that shorter lapse periods may be more appropriate for NoR 2 and possibly NoR 3.¹²⁰ At the time the report was written. AT's proposed lapse date for those NoRs was 15 years. As noted above, ART revised that proposal during the hearing and at closing sought a lapse date of 15 years for NoR 3 only (with 10 years sought for Nor 1 and NoR 2).
- 206. The revised lapse dates were not identified as remaining an issue of concern in its comments on the Final Conditions and so we assume that to be the case. We agree that such endorsement is appropriate. The extended lapse periods sought are necessary to provide AT with more certainty that the corridor can be implemented fully, and will enable it to safeguard the corridor alignment whilst providing sufficient time to undertake the necessary property negotiations, site investigations, resource consent processes and construction procurement and execution.¹²¹
- 207. Initially we expressed concerns that the proposed 15 year lapse dates may lead to a situation where the factors to be considered in the final preparation of management plans are redundant as a consequence of change in the receiving environment, and the relevant plans consequently out-dated and unresponsive. In an area of Auckland identified for swift urban growth, the environment along the rural Mill Road segment of the route in particular may be very different to what exists now, and what has been identified to guide final designs. Helpfully, AT acknowledged this concern and the potential for a non-environmentally integrated outcome, and has incorporated conditions to ensure a detailed review of the environment as it exists at the time it progresses the respective NoRs is undertaken.¹²²
- 208. Mr Reaburn also suggested that a land acquisition period of five years from the date the designation is confirmed might be appropriate as an option to reduce the impact that the designation may have on properties where it remains unimplemented for some years. 123

¹¹⁹ Assessment of Effects on the Environment, Appendix V at [4.7].

Peter Reaburn Section 42A Report at [8.6].

¹²¹ Evidence of Craig Hind at [145].

¹²² See Final Conditions 31.2.

¹²³ Peter Reaburn Section 42A Report at [8.6].

- 209. AT's position is that its land acquisition programme will be implemented on a phased basis to ensure that the required land is delivered in a timely manner for each proposed construction stage 124 and depending on the construction programme for the three NoRs, it may not be realistic to assume that all the land will be acquired within this timeline. 125
- 210. We note that where landowners may seek to sell their land before it is taken, but cannot achieve market value, s185 of the RMA provides a remedy. As noted above, this regime was endorsed by the Environment Court in Tram Lease v Auckland Transport as the appropriate mechanism to provide for landowner anxiety. We can say nothing more on this issue.

Part 2 (Purpose and Principles)

- 211. We find that the project achieves the sustainable management purpose of the RMA in s 5 of the RMA and is consistent with the important principles in Part 2. It achieves this purpose for the following reasons:
 - The 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;
 - The project will improve the safety of the corridor for all users, and facilitate active forms of transport, therefore managing natural and physical resources in way that enables people and communities to provide for their health and safety:
 - The 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; and
 - The avoidance, remediation or mitigation of adverse effects of the project will ensure that the life-supporting capacity of air, water, soil and ecosystems is safeguarded, and the potential of natural and physical resources to meet the needs of future generations is sustained.
- 212. We also consider that the project meets the relevant s6 matters of national importance, which must be recognised and provided for in managing the use of natural and physical resources, as follows:
 - Section 6(a): The corridor does not pass through a coastal environment, but does cross some upper stream catchments, and the natural character of those catchments will be affected by proposed bridge structures. However, AT has proposed conditions that will mitigate or offset these effects to the extent practicable.

¹²⁴ Evidence of Don Harrington at [23].125 Evidence of Don Harrington at [66].

- Section 6(c): The alignment of the corridor has been designed to avoid, as far as reasonably possible, areas of significant indigenous vegetation and habitats of indigenous fauna. In response to site survey by the project ecologist, the Puhinui bridge structure was shifted 13 metres to the east to specifically avoid a stand of mature native trees. Although three stands of native bush will still be impacted to varying degrees by the corridor, AT has proposed appropriate ecological restoration and mitigation works to off-set the loss of vegetation and habitat as a result of the corridor upgrade. We find that the social and economic cost of avoiding the bush at 146 Mill Road far outweighs the ecological benefits of doing so.
- Section 6(d): Bridges will be designed to ensure that public access to upper catchment streams traversed by the corridor is not compromised, and cycleways and a shared path facility will enhance access to these streams.
- Section 6(e): Consultation with iwi has been, and will be, ongoing throughout the life of the project, and tangata whenua will be involved in developing and implementing various mitigation measures and management plans at the time of detailed design and construction.¹²⁷
- Section 6(f): There are no historic heritage items recorded in the Auckland District Plan (Manukau and Papakura Sections) or the PAUP within the area of the proposed designations. Three sites located within and immediately adjacent to Section 4d and Section 5 of NoR 3 are recorded in the New Zealand Archaeological Association's (NZAA) Site Record File.¹²⁸ AT will make the appropriate applications in respect of any sites that might be affected by the project prior to undertaking any works within the proposed corridor.¹²⁹
- 213. Section 7 sets out further matters, to which particular regard must be given, in managing the use, development and protection of natural and physical resources. In summary, we find that the project gives particular regard to the following matters:¹³⁰
 - Section 7(a): The project gives particular regard to Kaitiakitanga through the participation and contribution of tangata whenua in the project to date and throughout the lifetime of the project.
 - Section 7(b): The project is an efficient use of natural and physical resources as
 it will ensure that an appropriate level of connectivity is achieved between growth
 areas and will cater for active and passenger modes of transport. It also
 represents an efficient use of resources by largely following the existing
 alignment of the road.

¹²⁸ Assessment of Environmental Effects at [12.2].

¹²⁶ Assessment of Effects on the Environment at [9.10].

¹²⁷ Evidence of Roger McDonald at [310].

Assessment of Environmental Effects at [12.2].

Assessment of Environmental Effects at [12.3]; Evidence of Roger McDonald at [313]-[328].

- Section 7(c): Due to the nature and scale of the project it has unavoidable adverse amenity effects which would be generated regardless of the route adoption, with the unacceptable exception of doing nothing. To address these effects, particular regard has been given to the mitigation of adverse amenity affects arising from the preferred route alignment.
- Section 7(d): The project will generate adverse ecological effects that can be sufficiently minimised or mitigated. Restoration planting will also be undertaken to compensate or offset adverse ecological effects.
- Section 7(f): The project will maintain and enhance the future ability of the transport network to safely and efficiently move people in and around South Auckland, contributing to regional economic growth through enhanced access to markets and employment and to the planned and co-ordinated urban development of South Auckland. Where adverse effects are generated, these will be remedied or mitigated in accordance with proposed conditions.
- Section 7(g): The management plans and work delivery plans proposed by AT to mitigate and offset the adverse ecological effects of the project aim to maintain and where possible enhance the ecological integrity of the environment.
- Section 7(h): Climate change could affect the corridor through an increase in intensity and/or duration of rainfall events, which may have stormwater and watercourse implications. However, the project allows sufficient space for stormwater control and treatment that cater for climate change influenced stormwater flows, and the bridges and culverts have been determined based on climate-adjusted rainfall data.
- 214. Section 8 of the RMA requires that the principles of the Treaty of Waitangi be taken into account. Partnership is a core principle of the Treaty and we find that AT has established a collaborative working relationship with Mana Whenua.
- 215. The project, overall, achieves the sustainable management purpose of the RMA.

Conclusion and Recommendation

216. We find that upgrading the Redoubt Road – Mill Road corridor is necessary to relieve existing and forecast congestion, accommodate planned growth, provide for alternative modes of transport, improve traffic safety and improve network efficiency. While the project will result in some adverse effects, particularly in relation to ecology, these effects can be appropriately avoided, remedied or mitigated.

217. In exercising our delegation under sections 34 and 34A of the RMA, and having regard to the foregoing matters, we recommend to AT that it confirm the NoRs subject to the conditions included in Appendix A. 131

K R M Littlejohn

Chairperson (for the Commissioners)

17 February 2016

¹³¹ We have made minor grammatical changes to AT's Final Conditions and so as to ensure appropriate crossreferencing. We have also deleted conditions that relate to activities for which resource consents will be required in the future. We can supply a tracked change version of the recommended conditions to assist AT to identify where we have made changes.

APPENDIX A - NOR CONDITIONS

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DEFINITIONS

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OPERATIONAL CONDITONS

Conditions 41 – Operational Traffic Noise

ADVICE NOTES

Auckland Transport Designation Conditions – NoR 1, 2 and 3

Condition	NoR	Condition	
Number DEFINITION	Applies to		
SEI-MINON	1 2 3	Consult Consulting Consultation	The process of providing information about the construction works, and receiving for consideration, information from stakeholders directly affected and affected in proximity parties, regarding those effects and proposals for the management and mitigation of them.
	1 2 3	Fully operational traffic lane	May include a traffic lane that is subject to a reduced speed limit, or one which may have a temporary reduction in the lane width, due to construction activity.
	1 2 3	Two way access	Access into and out from a site or a road. This access may include restrictions (e.g. left in, left out) where these are specified within the relevant conditions.
	1 2 3	Best practicable option	Has the meaning under the Resource Management Act 1991; as follows: Best practicable option, in relation to a discharge of a contaminant or an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to—
			(a) the nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and
			(b) the financial implications, and the effects on the environment, of that option when compared with other options; and
			(c) the current state of technical knowledge and the likelihood that the option can be successfully applied
	1 2 3	Highly Sensitive Air Pollution Land Use	This includes a location where people and surroundings may be particularly sensitive to the effects of air pollution. These include residential houses, hospitals, schools, early childhood centres, childcare facilities, rest homes, residential properties, premises primarily used as temporary accommodation (such as hotels, motels and camping grounds), open space used for recreation, the conservation estate, marae and other similar cultural facilities.
	1 2 3	Historic Heritage	This includes heritage buildings, sites and places identified in the New Zealand Heritage List, the Auckland Council Cultural Heritage Inventory, the NZAA Site Record File, or in the Auckland Council District Plan (Manukau or Papakura Sections), or in the Proposed Auckland Unitary Plan (for heritage rules currently with legal effect) or as specifically identified in conditions.
	1 2 3	Mana Whenua	Mana whenua for the purpose of this designation are considered to be the following (in no particular order), who at the time of Notice of Requirement expressed a desire to be involved in the Redoubt Road - Mill Road Corridor Project:
			- Te Akitai Waiohua

Condition Number	NoR Applies to	Condition		
			- Ngāti Tamaoho	
			- Ngai Tai ki Tam	aki
			- Ngāti Te Ata	
			- Ngāti Paoa	
	1 2 3	Material change	informing the CEMP(Plans and other Man or method of the CEI to materially increase	nclude amendment to any base information (s) or other Plans (including Delivery Work agement Plans) or any process, procedure MP(s) or other Plan which has the potential e adverse effects on a particular receiver. to personnel and contact schedules do not change.
	1 2 3	Delivery Work Plans	Delivery Work Plans will contain specific objectives and methods for avoiding, remedying or mitigating effects and address the following topics: a) Transport, Access and Parking; b) Construction noise and vibration; c) Historic Heritage;	
			d) Urban Design a	nd Landscape
			e) Ecological mana	agement and restoration;
			f) Social Impact a	nd Business Disruption;
			g) Air quality;	
			h) Contamination.	
ABBREVIAT	TIONS			
CEMP				Construction Environmental Management Plan
DWP				Delivery Work Plan
NoR				Notice of Requirement
SEP				Stakeholder Engagement Plan
SIMP				Social Impact Management Plan
GENERAL (CONDITIONS			
1	1 2 3	Redoubt Road - Mil with the information dated 24 October 20 a) Assessment Notice of Re b) Supporting 6 Notice of Re c) The Prelimir Requirement d) Plan sets:	Road Corridor Project provided by the Requipola and supporting doc of Environmental Effequirement suite of documents of documents ary Design Report (at suite of documents, docu	ects report (contained in Volume 2 of the uments, dated October 2014); nent reports (contained in Volume 2 of the
		Requ ii)Plans con	irement suite of docum	ents, dated October 2014); of the Notice of Requirement suite of

Condition Number	NoR Applies to	Condition
		iii) Plan 60317081-SKE-30-0000-C-0065 Rev A which details retaining walls on Murphys Road in proximity to the Thomas Road intersection.
2	1 2	Lapse Dates
	2	2.1 In accordance with section 184(1) of the Resource Management Act 1991 (the RMA), designation NoRs 1 and 2 shall lapse if not given effect to within 10 years from the date on which they are confirmed.
	3	2.2 In accordance with section 184(1) of the RMA, designation NoR 3 shall lapse if not given effect to within 15 years from the date on which it is confirmed.
3	1 2 3	3.1 On an on-going basis as design progresses, and as soon as reasonably practicable but no later than 12 months from the date of the relevant section of the Redoubt Road - Mill Road Corridor Project becoming operational, the Requiring Authority shall:
		 a) Identify any areas of the Redoubt Road - Mill Road Corridor designation that are no longer necessary for the on-going operation, on-going maintenance or for on-going mitigation measures; and b) Give notice to the Auckland Council in accordance with Section 182 of the RMA for the removal of those parts of the designation identified in a) above.
PRE-CONS	TRUCTION CO	ONDITIONS
4	1	Network Utility Operators
	3	4.1 Under s 176(1)(b) of the Resource Management Act 1991 (RMA) no person may do anything in relation to the designated land that would prevent or hinder the Redoubt Road - Mill Road Corridor Project, without the prior written consent of the Requiring Authority.
		4.2 In the period before construction begins on the Redoubt Road - Mill Road Corridor Project (or a section thereof), the following activities undertaken by Network Utility Operators will not prevent or hinder the Redoubt Road - Mill Road Corridor Project, and can be undertaken without seeking the Requiring Authority's written approval under section 176(1)(b) of the RMA:
		 a) Maintenance and urgent repair works of existing Network Utilities; b) Minor renewal works to existing Network Utilities necessary for the ongoing provision or security of supply of Network Utility Operations; c) Minor works such as new property service connections; d) Upgrades to existing Network Utilities within the same or similar location with the same or similar effects on the Redoubt Road - Mill Road Corridor Project designation.
		4.3 For the avoidance of doubt, in this condition an "existing Network Utility" includes infrastructure operated by a Network Utility Operator which was:
		 a) In place at the time the notice of requirement for the Redoubt Road - Mill Road Corridor Project was served on Auckland Council (24 October 2014); or
		b) Undertaken in accordance with this condition or the section 176(1)(b) RMA process.
5	1 2	Network Utility Operator Liaison

