UNITARY PLAN UPDATE REQUEST MEMORANDUM

TO Warren Maclennan, Manager - Planning North West and Islands

FROM Cosette Saville, Planner – Planning North West and Islands



DATE 23 January 2018

SUBJECT Designation to be updated in the Auckland Unitary Plan

Operative in Part in accordance with s181(3) of the Resource

Management Act 1991

This memorandum requests an update to Auckland Unitary Plan Operative in part		
Reason for update Minor alteration to conditions 1, 6.2g, 7.1 and 7.9 to enable changes to be made		
	ocated within the road reserve of Shakespeare Road,	
adjoining Westlake Girls High School.	01	
Chapter	Chapter K	
Section	Schedules and Designations	
Designation only		
Designation #1426	Auckland Transport	
Location:	Shakespeare Road (adjoins No. 78 Taharoto Road), Takapuna Eg. 600 Scenic Drive, Waiatarua	
Lapse Date	Given effect to (i.e no lapse date)	
Type of Designation	Minor alteration to conditions	
Purpose Character to the total (also are desired as a des	Westlake Station - for the construction, operation and maintenance of roads, buildings, facilities and amenities (including any ancillary structures, works, or activities) for the purpose of providing a rapid transit facility for buses and high occupancy vehicles	
Changes to text (shown in underline and strikethrough)	1. General Conditions	
	1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in "Volume 3 – A3 Plans" forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical Reports in Volume 5, subject to the final design and the conditions set out below. Provided that in respect to the design of the acoustic wall located on Shakespeare Road adjoining Westlake Girls High School, that part of the wall located in Shakespeare Road to the east of the existing music block, shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect Plan SK-035.	
	6. Landscape Mitigation Conditions 6.2 The Landscape Mitigation Plan shall provide for: (g) Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway, provided that this does not apply to the 1.3m high acoustic fence on the common boundary between Shakespeare Road	

	and Westlake Girls High School;
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	7. Noise Mitigation Conditions
	7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the NZTA Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited. Provided that the acoustic wall which is located on the common boundary between Shakespeare Road and Westlake Girls High School shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect plan SK-035.
	7.9 Unless: a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or
	b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where additional traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not exceeding 45 dBA Leq, or the ambient noise level existing prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4.
	c. Provided that clauses (a) and (b) above shall not apply in respect to the following two structures located within Westlake Girls High School grounds, being – (1) the Event Centre, and (2) the eastern end of the music block which is protected by a 2m high concrete acoustic wall located within Westlake Girls High School.
Changes to diagrams	N/A
Changes to spatial data	N/A
Attachments	Team Leader approved Decision Report S181(3) Notice of Requirement

Prepared by: Cosette Saville Text entered by:

Planner, Planning North West and Islands Planning Technician

Signature:

Signature:

Maps prepared by:

N/A - no map changes required

Reviewed by: Cosette Saville

Planner, Planning North West and Islands

Signature:

Signature:

Manager

Warren Maclennan, Manager Planning – North West and Islands

hA Maclenna.

Signature:

1426 Westlake Station

Designation Number	1426
Requiring Authority	Auckland Transport
Location	Shakespeare Road (adjoins 78 Taharoto Road), Takapuna
Rollover Designation	Yes
Legacy Reference	Designation 175, Auckland Council District Plan (North Shore Section) 2002
Lapse Date	Given effect to (i.e. no lapse date)

Purpose

Westlake Station - for the construction, operation and maintenance of roads, buildings, facilities and amenities (including any ancillary structures, works, or activities) for the purpose of providing a rapid transit facility for buses and high occupancy vehicles.

Conditions

The conditions below apply:

- 1. General Conditions
- 2. Duration of Designation
- 3. PMP and Outline Plans
- 4. Archaeological Mitigation Conditions (other than 4.3 and 4.4)
- 5. Ecological Mitigation Conditions (other than 5.5, 5.6 and 5.7)
- 6. Landscape Mitigation Conditions
- 7. Noise Mitigation Conditions
- 8. Geotechnical Mitigation Conditions
- 9. Vibration Mitigation Conditions
- 10. Traffic Mitigation Conditions except that:
- Condition 10.2 shall not apply
- Condition 10.1(ii) applies only to Notice 8 Westlake
- Condition 10.1(iv) applies only to Notices 8 and 9 Westlake and Sunnynook
- Condition 10.1(v) applies only to Notice 8 Westlake
- Condition 10.3 applies only to Notice 8 Westlake
- 11. Construction Management Conditions
- 14. Westlake Girls High School applies only to Notice 8 Westlake
- 18. Bateman: Stormwater Conditions applies only to Notice 9 Sunnynook (other than Condition 18.1(i)).

1. General Conditions

1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in "Volume 3 – A3 Plans" forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical Reports in Volume 5, subject to the final design and the conditions set out below. Provided that in respect to the design of the acoustic wall located on Shakespeare Road adjoining Westlake Girls High School, that part of the wall located in Shakespeare Road to the east of the existing music block, shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect Plan SK-035.

- 1.2 Prior to any works being commenced in particular location(s) of work, the Requiring Authority shall obtain all requisite resource consents for the location(s) affected under the Resource Management Act 1991.
- 1.3 Any land taken or held for the works shall be maintained to a reasonable standard until physical works commence.
- 1.4 At all times reasonable vehicular access shall be maintained to private properties not directly affected by construction and/or operation in the area affected. Where private properties are directly affected by construction and/or operations causing vehicular access to be temporarily prevented and no alternative can be utilised, the Requiring Authority shall ensure that the property owner is consulted with respect to the most suitable time for carrying out the work and the Requiring Authority shall minimise the period during which vehicular access is prevented.
- 1.5 A permanent liaison position from within the joint Project Governance Team of Auckland Council and the Requiring Authority will be appointed for the duration of the project. This person is to be available for ongoing consultation on all matters of concern to affected persons.
- 1.6 All contract documentation for physical works shall include reference to the designation conditions, any other resource consents (including conditions) and any approved mitigation or outline plan(s) held for the project.
- 1.7 Where requested by the owners, the Requiring Authority shall physically peg out the extent of the alignment in individually affected properties once the designation has been confirmed or all appeals have been determined, whichever is the later.

2. Duration of the Designation Condition deleted

3. Project Management Plans (PMP) and Outline Plans

3.1 The requiring authority shall prepare a PMP which shall include mitigation/management plans as referred to in conditions 5, 6, 7, 8, 9, 10 and 11. 3.2.

No works shall be undertaken in any particular location(s) until:

- a. The PMP, or such part(s) of the PMP as are relevant to the location(s) are approved in the manner provided for in condition 3.3; and
- b. Any outline plan(s) required by section 176A of the Resource Management Act 1991 (*RMA*) in relation to the works in the location(s), are approved in the manner provided in condition 3.3. 3.3

Approvals pursuant to condition 3.2(a) shall be obtained from the General Manager of Environmental Services, Auckland Council, and a senior regulatory officer of the Auckland Council who is at the time of the approval a member of the Project Governance Team for the management of the works (the approval officers).

Advice Note:

Where an outline plan or plans are required by section 176A RMA for works in any particular location(s) and the approval officers agree that the PMP or relevant part(s) of the PMP contains adequate details to satisfy section 176 RMA, then the Council may waive the requirement for an Outline Plan.

- 3.4 The works shall only be undertaken in accordance with an approved PMP and outline plan (where required).
- 3.5 If for any reason the PMP is not approved, the outline plan procedure under s 176A shall apply. For the avoidance of any doubt, the mitigation/management plans prepared under conditions 5, 6, 7, 8, 9, 10 and 11 shall be included with any outline plan lodged for approval pursuant to s 176A.

4. Archaeological Mitigation Conditions

- 4.1 If construction work uncovers any archaeological remains, the Requiring Authority will immediately advise local iwi and the New Zealand Historic Places Trust and cease working in the affected area until any necessary authority required by the New Zealand Historic Places Trust is obtained. (All archaeological sites are protected under the provisions of the Historic Places Act 1993, whereby it is unlawful to modify, damage or destroy an archaeological site, whether recorded or not, without prior consent of the Historic Places Trust).
- 4.2 That all recorded archaeological sites and other cultural heritage sites in the vicinity of the works shall be clearly marked on the construction plans.
- 4.3 Any significant native trees removed from Smiths bush as part of the works to construct the busway shall be offered as gifts to Te Hao o Ngati Whatua and/or Ngati Whatua o Orakei.
- 4.4 Preliminary earthworks in the vicinity of Onewa Road and Sylvan Ave realignment will be monitored by a suitably qualified and experienced archaeologist.

5. Ecological Mitigation Conditions

- 5.1 The PMP shall include an Ecological Mitigation Plan prepared by a suitably qualified and experienced ecologist who shall have regard to:
- i. The recommendations contained in the audit by Shona Myers Natural Heritage Scientist, ARC as to planting and the implementation of mitigation measures;
- ii. The planting of appropriate plant species as identified in AC Technical Publication 148: Riparian Zone Management: Strategy for the Auckland Region, June 2001.
- 5.2 The Plan shall provide for:
- i. Planting in riparian zones where consent of the landowner is obtained;
- ii. Mitigation of potential coastal effects.
- 5.3 Wherever practicable, any disturbance of existing vegetation shall be avoided.
- 5.4 Where riparian vegetation disturbance cannot be practicably avoided, the Requiring Authority shall take care that any necessary disturbance is minimised as far as practicable. For the avoidance of doubt, this condition is not intended to prohibit necessary disturbance, which is defined as including, but is not limited to, vegetation clearance, the construction and operation of all roads, depots, storage facilities and spoil disposal areas.
- 5.5 The PMP shall include a plan of the proposed works within the eastern remnant of Smiths Bush in sufficient detail to determine the impact on existing vegetation and the Requiring Authority shall undertake its best endeavours to minimise the removal of vegetation from Smiths Bush.
- 5.6 All works within the eastern remnant of Smiths Bush shall be supervised by a suitably qualified and experienced arboriculturist.

5.7 As a means of attempting to retain the overall ecological viability of Smiths Bush, any vegetation removed from the eastern remnant of the bush shall be replaced where practicable in accordance with a native tree planting and maintenance regime approved under condition 3.3. and following consultation with appropriate staff at the Auckland Council.

6. Landscape Mitigation Conditions

- 6.1 The PMP shall include a Landscape Mitigation Plan prepared by a suitably qualified and experienced landscape architect who shall have regard to:
- a. The Landscape Mitigation Plan prepared by LA4 Landscape Architects and contained in the Esmonde Interchange Project: Assessment of Environmental Effects Volume 10c; and
- b. The recommendations contained in the audits by Melean Absolum and Chris Boucher.
- 6.2 The Landscape Mitigation Plan shall provide for:
- a. The integration of the proposed works into the surrounding landscape;
- b. Appropriate consideration of the angle and extent of batter slopes;
- c. Appropriate screening of existing land-uses along Fred Thomas Drive;
- d. Design of borrow and disposal areas for excess fill to avoid significant visual impact, and to maximise integration with the general form of the surrounding landscape;
- e. Ecological mitigation measures (eg revegetation) required in accordance with the Ecological Mitigation Condition;
- f. Mitigation of effects on properties in the vicinity of the busway;
- g. Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway, provided that this does not apply to the 1.3m high acoustic fence on the common boundary between Shakespeare Road and Westlake Girls High School;
- h. Detailed designs of the acoustic barriers, retaining walls, and earth bunds in conjunction with the engineers where necessary; and
- i. The identification of existing trees and vegetation sited on the boundary of the Busway designation that ought to be retained for screening purposes.
- 6.3 The Landscape Mitigation Plan shall include details of:
- j. All proposed planting (including species, species size, densities, areas and locations);
- k. The planting programme;
- I. The maintenance programme. This programme shall include details of weed control, performance standards specifying allowable percentage survival rates, and replacement of any planting features; m. The sufficiency of the soil medium to sustain all planting proposed; and
- n. An appropriate maintenance regime.
- 6.4 All landscape mitigation planting shall be implemented during the first planting season following completion of the project construction works providing climatic conditions are suitable, otherwise at the first practicable opportunity thereafter. Following completion of planting, the Requiring Authority shall submit to the Auckland Council a report by the landscape architect on the implementation of the landscape plan.
- 6.5 Where practicable, any planting utilising native plants shall use plants genetically sourced from the ecological district.
- 6.6 Exposed cut and fill batters and slopes shall be re-vegetated as soon as practicable after construction.

7. Noise Mitigation Conditions

- 7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the NZTA Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited. Provided that the acoustic wall which is located on the common boundary between Shakespeare Road and Westlake Girls High School shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect plan SK-035.
- 7.2 The PMP shall include a Noise Mitigation Plan prepared by a suitably qualified noise consultant. The purpose of the plan is to describe the methods by which noise associated with traffic using the roading and the bus stations within the designation will be made to comply with specified noise limits at all affected dwellings and schools in the vicinity of the area affected. Where the ambient sound level is required to determine design limits then this shall be done prior to construction commencing.
- 7.3 The Requiring Authority shall ensure that all construction works are carried out in accordance with NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work".
- 7.4 The PMP shall include a Construction Noise Management Plan. The purpose of the Plan is to describe the methods by which noise associated with the construction of the work will be managed to comply with condition 7.3 above. In particular, the Construction Noise Management Plan shall identify:
- a. The location of permanent acoustic fences to be installed prior to the commencement of the main construction works;
- b. Methods of managing noise;
- c. Noise monitoring methods, including details of methods, equipment, location and frequency;
- e. Contingency measures in the event of any incidence of non-compliance; and
- f. Procedures for handling noise complaints.
- 7.5 Where the requirements of condition 7.4 are unable to be met, the alternative strategies that have been developed following consultation with affected landowners will be implemented. Such alternatives may include, but not be limited to, temporary relocation of occupiers, compensation for occupiers and purchase of the affected properties.
- 7.6 Construction works shall at all times be undertaken in accordance with the Construction Noise Management Plan.
- 7.7 Where practicable, acoustic barriers required to meet NZTA Noise Guidelines in particular locations, shall be erected prior to commencement of the construction works in those locations.
- 7.8 Where temporary acoustic barriers are proposed in the Marshall Day Report, and where their retention would result in effective traffic noise reduction for residents or educational facilities, they shall be built to a standard such that the barriers will be able to remain permanently in place at heights approved under condition 3.3, taking into consideration traffic noise reduction visual and landscaping factors and consultation with adjoining property owners.

7.9 Unless:

- a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or
- b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway

and associated new works; where *additional* traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not *exceeding* 45 dBA Leq, or the ambient noise level *existing* prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4.

c. Provided that clauses (a) and (b) above shall not apply in respect to the following two structures located within Westlake Girls High School grounds, being – (1) the Event Centre, and (2) the eastern end of the music block which is protected by a 2m high concrete acoustic wall located within Westlake Girls High School.

8. Geotechnical Mitigation Condition

8.1 A Geotechnical Mitigation Plan shall be prepared by a suitably qualified Geotechnical Engineer in consultation with Auckland Council. The plan shall be submitted to the Auckland Council prior to construction of any stage and shall take into account the recommendations of the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues' – November 2001.