Condition Number	NoR Applies to	Cond	ition
	3	5.1	The Requiring Authority and its contractor shall:
			 a) Work collaboratively with Network Utility Operators during the development of the further design for the Redoubt Road - Mill Road Corridor Project to provide for the ongoing operation and access to Network Utility operations; b) Undertake communication and consultation with Network Utility Operators as soon as reasonably practicable, and at least once prior to construction timing being confirmed and construction methodology, and duration being known; and c) Work collaboratively with Network Utility Operators during the preparation and implementation of the CEMP(s) (Condition 18) and DWPs in relation to management of adverse effects on Network Utility Operations.
6	1 2	Mana	Whenua Consultation
	3	6.1	Within three months of the confirmation of the designations the Requiring Authority shall provide a process for on-going consultation and input of mana whenua into the design and construction of the Redoubt Road - Mill Road Corridor Project.
		6.2	The frequency of meetings shall be agreed between the Requiring Authority and mana whenua.
		6.3	The role of mana whenua as part of the on-going consultation includes (but is not limited to) the following:
			 a) Input into the preparation of the Urban Design and Landscape DWP, Ecological Management and Restoration DWP, Social Impact and Business Disruption DWP and Construction Environmental Management Plan (CEMP(s)) required by these conditions; b) Recommending a Māori name for the new road associated with the project; c) Input into the urban design and landscape design associated with the project, including to incorporate pou or artistic features where the project crosses waterways; d) Involvement of mana whenua in removal and or replanting of any native tree species, or any on-going maintenance that may be required, and provision for use of any removed native vegetation for customary purposes; e) Working collaboratively with the Requiring Authority around archaeological matters; f) Undertaking kaitiakitanga responsibilities associated with the Mill Road Corridor Project, including ceremonial, monitoring/surveying of native flora and fauna, pest and weed control, assisting with discovery protocols and Accidental Discovery Protocols, and providing mātauranga Māori input in the relevant stages of the Project; g) Input into any matters requiring consultation with mana whenua under these NoR conditions; and h) Any other matters agreed between the Requiring Authority and mana
			whenua, for example, matters arising from the views, aspirations or recommendations set out in the MVAs and CVA.
		6.4	Mana whenua may provide written reports to the Requiring Authority in relation to any of the matters in Condition 6.3. The Requiring Authority must consider these reports and identify how any suggestions have been incorporated in the Redoubt Road - Mill Road Corridor Project in respect of the matters in Condition 6.3.
		6.5	Mana whenua may in addition to the foregoing, at their choice, participate in the

Condition	NoR	Cond	ition
Number	Applies to		0
			Community Liaison Group, refer Condition 15.3.
CONSTRUC	CTION CONDI	TIONS	
7	1 2	Management Plan and Outline Plan Requirements	
	3	7.1	Prior to commencing any works pursuant to these designations the Requiring Authority shall submit an Outline Plan (or Outline Plans) to the Auckland Council for the construction of the Redoubt Road - Mill Road Corridor Project in accordance with section 176A of the RMA. The Outline Plan(s) shall include:
			 a) The Stakeholder Engagement Plan(s) (SEP - Condition 15); b) The Construction Environmental Management Plan (CEMP(s)); c) Delivery Work Plans (DWPs) (where relevant); and d) Any other information required by the conditions of this designation associated with the construction of the Redoubt Road - Mill Road Corridor Project.
		7.2	Prior to submitting any Outline Plan to Auckland Council the Requiring Authority shall engage suitably qualified independent specialists approved by the appropriate Auckland Council representative (or representatives) to form Independent Peer Review Panels relevant to the SEP, CEMP and the following DWPs:-
			a) Historic Heritage;
			b) Urban Design and Landscape;
			c) Social Impact and Business Disruption;
			d) Ecological and Arboricultural Management.
	7.3 The purpose of the Independent Peer Review Panels is to review of the SEP, CEMP(s) and DWPs and to provide recommended whether changes are required to the SEP, CEMP(s) and DWPs the objective and other requirements of these conditions, incomprescribed as being required in the conditions to be given preparing the SEP, CEMP(s) and DWPs. This shall included documentation referred to in Condition 1 and in addition the		The purpose of the Independent Peer Review Panels is to undertake a peer review of the SEP, CEMP(s) and DWPs and to provide recommendations on whether changes are required to the SEP, CEMP(s) and DWPs in order to meet the objective and other requirements of these conditions, including the matters prescribed as being required in the conditions to be given regard to when preparing the SEP, CEMP(s) and DWPs. This shall include reference to all documentation referred to in Condition 1 and in addition the relevant Council Specialist Review reports submitted at the NoR hearing.
		7.4	The SEP, CEMP(s) and DWPs must clearly document all comments and inputs received by the Requiring Authority during its consultation with stakeholders, affected parties and affected in proximity parties, along with a clear explanation of where any comments have not been incorporated, and the reasons why not. This information must be included in the SEP, CEMP(s) and DWPs provided to both the Independent Peer Review Panels and Auckland Council as part of this condition.
		7.5	The SEP, CEMP(s) and DWPs submitted to Auckland Council shall demonstrate how the recommendations from the Independent Peer Review Panels have been incorporated, and, where they have not, the reasons why not.
		7.6	In reviewing an Outline Plan(s) submitted in accordance with these designation conditions, Auckland Council shall take into consideration the independent specialist peer reviews undertaken in accordance with this condition.
		7.7	The Requiring Authority may choose to give effect to the designation conditions associated with the construction of the Redoubt Road - Mill Road Corridor Project:
			a) Either at the same time or in parts; andb) By submitting one or more:

Condition Number	NoR Applies to	Condition
		i) Outline Plan of Works; ii) Stakeholder Engagement Plans; iii) CEMPs; and iv) DWPs. 7.8 These plans should clearly show how the part given effect to integrates with adjacent Mill Road corridor construction works and interrelated activities. 7.9 All works shall be carried out in accordance with the Outline Plan(s), SEP, CEMP(s) and DWPs required by this Condition 7.
8	1 2 3	8.1 For the duration of construction the following plans, and any material changes to these plans, shall be made available for public viewing on the Project web site: a) CEMP(s); b) DWPs; and c) Stakeholder Engagement Plan. 8.2 A copy of these Plans will also be held and made available for viewing at each construction site.
9	1 2 3	 Monitoring of Construction Conditions 9.1 The Requiring Authority and its contractor team shall seek to establish and implement a collaborative working process with Auckland Council dealing with day to day construction processes, including monitoring compliance with the designation conditions and with the CEMP(s) and DWPs and any material changes to these plans associated with construction of the Redoubt Road - Mill Road Corridor Project. a) This collaborative working process shall operate for the duration of the construction works and for 6 months following completion of construction works where monitoring of designation conditions is still required, unless a different timeframe is mutually agreed between the Requiring Authority and the Auckland Council; b) Have a "key contact" person representing the Requiring Authority and a "key contact" person representing the contractor team to work with the Auckland Council Consent Monitoring officer(s); c) The "key contacts" shall be identified in the CEMP(s) and shall meet at least monthly unless a different timeframe is agreed with the Auckland Council Consent Monitoring Officer(s). The purpose of the meeting is to report on compliance with the designation conditions and with the CEMP(s), DWPs and material changes to these plans and on any matters of non-compliance and how they have been addressed.
		9.3 The purpose and function of the collaborative working process is to: a) Assist as necessary the Auckland Council Consent Monitoring officer(s) to confirm that: i) The works authorised under these designations are being carried out in compliance with the designation conditions, the CEMP and DWPs and any material changes to these plans; ii) The Requiring Authority and its contractor are undertaking all monitoring and the recording of monitoring results in compliance with the requirements of the CEMP(s) and DWPs and any material changes to these plans. b) Subsequent to a confirmed Outline Plan, provide a mechanism through

Condition Number	NoR Applies to	Condition	
Number	Applies to	 which any changes to the design, CEMP(s) or DWPs, which are not material changes triggering the requirement for a new Outline Plan, can be required, provide input into and confirmed; c) Advise where changes to construction works following a confirmed Outline Plan require a new CEMP(s) or DWP; d) Review and identify any concerns or complaints received from, or related to, the construction works monthly (unless a different timeframe is mutually agreed with the Auckland Council Consent Monitoring officer) and adequacy of the measures adopted to respond to these. 	
Social Impa Work Plans		t Plan (SIMP), Construction Environmental Management Plan (CEMP) and Delivery	
10	1 2	Preparation, Compliance and Monitoring	
	3	The objective of the CEMP(s) and DWPs is to so far as is reasonably practicable, avoid, remedy or mitigate any adverse effects associated with the Redoubt Road - Mill Road Corridor Project. The objectives of a SIMP are as set out in Condition 11.1.	
		All works must be carried out in accordance with the CEMP(s), the DWPs required by these conditions and in accordance with any changes to plans made under Condition 10.7.	
		The CEMP(s) and DWPs shall be prepared, complied with and monitored by the Requiring Authority throughout the duration of construction of the Redoubt Road - Mill Road Corridor Project.	
		The DWPs shall give effect to the specific requirements and objectives set out in these designation conditions.	
		10.5 The CEMP(s) shall include measures to give effect to any specific requirements and objectives set out in these designation conditions that are not addressed by the DWPs.	
		10.6 Where mitigation measures are required to be implemented by the Requiring Authority in relation to the construction of the Redoubt Road - Mill Road Corridor Project, it shall meet reasonable and direct costs of implementing such mitigation measures.	
		The CEMP(s) and DWPs shall be reviewed as a result of a material change to the Redoubt Road - Mill Road Corridor Project or to address unforeseen adverse effects arising from construction or unresolved complaints. Such a review may be initiated by either Auckland Council or the Requiring Authority. The review shall take into consideration:	
		 a) Compliance with designation conditions, the CEMP(s), DWPs and material changes to these plans; b) Any changes to construction methods; c) Key changes to roles and responsibilities within the Redoubt Road - Mill Road Corridor Project; d) Changes in industry best practice standards; e) Changes in legal or other requirements; f) Results of monitoring and reporting procedures associated with the management of adverse effects during construction; g) Any comments or recommendations received from Auckland Council 	
		regarding the CEMP(s) and DWPs; and h) Any unresolved complaints and any response to the complaints and remedial action taken to address the complaint as required under	

Condition	NoR	Condit	ion		
Number	Applies to				
			Condition 16.		
		10.8	A summary of the review process shall be kept by the Requiring Authority, provided annually to the Auckland Council, and made available to the Auckland Council upon request.		
Social Impa	Social Impact Management Plan				
11	1 2	Submis	ssion of Social Impact Management Plan(s)		
	3	11.1	The Requiring Authority shall engage a suitably qualified specialist to prepare a Social Impact Management Plan (SIMP). The objectives of a SIMP are:		
			 a) To set out the Requiring Authority's commitments to mitigate and manage adverse social impacts and to enhance identified benefits to communities and other stakeholders during construction and operation of the Project; b) To define the measures to be undertaken to avoid, remedy or mitigate adverse effects and ensure the realisation of the intended benefits of the Project through the Social Impact and Business Disruption DWP; c) To monitor and review the effectiveness of measures designed to mitigate and manage adverse social impacts and those designed to realise the identified benefits to communities and other stakeholders during the construction and operation of the Project; d) To identify possible remedies if measures to mitigate and manage adverse effects and to realise benefits fail to achieve anticipated outcomes; e) To monitor and review the engagement with affected and interested parties undertaken through the Stakeholder Engagement Plan (Condition 15); and f) To specify the required actions to be undertaken through the Social Impact and Business Disruption DWP and provide the mechanism for the on-going review of that DWP. 		
		11.2	In addition to action plans containing social mitigation and management strategies required under the Social Impact and Business Disruption Delivery Work Plan (Condition 13), a SIMP must include:		
			a) A review of the social environment at the time of construction start;		
			 Confirmation of potential social impacts as they exist at the time of construction and how these have changed since the Social Impact Assessment as lodged in the environmental assessment reports referred to in Condition 1; 		
			 A programme to monitor and review the effectiveness of impact mitigation and management strategies from the confirmation of the Designation through the construction and implementation of the project; 		
			 A Stakeholder Engagement Strategy that includes action plans and mechanisms to ensure engagement processes, including those relevant to Conditions 14 – 17 and all DWPs, are integrated; and 		
			e) Means to document and review the key stakeholders and their interest in the project; and actions, outcomes, and mechanisms to support reviews of the SIMP.		
		11.3	When developing a SIMP the Requiring Authority must:		
			 a) Undertake engagement to provide opportunities for input from affected and interested parties (as defined in Condition 15.4c); b) Through the suitably qualified specialist, identify the suite of methods that might be used, as far as reasonably practicable, to avoid, remedy 		

Condition Number	NoR Applies to	Condition
Number	Applies to	or mitigate social impacts, including, but not limited to, the following specific issues: i) access for residents, community facilities and businesses as a result of construction activities; ii) loss of amenity for residents, community services and businesses as a result of construction activities; and iii) the benefits for the community identified in the SIA might be realised. c) Take into consideration the increased demands and cumulative effects placed on stakeholders and communities to participate in consultative processes in the project area; d) Document engagement undertaken and the views and concerns expressed by this engagement; matters and measures to be monitored identified by the affected and interested parties along with a clear explanation of where any matters or measures have not been incorporated and why not; e) Prepare a draft SIMP for peer review by suitably qualified independent specialists approved by the appropriate Auckland Council representative, and then submit to Auckland Council for any further comment. Prior to submission of the first Outline Plan, incorporate any recommended changes into a final SIMP, along with a clear explanation of where any recommendations have not been incorporated and why not. 11.4 The Requiring Authority shall:- a) Submit to the Auckland Council an annual progress report within one year of the of the submission of the SIMP and every year following until construction is complete; and b) Submit to the Auckland Council ar eview of the SIMP prior to the submission of any new Outline Plan and prior to the commencement of a new construction stage of the project. This review is to include a record of the further engagement undertaken (including engagement with the Community Liaison Group) and the views and concerns expressed by this engagement.
		specialist approved by the appropriate Auckland Council representative. Following any peer review a revised SIMP is to be submitted, along with a clear explanation of where any recommendations have not been incorporated and why not.
Social Impa	act and Busin	ess Disruptions
12	1 2 3	Property Management 12.1 The Requiring Authority will ensure the properties acquired for the Redoubt Road - Mill Road Corridor Project are appropriately managed so they do not deteriorate and adversely affect adjoining properties and the surrounding area.
13	1 2 3	Social Impact and Business Disruption DWP 13.1 The Requiring Authority shall prepare a Social Impact and Business Disruption DWP for each part (stage) of the project. 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 by: a) Setting out the specific methods to be adopted in managing the

Condition Number	NoR Applies to	Condition	
		b) Encouraging impact identi c) Maximising the developr d) Monitoring the	cial impacts in the construction phase, as identified in the tion 11); on-going participation and engagement in the process of fication and management; the project's positive social impacts and contributions to nent of strong and sustainable communities; and the effectiveness of mitigation strategies.
		DWP to address the	s) to prepare a Social Impact and Business Disruption following specific issues: ion to access (including pedestrian, cycle, passenger
		transport and services and as is reasons b) How the disrocustomers to as is reasons c) How loss of as a result	and service/private vehicles) for residents, community businesses as a result of construction activities will, so far ably practicable, be avoided, remedied or mitigated; uption effects that result or are likely to result in the loss of businesses as a result of construction activities will, so far ably practicable, be avoided, remedied or mitigated; and amenity for residents, community services and businesses of construction activities will be or has been mitigated CEMP(s) and other DWPs.
		consultation with t	and Business Disruption DWP shall be prepared in he community, community facility operators, business arties and affected in proximity parties relative to the
		operational r b) Identify the businesses, construction Project;	client and visitor behaviour and requirements and equirements of community facilities and businesses; scale of disruption and adverse effects likely to result to residents and community services/facilities as a result of of that stage of the Redoubt Road - Mill Road Corridor less and servicing requirements and in particular any
		special need	s of residents, community facilities and businesses; and methods to address matters outlined in (b) and (c) above,
		servic servic withir Parki ii) The busin	measures to maximise opportunities for pedestrian and the access to businesses, residents and social theses/facilities that will be maintained during construction, the practical requirements of the Transport, Access and the practical requirements of the Transport, Access and the practical requirements of the Transport, Access and the power of the practical requirements of the Transport, Access and the power of the practical requirements of the Transport, Access and the power of the practical requirements of the Transport, Access and the power of the practical requirements of the Transport, Access and the practical requirements of the Transport, Access and the power of the practical requirements of the Transport, Access and the practical requirements of the Transport of the
		iii) The r preve iv) Other servic	neasures to promote a safe environment, taking a crime ntion through environmental design approach;
		v) Other service	prary parking or parking options for access; measures to assist residents, businesses and social residents residents, businesses and social residential residents, businesses and social residential residents.
		norma vii) If ap reloc	al business operation following construction; propriate and reasonable, requirements for temporary ation during construction and/or assistance for relocation ding information to communities using these services and

Condition Number	NoR Applies to	Condition		
		facilities to advise of relocations).		
		13.4 The Social Impact and Business Disruption DWP shall include:		
		 a) Identification of the specific methods proposed for mitigation of social effects, including those identified in the SIMP; b) A record of the consultation undertaken with the community including specific access and operational requirements of individual businesses and residents including, if relevant, consultation on the necessity for, and the feasibility of, options and requirements for temporary relocation during construction and/or assistance for relocation); c) An implementation plan of the methods to mitigate the disruption effects (as developed in Condition 13.3 above); d) Reference to any site/business specific mitigation plans that exist (though these may not be included in the DWP); e) Cross reference to detail on how the CEMP(s) and DWPs have responded to the issues of resident, business and social service/facility accessibility and amenity; f) Details of on-going consultation with the local community through the Community Liaison Group(s) to provide updates and information relating to the timing for project works and acquisition (Condition 15); g) Details of on-going consultation with iwi (Condition 6); and h) The process for resolution of any disputes or complaints in relation to the management / mitigation of social impacts (including business disruption impacts). 		
		13.5 The Social Impact and Business Disruption DWP shall be implemented and complied with for the duration of the construction of the Redoubt Road - Mill Road Corridor Project and for up to 12 months following the completion of the Project if required.		
Stakeholde	r Engagemen	it		
14	1 2 3	Contact Person 14.1 The Requiring Authority shall make a contact person available for the duration of construction for public enquiries on the construction works, including for out-of-hours emergencies.		
15	1	Stakeholder Engagement Plan(s)		
	2 3	 The objective of a Stakeholder Engagement Plan is to set out a framework to ensure appropriate communication and consultation is undertaken with the affected and interested parties prior to and during the construction of the Redoubt Road - Mill Road Corridor Project. The Requiring Authority shall prepare a Stakeholder Engagement Plan (or 		
		Plans should the project be staged) which shall be implemented and complied with for the duration of the Redoubt Road - Mill Road Corridor Project beginning once the designation has been granted.		
		15.3 A Stakeholder Engagement Plan shall identify a Community Liaison Group (including its membership and processes), and all relevant affected party and affected in proximity stakeholders and set out how the Requiring Authority will:		
		 a) At regular intervals after the designation has been confirmed, provide progress updates (even if no construction activities are planned), by way of letters, adverts, community noticeboards and/or other means; b) Involve and inform the Community Liaison Group and other parties of the on-going planning for the project, construction activities and constraints that could affect them; 		

Condition Number	NoR Applies to	Condition	
		c) d)	Provide early information on key Project milestones; Obtain and specify a reasonable timeframe (being not less than 10 working days), for feedback and inputs from directly affected and affected in proximity parties regarding the development (as part of the review process provided by Condition 10.7) and implementation of the CEMP(s) or DWPs; and Respond to queries and complaints including but not limited to:
			 i) Who is responsible for responding; ii) How responses will be provided; and iii) The timeframes that responses will be provided within.
		15.4 A Sta	keholder Engagement Plan shall as a minimum include:
		a) b)	A communications framework that details the Requiring Authority's communication strategies, the frequency of communications and consultation, the range of communication and consultation tools to be used (including any modern and relevant communication methods, newsletters or similar, advertising etc.), and any other relevant communication matters; The Stakeholder Engagement Manager for the Project including their
		c)	contact details (phone, email and postal address); The methods for identifying, communicating and consulting with persons affected by the project including but not limited to:
			 i) All property owners and occupiers within the designation footprint; ii) All property owners and occupiers in proximity to the works as defined in the SIMP (and including the Primary Impact Area identified in Appendix Q of the SIA report); iii) Network Utility Operators, including the process:
			 To be implemented to capture and trigger where communication and consultation is required in relation to any material changes affecting the Network Utilities;
			 For the Requiring Authority to give approval (where appropriate) to Network Utility Operators as required by section 176(1)(b) of the RMA during the construction period;
			 For obtaining any supplementary authorisations (including but not limited to resource consents (including those required under a National Environmental Standard) and easements);
			 For inspection and final approval of works by Network Utility Operators; and
			 For implementing Conditions 4, 18, 19, and 20 of this designation in so far as they affect Network Utility Operations;
			iv) Any other stakeholder who identifies themselves as having a relevant interest in the work.
		d)	How stakeholders will be informed of the progress of planning for the project, notified of the commencement of construction activities and works, the expected duration of the activities and works, and who to contact for any queries, concerns and complaints;
		e)	Methods for communicating in advance to surrounding communities which must be notified at least 24 hours in advance where construction activities are predicted to:

Condition Number	NoR Applies to	Condition
Number	Applies to	 i) Exceed the noise limits (refer Condition 24); or ii) Exceed a vibration limit (refer Conditions 25 and 26). f) Methods for communicating in advance proposed hours of construction activities outside of normal working hours and on weekends and public holidays, to surrounding communities, and methods to record and deal with concerns raised about such hours; g) Methods for communicating and consulting with mana whenua for the duration of construction and implementation of mana whenua principles for the project (refer to Conditions 6 and 33); h) Methods for communicating and consulting in advance of construction works with emergency services (Police, Fire, Ambulance) on the location, timing and duration of construction works, and particularly in relation to temporary road lane reductions and/or closures and the alternative routes or detours to be used. i) Methods for communicating and consulting with affected and interested parties in the delivery of mitigation measures identified in the Social Impact Assessment as lodged in the environmental assessment reports referred to in Condition 1.
16	1 2 3	Concerns and Complaints Management 16.1 Upon receiving a concern or complaint during construction, the Requiring Authority shall instigate the following process to address concerns or
		complaints received about adverse effects: a) Identify the nature of the concern or complaint, and the location, date and time of the alleged event(s); b) Acknowledge receipt of the concern or complaint within 24 hours of receipt; c) Respond to the concern or complaint in accordance with the relevant management plan which may include monitoring of the activity by a suitably qualified expert and implementation of mitigation measures.
		16.2 A record of all concerns and / or complaints received shall be kept by the Requiring Authority. This record shall include:
		 a) The name and address of the person(s) who raised the concern or complaint (unless they elect not to provide this) and details of the concern or complaint; b) Where practicable, weather conditions at the time of the concern or complaint, including wind direction and cloud cover if the complaint relates to noise or air quality; c) Known Redoubt Road - Mill Road Corridor Project construction activities at the time and in the vicinity of the concern or complaint; d) Any other activities in the area unrelated to the Redoubt Road - Mill Road Corridor Project construction that may have contributed to the concern or complaint such as non-Redoubt Road - Mill Road Corridor Project construction, fires, traffic accidents or unusually dusty conditions generally; e) Remedial actions undertaken (if any) and the outcome of these, including monitoring of the activity. 16.3 This record shall be maintained on site, be available for inspection upon
		request, and shall be provided every two months (or as otherwise agreed) to the Auckland Council Consent Monitoring officer, and to the "key contacts" (see Condition 9). 16.4 Where a complaint remains unresolved or a dispute arises, the Auckland Council Compliance Monitoring Officer will be provided with all records of the

Condition Number	NoR Applies to	Condition		
		complaint and how it has been dealt with and addressed and whether the Requiring Authority considers that any other steps to resolve the complaint are required. Upon receiving records of the complaint the Auckland Council Compliance Monitoring Officer must determine whether a review of the CEMP(s) and/or DWPs is required under Condition 10 to address this complaint. The Auckland Council Compliance Monitoring Officer shall advise the Requiring Authority of its recommendation within 10 working days of receiving the records of complaint.		
17	1 2 3	"One Network" Consultation 17.1 The Requiring Authority and its contractor shall work collaboratively with the New Zealand Transport Agency (NZTA) during the preparation of the Transport, Access and Parking DWP (Condition 21) in relation to confirming the management of adverse transport effects on the road network. A record of this consultation and outcomes shall be included in the Traffic, Access and Parking DWP. The Requiring Authority shall consult with the NZTA throughout the duration of construction on any changes or updates to the Traffic, Access and Parking DWP which relate to the management of the road network.		
Construction	on Environme	ntal Management Plan (CEMP)		
18	1 2 3	18.1 In order to give effect to the objective in Condition 10.1, the CEMP(s) shall provide the following details: a) Notice boards that clearly identify the Requiring Authority and the Project name, together with the name, telephone number and email address of the Site or Project Manager and the Communication and Consultation Manager; b) The site or Project Manager and the Stakeholder Engagement Manager (who will implement and monitor the Stakeholder Engagement Plan), including their contact details (phone, email and physical address); c) The Document Management system for administering the CEMP(s), including review and Requiring Authority / Constructor / Auckland Council requirements; d) Training requirements for employees, sub-contractors and visitors on construction procedures, environment management and monitoring; e) Where a complaint is received, the complaint must be recorded and responded to as provided for in Conditions 9, 12 and 20; f) Environmental incident and emergency management procedures; g) Environmental complaints management procedures; h) An outline of the construction programme of the work, including construction hours of operation, indicating linkages to the DWPs which address the management of adverse effects during construction; i) Specific details on demolition to be undertaken during the construction period; j) Means of ensuring the safety of the general public; and Methods to assess and monitor potential cumulative adverse effects.		
19	1 2 3	19.1 In order to give effect to the objective in Condition 10.1, the CEMP(s) shall include the following details and requirements in relation to all areas within the designation footprint where construction works are to occur, and / or where materials and construction machinery are to be used or stored: a) Where access points are to be located and procedures for managing		