9. Vibration Mitigation Conditions

- 9.1 The PMP shall include a Vibration Mitigation Plan having regard to the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001'. This Mitigation plan shall include details of how the works will comply with the requirement of German Standards DIN4150 "Structural Vibration in Buildings Effects on Structures" during construction and shall take into account the recommendations.
- 9.2 A dilapidation survey of 'at risk' buildings, as per the recommendations of the audit prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001', shall be undertaken prior to during and after completion of the construction works, provided the consent of any landowner and/or occupier can be obtained.

10 . Traffic Mitigation Conditions

- 10.1 The PMP shall include a Traffic Mitigation Plan based on its adopted design for the project. The Traffic Mitigation Plan shall include:
- a. Methods of mitigating the local and network wide effects of both the construction of individual elements of the project and the use of staging to allow sections of the project to be opened to traffic while other sections are still under construction;
- b. Methods of helping to accommodate the bus transport needs of pupils of Westlake Girls' High School through the development and operation of Westlake Station and the busway system, in the light of consultation with the School;
- c. Methods of limiting the use of the busway to emergency vehicles and no more than 350HOVs (excluding buses) per hour north of Esmonde Road, including a restriction on the access of HOVs through Constellation Drive Station to no more than 350HOVs;
- d. Details of a monitoring programme to be undertaken detailing the demand for car parking in the vicinity of the Sunnynook Station and Westlake Station prior to the opening of the Station and at regular intervals (a minimum of 2 per annum) for a minimum period of five years following the opening of the Station to the public and measures to manage any such demand. (This condition shall only apply to Notices of Requirement 8 and 9); and
- e. Details of pedestrian access to be provided within the Westlake Bus Station and along Shakespeare Road Extension (This condition shall apply only to Notice of Requirement 8).

- 10.2 In order to prevent potentially significant traffic disruption during and after construction, the existing Onewa Interchange shall continue to be fully operational (that is in the manner in which it currently operates) until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.
- 10.3 The public use of the Westlake Station shall not be allowed until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.

11. Construction Management Conditions

- 11.1 The PMP shall include a Construction Management Plan which shall refer to all conditions imposed on any relevant resource consents granted by the Auckland Regional Council.
- 11.2 The purpose of the Construction Management Plan is to set out methods by which any dust nuisance from construction will be avoided or minimised and by which the possibility of ground vibration during construction can be notified to adjacent land owners and occupiers. In particular, the Management Plan shall identify amongst other things:
- a. Specific methods by which dust will be managed, including cleaning vehicle tyres before vehicles enter public roads, wetting or covering surfaces and replanting disturbed areas;
- b. Contingency measures to ensure that, in the event of any dust nuisance arising, immediate remedial measures are implemented;
- c. Procedures for prior notification of the use of machinery likely to generate vibration effects beyond the area of the designation to properties where ground vibration may be felt;
- d. The means by which loss of vehicle access to be (sic) properties will minimise inconvenience to each property owner affected following consultation with affected property owners;
- e. Methods of ensuring pedestrian safety along public footpaths and particularly where works are proposed in close proximity to any school;
- f. Procedures for handling any dust and ground vibration complaints; and ·

In respect of Takapuna Normal Intermediate School the Management Plan shall include measures to address the following, in consultation with the School:

- i. Preventing students from gaining access to the construction site via the parking area off Northcote road or Smiths bush by the erection of such gates or fencing as may be agreed to by the School and the Requiring Authority;
- ii. Control of construction traffic moving between the construction site and Northcote Road so as to encourage the safe movement of students along Northcote Road; and
- iii. Minimising any adverse effects of construction on the playing field, in particular, dust nuisance.
- 11.3 The Requiring Authority shall ensure that the Construction Management Plan is complied with at all times during construction and that a copy is kept at all site offices.
- 11.4 The Requiring Authority and its contractors shall, in addition to complying with all other construction related conditions, take all reasonable steps to prevent or mitigate any nuisance or damage to adjacent properties during construction.
- 11.5 The Requiring Authority shall advise neighbouring owners and occupiers in the vicinity of the affected area of the date on which construction is to start, the expected duration of the work, and the telephone number of Site Liaison Officer who is able to respond to queries.
- 11.6 The location and extent of each stage of the site works will be identified and the Auckland Council advised of the construction timetable.

- 11.7 The earthworks contractor shall be required to maintain the stability of the land and property at the boundary of the site by the best practicable method and to monitor that such works are and remain effective.
- 11.8 Control measures shall be in place to ensure that any vehicles leaving the designated site do not deposit soil or other debris on public roads. Any such material deposited on any public road shall be cleaned up as soon as practicably possible at the Requiring Authority's expense.
- 11.9 Adequate provision shall be made during the earthworks construction for the protection of the existing public drains that traverse the designation. It is the Requiring Authority's responsibility to remedy any damages to the public drains that may occur during construction.
- 11.10 Protected vegetation areas and trees identified in the Landscape Mitigation Plan are to be retained and protected. Other sensitive areas of the site are to be identified and market for protection prior to the commencement of works.
- 11.11 Spoil from earthworks, surplus to site requirements, shall be disposed of at an approved landfill site.

12. Exmouth Road Pedestrian Overbridge

12.1 The Requiring Authority will use its best endeavours to obtain all necessary resource consents to allow reinstatement of the existing Exmouth Road pedestrian overbridge in the same or a similar location but extended to provide access across the bus lane to the foreshore. If such consents are granted the Requiring Authority shall reinstate the overbridge prior to the consents lapsing.

13. Westlake Boys High School

- 13.1 The School accessway, adjoining the western boundaries of the Altona road properties and connecting the northern and southern playing fields, shall be constructed with a minimum width of 4m and designed so that service vehicles and pedestrians can obtain safe and convenient access.
- 13.2 The western embankment adjoining the southern playing fields of the School shall be planted with *Alnus incana and Alnus rubra* at a size and spacing to be detailed within the Landscape Mitigation Plan.
- 13.3 The Requiring Authority shall use its best endeavours to undertake construction of the works in the area adjoining the northern playing fields during the School Summer holidays (approximately 10 December 31 January the following year).

14. Westlake Girls High School

- 14.1 The Requiring Authority shall use its best endeavours to ensure that the pin oak trees along the western boundary of the School are retained.
- 14.2 The Requiring Authority shall use its best endeavours to undertake construction of the works along the School boundary during the School Summer holidays (approximately 10 December 31 January the following year).

15. Takapuna Normal Intermediate School

15.1 A permanent 1.8 metre close boarded and battened wooden fence shall be erected along the western boundary of the school (as identified in the **attached** plan titled "Building Locations Takapuna Normal Intermediate School") prior to commencement of construction of the Busway.

15.2 Where the operation of the Busway results in increases in traffic noise above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any existing Takapuna Normal Intermediate School classroom with windows open (identified in the **attached** plan), then the requiring authority shall implement mitigation measures which result in the noise level not exceeding either 45 dBA Leq, or the ambient noise levels existing prior to the establishment of the Busway, whichever is higher. This noise level shall be achieved together with the ventilation requirements of the New Zealand Building Code, Clause G4 and New Zealand Standard 4303:1990 'Ventilation Requirements for acceptable indoor air quality' and in particular the requirements for educational institutions.

15.3 The Requiring Authority shall provide for:

- a. Replanting, or replacement where replanting is not practicable, of trees along the western boundary that are required to be removed for construction of the Busway; and
- b. Planting along the inside of the 1.8 metre fence (as described in condition 15.1) to mitigate the visual impact of the fence.

16. Smales Farm

- 16.1 The requiring authorities shall consult with a liaison person appointed by Shea Investments Limited and Betty Leila Holdings Limited in respect of:
- a. The detailed landscape plan to be prepared for the Busway in the vicinity of Smales Farm, for the purpose of ensuring that the landscaping for the Busway is integrated with the landscape development of Smales Farm; and
- b. That part of the Traffic Mitigation Plan that relates to Shakespeare Road Extension and Westlake Bus Station.

17. T D Jane, L J & M F Bilton & A S & S J Church

17.1 Subject to access being granted by the landowners of the properties legally described as Lot 127, DP 56740 (CT 9C/703), Lot 128, DP 56740 (CT C/104) and Lot 129, DP 56740 ("the properties"), the Requiring Authority will implement the landscaping plan prepared by LA4 Landscape Architects for the properties (titled "Proposed Planting to Mitigate Busway" **attached**) and any amendments to the planting shown on the plan as reasonably agreed between the landowners and the Requiring Authority. Failing agreement within 12 months of completion of construction of the fence, the Requiring Authority shall implement the LA4 landscaping plan (or its equivalent in value).

- 17.2 The Requiring Authority shall construct a fence on the properties' western boundaries prior to construction of the Project commencing adjacent to the landowners properties. The fence shall have the following specifications:
- a. To be located along the properties' western legal boundaries at 2 metres above ground level (as at 16 May 2003) at 7 and 10 Altona Road, and at 2 metres and rising to 2.5 metres above ground level at the northern end at 9 Altona road, for the full length of the boundaries of those properties;
- b. To be constructed of exterior grade (marine) plywood having a thickness of 17.5 mm or more;
- c. Plywood panels to be bolted to a framework so as to ensure no gaps or cracks and to meet the surface of the ground at their lower edge;
- d. Fence posts and framework to be specified by engineering design;
- e. NZTA shall construct gates in the fence if requested by the landowners of 7 and 9 Altona Road; and
- f. To be certified by an engineer as having a design life of 20 years (except that certification of the design life of the fence shall not apply to any gates requested to be constructed).

Advice note:

It is the Requiring Authority's intention to construct the fence as part of the enabling works during

2003 or by April 2004 at the latest.

- 17.3 Any construction activities exceeding the Construction Standard set out in condition 7.3 between chainage 13200 to 13000 shown on the designation plan "Harbour Bridge to Constellation Drive Designation Plans Westlake Boys High School, Drawing No. 7716C609" (the affected area") shall be undertaken between the hours of 8.00am 6.00pm on weekdays only and shall exclude the two weeks following Christmas Eve. For the avoidance of any doubt, condition 7.5 relating to works exceeding the Construction Standard continues to apply to the landowners as affected parties.
- 17.4 The Requiring Authority shall undertake earthworks in the affected area in one stage.
- 17.5 The Requiring Authority shall consult with the landowners on the mitigation plans referred to in the conditions 5, 6, 7, 8, 9, 10 and 11 on the designation insofar as the mitigation plans affect the landowners' properties

18. Bateman Property

Stormwater

- 18.1 As part of the busway construction works, NZTA and Auckland Council shall provide the following measures to address stormwater effects:
- a. NZTA shall pipe the existing drain from chainage 15100 down to 14960 (see Figs 1a 1c, **attached**);
- b. NZTA and Auckland Council shall widen by 4m the motorway side of the existing drain located on the eastern side of the motorway, from the level of the top of the present vertical concrete wall, from chainage 14960m to Sunnynook Road Culvert (as shown on the **attached** Figs 1a 1c), such widening shall be at a grade as flat as possible from the existing concrete wall, consistent with efficient fall:
- c. Auckland Council shall use its best endeavours to reduce the volume of debris caught on the central wall of the Sunnynook Road Culvert by reshaping the leading edge of the central wall; e. NZTA and Auckland Council shall undertake the following measures to avoid slope instability and scour:
- i. Provide a batter toe restraint retaining wall to buttress the lower position of the batter;
- ii. Construct a gabion wall or timber pole wall to support the toe restraint retaining wall; and
- iii. To undertake grass seedling over the four metre widening of the berm.

Advice Note:

It is recorded that Mr Bateman has agreed to provide access to NZTA and Auckland Council or their contractors to enable them to undertake any drainage improvement works required within or adjacent to the Bateman family property.

Noise

- 18.2 NZTA shall construct a concrete 0.8 metre high barrier between the Busway and the property in compliance with the letter from Marshall Day Acoustics Limited dated 18 December 2002 (attached as Appendix 1). The detailed design of this barrier is to be finalized as part of the busway detailed design.
- 18.3 NZTA shall construct a 0.8 metre high solid concrete New Jersey Barrier on top of the retaining wall between the motorway and the busway as also described in Appendix 1; the detailed design of this barrier is to be finalised as part of the busway detailed design.
- 18.4 NZTA shall construct a 1.8 metre high barrier at the rear of the Sunnynook Station between the proposed bus shelter and the end of the platform to mitigate any reflection of noise from the

northbound bus shelter, the detailed design of this barrier is to be finalised as part of the busway detailed design.

18.5 NZTA agrees that any retaining wall to be constructed for the purposes of the Sunnynook Station shall be constructed from non-reflective materials to mitigate any potential noise effects.

Landscaping

18.6 NZTA shall undertake screen planting, consisting of native trees, shrubs and ground cover between Sunnynook Station, the busway and the property, as shown on the **attached** plan (titled "North Shore Busway Project: Amended Landscape Development for Sunnynook Bus Station, Figure 2") to provide effective screening. The planting, including the planting shown on the embankment between the busway and the motorway, will be undertaken as soon as practicable following the construction works and within the first planting season to provide effective screening.

18.7 The landscaping and planting provided for under clause 18.6 shall be planted at Pb28 grade so that the plants are approximately 1.5 metres high when planted.

18.8 All planting shall be tended and maintained to ensure the full establishment and effectiveness of the landscaping including replacement planting where necessary.

Attachments

No attachments.



Memo 22nd January 2018

To:

Gael McKitterick, Burton Consultants

From:

Cosette Saville, Auckland Council

Subject:

Section 176A(2)(c) Outline Plan waiver for the proposed works on the acoustic wall

in Designation 1426

The purpose of this memo is to correct an oversight whilst processing a minor alteration to conditions of Designation 1426 – Westlake Station under section 181(3) of the Resource Management Act 1991 (RMA).

Auckland Council received a request from Auckland Transport, dated 18 December 2017 to alter Designation 1426 – Westlake Station in the Auckland Unitary Plan (Operative in Part). Auckland Council confirmed the alteration to Designation 1426 through a section 181(3) report on 16 January 2018.

In section 10 of the Notice of Requirement report, approval was sought for a waiver of the requirement for an outline plan for the proposed works on the acoustic wall under section 176A(2)(c) of the RMA. This memo confirms that the requirement for an outline plan has been waived under section 176A(2)(c) of the RMA for the following reasons:

- The minor alterations to the conditions of Designation 1426 require the acoustic wall to be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect plan SK-035. The architect plan specifies the height, shape, bulk and location of the acoustic wall, whilst the acoustic letter ensures that any noise effects will not result in any adverse effects on the environment.
- An outline plan will be submitted as part of the resource consent application for the Westlake Girls Event Centre which is adjacent to the acoustic wall.

I therefore consider that enough detail has been included in the Marshall Day Acoustic Limited letter and the Athfield Architect plan SK-035 to waive the requirement for an outline plan for the proposed works on the acoustic wall that runs along the common boundary between Shakespeare Road and Westlake Girls High School.

Memo Prepared by

Cosette Saville

Planner - Planning North West and Islands

Approved

David Sanders

Team leader - Planning North West and Islands

Date

Dux. 22/1/18.