Condition Number	NoR Applies to	Condition
Number	Applies to	construction vehicle ingress and egress to construction support and storage areas; b) ; c) Methods for management of construction activities adjacent to buildings and structures and land adjoining the designation, including incorporating the findings of further geotechnical subsurface investigations particularly, but not exclusively, between CH 3000 to CH 5200; d) Measures to adopt to keep the construction area in a tidy condition in terms of disposal / storage of rubbish and storage unloading of construction materials (including equipment). All storage of materials and equipment associated with the construction works shall take place within the boundaries of the designation; e) Measures to ensure all temporary boundary / security fences associated with the construction of the Redoubt Road - Mill Road Corridor Project are maintained in good order with any graffiti removed as soon as possible; f) The location and specification of any temporary acoustic fences and visual barriers, and where practicable, opportunities for mana whenua (see Condition 6) and community art or other decorative measures along with viewing screens to be incorporated into these without compromising the purpose for which these are erected; g) How the construction areas are to be fenced and kept secure from the public and, where practicable and without compromising their purpose how opportunities for public viewing, including provision of viewing screens and display of information about the project and opportunities for mana whenua and community art or other decorative measures can be incorporated to enhance public amenity and connection to the project; h) The location of any temporary buildings (including worker's offices and portaloos) and vehicle parking (Methods to control the intensity, location and direction of artificial construction lighting to avoid light spill and glare onto sites adjacent construction areas; i) Methods to ensure the prevention and mitigation of adverse effects associated with the storage, use, disposal, or
		 edge of the construction yards where practicable; and k) Methods for management of vacant areas once construction is completed with the Urban Design and Landscape DWP.
20	1 2 3	 Network Utilities 20.1 The purpose of this section of the CEMP(s) shall be to ensure that the construction of the Mill Road corridor adequately takes account of, and includes measures to address the safety, integrity, protection or, where necessary, relocation of existing network utilities that traverse, or are in close proximity to, the designation during the construction of the Redoubt Road - Mill Road Corridor Project. 20.2 For the avoidance of doubt and for the purposes of this condition an "existing Network Utility" includes infrastructure operated by a Network Utility Operator which was: a) In place at the time the notice of requirement for the Redoubt Road - Mill Road Project was served on Auckland Council (24 October 2014); or b) Undertaken in accordance with condition 4 of this designation or the

Condition Number	NoR Applies to	Condition		
			section 176(1)(b) RMA process.	
		co sl e: do	o manage the adverse effects on Network Utilities Operations during the construction of the Redoubt Road - Mill Road Corridor Project, the CEMP(s) hall be prepared in consultation with Network Utility Operators who have existing Network Utilities that traverse, or are in close proximity to, the esignation and shall be adhered to and implemented during the construction of the Redoubt Road - Mill Road Corridor Project. The CEMP(s) shall include is a minimum:	
		a; b; c;	that will be used to liaise with all Network Utility Operators who have existing network utilities that traverse, or are in close proximity to, the designation; Measures to be used to accurately identify the location of existing Network Utilities, and the measures for the protection, support, relocation and/or reinstatement of existing Network Utilities;	
			 i) Measures to provide for the safe operation of plant and equipment, and the safety of workers, in proximity to existing Network Utilities; ii) Plans identifying the locations of the existing Network Utilities (and their designations) and appropriate physical indicators on the ground showing specific surveyed locations. 	
		ď	Measures to be used to ensure the continued operation of Network Utility Operations and the security of supply of the services by Network Utility Operators at all times;	
		e)		
		f)	Contingency management plans for reasonably foreseeable circumstances in respect of the relocation and rebuild of existing Network Utilities during the construction of the Redoubt Road - Mill Road Corridor Project;	
		g	•	
		h)	•	
		i)	Vibration management and monitoring for works in close proximity to existing Network Utilities;	
		j)	Emergency management procedures in the event of any emergency involving existing Network Utilities;	
		k)		
		I)	A summary of the consultation (including any methods or measures in dispute and the Requiring Authorities response to them) undertaken between the Requiring Authority and any Network Utility Operators	

Condition Number	NoR Applies to	Condition		
	Трршоо чо	during the preparation of the CEMP(s); m) Measures to appropriately manage the effects of dust, and any other material potentially resulting from construction activities, that may cause material damage, beyond normal wear and tear, to National Grid transmission lines or support structures; n) Measures to ensure that construction activities do not result in ground instability that would likely damage or undermine the structural integrity of any National Grid support structures; and o) Measures to ensure that all land use activities, including - any temporary buildings/structures, earthworks (filling and excavations), fencing, operation of mobile plant and/or persons working near National Grid assets, comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) or any subsequent revision of the code.		
		If the Requiring Authority and a Network Utility Operator cannot agree on the methods proposed under the CEMP(s) to manage the construction effects on the Operator's network utility operation, unless otherwise agreed, each party will appoint a suitably qualified and independent expert, who shall jointly appoint a third such expert to advise the parties and make a recommendation. That recommendation will be provided by the Requiring Authority as part of the CEMP(s) along with reasons if the recommendation is not accepted.		
Transport, /	Access and P	arking		
21	1	General Transport, Access and Parking		
	3	21.1 A Transport, Access and Parking DWP shall be prepared by an appropriately qualified and experienced specialist to manage the adverse effects of construction of the Redoubt Road - Mill Road Corridor Project, or any part of it, on the transport network.		
		21.2 The objective of the Transport, Access and Parking DWP is to so far as is reasonably practicable, avoid, remedy or mitigate the adverse effects of construction on transport, parking and property access. This is to be achieved by:		
		 a) Managing the road transport network for the duration of construction by adopting the best practicable option to manage congestion; b) Maintaining pedestrian access to private property at all times; and c) Providing on-going vehicle access to private property to the greatest extent possible. 		
		21.3 To achieve the above objective, the following shall be included in the Transport, Access and Parking DWP:		
		 a) The road routes which are to be used by construction related vehicles, particularly trucks to transport construction related materials, equipment, spoil, including how the use of these routes by these vehicles will be managed to mitigate congestion, and to the greatest extent possible, avoid adverse effects on residential zoned land and education facilities; b) Transport route options for the movement of construction vehicles carrying spoil, bulk construction materials or machinery shall be identified and details provided as to why these routes are considered appropriate routes. In determining appropriate routes, construction 		
		vehicles carrying spoil, bulk construction materials or machinery shall as far as practicably possible only use roads that:		
		i) Form part of the regional arterial network;		

NoR Applies to	Condition	
		ii)Are overweight / over dimensioned routes.
	c)	Where other routes are necessary (other than those roads identified in b above), the Transport, Access and Parking DWP shall identify any residential zoned land and education facilities and shall provide details on how adverse effects from these vehicle movements are to be mitigated through such measures as:
		 i) Stakeholder Engagement (in accordance with Condition 15 of this designation) with these properties in advance of the vehicle movements occurring; ii) Restricting vehicle movements on Monday to Friday to between 9.30am and 3.30pm, and on Saturday to between 9am and 2pm.
	d)	Proposed temporary road lane reductions and / or closures, alternative routes and temporary detours, including how these have been selected and will be managed to mitigate congestion as far as practicably possible and how advance notice will be provided;
	e)	How disruption to the use of private property will be mitigated through:
		 i) Ensuring pedestrian and cycle access to private property is retained at all times; ii) Providing vehicle access to private property as far as practicably possible at all times, except for temporary closures where landowners and occupiers have been communicated and consulted with in reasonable advance of the closure; and iii) How the loss of any private car parking will be mitigated through alternative car parking arrangements.
	f)	Where an affected party unexpectedly finds their vehicle blocked in as a result of a temporary closure, the Requiring Authority shall (within reasonable limits) offer alternative transport such as a taxi, rental car, or other alternative. For the purposes of these Designation Conditions "temporary closure" is defined as the following:
		 i) In place for less than six hours, the Requiring Authority shall communicate and consult on the closure at least 24 hours in advance, but is not required to offer or provide alternative parking arrangements, though it may choose to offer this on a case by case basis in consultation with the affected party; and ii) In place for between six and 72 hours, the Requiring Authority shall communicate and consult on the closure at least 72 hours in advance, and iii) will offer and provide where agreed with the affected party alternative parking arrangements. The alternative parking arrangement should be as close to the site affected as is reasonably practicable.
	g)	How disruption to use of the road network will be mitigated for emergency services, public transport, bus users, taxi operators, freight and other related vehicles, pedestrians and cyclists through:
		 i) Prioritising, as far as practicably possible, pedestrian and public transport at intersections where construction works are occurring; ii) Relocating bus stops to locations which, as far as practicably possible, minimise disruption; and iii) Identifying alternate heavy haul routes where these are affected by construction works.

Condition Number	NoR Applies to	Condition		
		i) Cross references to the specific sections in the Stakeholder Engagement Plan that detail how emergency services, landowners, occupiers, public transport users, bus and taxi operators, and the general public are to be consulted with in relation to the management of the adverse effects on the transport network.		
22	1 2	Monitoring of Transport Network Congestion		
	3	22.1 To achieve the objective of Condition 21.2(a), the Requiring Authority will undertake monitoring of the transport network through traffic surveys and implement additional mitigation measures as required to manage congestion to achieve the best practicable option.		
		22.2 The purpose of the traffic survey is to monitor congestion on the transport network by measuring average delays for traffic travelling along specified routes. The surveyed times are to be measured as:		
		 a) The average times over the two hour morning or evening peak period; and b) Inter-peak. 		
		22.3 The Requiring Authority shall carry out a traffic survey exercise within six months of the start of construction and once every six months (or following any significant change in the road layout) at the following times:		
		 a) The two hour morning or evening peak period; and b) Inter-peak for the duration that construction of the Redoubt Road -Mill Road Corridor Project is occurring. 		
		22.4 Surveys shall be carried out over a two week period, and generally on one "neutral" working day (i.e. Tuesday, Wednesday or Thursday) along each route specified in the Transport, Access and Parking DWP. If a congestion incident occurs (such as an accident) during the survey period the surveys shall be retaken as they will be considered unrepresentative.		
		22.5 Traffic surveys for comparison purposes shall also be conducted six months prior to construction of the Mill Road corridor to establish a baseline of existing transport congestion.		
23	1 Road Design/Layout			
	2 3	23.1 All lane widths, including cycle lanes, shall have regard to the Auckland Transport Code of Practice (or any successive/renamed publication) for the proposed speed environment.		
		23.2 When the section on Hilltop Road is constructed as part of the project, a footpath is to be constructed between the Redoubt Road footpath and the existing footpath on Hilltop Road.		
		23.3 All redundant infrastructure (such as street furniture, footpaths, kerb and channel, road signs and pavement) on the portion of roads that are closed are to be physically removed and replaced with appropriate landscape treatment.		
		Where feasible and safe, pedestrian and cycle connections are to be installed from newly formed cul-de-sac heads to the new road network.		
		23.5 Where road gradients are less than 0.5%, provision is to be made to ensure ponding does not occur, as per the Auckland Transport Code of Practice.		
		23.6 Following the completion of the Redoubt Road – Mill Road corridor project, Auckland Transport is to undertake regular assessments of whether the installation of a priority lane is required against the criteria of the Code of		

Condition Number	NoR Applies to	Condition	on				
			Practice, or subsequendertaken at two-year	ent documents. The intervals until such time		ents are to be ne is installed.	
				perational or design red bus lanes) shall be in			
		23.7	traffic signals at the int	onstructed the Requiring ersections of Thomas F ush Scenic and Murphys all consider:	Road, Hodges R	oad and Murphys	
				ing and likely further de immediate and wider a	-	s as a result of urba	an
			(b) The impact of traff	ic flows along Murphys	Road;		
			(c) The safety and effi and cyclists; and	ciency of the intersection	ons including the	e safety of pedestria	ans
			(d) The interests of sta	akeholders.			
		23.8	traffic signals rather th Road and Ranfurly F Authority shall conside a) The extent of ex	constructed the Requir an roundabouts at the i Road and Mill Road. I er: sting and likely further of ent in the immediate and	ntersections of an analysis of an analysis of demand for sign	Alfriston Road and lecision the Requi	Mill
			-	iffic flows along Mill Roa			
			c) The safety and pedestrians and	efficiency of the inters	sections includi	ng the safety of	
			d) The interests of si School.	akeholders and affecte	d landowners, ir	ncluding Alfriston	
Noise and \	/ibration						
24	1	Project	Standards – Construc	tion Noise			
	2 3	24.1		all, as far as is practicab on Noise, specifically th			
			a) Residential rece	eivers			
				Time	dB L _{Aeq}	dB L _{Am}	
					(Т)	ax	
			Weekdays	0630-0730	55	75	
				0730-1800	70	85	
				1800-2000	65	80	
				2000-0630	45	75	
			Saturdays	0630-0730	45	75	
				0730-1800	70	85	

Condition Number	NoR Applies to	Condition	1					
				1800-2	2000	45	75	
				2000-0	0630	45	75	
			Sundays and	0630-0	730	45	75	_
			Public Holidays	0730-1	800	55	85	
				1800-2	2000	45	75	_
				2000-0	0630	45	75	
		b) Industrial a	nd commercial re	eceivers			
			Time		dB L _{Aeq(T)}			
			0730-1800		70			
			1800-0730		75			
			Note: "(T)" is a minutes.	representative a	assessment	duration betwe	een 10 and 6	30
		24.2	Sound levels sha				dance with th	ne
25	1		orovisions of NZS tandards – Cons			truction Noise.		
	2 3	25.1	Construction vibra damage:			owing Project S	Standards for b	ouilding
				Short-tern	n vibration			
			Type of tructure	PPV at the	foundation a	t a frequency of	h	PPV at norizont al plane
				1 - 10Hz (mm/s)	1 - 50 Hz (mm/s)	50 - 10 Hz (m	00 m/s) h	of nighest loor mm/s)
			Commercia Industrial	20	20 – 40	40 – 5	0	40
		S	Residential/ school/ ranspower tructures	5	5 – 15	15 – 2	0	15
		S	Historic or ensitive tructures	3	3 – 8	8 – 10		8
		Note:		I 4150-3:1999 c				

Condition Number	NoR Applies to	Condition
		and which does not produce resonance in the structure being evaluated". Long-term (continuous) vibration is defined as all other vibration types not covered by the short-term vibration definition.
		25.2 Construction vibration shall be measured in accordance with German Standard DIN 4150-3:1999.
26	1	Project Standards - Construction Vibration (Amenity)
	3	26.1 Between the hours of 7am and 10pm vibration generated by construction activities shall not exceed:
		 A Peak Particle Velocity (PPV) of 1mm/s as measured on the floor of the receiving room for residentially occupied habitable rooms, bedrooms in temporary accommodation and medical facilities; and A Peak Particle Velocity (PPV) of 2mm/s as measured on the floor of the receiving room for retail and office spaces (including work areas and meeting rooms).
		26.2 The limits in Condition 26.1 shall only be investigated and applied upon the receipt of a complaint from any building occupant. They shall not be applied where there is no concern from the occupant of the building.
27	1 2	Construction Noise and Vibration DWP
	3	For the avoidance of doubt, this condition is applicable to the management of construction noise and vibration on all receivers, including sensitive receivers.
		27.1 A Construction Noise and Vibration DWP shall be prepared. The objective of the Construction Noise and Vibration DWP is to provide a framework for the development and implementation of an identified best practicable option to avoid, remedy or mitigate the adverse effects of noise and vibration resulting from construction.
		27.2 The Construction Noise and Vibration DWP shall:
		 Adopt the noise and vibration standards for construction set out in Conditions 24, 25 and 26 of these designations;
		b) Identify the best practicable option to avoid, remedy or mitigate adverse effects on a receiver resulting from construction noise or vibration that does not comply with the project standards set out in conditions 24, 25 and 26;
		 c) Identify measures to ensure that construction activities do not result in ground instability that would likely damage or undermine the structural integrity of any neighbouring structures; and d) Identify methods to achieve best practicable option for mitigating adverse effects in accordance with section 17 of the RMA.
		27.3 To achieve this objective, the Construction Noise and Vibration DWP shall include:
		 The roles and responsibilities of the noise and vibration personnel in the contractor team with regard to managing and monitoring adverse noise and vibration effects;
		b) That piling and road cutting will be restricted to between the hours of 7am to 7pm, Monday to Saturday;c) Construction machinery and equipment to be used and their operating
		noise levels; d) Identification of construction activities that are likely to create adverse noise and vibration effects, the location of these in the construction site areas, and the distance to comply with the Project Criteria in

Condition Number	NoR Applies to	Condition	
		e) f) g) h)	Conditions 24, 25 and 26; The timing of construction activities that are likely to create an adverse noise and vibration effect; The proximity of neighbouring noise and vibration sensitive areas; The process of community liaison; Specific training procedures for construction personnel including:
			 i) Information about noise and vibration sources within the construction area and the locations of sensitive noise and vibration areas; and ii) Construction machinery operation instructions relating to mitigating noise and vibration;
		j)	Methods and measures to mitigate adverse noise and vibration effects including, but not limited to, structural mitigation such as barriers and enclosures, the scheduling of high noise and vibration construction, use of low noise and vibration machinery, temporary relocation of affected receivers or any other measures or offer agreed to by the Requiring Authority and the affected receiver; The proposed methods for monitoring construction noise and vibration to be undertaken by a suitably qualified person for the duration of construction works including:
			 i) Updating the predicted noise and vibration contours based on the final design and construction activities; ii) Confirm which buildings are to be subject to a pre and post building condition survey in accordance with Condition 30; iv) Identifying appropriate monitoring locations for receivers of construction noise and vibration;
			iv) Procedures for working with the Stakeholder Engagement Manager to respond to complaints received on construction noise and vibration, including methods to monitor and identify noise and vibration sources; v) Procedures for monitoring construction noise and vibration and reporting to the Auckland Council Consent Monitoring officer; and vi) Procedures for how works will be undertaken should they be
		k)	required as a result of the building condition surveys; Cross references to the specific sections in the Stakeholder Engagement Plan which detail how landowners and occupiers are to be communicated with around noise and vibration effects.
Historic He	ritage		
28	1	Historic Herit	age
	3	speci	Requiring Authority shall employ a suitably experienced historic heritage alist ('Nominated Heritage Expert')' to prepare and implement a Historic age DWP(s).
		Herita defina propo may site s locati identi	each stage a survey shall be undertaken and included in the Historic age DWP(s). The purpose of the survey is to identify historic heritage (as ed under the RMA 1991) and the actual and potential effects of the osed activity on historic heritage within the Designation footprint or which otherwise be directly affected by the Project. This will involve detailed urvey of private property within the proposed corridor route to verify the on and confirm the significance of archaeological and other heritage sites fied in the archaeological report prepared by Clough and Associates and previously unrecorded sites, and the adverse effects on those places.

Condition Number	NoR Applies to	Condit	ion	
			Desig	ect to the agreement of property owners in areas outside the gnation footprint proper, the survey is to include (but will not necessarily nited to):
			a)	The road berm and other unmodified ground at 21-25 Redoubt Road, where evidence relating to the St Johns Redoubt may still survive;
			b)	The area within the designation footprint in the vicinity of the house at 236 Redoubt Road, which may be the location of an unrecorded historic farmstead;
			c)	The area within the designation footprint in the vicinity of the house at 140 Ranfurly Road, which may be an unrecorded historic farmstead;
			d)	The area in the vicinity of 1348 Alfriston Road (the Meeting House);
			e)	The area in the vicinity of 1345 Alfriston Road (Bodle Homestead and Store);
			f)	The access to 125 Murphys Road and adjacent farm boundary;
			g)	The Murphys Road frontage of Pt Lot 1 DP69592; and
			h)	Any new archaeological remains discovered during the field survey.
		28.3	adver may r	objective of the Historic Heritage DWP(s) is to avoid, remedy or mitigate rse effects on known and any as yet unrecorded historic heritage that result from construction of the Redoubt Road - Mill Road Corridor Project y part of it, as far as reasonably practicable.
		28.4	The F	Historic Heritage DWP(s) shall as a minimum, include the following:
			a)	Identification and methodology for recording and documenting all Built Heritage and archaeology directly affected by the construction, or associated pre- and post-construction.
			b)	Specific consideration of the following:
				 At the western end of NoR 1 Section 1a in the vicinity of St John's Redoubt (R11/534), a scheduled item on the PAUP schedule of Significant Historic Heritage Places (No. 1271);
				ii) At 135 Redoubt Road, 1947 house CHI 19900;
				iii) On NoR 3 Sections 4d and 5 at the intersection of Mill Road and Alfriston Road. This area of Mill Road was the centre of the Alfriston community in the mid-late 19th century and early 20th century and several historic buildings and sites of former buildings are recorded here. Two of these sites — R11/2074 Alfriston Meeting Hall (The Meeting House), R11/2069 Bodle Homestead and Post Office/Store site are located within Section 4d and Section 5 of NoR 3. Both will be affected by the proposed corridor route;
				iv) At 125 Murphys Road, a 19 th century homestead R11/2975;
				v) At the intersection of Murphys Road and Flat Bush School Road where R11/2745 Stancombe Road Cottage or Baverstock School House, CHI 2776 and the former Old Flat Bush School are located; and
				vi) The results of the survey required to be undertaken under Condition 28.2.
			c)	The outcome of any consultation carried out with Heritage New Zealand in relation to obtaining an authority to modify any

Condition Number	NoR Applies to	Condition	
Number	Applies to		archaeological sites or built heritage (see Advice Notes - AN1);
		d)	How Built Heritage buildings and structures will be protected during construction:
			 Through the use of screening or other protective measures to mitigate adverse construction effects;
			 Through proposed methods for monitoring building damage, to be overseen by the Nominated Heritage Expert or Nominated Conservation Architect for the duration of construction works; and
			iii) By confirming which Built Heritage buildings and structures are to be subject to a pre and post building condition survey and how mitigation or rectification of any damage will be addressed.
		e)	Identification of Built Heritage which may be directly affected by the works and whether that Built Heritage may:
			 i) Be adaptively reused; ii) Be partially retained in design and construction; iii) Have heritage elements that will be integrated into other elements of the Redoubt Road - Mill Road Corridor Project; or iv) Have to be demolished.
		f)	How during the process of any adaptive reuse, modification or demolition the Nominated Heritage Expert will record the history of the place using building archaeological techniques.
		g)	Identification of areas of known archaeological evidence or locations where there is the potential for archaeological remains to be discovered and the procedures for:
			i) Pre-earthworks archaeological investigations;
			ii) Monitoring of preliminary earthworks;
			iii) Recording any archaeological remains or evidence before it is modified or destroyed; and
			 iv) Opportunities for the conservation and preservation of artefacts and ecofacts (biological material) that are discovered.
		h)	A report of post-excavation assessment analysis, archiving, and updating of archaeological records to be submitted to the Auckland Council within 12 months of completion of earthworks.
		i)	Procedures for the accidental discovery of archaeological remains including:
			 The ceasing of all physical construction works in the immediate vicinity of the discovery;
			ii) Practices for dealing with the uncovering of cultural or archaeological remains and the parties to be notified (including, but not limited to, appropriate iwi authorities, the Auckland Council Consents Monitoring officer, Heritage New Zealand, and the New Zealand Police (if koiwi (human skeletal remains) are discovered); and iii) Procedures to be undertaken before physical works in the area
			of discovery can start again, including any iwi protocols, recording of sites and material, recovery of any artefacts, and consultation to be undertaken with iwi, Auckland Council

Condition	NoR	Condition
Number	Applies to	
		Consent Monitoring officer and Heritage Unit, and with Heritage New Zealand.
		 j) Clearly defined constructor roles and responsibilities, stand-down periods and reporting requirements; and
		k) Training procedures for all contractors, to be undertaken in advance of construction, regarding the possible presence of cultural or archaeological sites or material, what these sites or material may look like, and the relevant provisions of the Heritage New Zealand Pouhere Taonga Act 2014 if any sites or material are discovered.
29	3	Historic Heritage – The Meeting House
		The Requiring Authority shall use its best endeavours to relocate the Meeting House to a suitable alternative location preferably in the Alfriston area.
		29.2 Until such time as the Meeting House is able to be relocated the Requiring Authority will:
		 a) use its best endeavours to obtain the approval of the relevant landowner for the Requiring Authority to carry out reasonable works to the Meeting House in its current location to ensure that the Meeting House is in a structurally sound and watertight condition; and b) where landowner approval is obtained under condition 29.2(a), carry out the works described in condition 29.2(a) as soon as reasonably practicable.
		29.3 Where the Meeting House is able to be made structurally sound and watertight and/or relocated:
		 The methods the Requiring Authority will use to ensure that the Meeting House is put into a sound and watertight condition;
		b) What renovation works are required and how these will be carried out; and;
		c) The outcome of any consultation carried out with Heritage New Zealand in relation to obtaining an archaeological authority to modify the site of the Meeting House (cross reference AN1).
		29.4 Upon relocation of the Meeting House the Requiring Authority shall carry out reasonable renovation works to bring the Meeting House to a suitable standard to enable it be re- used for either private or public activities.
		29.5 Where, after using its best endeavours to relocate the Meeting House either:
		a) the relocation is found to not be practicable; or
		 b) Auckland Council does not agree to the relocation of the Meeting House, condition 28 will apply.
Building Co	ondition Surve	eys
30	1 2	Process for Building Condition Surveys
	3	Prior to construction of a stage a building condition survey will be undertaken where it is assessed that there is potential for damage to buildings or structures arising from construction as determined by an independent suitably qualified person appointed by Auckland Transport based on the criteria below unless the relevant industry criteria applied at the time or heightened building sensitivity or other inherent building vulnerability requires it. Factors which may be considered in determining whether a building condition survey will be

Condition Number	NoR Applies to	Condition
		undertaken include:
		a) Age of the building; b) Construction types; c) Foundation types; d) General building condition; e) Proximity to any excavation; f) Whether the building is earthquake prone; and g) Whether any basements are present in the building.
		30.2 Where prior to construction it is determined that a Building Condition Survey is required in accordance with Condition 30.1:
		 a) The Requiring Authority shall employ a suitably qualified person to undertake the building condition surveys and that person shall be identified in the CEMP(s); b) The Requiring Authority shall provide the building condition survey report to the relevant property owner within 15 working days of the survey being undertaken, and additionally it shall notify and provide the Auckland Council Consent Monitoring officer a copy of the completed survey report; c) The Requiring Authority shall contact owners of those buildings and structures where a Building Condition Survey is to be undertaken to confirm the timing and methodology for undertaking a pre-construction condition assessment; d) The Requiring Authority shall record all contact, correspondence and communication with owners and this shall be available on request for the Auckland Council Consent Monitoring Officer; e) Should agreement from owners to enter property and undertake a condition assessment not be obtained within 3 months from first contact, then the Requiring Authority shall not be required under these designation conditions to undertake these assessments; f) The Requiring Authority shall undertake a visual inspection during "active construction" if requested by the building owner where a preconstruction condition assessment has been undertaken; g) The Requiring Authority shall develop a system of monitoring the condition of existing buildings which is commensurate with the type of
		the existing building and the proximity of the Redoubt Road - Mill Road Corridor Project works. The purpose of monitoring is to assess whether or not active construction is compromising the structural integrity of the building; and
		h) The Requiring Authority shall, during the Building Condition Survey, determine whether the building is classified as Commercial / Industrial / School or a Historic or sensitive structure in terms of Condition 25.
		30.3 During construction:
		 a) The Requiring Authority shall implement procedures that will appropriately respond to the information received from the monitoring system. Where necessary this may include the temporary cessation of works in close proximity to the relevant building until such time as measures are implemented to avoid further damage or compromise of the structural integrity of the building; and b) Any damage to buildings or structures shall be recorded and repaired by the Requiring Authority and costs associated with the repair will met by the Requiring Authority.
		30.4 Following construction:
		a) The Requiring Authority shall, within 12 months of the commencement