Notice of Requirement for a minor alteration to a designation under section 181(3) of the Resource Management Act 1991



Notice of requirement description

Designation number: Designation 1426 – Westlake Station

Requiring authority: Auckland Transport

Site address: Shakespeare Road (adjoins No. 78 Taharoto Road),

Takapuna

Summary

Auckland Council has received a request from Auckland Transport under section 181(3) of the Resource Management Act 1991 (RMA), dated 18 December 2017 to alter Designation 1426 – Westlake Station in the Auckland Unitary Plan Operative in Part.

Auckland Transport has requested for the Notice of Requirement to be processed as a minor alteration as the amendments involve only minor alterations to the conditions and there are no more than minor changes to the effects on the environment.

It is considered after undertaking an assessment of the Notice, that the proposed alteration meets the statutory tests of Section 181(3) of the RMA and can therefore be processed and confirmed as a 'minor alteration'.

Recommendation

- That pursuant to Section 181(3) of the Resource Management Act 1991, the Auckland Transport Notice of Requirement for an alteration to Designation 1426 -Westlake Station in the Auckland Unitary Plan is **confirmed** subject to the conditions recommended in Section 4 of this report for the following reasons:
- The alteration involves no more than minor changes to the environmental effects
- The alteration does not involve any changes to the boundary
- The owners and/or occupiers of all land directly affected by the proposed alteration have been given notice and agree with the proposed alteration
- Adherence with recommended conditions will ensure any potential adverse effects are avoided, remedied or mitigated.
- That the conditions of Designation 1426 Westlake Station are altered in Chapter K
 Designations in the Auckland Unitary Plan Operative in Part as recommended in
 Section 4 of this report.

1. BACKGROUND

1.1. Details of Designation

Auckland Transport is an Auckland Council Controlled Organisation and the site (Shakespeare Road) is wholly owned by Auckland Transport.

Designation 1426 – Westlake Station in the Auckland Unitary Plan Operative in Part provided for the construction of the Westlake Bus Station and for the extension of Shakespeare Road, from the Wairau Road intersection to the new (Smales Farm) bus station. The designation formed part of the Northern Busway project which was constructed from 2003-2005 in accordance with a series of designations for the busway itself and the various busways along its route.

The designation was rolled over from the former North Shore City Council District Plan 2002 into the proposed Auckland Unitary Plan in September 2014. The rollover designation was confirmed in 2016 in the Auckland Unitary Plan Operative in Part.

1.2. Minor alteration to a designation

Auckland Council has received a Notice of Requirement (NoR) for a minor alteration to Designation 1426 – Westlake Station (known as "Smales Farm Bus Station") from Auckland Transport under section 181(3) of the RMA.

Auckland Transport is proposing amendments to conditions 1, 6.2(g), 7.1 and 7.9 (being 'General' 'Landscaping' and 'Noise Mitigation'). The proposal to alter the conditions to Designation 1426 – Westlake Station has been developed in conjunction with the Westlake Girls High School proposal to construct a new Event Centre close to Shakespeare Road, and as part of that project to provide for service access to the back of the Event Centre from Shakespeare Road.

The purpose of the amendments to the conditions is to enable changes to be made to part of the existing 2m high acoustic wall which is located within the road reserve of Shakespeare Road, adjoining Westlake Girls High School. That acoustic wall was constructed as a condition of Designation 1426 – Westlake Station.

Auckland Transport proposes to amend conditions 1, 6.2(g), 7.1 and 7.9 of Designation 1426 to read as follows (changes underlined):

1. General Conditions

1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in "Volume 3 – A3 Plans" forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical Reports in Volume 5, subject to the final design and the conditions set out below. Provided that in respect to the design of the acoustic wall located on Shakespeare Road adjoining Westlake Girls High School, that part of the wall located in Shakespeare Road to the east of the existing music block, shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect Plan SK-035.

6. Landscape Mitigation Conditions

6.2 The Landscape Mitigation Plan shall provide for:

. . . .

(g) Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway, provided that this does not apply to the 1.3m high acoustic fence on the common boundary between Shakespeare Road and Westlake Girls High School;

7. Noise Mitigation Conditions

7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the NZTA Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited. Provided that the acoustic wall which is located on the common boundary between Shakespeare Road and Westlake Girls High School shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect plan SK-035.

7.9 Unless:

- a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or
- b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where additional traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not exceeding 45 dBA Leq, or the ambient noise level existing prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4.
- c. Provided that clauses (a) and (b) above shall not apply in respect to the following two structures located within Westlake Girls High School grounds, being (1) the Event Centre, and (2) the eastern end of the music block which is protected by a 2m high concrete acoustic wall located within Westlake Girls High School.

Comment

I consider that the proposed amendments to the conditions are minor and enable logical changes to be made to the height and location of part of the existing 2m high acoustic wall which runs along the common boundary between Shakespeare Road and Westlake Girls High School.

The amendment to Condition 7.1 relates to the alterations which will be made to the existing acoustic wall as a result of the changes which are occurring at Westlake Girls High School. The new Event Centre at Westlake Girls High School has been designed to ensure that the effects of noise from external sources are appropriately mitigated and therefore some 40m of the existing acoustic wall will be removed with 19.5m of the existing acoustic wall being replaced with 1.3m high steel fence. 7m of existing pool fence will also be replaced with new 1.3m high steel fence, and 11.4m of existing pool fence will be removed. The changes are set out in plan SK-035.

The proposed amendments to Conditions 1, 6.2(g) and 7.9 are consequential as a result of the changes to the acoustic wall. The change to condition 1 is necessary to

include reference to the new plans and MDA letter in the general condition. The change to condition 6.2(g) is required as landscaping is no longer considered necessary along the new 1.3m high acoustic fence as the reduced height of the wall will result in significantly less visual dominance than the existing 2m high acoustic wall. The proposed change to condition 7.9 identifies that Auckland Transport is not liable for compensation if the noise exceeds the specified limits in specified hours. This change is required as the existing acoustic wall which mitigates the effects of traffic noise which was previously constructed by Auckland Transport is being removed at the request of Westlake Girls High School.

The amendments to conditions 1, 6.2(g), 7.1 and 7.9 are being made at the request of Westlake Girls High School, in conjunction with the school project to construct a new Event Centre close to Shakespeare Road.

I conclude that I do agree with the proposed alteration to conditions 1, 6.2(g), 7.1 and 7.9 as the amendment is logical and only relates to a minor matter, being the height and location of the acoustic fence which runs along the common boundary between Shakespeare Road and Westlake Girls High School.

1.3. Land affected by the alteration

The land affected by the alteration to the designation is located at Shakespeare Road (adjoins No. 78 Taharoto Road), Takapuna and is shown in the Auckland Unitary Plan maps as follows:



1.4. Description of the site and existing environment

Burton Planning Consultants prepared the report, for Auckland Transport, which includes a description of the site and the existing environment. The report states the following:

'The land affected by this notice of requirement ... relates to some 40m of common boundary between Shakespeare Road and Westlake Girls High School (designation 4558), south of the Wairau Road intersection. The notice relates to part of the Westlake Busway-Shakespeare Road extension designation (1426).

In accordance with condition 7.1 of Designation 1426, a 2m high acoustic wall of some 90m in length is located within the road reserve of Shakespeare Road, adjoining Westlake Girls High School. The acoustic wall commences at the entrance of the school's western car park (generally opposite the Westlake Bus Station), and extends some 90 metres to the east. Thereafter the common boundary between Westlake Girls High School is defined by an open pool style fence. The acoustic wall consists of exposed aggregate concrete panels with a series of inset landscaped panels (backed by wood panel rather than concrete.) A 7m wide sliding acoustic gate is located within the acoustic wall, with that gate provided in conjunction with the bus way project as an additional service access for Westlake Girls High School. A series of bus stops are sited along the Shakespeare Road frontage, with the associated bus shelters attached to the acoustic wall itself. Both the acoustic wall and the pool style fence are sited on top of a retaining wall, (within the school grounds located some 2-2.5 metres below the road level).'

I have undertaken a visit on 20 December 2017 to the site accompanied by the reporting planner from Burton Planning Consultants. The description of the site and the existing environment provided by Burton Planning Consultants is accurate and reliable.

1.5. Delegated authority

The Team Leader - Planning North West and Islands has delegated authority, in accordance with Schedule 2A of the Auckland Council Delegations: Chief Executive Officer (updated February 2017), to exercise the council's functions, powers, duties and discretions under the Resource Management Act 1991 in relation to section 181(3) to approve a minor alteration to a designation.

The application to alter the designation can therefore be considered by the Team Leader – Planning North West and Islands and confirmed or declined under section 181(3)(c).

1.6. Relevant statutory provisions

Section 181 "Alteration of designation" of the Resource Management Act 1991 states:

- (1) A requiring authority that is responsible for a designation may at any time give notice to the territorial authority of its requirement to alter the designation.
- (2) Subject to subsection (3), sections 168 to 179 and 198AA to 198AD shall, with all necessary modifications, apply to a requirement referred to in subsection (1) as if it were a requirement for a new designation.
- (3) A territorial authority may at any time alter a designation in its district plan or a requirement in its proposed district plan if-
 - (a) The alteration-
 - (i) Involves no more than minor changes to the effects on the environment associated with the use or proposed use of land or any water concerned; or
 - (ii) Involves only minor changes or adjustments to the boundaries of the designation or requirement; and

- (b) Written notice of the proposed alteration has been given to every owner or occupier of the land directly affected and those owners or occupiers agree with the alteration; and
- (c) Both the territorial authority and the requiring authority agree with the alteration
 - and sections 168 to 179 and 198AA to 198AD shall not apply to any such alteration.
- (4) This section shall apply, with all necessary modifications, to a requirement by a territorial authority to alter its own designation or requirement within its own district.

2. ANALYSIS OF THE PROPOSED ALTERATION

The relevant matters to consider are contained in section 181(3) of the RMA as outlined above.

2.1. Assessment of Environmental effects (s181(3)(a)(i))

The requiring authority has provided an assessment of environmental effects (AEE) with the NoR. The following effects have been considered:

(a) Noise Effects

Auckland Transport considers that the amendments to the Conditions of Designation 1426 and the consequential changes to part of the existing 2m high acoustic wall will result in no change in noise effects within the music department classrooms at Westlake Girls High School, which is managed through existing conditions. The AEE report states:

The MDA letter dated 27 October 2017 in **Annexure 4** confirms that the provision of a new 2m high precast concrete wall extending from the Shakespeare Road boundary for some 9m northeast to the rear of the new WGHS Event Centre will ensure that there is no change in noise effects within the music department classrooms. The 9m length of wall is being provided by WGHS as part of the OPW for the Event Centre and does not form part of the NOR.

The MDA letter also confirms that the installation of a new 1.3m high steel fence located as shown on plan SK 035 in **Annexure 1**, in conjunction with the proposed design of the Event Centre will ensure that an internal noise level of less than 45 dB L_{AEQ} can be achieved as required by the designation conditions. The provision of the 1.3m high 3mm thick fence is required in this location to continue to provide appropriate mitigation to the effects of traffic noise. The boundary fence works will be undertaken at the same time that works are occurring to construct the new Event Centre. The coinciding of timing of these works will ensure that the Event Centre and classrooms are not adversely impacted by additional bus noise.

(b) Amenity

Auckland Transport considers that the proposed amendments to Conditions 1 and 7.1 of Designation 1426 will result in a positive contribution to both pedestrian and streetscape amenity. The AEE report states:

The requested alteration to Conditions 1 and 7.1 of Designation 1426, will make a positive contribution to pedestrian and streetscape amenity. In this respect, the complete removal of the acoustic wall for a distance of some 20m will enable a landscaped urban common to be created within WGHS adjoining Shakespeare Road. The urban common and associated seating will provide an enhanced waiting area for students using buses, with better separation from traffic and activity on Shakespeare Road.

Further to the east, the replacement of the existing 2m high acoustic wall, with a 1.3m steel fence will provide pedestrians on Shakespeare Road with views down into the adjoining lower level courtyard located between the Shakespeare Road boundary and the Event Centre. It will also provide views of activity within the Event Centre itself. In contrast, the existing acoustic wall on the road boundary, completely blocks views to the north through the adjoining school. The opening up of views into WGHS, and in particular into the Event Centre, will enhance visual connectivity between the street and the adjoining land use.

The existing 2m high acoustic wall on Shakespeare Road includes small inset landscape bays spaced along the length of the wall. The removal of a total length of some 40m of the acoustic wall in the vicinity of the Westlake Girls High School Event Centre will result in the loss of two existing inset landscape bays. These two particular landscape bays make a very limited contribution to streetscape amenity as the climbers within have made very little growth since their establishment. It is considered that the revised fence/wall design in this location will make a significant improvement to streetscape amenity. The proposed changes will enable views from the street in to the landscaped urban common which is to be created within WGHS, with the new 1.3m high painted steel fence, providing a less dominating street feature, with views available down into the adjoining Event Centre. The reduced thickness of the fence will result in a wider footpath and therefore improved pedestrian amenity. The fence will be painted in a dark colour of similar tone to the existing aggregate concrete noise wall and existing pool fence which is to be retained. The new fence can also be readily cleaned. Consequently, the provision of additional landscaping between the 1.3m acoustic fence and the carriageway is not considered to be necessary in this location.

(c) Traffic Effects

Auckland Transport considers that the minor alterations to Conditions in Designation 1426 will not adversely affect the traffic in the area. The AEE report states:

The removal of a length of 20m of the acoustic wall (including the 7m wide sliding acoustic gate) will enable the creation of an 'urban common' between the Event Centre and Shakespeare Road. This landscaped area, will also be used for servicing of the Event Centre. One of the bench seats has been designed to swivel to the side, enabling a delivery truck to reverse into the loading area beside the Event Centre. The potential effects of this activity are considered as part of the Outline Plan of Works for the WGHS Event Centre. Notably, the need for specific provision for a loading access for WGHS on the Shakespeare Road frontage was recognised and provided for as part of Designation 1426, and the associated agreements between the school, the Council (then North Shore City Council) and NZTA. The sliding service access gate was provided in conjunction with the acoustic wall construction, but has been essentially unused up until now. That being the case, it is considered that the effects of the use of this area for loading purposes in association with the new Event Centre are effects which have previously been anticipated and provided for. Additionally, the activity is expected to be low level, (approximately 1 truck per

week) primarily delivering musical instruments to the rear of the Centre, and will be managed to avoid busy traffic and pedestrian hours. That being the case, it is considered that the effects will be less than minor.

(d) Construction Effects

Auckland Transport considers that the minor alterations to the designation will result in no construction effects which cannot be dealt with in accordance with normal construction standards and hours and through the coinciding of the construction works of the existing wall with the Event Centre. The AEE report states:

The potential for adverse effects to arise during construction are temporary in nature and are consistent with those normally experienced as part of construction activity. Works will be undertaken in accordance with normal construction hours and noise standards. Due to the close proximity to WGHS, the school is the party most likely to be affected by construction works. However, the school itself will be undertaking these works as part of the Event Centre project, which involves both the demolition of the old school hall and the construction of a new Event Centre. As the works on the acoustic wall will coincide with the much larger works being undertaken within the WGHS grounds in association with the Event Centre, the potential for adverse effects on the school will be minimised. A Land Management Plan will be prepared and will be submitted to Council in association with the Corridor Access Request (for works within the road reserve), which will address matters such as the management of noise, dust and public access during works on the wall. That being the case, it is considered that the adverse effects of construction will be less than minor.