Condition	NoR	Condition
Number	Applies to	of operation of the stage , contact owners of those buildings and structures where a Building Condition Survey was undertaken to confirm the need for undertaking a post-construction condition assessment; b) Where a post-construction building condition survey confirms that the building has deteriorated as the result of construction or operation works relating to the Redoubt Road - Mill Road Corridor Project , the Requiring Authority shall, at its own cost, rectify the damage; and c) Where the Requiring Authority is required to undertake building repairs in accordance with Conditions 30.3(b) or 30.4(b), such repairs shall be undertaken as soon as practicably possible and in consultation with the owner of the building.
Urban Desig	gn and Lands	scape
31	1	Urban Design and Landscape Principles
	2 3	31.1 The Requiring Authority shall appoint a suitably qualified and experienced specialist (or specialists) to prepare an Urban Design and Landscape DWP(s). The objective of the Urban Design and Landscape DWP(s) is to enable the integration of the Redoubt Road - Mill Road Corridor Projects permanent works into the surrounding landscape and urban design context.
		31.2 The Urban Design and Landscape DWP(s) shall show how the principles from the Urban Design & Landscape study have been used to guide and influence the design of permanent works associated with the Redoubt Road - Mill Road Corridor Project, and how the design has responded or otherwise to these principles and initiatives. For NoRs 2 and 3, the DWP(s) shall also show how the design of the permanent works responds to its landscape context existing and reasonably anticipated at the time of construction noting in particular the transition from a rural to urban context along Murphys Road and from Ranfurly Road through to Alfriston Road. The DWP(s) shall detail the proposed urban design and landscape design theme to be adopted for the entire length of the corridor, or if the designation is to be staged, then the DWP shall show how that part to be given effect to integrates with the design theme for the corridor. The DWP(s) shall have regard to the following:
		 a) Views to the road from the surrounding urban and rural catchments (including dwellings and public open space areas). Manage and mitigate the adverse landscape and visual effects of earthworks, retaining and fencing structures via the engineering design, structure design and/or mitigation planting; b) Ensure that the design approach is consistent with the Urban Design and Landscape Study, including the Landscape Concept Plans and corridor design. This should focus on the development of a comprehensive and coordinated landscape framework for the road corridor that: i. responds to the differing character areas, including reinforcing and integrating with existing important vegetation features (e.g. Murphys Bush, Cheesmans Bush (146 Mill Road)) and enabling longer range views where appropriate;
		ii. integrates stormwater management devices as high quality landscape features that contribute positively to the amenity of the local area;
		iii. encourages passive surveillance (where appropriate); and;
		iv. seeks to reinforce the landscape patterning of the area and integrates with adjacent bush and riparian plantings.
		c) How and when the areas within the designation footprint used during the construction of the Redoubt Road – Mill Road Corridor Project are to be restored;

	NoR	Condition
Number	Applies to	 d) Show any vegetation to be retained, boundary fences and walls to be retained, new retaining walls, noise fences, areas of landscape/visual mitigation planting and ecological enhancement planting; e) Show the proposed design, materials and colouring of fences (including acoustic fences); f) Show the location and design of off-road walking and cycling tracks to be implemented as part of the Project; h) Show the location and design details for gabion cages and retaining walls. Gabion and retaining structures shall be designed to form high quality landscape elements that contribute positively to the local area. In the case of the large scale retaining at the intersection of Murphys Road and Redoubt Road, the retaining structures should be designed to form a memorable and high quality gateway feature. Appropriate retaining wall finishes are likely to include scoria cladding, and decorative patterned and/or textured concrete finishes. Appropriate gabion cage materials are likely to include welded steel cage structures; i) Show the location and design of all street lighting. Street lighting in NoR 3 shall be designed to minimise external light spill; j) Show design details for bridge structures. Ensure bridges contribute positively to the identity of the local area. This is likely to include the consideration of the design, materiality and colour of balustrading, the base of the bridge and the bridge supports, to avoid the perception of a distinctly utilitarian engineered structure; k) Show design details for stormwater wetlands including areas of landscape/visual mitigation planting and ecological enhancement planting; l) Retaining walls on Murphys Road are the same or lesser than those shown on plans 60317081-SKE-30-0000-C-0065Rev A and 60317081-SHT-30-0000-CD-0118; and m) The design creates an appropriate interface and access, for all road users to and from the Murphys Bush neighbourhood centre.
32	1 2 3	 32.1 As part of the Urban Design and Landscape DWP, an Open Space Restoration Plan or Plans (should construction of the corridor be staged) shall be prepared to outline how open space land occupied during construction which adjoins Auckland Council park/reserve land is to be reinstated / restored. This includes land occupied during construction that will be reinstated or replaced on completion of construction, for handover to Auckland Council. 32.2 The Open Space Restoration Plans shall be prepared in consultation with the Auckland Council Parks Department and lwi. In the case of St Johns Redoubt, NZHPT and Department of Conservation shall also be consulted. The Open Space Restoration Plans shall include the following open spaces: a) Totara Park Restoration Plan; b) St Johns Redoubt; c) Murphy's Bush; and d) Ostrich Farm. 32.3 All Open Space Restoration Plans shall be prepared in general accordance with the CEMP(s) and DWP Plans, and shall include, but not be limited to, the following: a) Details of any vehicle access to the reserves and parking areas. b) In the case of Totara Park, details of:- i) The means by which any retaining structures facing the park will be designed or mitigated so that views from within the park maintain a rural or informal rather than built appearance; and

Condition	NoR	Condition
Number	Applies to	including appropriate linkages to the park entry / exit points and the provision for continuing use of these facilities during the construction phase. The mountain bike trail layout shall be reinstated if approved by the Auckland Council Parks Department and developed in consultation with mountain biking clubs.
		 c) In the case of Murphys Bush, details of tree removal, works required within the dripline of trees and proposed replacement plantings; d) The inclusion and integration of the design for all pedestrian and cycleway linkages and facilities; e) Implementation programme, including sequencing of works and completion dates. This shall include works that could be implemented prior to practical completion of construction works or are outside the Project area including re-instatement of the mountain bike trails prior to construction commencement; f) Implementation programmes for planting and field reinstatement; and g) Documentation of consultation undertaken required by Condition 32.2 and the views and concerns expressed by this consultation.
33	1	Landscape Mitigation Planting Plan
	2 3	33.1 As part of the Urban Design and Landscape DWP a Landscape Mitigation Planting Plan (LMPP) shall be prepared by a suitably qualified landscape specialist and a suitably qualified arborist to manage landscape/visual mitigation planting. The LMPP shall include:
		 a) Plans that identify any vegetation to be retained, areas of landscape/visual mitigation planting and ecological enhancement planting required by condition 34. This shall include a schedule of the species to be planted including botanical name, average plant size at the time of planting, planting density and average mature height of each species; b) Location-specific details of site preparation, planting, and maintenance operations; c) Location specific details of site preparation weed and pest control measures, planting methodology, mulching, weed and pest control, replacement planting, and ongoing maintenance until 100% canopy closure is achieved (in the case of mass planted areas) in accordance with NZTA P39 Standard Specification (or subsequent document) for Highway Landscape Treatments; d) Details of measures to be undertaken for topsoil and subsoil amelioration and management, to rehabilitate the soil profile so as to provide a viable growing medium for the areas to be planted, and for use on the berms:
		e) Details of screening and enhancement planting to soften or naturalise adverse visual effects and visual enhancement of the route for road users and the surrounding visual catchment (including dwellings and public open space areas);
		f) Plans and elevations showing screening and enhancement planting to soften or naturalise batter slopes, stormwater ponds, retaining walls MSE walls, bridges and acoustic fencing;
		 g) Selection of locally appropriate eco-sourced native plant species; to ensure that once established, the type of planting is such that it does not require specific ongoing maintenance;
		 h) The integration of cut and fill batters with existing topographical features;
		i) Where practicable, including gentle grades and well-rounded profiles for batters, and shaping tops of cut batters for top soiling and grassing.
		j) Maintenance and establishment requirements (see also Condition 33.5); Massures to minimise clearing work to present and any
		 k) Measures to minimise clearing work to preserve soil and any indigenous vegetation; l) Measures to ensure the appropriate disposal of any clearance of
		invasive/noxious weeds;
	<u> </u>	m) Integration with the design of noise mitigation measures (such as noise

Condition Number	NoR Applies to	Condition			
		fences) so that the combined measures can be implemented in a co- ordinated manner; and n) How the Auckland Council Parks Department, the general public and mana whenua are to be communicated and liaised with on the management of the adverse effects relating to the removal of trees and vegetation.			
		33.2 15 Pin Oaks (Quercus Palustrus) and one Algerian Oak (Quercus Anariensis) situated at 242 Redoubt Road will need to be removed to construct the new intersection of Redoubt Road and Murphys Road. For that stage of the project including this new intersection, the LMPP shall include a minimum of 16 replacement trees within the same genus, capable of achieving large dimensions planted in proximity to the new intersection. The trees should be of good quality nursery stock and have a minimum root ball grade of 400 litres at the time of planting.			
		The trees should be planted with sufficient spacing from each other and any adjacent structure such that their optimum final dimensions can be achieved.			
		The growing environment should be free of impediments to root growth and will need to be conducive with sustaining healthy tree function allowing for a sufficient permeable area and natural additions of organic material to foster the trees' long term development and success.			
		Once planted, the requiring authority shall legally protect the replacement trees in perpetuity.			
		Planting sites in the road corridor should be engineered to optimise planting success and long term performance, avoiding confining trees to compacted clay or road base. The planting sites should be engineered such that the newly planted trees have access to a sufficient volume of good quality uncompacted soil appropriate for the growing location and species selection.			
		Any landscaping included under the Urban Design and Landscape DWP shall be implemented in accordance with this plan within the first planting season following the construction completion of the Redoubt Road - Mill Road Corridor Project (or if staged – that section of the project). If the weather in that planting season is unsuitable for planting, as determined by the Auckland Council Consent Monitoring officer (in consultation with the Auckland Council Parks Department), the landscaping shall instead be implemented at the first practicable opportunity thereafter. The next practicable opportunity shall be agreed by the Auckland Council Consent Monitoring officer.			
		33.5 The landscaping shall be maintained by the Requiring Authority for a period of five (5) years for specimen street trees and for all other landscape planting.			
Ecological	Management	and Restoration			
34	1	Ecological and Restoration DWP			
	2 3	34.1 The Requiring Authority shall appoint a suitably qualified and experienced Ecologist (or Ecologists) to prepare an Ecological Management and Restoration DWP for each part (stage) of the project. The DWP shall be provided to the Auckland Council, at least 30 working days prior to Work commencing within the respective stage. The final Ecological Management and Restoration DWP must be provided to the appropriate Auckland Council representative prior to commencement of works. The purpose of the Ecological Management and Restoration DWP(s) is to:			
		Detail the ecological and arboricultural management and monitoring programme that will be implemented to appropriately manage effects on the environment during and after the construction phase of the Project;			

Condition	NoR Applies to	Condition
Number	Applies to	 b) Ensure that mitigation and any long-term effects are appropriately managed through monitoring, adaptive management and implementation of appropriate responses; c) Document the permanent mitigation measures, including the restoration, management and maintenance of ecological and arboricultural mitigation, as well as the mechanisms for developing relevant mitigation and restoration plans for terrestrial and freshwater habitat; d) Detail the Biodiversity Offset & Mitigation Package that will be implemented to offset significant adverse residual ecological and aboricultural impacts; and e) Give effect to the ecological and aboricultural conditions of this designation.
		34.2 In designing and managing the construction of the Redoubt Road-Mill Road Corridor Project and the potential for adverse effects on ecology, the Requiring Authority shall achieve the following outcomes:
		 a) Minimise adverse effects on areas of indigenous vegetation and habitat, habitat and wildlife within the Designation Footprint; b) Remedy, mitigate or offset any unavoidable adverse ecological effects of the Project (in that order) in accordance with the conditions; and c) In implementing the project the Requiring Authority shall comply with the Ecological Management and Restoration DWP.
		34.3 The Ecological Management and Restoration DWP(s) shall include, but need not be limited to, details of the following:
		 a) The matters required by Condition 35; b) The Lizard Management Plan (LMP) required by Condition 36. c) The Bat Management Plan (BMP) required by Condition 37. d) Identification of significant natural features (including species, habitats and ecosystems) within the designation; e) Measures to avoid tree and ecological loss; f) The means by which any vegetation clearance that is unavoidable will be undertaken; g) The type, location and extent of mitigation planting to give effect to the Vegetation Conditions;;
		 h) j) A comprehensive monitoring programme to be undertaken preconstruction, during construction and post construction;. k) Identification of additional offsetting opportunities if required, subject to post-construction monitoring required by Condition 35.13(d); l) Ecological thresholds which if breached will trigger adaptive management responses; m) An outline of the adaptive management response process, including specific reference to the presence of threatened species and habitat loss;
		n) A Tree Protection Plan with all measures required for working in proximity to trees to be retained within the Designation footprint and those immediately adjacent; and o) Appropriate engineering and hydrological design to ensure that there are no adverse effects created as a result of any alteration of water flows or water availability that may affect the continuing health of trees inside or outside the Designation footprint.
35	1 2 3	Vegetation 35.1 The Requiring Authority shall employ a suitably experienced ecologist ('Nominated Ecologist) and a suitably experienced arborist ('Nominated