The requiring authority considers that the proposed alteration to the designation involves less than minor changes to the effects on the environment and the change to conditions will enable positive improvements to be made to the streetscape along Shakespeare Road.

Comment

I consider the proposed alteration to the existing conditions appropriate and logical. The alteration to the Conditions of Designation 1426 – Westlake Station enables positive changes to be made to part of the existing 2m high acoustic wall as requested by Westlake Girls High School.

Therefore, I conclude that I agree with Auckland Transport that the alteration involves less than minor changes to the effects on the environment.

2.2. Assessment of minor changes or adjustments to the boundary (s181(3)(a)(ii))

The alteration to the designation does not involve any changes to the boundary of the existing designation.

2.3. Written notice of the proposed alteration has been given to every owner or occupier of the land directly affected and those owners and occupiers agree with the alteration (s181(3)(b))

Auckland Transport owns and occupies the designated site. Westlake Girls High School directly adjoins the location of works and is considered to be the only party which is affected by the proposed alteration to the designation conditions. Westlake Girls High School is in agreement with the alterations to the conditions relating to the acoustic wall, as the proposed

changes to the wall are being undertaken at the request of the school as they arise from the changes proposed as part of the Event Centre project.

A copy of Westlake Girls High School's affected party approval is attached as Annexure 5 in the documentation provided by Auckland Transport.

2.4. Agreement of both the territorial authority and the requiring authority (181(3)(c))

The alteration to the designation has been requested by the Auckland Transport, and therefore it agrees to the alteration. Auckland Council agrees with the proposed alteration for the following reasons:

- The alteration involves no more than minor changes to the environmental effects
- The alteration does not involve any changes to the boundary
- The owners and/or occupiers of all land directly affected by the proposed alteration have been given notice and agree with the proposed alteration
- Adherence with recommended conditions will ensure any potential adverse effects are avoided, remedied or mitigated.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1. Conclusions

For the reasons above in section 2.4 and the discussion within this report, the proposed alteration meets the statutory tests of Section 181(3) of the Resource Management Act 1991.

3.2 Recommendation

- That pursuant to Section 181(3) of the Resource Management Act 1991, Auckland Transport's notice of requirement for an alteration to Designation 1426 – Westlake Station is confirmed subject to the amended conditions recommended in Section 4 of this report.
- 2. That Designation 1426 Westlake Station is amended in Chapter K Designations in the Auckland Unitary Plan Operative in part as recommended in Section 4 of this report.

4. AGREED ALTERATIONS

The text alterations are shown below. Amendments to the existing conditions are shown as underlined.

1426 Westlake Station

Designation Number	1426
Requiring Authority	Auckland Transport
Location	Shakespeare Road (adjoins 78 Taharoto Road), Takapuna
Rollover Designation	Yes
Legacy Reference	Designation 175, Auckland Council District Plan (North Shore Section) 2002
Lapse Date	Given effect to (i.e. no lapse date)

Purpose

Westlake Station - for the construction, operation and maintenance of roads, buildings, facilities and amenities (including any ancillary structures, works, or activities) for the purpose of providing a rapid transit facility for buses and high occupancy vehicles.

Conditions

The conditions below apply:

- 1. General Conditions
- 2. Duration of Designation
- 3. PMP and Outline Plans
- 4. Archaeological Mitigation Conditions (other than 4.3 and 4.4)
- 5. Ecological Mitigation Conditions (other than 5.5, 5.6 and 5.7)
- 6. Landscape Mitigation Conditions
- 7. Noise Mitigation Conditions
- 8. Geotechnical Mitigation Conditions
- 9. Vibration Mitigation Conditions
- 10. Traffic Mitigation Conditions except that:
- Condition 10.2 shall not apply
- Condition 10.1(ii) applies only to Notice 8 Westlake
- Condition 10.1(iv) applies only to Notices 8 and 9 Westlake and Sunnynook
- Condition 10.1(v) applies only to Notice 8 Westlake
- Condition 10.3 applies only to Notice 8 Westlake
- 11. Construction Management Conditions
- 14. Westlake Girls High School applies only to Notice 8 Westlake
- 18. Bateman: Stormwater Conditions applies only to Notice 9 Sunnynook (other than Condition 18.1(i)).

1. General Conditions

- 1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in "Volume 3 A3 Plans" forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical Reports in Volume 5, subject to the final design and the conditions set out below. Provided that in respect to the design of the acoustic wall located on Shakespeare Road adjoining Westlake Girls High School, that part of the wall located in Shakespeare Road to the east of the existing music block, shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect Plan SK-035.
- 1.2 Prior to any works being commenced in particular location(s) of work, the Requiring Authority shall obtain all requisite resource consents for the location(s) affected under the Resource Management Act 1991.
- 1.3 Any land taken or held for the works shall be maintained to a reasonable standard until physical works commence.
- 1.4 At all times reasonable vehicular access shall be maintained to private properties not directly affected by construction and/or operation in the area affected. Where private properties are directly affected by construction and/or operations causing vehicular access to be temporarily prevented and no alternative can be utilised, the Requiring Authority shall ensure that the property owner is consulted with respect to the most suitable time for carrying out the work and the Requiring Authority shall minimise the period during which vehicular access is prevented.
- 1.5 A permanent liaison position from within the joint Project Governance Team of Auckland Council and the Requiring Authority will be appointed for the duration of the project. This person is to be available for ongoing consultation on all matters of concern to affected persons.
- 1.6 All contract documentation for physical works shall include reference to the designation conditions, any other resource consents (including conditions) and any approved mitigation or outline plan(s) held for the project.

1.7 Where requested by the owners, the Requiring Authority shall physically peg out the extent of the alignment in individually affected properties once the designation has been confirmed or all appeals have been determined, whichever is the later.

2. Duration of the Designation Condition deleted

3. Project Management Plans (PMP) and Outline Plans

3.1 The requiring authority shall prepare a PMP which shall include mitigation/management plans as referred to in conditions 5, 6, 7, 8, 9, 10 and 11, 3.2.

No works shall be undertaken in any particular location(s) until:

- a. The PMP, or such part(s) of the PMP as are relevant to the location(s) are approved in the manner provided for in condition 3.3; and
- b. Any outline plan(s) required by section 176A of the Resource Management Act 1991 (RMA) in relation to the works in the location(s), are approved in the manner provided in condition 3.3. 3.3

Approvals pursuant to condition 3.2(a) shall be obtained from the General Manager of Environmental Services, Auckland Council, and a senior regulatory officer of the Auckland Council who is at the time of the approval a member of the Project Governance Team for the management of the works (the approval officers).

Advice Note:

Where an outline plan or plans are required by section 176A RMA for works in any particular location(s) and the approval officers agree that the PMP or relevant part(s) of the PMP contains adequate details to satisfy section 176 RMA, then the Council may waive the requirement for an Outline Plan.

- 3.4 The works shall only be undertaken in accordance with an approved PMP and outline plan (where required).
- 3.5 If for any reason the PMP is not approved, the outline plan procedure under s 176A shall apply. For the avoidance of any doubt, the mitigation/management plans prepared under conditions 5, 6, 7, 8, 9, 10 and 11 shall be included with any outline plan lodged for approval pursuant to s 176A.

4. Archaeological Mitigation Conditions

- 4.1 If construction work uncovers any archaeological remains, the Requiring Authority will immediately advise local iwi and the New Zealand Historic Places Trust and cease working in the affected area until any necessary authority required by the New Zealand Historic Places Trust is obtained. (All archaeological sites are protected under the provisions of the Historic Places Act 1993, whereby it is unlawful to modify, damage or destroy an archaeological site, whether recorded or not, without prior consent of the Historic Places Trust).
- 4.2 That all recorded archaeological sites and other cultural heritage sites in the vicinity of the works shall be clearly marked on the construction plans.
- 4.3 Any significant native trees removed from Smiths bush as part of the works to construct the busway shall be offered as gifts to Te Hao o Ngati Whatua and/or Ngati Whatua o Orakei.
- 4.4 Preliminary earthworks in the vicinity of Onewa Road and Sylvan Ave realignment will be monitored by a suitably qualified and experienced archaeologist.

5. Ecological Mitigation Conditions

- 5.1 The PMP shall include an Ecological Mitigation Plan prepared by a suitably qualified and experienced ecologist who shall have regard to:
- i. The recommendations contained in the audit by Shona Myers Natural Heritage Scientist, ARC as to planting and the implementation of mitigation measures;
- ii. The planting of appropriate plant species as identified in AC Technical Publication 148: Riparian Zone Management: Strategy for the Auckland Region, June 2001.

- 5.2 The Plan shall provide for:
- i. Planting in riparian zones where consent of the landowner is obtained;
- ii. Mitigation of potential coastal effects.
- 5.3 Wherever practicable, any disturbance of existing vegetation shall be avoided.
- 5.4 Where riparian vegetation disturbance cannot be practicably avoided, the Requiring Authority shall take care that any necessary disturbance is minimised as far as practicable. For the avoidance of doubt, this condition is not intended to prohibit necessary disturbance, which is defined as including, but is not limited to, vegetation clearance, the construction and operation of all roads, depots, storage facilities and spoil disposal areas.
- 5.5 The PMP shall include a plan of the proposed works within the eastern remnant of Smiths Bush in sufficient detail to determine the impact on existing vegetation and the Requiring Authority shall undertake its best endeavours to minimise the removal of vegetation from Smiths Bush.
- 5.6 All works within the eastern remnant of Smiths Bush shall be supervised by a suitably qualified and experienced arboriculturist.
- 5.7 As a means of attempting to retain the overall ecological viability of Smiths Bush, any vegetation removed from the eastern remnant of the bush shall be replaced where practicable in accordance with a native tree planting and maintenance regime approved under condition 3.3. and following consultation with appropriate staff at the Auckland Council.

6. Landscape Mitigation Conditions

- 6.1 The PMP shall include a Landscape Mitigation Plan prepared by a suitably qualified and experienced landscape architect who shall have regard to:
- a. The Landscape Mitigation Plan prepared by LA4 Landscape Architects and contained in the Esmonde Interchange Project: Assessment of Environmental Effects Volume 10c; and
- b. The recommendations contained in the audits by Melean Absolum and Chris Boucher.
- 6.2 The Landscape Mitigation Plan shall provide for:
- a. The integration of the proposed works into the surrounding landscape:
- b. Appropriate consideration of the angle and extent of batter slopes;
- c. Appropriate screening of existing land-uses along Fred Thomas Drive;
- d. Design of borrow and disposal areas for excess fill to avoid significant visual impact, and to maximise integration with the general form of the surrounding landscape;
- e. Ecological mitigation measures (eg revegetation) required in accordance with the Ecological Mitigation Condition;
- f. Mitigation of effects on properties in the vicinity of the busway;
- g. Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway provided that this does not apply to the 1.3m high acoustic fence on the common boundary between Shakespeare Road and Westlake Girls High School;
- h. Detailed designs of the acoustic barriers, retaining walls, and earth bunds in conjunction with the engineers where necessary; and
- i. The identification of existing trees and vegetation sited on the boundary of the Busway designation that ought to be retained for screening purposes.
- 6.3 The Landscape Mitigation Plan shall include details of:
- j. All proposed planting (including species, species size, densities, areas and locations);
- k. The planting programme;
- I. The maintenance programme. This programme shall include details of weed control, performance standards specifying allowable percentage survival rates, and replacement of any planting features;
- m. The sufficiency of the soil medium to sustain all planting proposed; and
- n. An appropriate maintenance regime.
- 6.4 All landscape mitigation planting shall be implemented during the first planting season following completion of the project construction works providing climatic conditions are suitable, otherwise at the first practicable opportunity thereafter. Following completion of planting, the Requiring Authority

shall submit to the Auckland Council a report by the landscape architect on the implementation of the landscape plan.

- 6.5 Where practicable, any planting utilising native plants shall use plants genetically sourced from the ecological district.
- 6.6 Exposed cut and fill batters and slopes shall be re-vegetated as soon as practicable after construction.

7. Noise Mitigation Conditions

- 7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the NZTA Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited. Provided that the acoustic wall which is located on the common boundary between Shakespeare Road and Westlake Girls High School shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017and associated Athfields Architect plan SK-035.
- 7.2 The PMP shall include a Noise Mitigation Plan prepared by a suitably qualified noise consultant. The purpose of the plan is to describe the methods by which noise associated with traffic using the roading and the bus stations within the designation will be made to comply with specified noise limits at all affected dwellings and schools in the vicinity of the area affected. Where the ambient sound level is required to determine design limits then this shall be done prior to construction commencing.
- 7.3 The Requiring Authority shall ensure that all construction works are carried out in accordance with NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work".
- 7.4 The PMP shall include a Construction Noise Management Plan. The purpose of the Plan is to describe the methods by which noise associated with the construction of the work will be managed to comply with condition 7.3 above. In particular, the Construction Noise Management Plan shall identify:
- a. The location of permanent acoustic fences to be installed prior to the commencement of the main construction works:
- b. Methods of managing noise;
- c. Noise monitoring methods, including details of methods, equipment, location and frequency;
- e. Contingency measures in the event of any incidence of non-compliance; and
- f. Procedures for handling noise complaints.
- 7.5 Where the requirements of condition 7.4 are unable to be met, the alternative strategies that have been developed following consultation with affected landowners will be implemented. Such alternatives may include, but not be limited to, temporary relocation of occupiers, compensation for occupiers and purchase of the affected properties.
- 7.6 Construction works shall at all times be undertaken in accordance with the Construction Noise Management Plan.
- 7.7 Where practicable, acoustic barriers required to meet NZTA Noise Guidelines in particular locations, shall be erected prior to commencement of the construction works in those locations.
- 7.8 Where temporary acoustic barriers are proposed in the Marshall Day Report, and where their retention would result in effective traffic noise reduction for residents or educational facilities, they shall be built to a standard such that the barriers will be able to remain permanently in place at heights approved under condition 3.3, taking into consideration traffic noise reduction visual and landscaping factors and consultation with adjoining property owners.

7.9 Unless:

- a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or
- b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where additional traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then

the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not exceeding 45 dBA Leq, or the ambient noise level existing prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4.

c. Provided that clauses (a) and (b) above shall not apply in respect to the following two structures located within Westlake Girls High School grounds, being – (1) the Event Centre, and (2) the eastern end of the music block which is protected by a 2m high concrete acoustic wall located within Westlake Girls High School.

8. Geotechnical Mitigation Condition

8.1 A Geotechnical Mitigation Plan shall be prepared by a suitably qualified Geotechnical Engineer in consultation with Auckland Council. The plan shall be submitted to the Auckland Council prior to construction of any stage and shall take into account the recommendations of the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues' – November 2001.

9. Vibration Mitigation Conditions

- 9.1 The PMP shall include a Vibration Mitigation Plan having regard to the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001'. This Mitigation plan shall include details of how the works will comply with the requirement of German Standards DIN4150 "Structural Vibration in Buildings Effects on Structures" during construction and shall take into account the recommendations.
- 9.2 A dilapidation survey of 'at risk' buildings, as per the recommendations of the audit prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001', shall be undertaken prior to during and after completion of the construction works, provided the consent of any landowner and/or occupier can be obtained.