Condition Number	NoR Applies to	Condit	ion
Number	Applies to		Arborist') to, for the duration of the works, to supervise the implementation of the Ecological Management and Restoration DWP(s), including monitor, supervision and direct all works affecting or otherwise in close proximity to native vegetation and any exotic trees to be retained.
		35.2	Prior to the commencement of site works within 146 Mill Rd, a thorough ecological survey shall be undertaken at 146 Mill Rd by the Nominated Ecologist and Nominated Arborist. This should be restricted to the designation footprint, and include survey for threatened species and assessment of vegetation within the works footprint and below the proposed bridge. In the event that a threatened species is identified, the record must be documented and appropriate authorities contacted (Auckland Council and Department of Conservation). This triggers the requirement for a Threatened Species Management Plan which must be submitted for approval to the appropriate authorities. A detailed assessment of the vegetation within the footprint and below the proposed bridge must include specific avoidance, mitigation measures and details of appropriate offsets for this area. These measures must be incorporated into the Ecological Management and Restoration DWP.
		35.3	Tree removal work must be undertaken outside of the main part of the bird breeding season (October-February inclusive) to avoid adverse effects on avifauna. Any tree removal works undertaken outside of this period, and particularly between March-May (end of bird breeding season), must trigger the use of a pre works survey carried out by a suitably competent ecologist. If birds are found to be nesting, the tree must be monitored until the bird has moved on and/or chicks fledged, prior to felling.
			The tree removal work at 146 Mill Road shall commence only when immediately necessary to construct the bridge, so as to limit exposure to the vegetation that remains. Consideration shall be given to construction of the bridge abutments prior to the topping of canopy species within the remainder of the bridge footprint.
		35.4	Prior to any site works commencing, a pre-commencement site meeting shall be held so that the conditions and Ecological Management and Restoration DWP(s) content pertaining to the native vegetation are explained by the nominated botanist to a representative of all contractors or sub-contractors who will be working on site within the close vicinity of that vegetation.
		35.5	The Requiring Authority shall minimise the amount of native vegetation that is cleared to the extent practicable. All vegetation clearance shall be undertaken in accordance with the measures set out in the Ecological Management and Restoration DWP(s). Special care shall be taken to minimise the loss of old growth native forest and trees at 38, 134, 146 Mill Road and Murphy's Bush to that which is absolutely necessary for the proposed works. To this end no contractor's yard or any other construction-related facility shall be located within the indigenous vegetation at 38, 134 and 146 Mill Road or Murphys Bush, and any necessary haul roads and crane platforms located within indigenous vegetation shall avoid significant native trees and shall be kept as narrow and small as practicable.
		35.6	Following completion of the works at 38 Mill Road the Requiring Authority shall reinstate all haul roads, crane platforms and all other areas cleared of native vegetation by way of appropriate soil reconditioning and revegetation planting with shade tolerant native shrubs and small tree species, in accordance with the Ecological Management and Restoration DWP, which shall have detailed the means by which this shall be achieved, and including species, size, density and layout, including a planting and maintenance plan. Species selection and density shall be guided by Auckland Council's Draft Indigenous terrestrial and freshwater ecosystems of Auckland (2013). Restoration planting of shrub species shall be at an average of 1m spacing

Condition Number	NoR Applies to	Condit	ion
			and native grasses at 0.5m spacing using PB3 size plants or larger. Enhancement planting and the placement of canopy species will be dependent upon the species selected but will be at an average of 5-10m apart.
		35.7	Following completion of works at 38 Mill Road the Requiring Authority shall legally protect the indigenous vegetation remaining within the new road designation on this property.
		35.8	The Requiring Authority shall clearly demarcate the extent of indigenous vegetation clearance prior to its removal, under the supervision of the nominated botanist.
		35.9	The Requiring Authority shall undertake mitigation planting to replace any native vegetation that is required to be removed as a result of construction activities, in accordance with the Ecological Management and Restoration DWP(s). This will be at a minimum ratio of 7:1 for kanuka-manuka scrub and 8:1 for mature native vegetation.
		35.10	The mitigation and off-setting planting covers a minimum of 2.2 hectares and shall be undertaken in the severance lands that remain within the road designation following completion of the works, as shown in the Mill Road Corridor Project Notice of Requirement for Designation, Volume 2.2 Appendix B – Urban Design and Landscape Study Strips 4 and 5 (AECOM 29 September (2014).
		35.11	All mitigation planting as part of this project must be protected by way of a binding covenant, consent notice or other suitable and effective legal mechanism.
		35.12	For a period of five (5) years following completion of construction, or until canopy closure, the Requiring Authority shall undertake weed control and management of all invasive plant pests (as defined by Auckland Council's Regional Pest Management Strategy) within the vegetated areas of the designation and also within the mitigation planting areas for the Project. The methodology for weed control and management of all invasive plant pests within the vegetated areas shall be included in the Ecological Management and Restoration DWP(s).
		35.13	The Nominated Ecologist, in consultation with the Nominated Arborist, shall undertake an Ecological Monitoring Programme (EMP) prior to, throughout, and following the construction period, including monitoring of:
			 Any works within the vicinity of native vegetation that has the potential to impact on that vegetation; The general health of native vegetation within the designation including soil condition monitoring to ensure good root environment for those trees beneath the bridging structures and monitoring of the vegetation communities present at Totara Park that may be affected by the designation; Compliance with the clauses of Condition 35 by way of fortnightly inspections and reporting during the construction period; and Post-construction monitoring of the effects of the project will be required for a period of five (5) years to determine any adverse effects and replace plants as required. As a result of monitoring, if the effects of the bridge spanning the bush at 146 Mill Road are considered to be more than minor on native flora and fauna populations, there shall be a requirement for additional offsetting.
		35.14	If at any stage the monitoring results indicate adverse ecological effects greater than those anticipated by the project, this shall trigger an appropriate management response accordance with the Ecological Management and

Condition	NoR	Condit	ion
Number	Applies to		Restoration DWP(s).
		35.15	Any mitigation planting utilising native plants shall use plants genetically sourced from the Manukau Ecological District where possible or otherwise shall use plants that have been genetically sourced from within the neighbouring Hunua Ecological District.
36	2	Lizard	Management Plan
	3	36.1	A Lizard Management Plan (LMP) shall be submitted as part of the Ecological Management and Restoration DWP(s) required by Condition 34. The objective of the LMP is to minimise lizard mortality resulting from construction of the Project and shall have the following objectives:
			 The population of each species of native lizard present on the site shall be maintained or enhanced, either on site or appropriately translocated; and
			b) The habitats on the site or at the translocation site post development support viable lizard populations for all species present pre- development.
		36.2	The LMP shall address the following (as appropriate):
			 a) Credentials and contact details of the ecologist/herpetologist who will implement the plan;
			b) Details regarding obtaining the necessary Wildlife Act 1953 permits; and
			c) Timing of the implementation of the LMP.
		36.3	The LMP shall also include, but not be limited to, details of search methods to be implemented within the project footprint for identifying arboreal and ground-dwelling lizards prior to any vegetation clearance in the vicinity. Specifically, the LMP must include the following information:
			 a) Description of the relocation site; b) Any protection mechanisms (if required) to ensure the relocation site is maintained (e.g.) covenants, consent notices etc; c) A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to: salvage protocols, relocation protocols, nocturnal and diurnal capture protocols, supervised habitat clearance/transfer protocols; artificial cover object protocols, and opportunistic relocation protocols. Capture techniques should be determined by the consulting herpetologist and detailed within the LMP; d) The LMP must implemented outside of the winter months of June, July and August due to low lizard detectability during the colder months;; a) Mothodology for minimizing lizard monthity requiting from construction
			 Methodology for minimising lizard mortality resulting from construction works associated with the project; Mechanisms for re-establishing affected lizard habitat within the
			corridor of works including provision for additional refugia, if required e.g. depositing salvaged logs, wood particles or debris for newly released skinks that have been rescued; g) Locations for the potential release of lizards, including details on any weed and pest management to ensure the relocation site is maintained as appropriate habitat; h) The methodology for any post-vegetation clearance capture of lizards; and
			i) The methodology for captive management of lizards.

Condition Number	NoR Applies to	Condition		
Number	Applies to	36.4 A suitably qualified and experienced ecologist/herpetologist to oversee the implementation of the LMP shall certify that the works have been carried out according to the approved LMP within two weeks of completion of the vegetation clearance works.		
		36.5 Upon completion of works, all findings resulting from the implementation of the Lizard Management Plan shall be recorded on an Amphibian and Reptile Distribution Scheme (ARDS) Card and sent to the Department of Conservation. A copy shall be sent to the Auckland Council Team Leader (Central/South) Biodiversity.		
37	2	Bat Management Plan		
	3	37.1 A Bat Management Plan (BMP), prepared and implemented by a qualified bat ecologist, shall be submitted as part of the Ecological Management and Restoration DWP(s). The objective of the BMP is to minimise bat mortality resulting from construction of the Project. The BMP shall include, but not be limited to:		
		 a) Details of searching methods to be implemented within the project footprint for identifying bat roost trees prior to any vegetation clearance in the vicinity; b) Mechanisms to avoid felling of active bat roost trees where practicable and minimising where practicable bat mortality resulting from construction works associated with the project. c) Details on the appropriate procedure to follow in the event of finding alive, dead or injured bats must be included in the BMP. These should be based on recommendations from the Department of Conservation (DOC); and d) Details on appropriate lighting to be incorporated into the project design, based on best-practice methodology for minimising effects on bat populations. 37.2 Trees that may contain bats ideally should not be removed from May - October when bats are hibernating or torpid nor during November-January which is the breeding season for long-tailed bats. Where trees need to be felled in these periods the following methodology will be applied: a) All trees to be removed within the designation footprint must be clearly marked. Each tree to be removed should be monitored overnight (ensuring sampling at dusk and dawn) via an ABM, for a minimum of 5 days, during which time the dusk temperature must remain above 7°C; and b) If bat activity is recorded, tree felling in the area shall not proceed until such activity ceases. Should this take longer than three days, Auckland Council and DOC shall be informed and the appropriate procedure from the BMP shall be implemented. 		
Contaminat	ed Land			
38	1 2 3	Contamination DWP 38.1 A Detailed Site Investigation covering the areas of potential contamination identified in AECOM's Contaminated Land Assessment – Redoubt Road/ Mill Road Corridor (October 2014) shall be undertaken in accordance with the Ministry for the Environment's Contaminated Land Management Guideline Number 1: Reporting on Contaminated Sites in New Zealand (Revised 2011), and Guideline Number 5: Site Investigation and Analysis of Soils (Revised 2011). If the designation is to be given effect to in part (staged), then the site investigation shall only relate to those areas of potential contamination identified in the Contaminated Land Assessment within that stage.		

Condition Number	NoR Applies to	Conditi	on
Number	Applies to	38.2	The Detailed Site Investigation required by Condition 38.1 shall include the site at 1345 Alfriston Road.
		38.3	A Contamination DWP shall be prepared to manage the adverse effects relating to contaminated land during the construction of the Redoubt Road - Mill Road Corridor Project. If the designation is to be given effect to in part (staged), the DWP need only relate to that part (stage).
		38.4	The objective of the Contamination DWP is to avoid, remedy or mitigate the adverse effects of construction on human health and environmental impacts which may result from the disturbance of contaminated materials during construction.
		38.5	To achieve the above objective the following shall be included in the Contamination DWP and implemented as required:
			 A report detailing the outcomes of the Detailed Site Investigation required by Condition 38.1.
			b) A health and safety plan that addresses:
			 i) Worker safety in relation to hazardous substances; and ii) Worker training with regard to handling hazardous substances, identifying potentially contaminated soil / material, and notification procedures for discovery of contamination;
			c) Procedures for how erosion and sediment control measures will manage the effects caused by the removal of contaminated soil/material. The procedures must also be set out in the erosion and sediment control plans required under condition 19.1(b);
			Procedures for how stormwater, dust, and odour control measures will manage the effects caused by the removal of contaminated soil / material;
			d) Procedures for site characterisation, contaminated soil classification, management and disposal of contaminated soil / material;
			 e) Where any trenches/excavations during civil works are to be sealed as a result of contamination and how this is to be recorded;
			f) How and which work areas are to be restricted to authorised personnel only and procedures to limit the presence of ignition sources in these areas (e.g. no smoking within or adjacent to construction area, no welding or open flames near areas with high concentrations of hydrocarbon contamination);
			g) Procedures for the monitoring and management of the removal of contaminated soil / material by a suitably qualified environmental specialist including onsite monitoring of soil, surface water and groundwater quality during construction to ensure that waste is properly classified in order to minimise the risk to site workers, the public and the environment;
			h) How the placement of re-used contaminated soil / material will be
			recorded and tracked; i) Where areas for stockpiling and storing contaminated soil / material will be established on the construction site and the procedures for managing
			the containment of the contaminated soil / material in these areas; and j) Cross references to the specific sections in the Stakeholder Engagement Plan which detail how the general public are to be communicated with on the management of the adverse effects relating to the removal of contaminated soil / material.
Air Quality		<u> </u>	

Condition Number	NoR Applies to	Condit	ion
39	Applies to	Air O	ality DWP
39	2 3	39.1	An Air Quality DWP shall be prepared to avoid, remedy or mitigate the adverse effects on air quality during the construction of the Redoubt Road - Mill Road Corridor Project or any part of it (if staged).
		39.2	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.
		39.3	To achieve the above objective measures shall be included in the Air Quality DWP that, so far as practicable, seek to:
			 a) Reduce the odour, dust or fumes arising as a result of construction of the project at any point within 100 m that borders a highly sensitive air pollution land use; and b) Ensure that the 24-hour average concentration, measured midnight to midnight, of Total Suspended Particulate (TSP) at any point within 100 m of the designation boundary that borders a highly sensitive air pollution land use does not exceed 80 micrograms per cubic metre (μg/m³).
		39.4	The Air Quality DWP shall, as a minimum, address the following:
			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;
			 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;
			 Methods for mitigating odour that may arise from ground disturbing construction activities;
			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;
			 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 of odour, dust or fumes; and
			Contact numbers for key construction staff, staff responsible for managing air quality during construction and council officers.
Specific De	sign Requirer	nents	
40	1 2 3	40.1	The bridge structure spanning the bush referred to as Cheesman's bush (146 Mill Road) shall be constructed without piers or other bridge support structures between the abutments (NoR 3 only).
		40.2	Provision shall be made where it is safe and practicable for an effective means of separation between the carriageway and cyclists along the entire length of the corridor. Options to consider may include the use of planted or raised