10. Traffic Mitigation Conditions

- 10.1 The PMP shall include a Traffic Mitigation Plan based on its adopted design for the project. The Traffic Mitigation Plan shall include:
- a. Methods of mitigating the local and network wide effects of both the construction of individual elements of the project and the use of staging to allow sections of the project to be opened to traffic while other sections are still under construction;
- b. Methods of helping to accommodate the bus transport needs of pupils of Westlake Girls' High School through the development and operation of Westlake Station and the busway system, in the light of consultation with the School;
- c. Methods of limiting the use of the busway to emergency vehicles and no more than 350HOVs (excluding buses) per hour north of Esmonde Road, including a restriction on the access of HOVs through Constellation Drive Station to no more than 350HOVs;
- d. Details of a monitoring programme to be undertaken detailing the demand for car parking in the vicinity of the Sunnynook Station and Westlake Station prior to the opening of the Station and at regular intervals (a minimum of 2 per annum) for a minimum period of five years following the opening of the Station to the public and measures to manage any such demand. (This condition shall only apply to Notices of Requirement 8 and 9); and
- e. Details of pedestrian access to be provided within the Westlake Bus Station and along Shakespeare Road Extension (This condition shall apply only to Notice of Requirement 8).
- 10.2 In order to prevent potentially significant traffic disruption during and after construction, the existing Onewa Interchange shall continue to be fully operational (that is in the manner in which it currently operates) until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.
- 10.3 The public use of the Westlake Station shall not be allowed until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.

11. Construction Management Conditions

- 11.1 The PMP shall include a Construction Management Plan which shall refer to all conditions imposed on any relevant resource consents granted by the Auckland Regional Council.
- 11.2 The purpose of the Construction Management Plan is to set out methods by which any dust nuisance from construction will be avoided or minimised and by which the possibility of ground vibration during construction can be notified to adjacent land owners and occupiers. In particular, the Management Plan shall identify amongst other things:
- a. Specific methods by which dust will be managed, including cleaning vehicle tyres before vehicles enter public roads, wetting or covering surfaces and replanting disturbed areas;
- b. Contingency measures to ensure that, in the event of any dust nuisance arising, immediate remedial measures are implemented;
- c. Procedures for prior notification of the use of machinery likely to generate vibration effects beyond the area of the designation to properties where ground vibration may be felt:
- d. The means by which loss of vehicle access to be (sic) properties will minimise inconvenience to each property owner affected following consultation with affected property owners;
- e. Methods of ensuring pedestrian safety along public footpaths and particularly where works are proposed in close proximity to any school;
- f. Procedures for handling any dust and ground vibration complaints; and ·
- In respect of Takapuna Normal Intermediate School the Management Plan shall include measures to address the following, in consultation with the School:
- i. Preventing students from gaining access to the construction site via the parking area off Northcote road or Smiths bush by the erection of such gates or fencing as may be agreed to by the School and the Requiring Authority;
- ii. Control of construction traffic moving between the construction site and Northcote Road so as to encourage the safe movement of students along Northcote Road; and
- iii. Minimising any adverse effects of construction on the playing field, in particular, dust nuisance.
- 11.3 The Requiring Authority shall ensure that the Construction Management Plan is complied with at all times during construction and that a copy is kept at all site offices.
- 11.4 The Requiring Authority and its contractors shall, in addition to complying with all other construction related conditions, take all reasonable steps to prevent or mitigate any nuisance or damage to adjacent properties during construction.
- 11.5 The Requiring Authority shall advise neighbouring owners and occupiers in the vicinity of the affected area of the date on which construction is to start, the expected duration of the work, and the telephone number of Site Liaison Officer who is able to respond to queries.
- 11.6 The location and extent of each stage of the site works will be identified and the Auckland Council advised of the construction timetable.
- 11.7 The earthworks contractor shall be required to maintain the stability of the land and property at the boundary of the site by the best practicable method and to monitor that such works are and remain effective.
- 11.8 Control measures shall be in place to ensure that any vehicles leaving the designated site do not deposit soil or other debris on public roads. Any such material deposited on any public road shall be cleaned up as soon as practicably possible at the Requiring Authority's expense.
- 11.9 Adequate provision shall be made during the earthworks construction for the protection of the existing public drains that traverse the designation. It is the Requiring Authority's responsibility to remedy any damages to the public drains that may occur during construction.
- 11.10 Protected vegetation areas and trees identified in the Landscape Mitigation Plan are to be retained and protected. Other sensitive areas of the site are to be identified and market for protection prior to the commencement of works.
- 11.11 Spoil from earthworks, surplus to site requirements, shall be disposed of at an approved landfill site.

12. Exmouth Road Pedestrian Overbridge

12.1 The Requiring Authority will use its best endeavours to obtain all necessary resource consents to allow reinstatement of the existing Exmouth Road pedestrian overbridge in the same or a similar location but extended to provide access across the bus lane to the foreshore. If such consents are granted the Requiring Authority shall reinstate the overbridge prior to the consents lapsing.

13. Westlake Boys High School

- 13.1 The School accessway, adjoining the western boundaries of the Altona road properties and connecting the northern and southern playing fields, shall be constructed with a minimum width of 4m and designed so that service vehicles and pedestrians can obtain safe and convenient access.
- 13.2 The western embankment adjoining the southern playing fields of the School shall be planted with Alnus incana and Alnus rubra at a size and spacing to be detailed within the Landscape Mitigation Plan.
- 13.3 The Requiring Authority shall use its best endeavours to undertake construction of the works in the area adjoining the northern playing fields during the School Summer holidays (approximately 10 December 31 January the following year).

14. Westlake Girls High School

- 14.1 The Requiring Authority shall use its best endeavours to ensure that the pin oak trees along the western boundary of the School are retained.
- 14.2 The Requiring Authority shall use its best endeavours to undertake construction of the works along the School boundary during the School Summer holidays (approximately 10 December 31 January the following year).

15. Takapuna Normal Intermediate School

- 15.1 A permanent 1.8 metre close boarded and battened wooden fence shall be erected along the western boundary of the school (as identified in the attached plan titled "Building Locations Takapuna Normal Intermediate School") prior to commencement of construction of the Busway.
- 15.2 Where the operation of the Busway results in increases in traffic noise above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any existing Takapuna Normal Intermediate School classroom with windows open (identified in the attached plan), then the requiring authority shall implement mitigation measures which result in the noise level not exceeding either 45 dBA Leq, or the ambient noise levels existing prior to the establishment of the Busway, whichever is higher. This noise level shall be achieved together with the ventilation requirements of the New Zealand Building Code, Clause G4 and New Zealand Standard 4303:1990 'Ventilation Requirements for acceptable indoor air quality' and in particular the requirements for educational institutions.
- 15.3 The Requiring Authority shall provide for:
- a. Replanting, or replacement where replanting is not practicable, of trees along the western boundary that are required to be removed for construction of the Busway; and
- b. Planting along the inside of the 1.8 metre fence (as described in condition 15.1) to mitigate the visual impact of the fence.

16. Smales Farm

- 16.1 The requiring authorities shall consult with a liaison person appointed by Shea Investments Limited and Betty Leila Holdings Limited in respect of:
- a. The detailed landscape plan to be prepared for the Busway in the vicinity of Smales Farm, for the purpose of ensuring that the landscaping for the Busway is integrated with the landscape development of Smales Farm; and
- b. That part of the Traffic Mitigation Plan that relates to Shakespeare Road Extension and Westlake Bus Station.

17. T D Jane, L J & M F Bilton & A S & S J Church

17.1 Subject to access being granted by the landowners of the properties legally described as Lot 127, DP 56740 (CT 9C/703), Lot 128, DP 56740 (CT C/104) and Lot 129, DP 56740 ("the

properties"), the Requiring Authority will implement the landscaping plan prepared by LA4 Landscape Architects for the properties (titled "Proposed Planting to Mitigate Busway" attached) and any amendments to the planting shown on the plan as reasonably agreed between the landowners and the Requiring Authority. Failing agreement within 12 months of completion of construction of the fence, the Requiring Authority shall implement the LA4 landscaping plan (or its equivalent in value).

- 17.2 The Requiring Authority shall construct a fence on the properties' western boundaries prior to construction of the Project commencing adjacent to the landowners properties. The fence shall have the following specifications:
- a. To be located along the properties' western legal boundaries at 2 metres above ground level (as at 16 May 2003) at 7 and 10 Altona Road, and at 2 metres and rising to 2.5 metres above ground level at the northern end at 9 Altona road, for the full length of the boundaries of those properties;
- b. To be constructed of exterior grade (marine) plywood having a thickness of 17.5 mm or more;
- c. Plywood panels to be bolted to a framework so as to ensure no gaps or cracks and to meet the surface of the ground at their lower edge;
- d. Fence posts and framework to be specified by engineering design:
- e. NZTA shall construct gates in the fence if requested by the landowners of 7 and 9 Altona Road; and
- f. To be certified by an engineer as having a design life of 20 years (except that certification of the design life of the fence shall not apply to any gates requested to be constructed).

Advice note:

It is the Requiring Authority's intention to construct the fence as part of the enabling works during 2003 or by April 2004 at the latest.

- 17.3 Any construction activities exceeding the Construction Standard set out in condition 7.3 between chainage 13200 to 13000 shown on the designation plan "Harbour Bridge to Constellation Drive Designation Plans Westlake Boys High School, Drawing No. 7716C609" (the affected area") shall be undertaken between the hours of 8.00am 6.00pm on weekdays only and shall exclude the two weeks following Christmas Eve. For the avoidance of any doubt, condition 7.5 relating to works exceeding the Construction Standard continues to apply to the landowners as affected parties.
- 17.4 The Requiring Authority shall undertake earthworks in the affected area in one stage.
- 17.5 The Requiring Authority shall consult with the landowners on the mitigation plans referred to in the conditions 5, 6, 7, 8, 9, 10 and 11 on the designation insofar as the mitigation plans affect the landowners' properties

18. Bateman Property

Stormwater

- 18.1 As part of the busway construction works, NZTA and Auckland Council shall provide the following measures to address stormwater effects:
- a. NZTA shall pipe the existing drain from chainage 15100 down to 14960 (see Figs 1a 1c, attached);
- b. NZTA and Auckland Council shall widen by 4m the motorway side of the existing drain located on the eastern side of the motorway, from the level of the top of the present vertical concrete wall, from chainage 14960m to Sunnynook Road Culvert (as shown on the attached Figs 1a 1c), such widening shall be at a grade as flat as possible from the existing concrete wall, consistent with efficient fall:
- c. Auckland Council shall use its best endeavours to reduce the volume of debris caught on the central wall of the Sunnynook Road Culvert by reshaping the leading edge of the central wall;
- e. NZTA and Auckland Council shall undertake the following measures to avoid slope instability and scour:
- i. Provide a batter toe restraint retaining wall to buttress the lower position of the batter;
- ii. Construct a gabion wall or timber pole wall to support the toe restraint retaining wall; and
- iii. To undertake grass seedling over the four metre widening of the berm.

Advice Note:

It is recorded that Mr Bateman has agreed to provide access to NZTA and Auckland Council or their contractors to enable them to undertake any drainage improvement works required within or adjacent to the Bateman family property.

Noise

18.2 NZTA shall construct a concrete 0.8 metre high barrier between the Busway and the property in compliance with the letter from Marshall Day Acoustics Limited dated 18 December 2002 (attached as Appendix 1). The detailed design of this barrier is to be finalized as part of the busway detailed design.

18.3 NZTA shall construct a 0.8 metre high solid concrete New Jersey Barrier on top of the retaining wall between the motorway and the busway as also described in Appendix 1; the detailed design of this barrier is to be finalised as part of the busway detailed design.

18.4 NZTA shall construct a 1.8 metre high barrier at the rear of the Sunnynook Station between the proposed bus shelter and the end of the platform to mitigate any reflection of noise from the northbound bus shelter, the detailed design of this barrier is to be finalised as part of the busway detailed design.

18.5 NZTA agrees that any retaining wall to be constructed for the purposes of the Sunnynook Station shall be constructed from non-reflective materials to mitigate any potential noise effects.

Landscaping

18.6 NZTA shall undertake screen planting, consisting of native trees, shrubs and ground cover between Sunnynook Station, the busway and the property, as shown on the attached plan (titled "North Shore Busway Project: Amended Landscape Development for Sunnynook Bus Station, Figure 2") to provide effective screening. The planting, including the planting shown on the embankment between the busway and the motorway, will be undertaken as soon as practicable following the construction works and within the first planting season to provide effective screening.

18.7 The landscaping and planting provided for under clause 18.6 shall be planted at Pb28 grade so that the plants are approximately 1.5 metres high when planted.

18.8 All planting shall be tended and maintained to ensure the full establishment and effectiveness of the landscaping including replacement planting where necessary.

Date: 16/01/2018

Attachments

No attachments.

Report Prepared by:

Cosette Saville

Planner

Planning North West and Islands

5. SECTION 181(3) DETERMINATION

Having read the council planner's report and recommendations on the NoR, I am satisfied I have adequate information to consider the matters required by the Resource Management Act 1991 (the RMA) and to make a decision under delegated authority.

Accordingly, this Notice of Requirement for an alteration to Designation 1426 – Westlake Station in the Auckland Unitary Plan Operative in Part is confirmed under section 181(3) of the RMA as agreed and set out in section 4 of this report.

Name:

David Sanders

By James. 16/1/18.

Title:

Team Leader - Planning North West and Islands

Signed:

Date:

SCHEDULE OF ATTACHMENTS

Attachment

Auckland Transport s181(3) Notice of Requirement for an alteration to

A:

Designation 1426 – Westlake Station.



SPECIALIST PLANNING & RESOURCE
MANAGEMENT CONSULTANTS

Section 181 Notice of Requirement for Minor Alterations to Conditions of Designation 1426 'Westlake Bus Station'

Applicant:

Auckland Transport

Prepared by: Gael McKitterick
Burton Planning Consultants Limited
PO Box 33-817
Takapuna
Auckland 0740

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Annexure 2	Designation 1426 : Conditions
Annexure 3	Marshall Day Acoustic Noise Report No 97245B for the Busway
Annexure 4	Marshall Day Letter dated October 2017 Re Changes to Acoustic Wall
Annexure 5	Affected Party Approval from WGHS

File:15/036

Date: December 2017

Form 20

Notice of Requirement by a Requiring Authority for an Alteration to a Designation under Section 181 of the Resource Management Act

File:15/036 Page **2** of **20**

1.0 NOTICE OF REQUIREMENT TO ALTER A DESIGNATION TO:

Auckland Council Private Bag 92516 Wellesley Street Auckland 1141

2.0 NOTICE OF REQUIREMENT TO ALTER A DESIGNATION FROM:

Auckland Transport (an Auckland Council Controlled Organisation) gives notice of a requirement for an alteration to an existing designation, being an alteration to conditions 1, 6.2(g), 7.1 and 7.9 of Designation 1426 'Westlake Bus Station'.

3.0 THE SITE TO WHICH THE REQUIREMENT APPLIES:

The land affected by this notice of requirement is shown in the plans in **Annexure 1**, and relates to some 40m of the common boundary between Shakespeare Road and Westlake Girls High School (designation 4558), south of the Wairau Road intersection. The notice relates to part of the Westlake Busway-Shakespeare Road extension designation (1426), the location of which is shown in Figure 1 below.

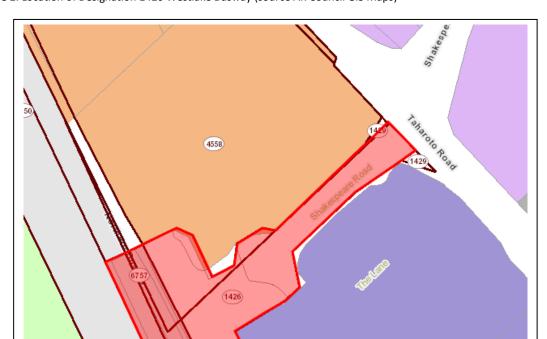


Figure 1: Location of Designation 1426 Westlake Busway (source AK Council GIS Maps)

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4.0 NATURE OF PROPOSED PUBLIC WORK:

The notice of alteration under Section 181 of the Resource Management Act (RMA) relates to four conditions (being condition 1, 6.2(g), 7.1 and 7.9) which apply to the Westlake Bus Station (known as "Smales Farm Bus Station"), being designation 1426 in the Operative in Part: Auckland Unitary Plan (OiP:AUP). The purpose of the amendment to the conditions is to enable changes to be made to part of the existing 2 m high acoustic wall which is located within the road reserve of Shakespeare Road, adjoining Westlake Girls High School (WGHS). That acoustic wall was constructed as a condition of designation 1426.

Specifically, it is considered that the requested alteration to the conditions falls under the provisions of section 181(3) which provides for minor changes to a designation and which exempts those alterations from RMA subsections 168 to 179 which otherwise apply to an alteration as if it were a requirement for a new designation.

Designation 1426 in the OiP: AUP provided for the construction of the Westlake Bus Station and for the extension of Shakespeare Road, from the Wairau Road intersection to the new Bus station. The designation formed part of the Northern Busway project which was constructed from 2003-2005 in accordance with a series of designations for the busway itself and the various bus stations along its route.

Designation 1426 for the Westlake Bus station is subject to eighteen specific conditions, (refer to **Annexure 2**) with the conditions relevant to this application (being 'General' 'Landscaping' and 'Noise Mitigation'), reading as follows:

1. General Conditions

1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in "Volume 3 – A3 Plans" forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical Reports in Volume 5, subject to the final design and the conditions set out below.

6. Landscape Mitigation Conditions

- 6.1 The PMP shall include a Landscape Mitigation Plan prepared by a suitably qualified and experienced landscape architect who shall have regard to:
- a. The Landscape Mitigation Plan prepared by LA4 Landscape Architects and contained in the Esmonde Interchange Project: Assessment of Environmental Effects Volume 10c; and
- b. The recommendations contained in the audits by Melean Absolum and Chris Boucher.

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- 6.2 The Landscape Mitigation Plan shall provide for:
- a. The integration of the proposed works into the surrounding landscape;
- b. Appropriate consideration of the angle and extent of batter slopes;
- c. Appropriate screening of existing land-uses along Fred Thomas Drive;
- d. Design of borrow and disposal areas for excess fill to avoid significant visual impact, and to maximise integration with the general form of the surrounding landscape;
- e. Ecological mitigation measures (eg revegetation) required in accordance with the Ecological Mitigation Condition;
- f. Mitigation of effects on properties in the vicinity of the busway;
- g. Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway;
- h. Detailed designs of the acoustic barriers, retaining walls, and earth bunds in conjunction with the engineers where necessary; and
- i. The identification of existing trees and vegetation sited on the boundary of the Busway designation that ought to be retained for screening purposes.
- 6.3 The Landscape Mitigation Plan shall include details of:
- j. All proposed planting (including species, species size, densities, areas and locations);
- k. The planting programme;
- I. The maintenance programme. This programme shall include details of weed control, performance standards specifying allowable percentage survival rates, and replacement of any planting features; m. The sufficiency of the soil medium to sustain all planting proposed; and
- n. An appropriate maintenance regime.
- 6.4 All landscape mitigation planting shall be implemented during the first planting season following completion of the project construction works providing climatic conditions are suitable, otherwise at the first practicable opportunity thereafter. Following completion of planting, the Requiring Authority shall submit to the Auckland Council a report by the landscape architect on the implementation of the landscape plan.
- 6.5 Where practicable, any planting utilising native plants shall use plants genetically sourced from the ecological district.
- 6.6 Exposed cut and fill batters and slopes shall be re-vegetated as soon as practicable after construction.

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7. Noise Mitigation Conditions

- 7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the Transit NZ Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited.
- 7.2 The PMP shall include a Noise Mitigation Plan prepared by a suitably qualified noise consultant. The purpose of the plan is to describe the methods by which noise associated with traffic using the roading and the bus stations within the designation will be made to comply with specified noise limits at all affected dwellings and schools in the vicinity of the area affected. Where the ambient sound level is required to determine design limits then this shall be done prior to construction commencing.
- 7.3 The Requiring Authority shall ensure that all construction works are carried out in accordance with NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work".
- 7.4 The PMP shall include a Construction Noise Management Plan. The purpose of the Plan is to describe the methods by which noise associated with the construction of the work will be managed to comply with condition 7.3 above. In particular, the Construction Noise Management Plan shall identify:
- a. The location of permanent acoustic fences to be installed prior to the commencement of the main construction works:
- Methods of managing noise;
- c. Noise monitoring methods, including details of methods, equipment, location and frequency;
- e. Contingency measures in the event of any incidence of non-compliance; and
- f. Procedures for handling noise complaints.
- 7.5 Where the requirements of condition 7.4 are unable to be met, the alternative strategies that have been developed following consultation with affected landowners will be implemented. Such alternatives may include, but not be limited to, temporary relocation of occupiers, compensation for occupiers and purchase of the affected properties.
- 7.6 Construction works shall at all times be undertaken in accordance with the Construction Noise Management Plan.
- 7.7 Where practicable, acoustic barriers required to meet NZTA Noise Guidelines in particular locations, shall be erected prior to commencement of the construction works in those locations.
- 7.8 Where temporary acoustic barriers are proposed in the Marshall Day Report, and where their retention would result in effective traffic noise reduction for residents or educational facilities, they shall be built to a standard such that the barriers will be able to remain permanently in place at heights approved under condition 3.3, taking into consideration traffic noise reduction visual and landscaping factors and consultation with adjoining property owners.

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7.9 Unless:

a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where additional traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not exceeding 45 dBA Leq, or the ambient noise level existing prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4.

Note: changes to conditions 1, 6.2(g) 7.1 and 7.9 only are sought.

A copy of the Marshall Day Acoustic Limited (MDA) noise report (No 97245B) which is referenced in Condition 7.1 above is included in **Annexure 3.** Section 7.1.2 of the MDA report refers to the provision of a 2 m high acoustic wall along the boundary between Shakespeare Road and Westlake Girls High School (WGHS) to provide acoustic protection for the school including for the adjoining music classrooms.

5.0 EXISTING ACOUSTIC WALL:

As shown in the plans in **Annexure 1**, and in the photograph in Figure 2 below, in accordance with condition 7.1 of designation 1426, a 2m high acoustic wall of some 90m in length is located within the road reserve of Shakespeare Road, adjoining WGHS.



Figure 2: Aerial Photograph (source Google maps)

The acoustic wall commences at the entrance to the school's western car park (generally opposite the Westlake Bus Station), and extends some 90 metres to the east. Thereafter the common boundary between WGHS and Shakespeare Road is defined by an open pool style fence. The acoustic wall consists of exposed aggregate concrete panels with a series of insert landscaped panels (backed by wood panel rather than concrete). A 7m wide sliding

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acoustic gate is located within the acoustic wall, with that gate provided in conjunction with the bus way project as an additional service access for WGHS. A series of bus stops are sited along the Shakespeare Road frontage, with the associated bus shelters attached to the acoustic wall itself. Both the acoustic wall and the pool style fence are sited on top of a retaining wall, (with the school grounds located some 2-2.5 metres below the road level).

The photographs in Figures 3 -5 below show the existing acoustic wall with associated landscaping, the sliding gate and the pool style fence in the vicinity of the Wairua Road intersection.

Figure 3: Acoustic wall with landscaping, looking east toward Wairua Road (Source Google Maps)



Figure 4: Acoustic Fence with Sliding Gate, with old school hall behind



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Figure 5: Showing Eastern End of Acoustic Fence and Pool Style Fence



6.0 NATURE OF PROPOSED CHANGE TO CONDITIONS:

6.1 Notice of Change to Conditions

Pursuant to section 181 of the RMA, Auckland Transport gives notice to Auckland Council that it is required to alter conditions 1, 6.2(g), 7.1 and 7.9 of Designation 1426 to read as follows (changes underlined and in bold):

1. General Conditions

1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in 'Volume 3-A3 Plans' forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical reports in Volume 5, subject to final design and conditions set out below. Provided that in respect to the design of the acoustic wall located on Shakespeare Road adjoining Westlake Girls High School, that part of the wall located in Shakespeare Road to the east of the existing music block, shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect plan SK-035.

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- 6. Landscape Mitigation Conditions
- 6.2 The Landscape Mitigation Plan shall provide for:

....

(g) Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway, provided that this does not apply to the 1.3m high acoustic fence on the common boundary between Shakespeare Road and Westlake Girls High School;

7. Noise Mitigation Conditions

7.1 The project shall as a minimum standard, be designed and constructed to comply with the limits within the NZTA guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report "North Shore Busway Project, SH1 busway Report no 97245B' by Marshall Day Acoustic Limited. Provided that the acoustic wall which is located on the common boundary between Shakespeare Road and Westlake Girls High School shall be constructed in accordance with the Marshall Day Acoustic Limited letter dated November 2017 and associated Athfield Architect plan SK-035.

7.9 Unless:

- a. Otherwise agreed between the Ministry of Education (MOE) and the requiring authority; or
- b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where additional/traffic noise resulting from the Busway or associated new works increase above 45 dBA Leq (0830 to 1530hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not exceeding 45dBA Leq, or the ambient noise level existing prior to the establishment of the Busway, whichever is higher. This noise level shall be achieved together with the ventilation requirements of the New Zealand Building Code, clause C4.
- c. Provided that clauses (a) and (b) above shall not apply in respect to the following two structures located within Westlake Girls High School grounds, being (1) the Event Centre, and (2) the eastern end of the music block which is protected by a 2m high concrete acoustic wall located within Westlake Girls High School.

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6.2 Explanation of Reasons for Proposed Change to Condition 7.1

The need to alter condition 7.1 relating to the acoustic wall along Shakespeare Road has arisen due to changes which are occurring at WGHS. In this respect, WGHS is proposing to demolish the existing old school hall that was constructed in 1958 and which, due to its size and design, no longer meets the school's needs. The hall, which is located close to the common boundary with Shakespeare Road, will be replaced with a modern, multi-purpose Event Centre. As shown in the plans in **Annexure 1**, the Event Centre will be located closer to Shakespeare Road than the existing hall. An Outline Plan of Works application for the construction of the Event Centre has been prepared and has already been lodged with Auckland Council, and is consequently at the same (or similar) time as this notice is being served on Auckland Council under section 181 of the RMA.

Unlike the existing outdated school hall, the new Event Centre has been designed having specific regard to the need to ensure that the effects of noise from external sources, such as buses on Shakespeare Road, are appropriately mitigated. As a consequence a 2m high acoustic wall along almost the entire common boundary with Shakespeare Road is no longer required for noise mitigation adjoining the Event Centre. Furthermore, due to its height, the existing wall will prevent views into the new Events Centre and into the associated courtyard which will be located between the building and the common boundary with Shakespeare Road.

Accordingly, it is now proposed to remove a 40m length of the acoustic wall commencing generally from the eastern end of the music classrooms, in accordance with the plans in **Annexure 1.**

In order to protect the existing music class rooms which are located immediately to the west of the new Event Centre, a new 2m high concrete block wall will be provided within WGHS immediately to the south east of the music suite. The block wall will extend 9m from Shakespeare Road to the new Event Centre. The wall will be constructed by WGHS and forms part of the outline plan of works submitted separately by the MOE for the new WGHS Event Centre. The construction of that wall will ensure that the music classrooms continue to be protected from road noise.

To the east of the music classrooms, the complete removal of the existing acoustic wall is proposed for a distance of some 21m. The removal of the wall will enable the creation of an 'urban common' between Shakespeare Road and the Event Centre, being an expansive area of seating and paving for use by students waiting to catch buses along Shakespeare Road. In this location, Shakespeare Road is heavily used by pedestrians accessing the bus way. The street also contains a significant number of bus stops, which are intensively used by students before and after school. The 'urban common' will also be available for loading activities for the Event Centre when required.

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Beyond the 'urban common', approximately a 20 length of the 2 m high acoustic wall will be replaced by an acoustic fence of 1.3m in height constructed of sheet steel panels with lapped vertical joins, placed on top of the existing retaining wall. The provision of the 1.3m high steel acoustic fence in this location will ensure that the adverse noise effects on the Event Centre arising from cars and buses in Shakespeare Road, will continue to be appropriately mitigated.

Beyond the acoustic fence, the existing pool style fence will be removed for a distance of some 7 m, and will also be replaced by the 1.3m high acoustic fence., with that fence extending to the side entry door to the Event Centre. Thereafter, the existing pool style fence on the common boundary will be removed, with part of the Event Centre wall adjoining the road reserve at this point. Finally, to the east of the Event Centre, a 6.4m length of the pool style fence will be retained adjoining the landscape strip beside Wairua Road. These changes are all set out on plan SK- 035 in **Annexure 1.**

6.3 Explanation of Reasons for Changes to Conditions 1, 6.2(g) and 7.9

The proposed changes to conditions 1, 6.2(g) and 7.9 arise as consequential changes resulting from changes to the acoustic wall. The change to condition 1 is required to include reference to the relevant new plans and MDA letter in that general condition.

The proposed change to condition 6.2(g) is necessary due to the fact that this condition requires that planting be provided between all noise barriers and the carriageway. In respect to the proposed 1.3m high acoustic fence, landscaping is not considered to be necessary having regard to the reduced height of the wall which will have significantly less visual dominance than the existing 2m high fence, and that fact that the subject wall has a total length of only 20m, with the area to the west of the wall comprising a landscaped court yard.

The proposed change to condition 7.9 is required to identify that AT (the requiring authority) is not liable for compensation in the event that the noise in either the Event Centre or the music suite exceeds 45dBA Leq in the specified hours. This change is required for the reason that the acoustic wall previously constructed by AT to mitigate the effects of traffic noise is to be removed at the request of WGHS. WGHS will provide a new 2m high concrete block acoustic wall within WGHS to protect the eastern end of the music suite, and this will form part of WGHS's OPW for the school upgrades. The Event Centre will be protected by the proposed 1.3m high acoustic fence along the Shakespeare Road boundary.