Condition Number	NoR Applies to	Condit	ion
			medians and the reconfiguration of the road cross section such that the lighting column/street tree planting berm is located between the carriageway and cycleway.
		40.3	Provision shall be made for pedestrian-friendly crossing points at appropriate, safe and practicable locations where the corridor is bounded on both sides by Urban / Future Urban land and adjacent to Totara Park. Options to consider are to include the introduction of pedestrian refuges, contrasting carriageway paving materials to reinforce pedestrian priority, and footbridges (where pedestrian crossovers cannot be integrated into signalised intersections). Where pedestrian crossing points are at-grade with the cycle lane it should be ensured that safety for pedestrians and cyclists and the operation of the cycle lane are not compromised.
		40.4	Directional information from the Alfriston-Mill Road intersection roundabout to the child care centre at 310 Mill Road.
			Prior to the existing Mill Road being closed for access south of the Alfriston Road intersection as required to commence construction for the relevant section of the Redoubt Road – Mill Road Corridor Project (NOR 3) the requiring authority shall install a directional sign in accordance with ATCOP and/or AT's Approach to Acknowledged Direction, Service & General Guide Signs (or equivalent standard) identifying the child care centre at 310 Mill Road. Should the child care centre no longer be in operation at 310 Mill Road at this time then this signage will no longer be considered necessary.
		40.5	All stormwater wetlands are to be designed in collaboration with a landscape architect. The stormwater wetland designs are to be submitted as part of the Urban Design and Landscape DWP required by condition 31.2.
		40.6	As part of detailed design, and in consultation with the landowner, the requiring authority shall investigate opportunities to limit land take, limit removal of landscape plantings and provide suitable access in relation to 208 Redoubt Road.
		40.7	At the time NoR 3 is constructed the Requiring Authority shall consider providing a slip lane along the existing part of Mill Road south of Alfriston Road, with direct access to the new road alignment. In making its decision the Requiring Authority shall consider:
			 (a) The extent of existing and likely further demand for a slip lane as a result of urban development in the immediate and wider area; (b) The impact of traffic flows along Mill Road; (c) Alternative intersection types including a roundabout or the use of traffic signals and the safety and efficiency of the intersections; and (d) The benefits of a slip lane for individual properties (including 310 Mill Road) as well as the interests of other stakeholders, including Alfriston School.
		40.8	For Murphys Road, stormwater infrastructure, where practicable shall be located within the road reserve, adopt water sensitive design principles in accordance with the Proposed Auckland Unitary Plan Stormwater Management Area Flow 1 requirements any relevant Network Discharge Consent and the Stormwater Code of Practice.
		40.9	Within one month of confirmation of the designation Wetland 7 shall be redesigned (concept design) to remove the requirement for attenuation for the 1:100 year event. The design shall be reviewed and approved by the Auckland Council's Stormwater Unit.
		40.10	In meeting its obligations under Condition 3.1 in relation to the property at 125 Murphys Road, the Requiring Authority shall consider whether there are any areas of the designation that are no longer necessary for stormwater

Condition Number	NoR Applies to	Condition
		infrastructure at the following times:
		When the revised design for Wetland 7 is approved by Auckland Council's Stormwater Unit;
		b) At such time as the Section 127 variation to the East Tamaki Storm Water Network Discharge Consent decision is released;
		 At such time that the Proposed Auckland Unitary Plan becomes operative, in order to take into account any change in return period event management expectations in relation to stormwater;
		d) At such time that the owner of 125 Murphys Road provides the Requiring Authority with a development design for the adjoining property to take into account whether proposed stormwater measures as part of that design alter the need for or extent of the designation in this location; and
		e) At such time that the Requiring Authority undertakes detailed design. Advice note:
		The owner of the land at 1345 Alfriston Road has sought that provision be made for access to that site as part of the designation confirmation process. Any such access and site development will require resource consent. The Requiring Authority considers that access can be achieved to 1345 Alfriston Road without compromising the safe and efficient operation of the new road, although it cannot provide a conclusive assurance or assessment until such time as a resource consent is sought for the access and site development and sufficient details are available to enable a final assessment.
Operational	Traffic Noise	
41	1 2	41.1 For the purposes of Conditions 41–53 the following terms will have the following meanings:
	3	 a) BPO – means the Best Practicable Option. b) Building-Modification Mitigation – has the same meaning as in NZS 6806:2010. c) Habitable Space – has the same meaning as in NZS 6806:2010.
		d) Noise Assessment - means the Road-traffic Noise Assessment Report in accordance with Condition 42.
		 e) Noise Criteria Categories – means the groups of preference for time-averaged sound levels established in accordance with NZS 6806:2010 when determining the BPO mitigation option, i.e. Category A – primary noise criterion, Category B – secondary noise criterion and Category C internal noise criterion. f) NZS 6806:2010 – means New Zealand Standard NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads. g) PPFs - has the same meaning as in NZS 6806:2010 for the purpose of the preparation of the Noise Assessment. Once a Noise Assessment has been prepared in accordance with Condition 42, PPFs means only the premises and facilities identified in green, orange or red in the Noise Assessment. h) Structural Mitigation – has the same meaning as in NZS 6806:2010.
42	1 2 3	42.1 The Requiring Authority shall appoint a suitably qualified acoustics specialist to confirm the indicative BPO mitigation options set out in the Noise and Vibration Assessment (dated 19 March 2015) in Attachment 3 of the Response to Feedback to Council. No later than 6 months prior to construction starting for a

Condition	NoR	Condition
Number	Applies to	project stage, the Requiring Authority shall submit to the Council a Road-traffic Noise Assessment Report ('Noise Assessment') detailing the assessment process, 'Selected Options' for noise mitigation, and the Noise Criteria Categories for all PPFs ('Identified Categories') that achieve, at a minimum, the same Noise Criteria Categories as for the indicative BPO mitigation options of the Noise and Vibration Assessment (dated 19 March 2015). The Requiring Authority shall implement the Selected Options for noise mitigation identified in the Noise Assessment as part of the Project, in order to achieve the Identified Categories where practicable, subject to Conditions 43 – 53 below.
43	1 2 3	Notice of Requirement was served on Auckland Council (24 October 2014). 43.1 The design of the Structural Mitigation or building mitigation measures in the Selected Options (the 'Detailed Mitigation Options') shall be undertaken by a suitably qualified acoustics specialist prior to construction of the Project, and, subject to Condition 44, shall include, as a minimum, the following:
		Building modification or structural mitigation measures (such as noise fences) in accordance with the Noise Assessment; and b) Low-noise road surfaces materials on the carriageways of the Project, except where not practicable for engineering or safety reasons, in accordance with the Noise Assessment.
44	1 2 3	 Where the design of the Detailed Mitigation Options identifies that it is not practicable to implement a particular Structural Mitigation measure in the location or of the length or height included in the Selected Options either: a) if the design of the Structural Mitigation measure could be changed and would still achieve the same Identified Category or Category B at all relevant PPFs, and a suitably qualified specialist certifies to the Council that the changed Structural Mitigation would be consistent with adopting the BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed mitigation measure; or b) if changed design of the Structural Mitigation measure would change the Noise Criteria Category at any relevant PPF from Category A or B to Category C, but the Council confirms that the changed Structural Mitigation would be consistent with adopting BPO in accordance with NZS 6806:2010, the Detailed Mitigation Options may include the changed mitigation measure.
45	1 2 3	45.1 The Detailed Mitigation Options shall be implemented prior to completion of construction of the Project stage, with the exception of any low-noise road surfaces, which shall be implemented within 12 months of completion of construction.
46	1 2 3	46.1 Prior to construction of the Project stage, a suitably qualified acoustics specialist shall identify those PPFs which following implementation of all the Structural Mitigation included in the Detailed Mitigation Options are not in Noise Criteria Categories A or B and where the internal noise level would be greater than 45 dB L _{Aeq(24h)} ('Category C Buildings'). For these Category C Buildings, Building Modification Mitigation may be required to achieve 40 dB L _{Aeq(24h)} inside habitable spaces.
47	1 2 3	47.1 Prior to commencement of construction of the Project stage in the vicinity of a Category C Building, the requiring authority shall write to the owner of each Category C Building seeking access to such building for the purpose of measuring internal noise levels and assessing the existing building envelope in relation to noise reduction performance.

Condition	NoR	Condition			
Number	Applies to				
		47.2 If the owner(s) of the Category C Building approves the Requiring Authority's access to the property within 12 months of the date of the Requiring Authority's letter (sent pursuant to Condition 47.1), then no more than 12 months prior to commencement of construction of the Project, the Requiring Authority shall instruct a suitably qualified acoustics specialist to visit the building to measure internal noise levels and assess the existing building envelope in relation to noise reduction performance.			
48	1 2 3	 Where a Category C Building is identified, the Requiring Authority shall be deemed to have complied with Condition 47 above where: a) The Requiring Authority (through its acoustics specialist) has visited the building; or b) The owner of the Category C Building approved the Requiring Authority's access, but the Requiring Authority could not gain entry for some reason (such as entry denied by a tenant); or c) The owner of the Category C Building did not approve the Requiring Authority's access to the property within the time period set out in Condition 47.2 including where the owner(s) did not respond to the Requiring Authority's letter (sent pursuant to Condition 47.1 within that period)); or d) The owner of the Category C Building cannot, after reasonable enquiry, be found prior to completion of construction of the Project. 			
		If any of (b) to (d) above apply to a particular Category C Building, the Requiring Authority shall not be required to implement any Building-Modification Mitigation at that Category C Building.			
49	1 2 3	 Subject to Condition 48, within six months of the assessment required under Condition 47.2 the Requiring Authority shall give written notice to the owner of each Category C Building: a) Advising of the options available for Building-Modification Mitigation to the building; and b) Advising that the owner has three months within which to decide whether to accept Building- Modification Mitigation for the building, and if the Requiring Authority has advised the owner that more than one option for Building-Modification Mitigation is available, to advise which of those options the owner prefers 			
50	1 2 3	50.1 Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of an affected building, the mitigation shall be implemented (including the Requiring Authority obtaining any third party authorisations required to implement the mitigation) in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.			
51	1 2 3	 Subject to Condition 48, where Building-Modification Mitigation is required, the Requiring Authority shall be deemed to have complied with Condition 50 above where: a) The Requiring Authority has completed Building-Modification Mitigation to the Category C Building; or b) The owner of the Category C Building did not accept the Requiring Authority's offer to implement Building- Modification Mitigation prior to the expiry of the timeframe stated in Condition 47.2 above (including where the owner did not respond to the Requiring Authority within that period); or c) The owner of the Category C Building cannot, after reasonable 			

Condition Number	NoR Applies to	Condition
		enquiry, be found prior to completion of construction of the Project.
52	1 2 3	52.1 The Requiring Authority shall manage and maintain the Detailed Mitigation Options to ensure that, to the extent practicable, those mitigation measures retain their noise reduction performance.
53	1 2 3	No more than 6 months after the final road surface required by Condition 45 has been laid, on the Project stage, the Requiring Authority shall appoint a suitably qualified acoustics specialist to undertake monitoring of operational noise at a minimum of 2 locations per project stage (minimum of 5 locations in total along the entire Project length) to confirm that operational noise levels from the Project meet the noise criteria categories set out in the Noise Assessment. Results of the surveys shall be adjusted for traffic volume in the design year. If the adjusted results of the surveys show that PPFs receive noise levels in a noise criteria category that is greater than set out in the Noise Assessment (e.g. from Category A to Category B), the Requiring Authority shall carry out mitigation to attenuate the noise generated by the Project to within the category levels specified in the Noise Assessment.

ADVICE NOTES							
AN1	1 2 3	The Requiring Authority is required to submit an application to Heritage New Zealand for an archaeological authority to modify or destroy the whole or any part of any archaeological site or sites within a specified area of land, whether or not a site is a recorded archaeological site (Heritage New Zealand Pouhere Taonga Act 2014 Section 44(a)) in advance of earthworks commencing in the area where the archaeological site is located within the proposed corridor. An Authority would establish procedures to ensure that for any archaeological remains affected by the project would be investigated or recorded to recover information relating to the history of the area.					
		In the event of unanticipated archaeological sites, taonga (artefacts) or koiwi (human remains) being uncovered the Requiring Authority shall cease activity in the vicinity until it has the relevant approvals, and consulted with the Heritage New Zealand and relevant iwi interests.					
AN2	1 2 3	The Requiring Authority will need to acquire the relevant property interests in land subject to the designation before it undertakes any works on that land pursuant to the designation. That may include a formal Public Works Act 1981 land acquisition process. It is acknowledged that property rights issues are separate from resource management effects issues and that the resolution of property issues may be subject to confidentiality agreements between the Requiring Authority and the relevant landowners.					
AN3	1 2 3	Prior to construction if Network Utility Operators are carrying out works that do not require prior written consent of the Requiring Authority in accordance with Condition 5 of this designation, they must carry out those works in accordance with the Corridor Access Request (CAR) Process (as set out in Part 4 of the National Code of Practice for Utility Operators' Access to Transport Corridors 2011) where that process applies to the works being carried out.					
AN4	1 2 3	Under section 176 of the RMA no person may do anything in relation to the land subject to the designation that would prevent or hinder the Redoubt Road - Mill Road Corridor Project without the written approval of the Requiring Authority.					
AN5	1 2 3	Some of the land is subject to existing designations. Nothing in these designation conditions negates the need for the Requiring Authority to adhere to the provisions of section 177 of the RMA.					