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7.0 EFFECTS ON THE ENVIRONMENT:

It is considered that the proposal to alter the Conditions of designation 1426 to enable changes to be made to part of the existing 2m high acoustic wall which is located on the common boundary between Shakespeare Road and WGHS, will have less than minor adverse effects on the environment. In this respect:

Noise:

The MDA letter dated 27 October 2017 in **Annexure 4** confirms that the provision of a new 2m high precast concrete wall extending from the Shakespeare Road boundary for some 9m northeast to the rear of the new WGHS Event Centre will ensure that there is no change in noise effects within the music department classrooms. The 9m length of wall is being provided by WGHS as part of the OPW for the Event Centre and does not form part of the NOR.

The MDA letter in **Annexure 4** also confirms that the installation of a new 1.3m high steel fence located as shown on plan SK 035 in **Annexure 1**, in conjunction with the proposed design of the Event Centre will ensure that an internal noise level of less than 45 dB L_{AEQ} can be achieved as required by the designation conditions. The provision of the 1.3m high 3mm thick fence is required in this location to continue to provide appropriate mitigation to the effects of traffic noise. The boundary fence works will be undertaken at the same time that works are occurring to construct the new Event Centre. The coinciding of timing of these works will ensure that the Event Centre and classrooms are not adversely impacted by additional bus noise.

Amenity:

The requested alteration to Conditions 1 and 7.1 of Designation 1426, will make a positive contribution to pedestrian and streetscape amenity. In this respect, the complete removal of the acoustic wall for a distance of some 20m will enable a landscaped urban common) to be created within WGHS adjoining Shakespeare Road. The urban common and associated seating will provide an enhanced waiting area for students using buses, with better separation from traffic and activity on Shakespeare Road.

Further to the east, the replacement of the existing 2m high acoustic wall, with a 1.3m steel fence will provide pedestrians on Shakespeare Road with views down into the adjoining lower level courtyard located between the Shakespeare Road boundary and the Event Centre. It will also provide views of activity within the Event Centre itself. In contrast, the existing acoustic wall on the road boundary, completely blocks views to the north through the adjoining school. The opening up of views into WGHS, and in particular into the Event Centre, will enhance visual connectivity and between the street and the adjoining land use.

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The existing 2m high acoustic wall on Shakespeare Road includes small inset landscape bays spaced along the length of the wall. The removal of a total length of some 40m of the acoustic wall in the vicinity of the Westlake Girls High School Event Centre will result in the loss of two existing inset landscape bays, refer to Figure 6 below. These two particular landscape bays make a very limited contribution to streetscape amenity as the climbers within have made very little growth since their establishment. It is considered that the revised fence/wall design in this location will make a significant improvement to streetscape amenity. The proposed changes will enable views from the street in to the landscaped urban common which is to be created within WGHS, with the new 1.3m high painted steel fence, providing a less dominating street feature, with views available down into the adjoining Event Centre. The reduced thickness of the fence will result in a wider footpath and therefore improved pedestrian amenity. Images of the proposed steel fence are included in Annexure 2. The fence will be painted in a dark colour of similar tone to the existing aggregate concrete noise wall and existing pool fence which is to be retained. The new fence can also be readily cleaned. Consequently, the provision of additional landscaping between the 1.3m acoustic fence and the carriageway is not considered to be necessary in this location.

Figure 6: Two Landscape Bays to be Removed



Traffic

The removal of a length of 20m of the acoustic wall (including the 7m wide sliding acoustic gate) will enable the creation of an 'urban common' between the Event Centre and Shakespeare Road. This landscaped area, will also be used for servicing of the Event Centre. One of the bench seats has been designed to swivel to the side, enabling a delivery truck to reverse into the loading area beside the Event Centre. The potential effects of this activity are considered as part of the Outline Plan of Works for the WGHS Event Centre. Notably,

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the need for specific provision for a loading access for WGHS on the Shakespeare Road frontage was recognised and provided for as part of designation 1426, and the associated agreements between the school, the Council (then North Shore City Council) and NZTA. The sliding service access gate was provided in conjunction with the acoustic wall construction, but has been essentially unused up until now. That being the case, it is considered that the effects of the use of this area for loading purposes in association with the new Event Centre are effects which have previously been anticipated and provided for. Additionally, the activity is expected to be low level, (approximately 1 truck per week) primarily delivering musical instruments to the rear of the Centre, and will be managed to avoid busy traffic and pedestrian hours. That being the case, it is considered that eh effects will be less than minor.

Construction:

The potential for adverse effects to arise during construction are temporary in nature and are consistent with those normally experienced as part of construction activity. Works will be undertaken in accordance with normal construction hours and noise standards. Due to the close proximity to WGHS, the school is the party most likely to be affected by construction works. However, the school itself will be undertaking these works as part of the Event Centre project, which involves both the demolition of the old school hall and the construction of a new Event Centre. As the works on the acoustic wall will coincide with the much larger works being undertaken within the WGHS grounds in association with the Event Centre, the potential for adverse effects on the school will be minimised. A Land Management Plan will be prepared and will be submitted to Council in association with the Corridor Access Request (for works within the road reserve), which will address matters such as the management of noise, dust and public access during works on the wall. That being the case, it is considered that the adverse effects of construction will be less than minor.

8.0 CONSIDERATION OF ALTERNATIVE SITE, ROUTES & METHODS

The site (Shakespeare Road) is wholly owned by Auckland Transport and it has been concluded in section 7.0 that the changes to the acoustic wall will generate adverse environmental effects which are less than minor, therefore in accordance with 168A (3) (b) alternative sites have not been considered. The proposal to alter the conditions to Designation 1426 has been developed in conjunction with the WGHS proposal to construct a new Event Centre close to Shakespeare Road, and as part of that project to provide for service access to the back of the Event Centre from Shakespeare Road. Benefits include enhanced pedestrian amenity for students using buses on Shakespeare Road and the enabling of views into the Event Centre.

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9.0 THE PROJECT AND DESIGNATION ARE REASONABLY NECESSARY FOR ACHIEVING THE OBJECTIVES OF THE REQUIRING AUTHORITY

The project objectives for the Westlake Busway related to the establishment of the busway station as part of the Northern Busway project. The conditions on the designation, including those relating to landscaping (condition 6) and noise (condition 7) sought to address the potential adverse effects arising from the designation and associated works. The installation of the acoustic wall was required to protect the existing classrooms and hall from the effects of traffic on Shakespeare Road extension. With the changes now proposed at WGHS, the retention of a 2m high wall along the entire length of Shakespeare Road is no longer either required or desirable.

Importantly, the proposed alteration to conditions 1, 6.2(g), 7.1 and 7.9 will not impact the operation of the public work nor result in greater adverse environmental effects.

10.0 OUTLINE PLAN WAIVER

It is considered that the details of the proposed work have been included in this NOR, with a detailed description at Section 6, and Drawing SK-035 in Annexure 1. It is therefore requested that Auckland Council waives the requirement for an outline plan for the proposed works pursuant to Section 176A(2)(c).

11.0 RESOURCE CONSENTS REQUIRED

The proposed works that will be undertaken following the alteration to the conditions will comprise the complete removal of a length of 20m of acoustic wall, and the replacement of another 20m section of acoustic wall with a 1.3m high steel acoustic wall. These works do not require separate district or regional resource consent.

The construction of 9m length of concrete panel acoustic wall within WGHS extending north from Shakespeare Road to the new Event Centre will be included within the Outline Plan of Works, approval of which is being sought separately and concurrently by WGHS for the Event Centre.

12.0 CONSULTATION

The notice of requirement to alter conditions 1, 6.2(g), 7.1 and 7.9 of designation 1426 by Auckland Transport has been prepared on behalf of Auckland Transport at the request of

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WGHS. WGHS has provided its affected party approval to the notice of requirement, refer to **Annexure 5**.

Due to the location of the works directly adjoining WGHS, and the nature of the works (an acoustic wall) it is considered that no other parties are potentially affected. That being the case, not other consultation has taken place.

13.0 SECTION 181 ALTERATION OF DESIGNATION

The procedures for altering an existing designation are set out in Section 181 of the RMA. An alteration under section 181 may be to the physical boundaries of the designation, the scope/purpose of the designation, or the conditions imposed on the designation. Section 181 provides that a requiring authority may at any time give notice of a requirement to alter a designation to a territorial authority, and in clause (2) requires that the notice of alteration must be treated in the same way as a notice of requirement served under RMA ss168 or 168A. That is, the territorial authority is able to request further information, must make a decision on notification, and can only make recommendations to the requiring authority.

However, s181(3) provides an exception to this standard process. It provides as follows:

(3) A territorial authority may, at any time, alter a designation in its district plan or a requirement in a proposed plan if:

- (a) The alteration:
 - (i) involves no more than a minor change to the effects on the environment associated with the use or proposed use of land or any water concerned; **or**
 - (ii) involves only a minor change or adjustment to the boundaries of the designation or requirement; **and**
- (b) Written notice of the proposed alteration has been given to every owner or occupier of the land directly affected and they agree with the alteration; and
- (c) The territorial authority and the requiring authority agree with the alteration.

And sections 168 to 179 (and 198AA to 198AD) shall not apply to any such alteration.

In the following paragraphs the proposal is assessed against the requirements of section 181(3).

13.1 The Effects on the Environment

The assessment in section 7.0 has concluded that the alteration to the Conditions of the designation to enable changes to be made to part of the existing 2m high acoustic wall

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which is located on the common boundary between Shakespeare Road and WGHS, will have less than minor adverse effects on the environment.

Therefore, as required by section 181 clause (3)(i), the requested change to conditions 1, 6.2(g), 7.1 and 7.9 will result in a less than minor change to the effects on the environment. Indeed, the change to conditions will enable positive improvements to be made to streetscape.

13.2 Change to Boundary of Designation

Section 181 (3) (a) (ii) relates to changes to the boundary of land affected by a designation. In this case, there will not be a change to the boundary of the designation, and consequently, clause (a) (ii) is not relevant to the consideration of this proposal.

13.3 Written Notice

The only party which is affected by the proposed alteration to the designation condition is WGHS. WGHS is in agreement with the alterations to the conditions relating to the acoustic wall, and indeed the proposed changes to the wall are being undertaken at the request of the school as they arise from those changes in the vicinity of Shakespeare Road that are proposed as part of the Event Centre project. The Event Centre is the subject of a separate Outline Plan of Works application.

WGHS has provided affected party approval to the proposed change to condition 7.1, and this is included in **Annexure 5**.

14.0 CONCLUSION

Auckland Transport gives notice to Auckland Council, under Section 181(3) RMA, of a requirement to alter the conditions (conditions 1, 6.2(g), 7.1 and 7.9) of existing designation 1426 relating to Westlake Bus station. The proposed alteration relates only to a minor matter (height and location of an acoustic fence on Shakespeare Road). Condition 7.1 was imposed to address an effect of the designation, rather than being material to the operation of the bus station itself. The changes to conditions are being made at the request of WGHS, in conjunction with the school project to construct a new Event Centre close to Shakespeare Road. The design and location of that new Event Centre mean that a 2m acoustic wall is no longer required along the entire length of the common boundary between the school and the road. The construction of a new 1.3m high acoustic fence on a length of some 20m of the boundary of Shakespeare Road beside the Event Centre will ensure that the equivalent level of noise mitigation as was originally required to manage noise effects generated by the busway project on WGHS will be achieved. Furthermore, the requested changes will enable streetscape amenity to be enhanced for pedestrians and students awaiting buses, through

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the creation of an open courtyard incorporating seating within the school (beside the main bus stops) and the provision of views into activity areas (lower courtyard and Event Centre).

The nature of the proposal which relates to a condition on the existing designation for the operational busway means that in this instance, the consideration of other higher order documentation is not required. In this respect, the proposal remains entirely consistent with the designation as originally approved, with the protection of WGHS from intrusive bus noise, still achieved, as is intended by Condition 7.1. The purpose of the RMA, being the sustainable management of natural and physical resources, will continue to be met.

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Dated at AUCKLAND this day of DECEMBER 2017
Signature for and on behalf of the Authority Giving Notice

Auckland Transport

Jane Small

Infrastructure Division

Group Manager Property & Planning

Address for Service:

BURTON PLANNING CONSULTANTS LIMITED

PO Box 33-817 Takapuna Auckland 0740

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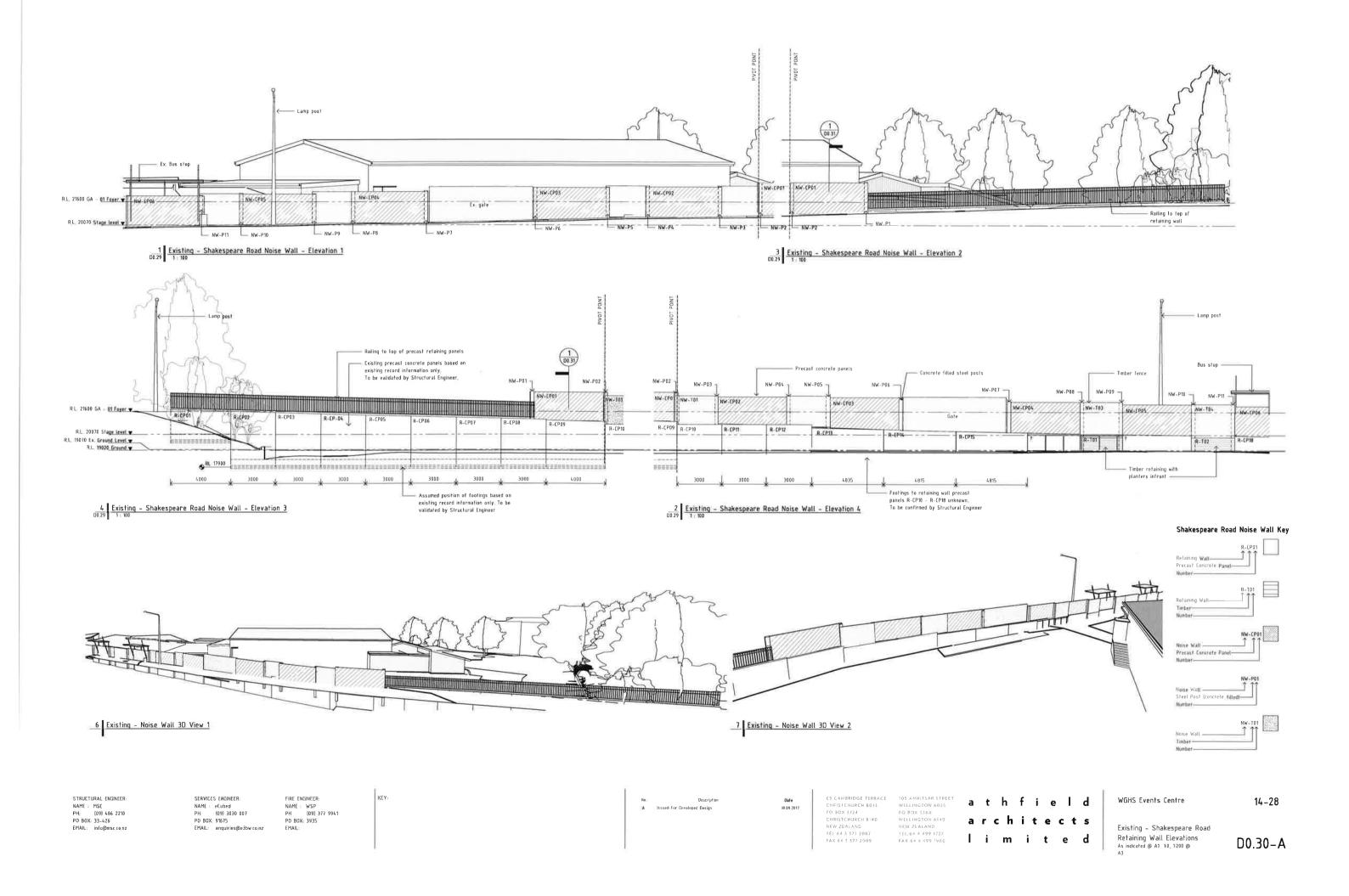
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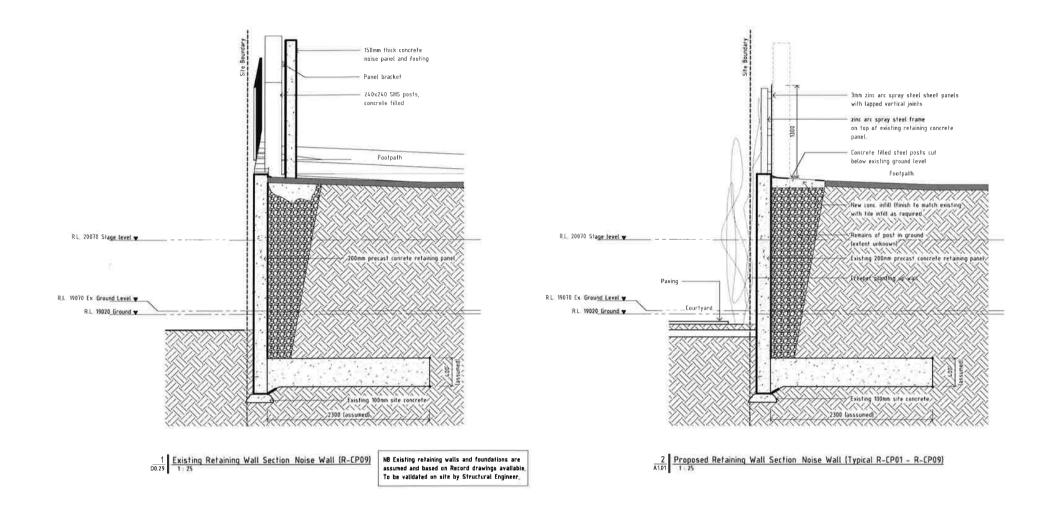
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File:15/036



Annexure 1 Plans





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No. Description
A Issued For Developed Design

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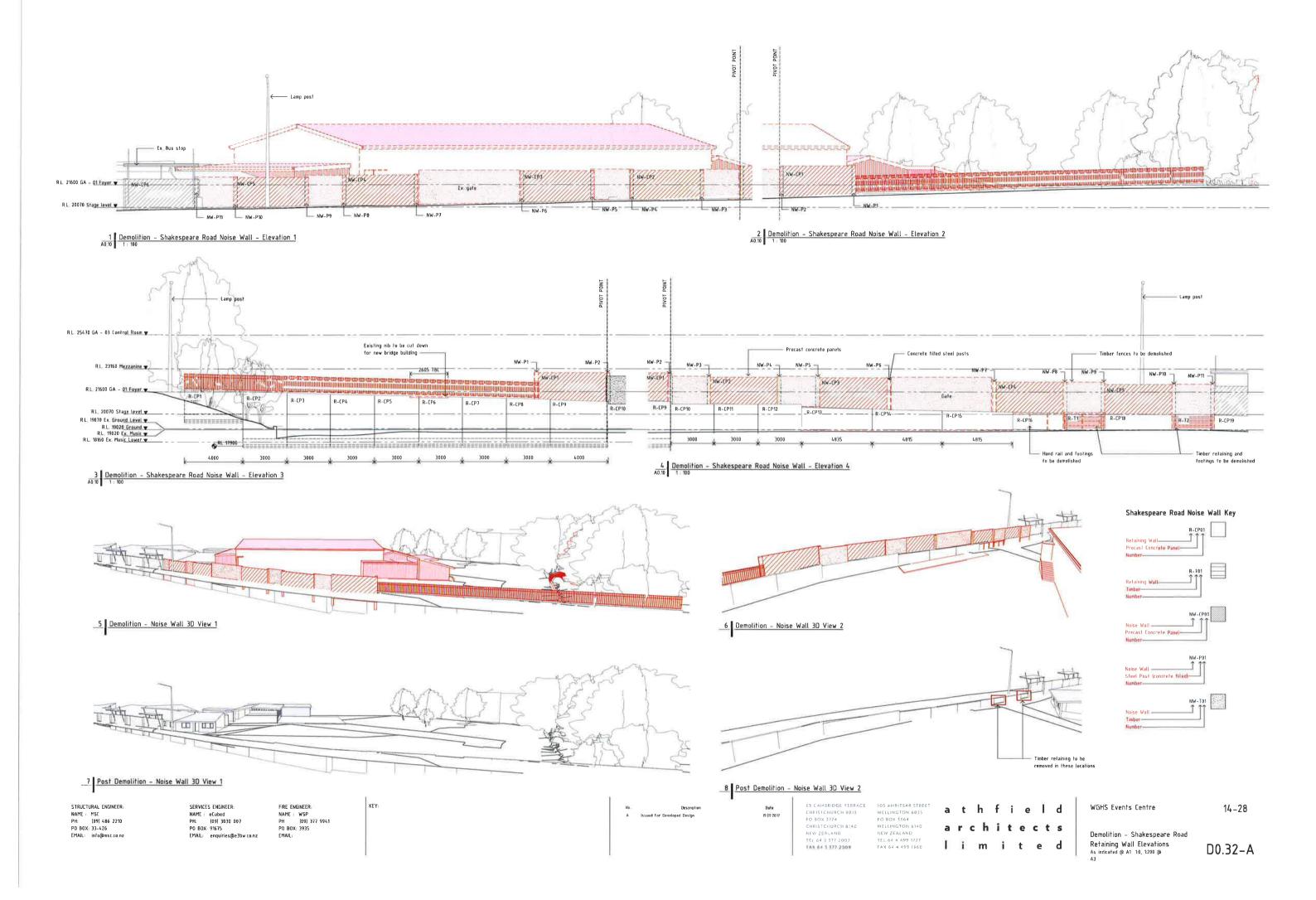
105 AMRITSAR STREET
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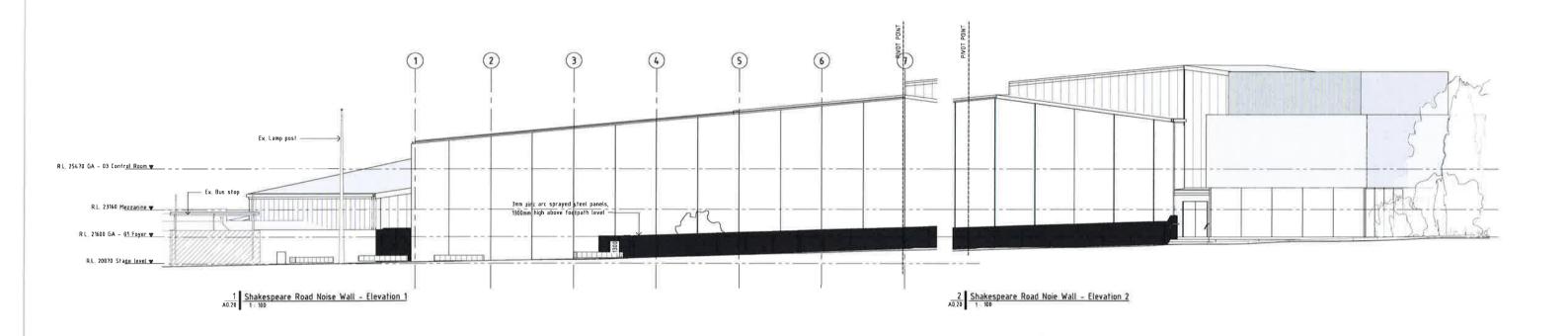
WGHS Events Centre

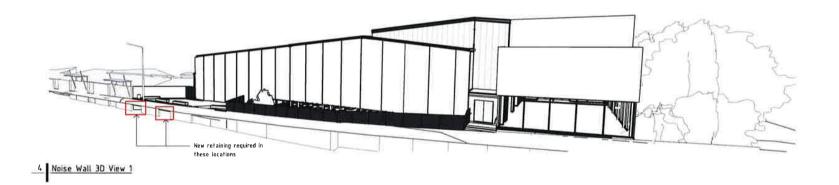
14-28

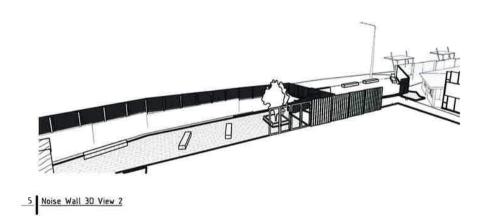
Existing - Shakespeare Road Retaining Wall Section 1 | 25 @ A1 1:50 @ A3

D0.31-A









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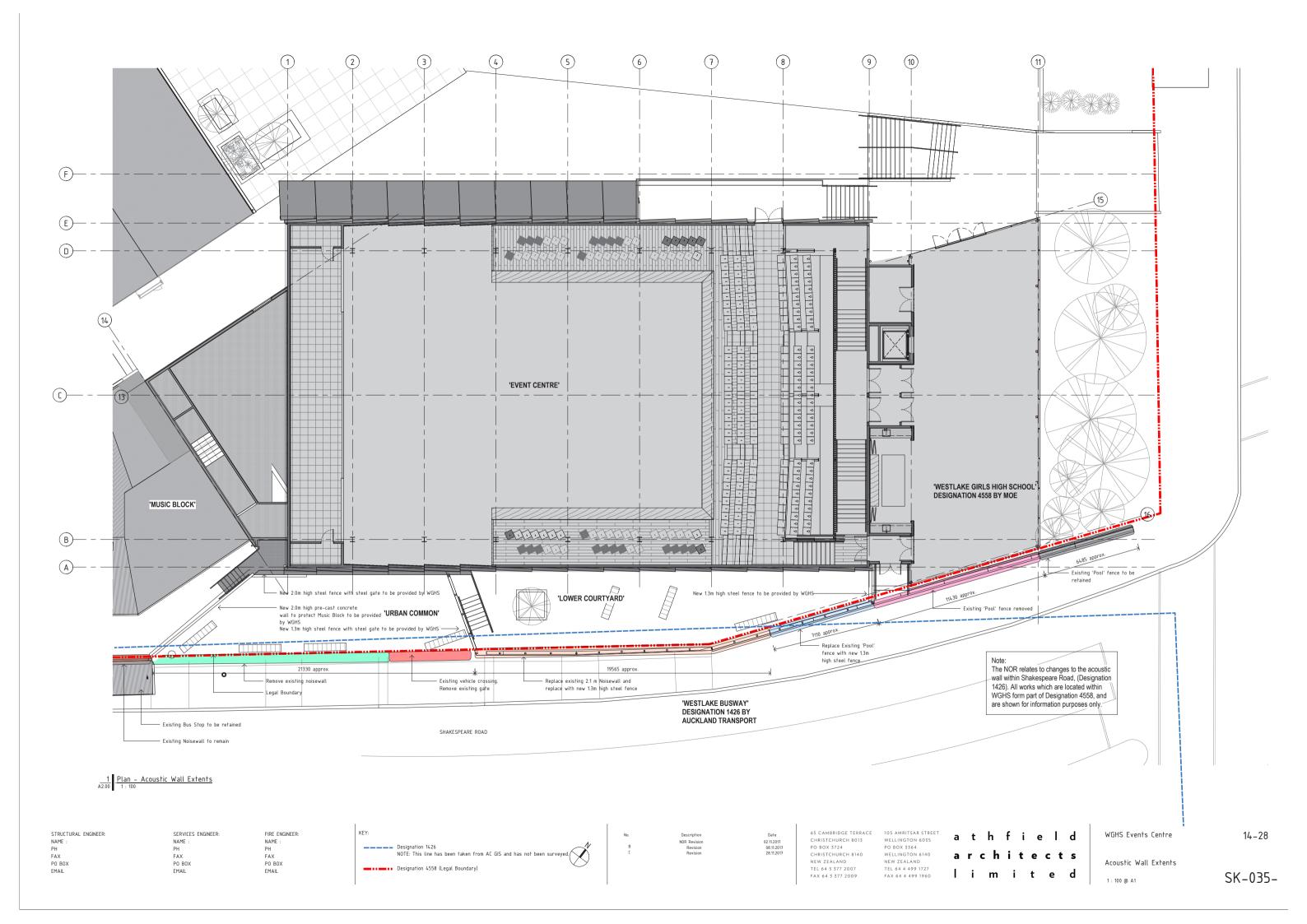
limited

WGHS Events Centre

14-28

GA Elevations - Shakespeare Road Noise Wall 1 100 @ A1 10, 1:200 @ A3

D0.33-A



memo

478 KARANGAHAPE ROAD NEWTON AUCKLAND 1010 NEW ZEALAND TEL 64 9 379 7331

ath field architects thfield rchitects t h field

PROJECT	WGHS – Events Centre	FILE NO.	14-28
FROM		DATE	10/11/17
SUBJECT	Noisewall – Proposed new fence.		

MATERIAL: 3-5mm Steel sheets. 1.3m.

FINISH: Paint finish with Graffiti protection layer.

DESCRIPTION: Steel Fence with expressed panel joints to be a dark colour to work with existing

exposed aggregate concrete panel noise wall and pool fencing that is being

retained.

See below images for materiality.



Proposed Elevation render below from Shakespeare Road showing Auditorium building:





Annexure 2

WESTLAKE
BUS STATION:
DESIGNATION 1426
CONDITIONS

1426 Westlake Station

Designation Number 1426

Requiring Authority Auckland Transport

Location Shakespeare Road (adjoins 78 Taharoto Road), Takapuna

Rollover Designation Yes

Legacy Reference Designation 175, Auckland Council District Plan (North Shore Section)

2002

Lapse Date Given effect to (i.e. no lapse date)

Purpose

Westlake Station - for the construction, operation and maintenance of roads, buildings, facilities and amenities (including any ancillary structures, works, or activities) for the purpose of providing a rapid transit facility for buses and high occupancy vehicles.

Conditions

The conditions below apply:

- 1. General Conditions
- 2. Duration of Designation
- 3. PMP and Outline Plans
- 4. Archaeological Mitigation Conditions (other than 4.3 and 4.4)
- 5. Ecological Mitigation Conditions (other than 5.5, 5.6 and 5.7)
- 6. Landscape Mitigation Conditions
- 7. Noise Mitigation Conditions
- 8. Geotechnical Mitigation Conditions
- 9. Vibration Mitigation Conditions
- 10. Traffic Mitigation Conditions except that:
- Condition 10.2 shall not apply
- Condition 10.1(ii) applies only to Notice 8 Westlake
- Condition 10.1(iv) applies only to Notices 8 and 9 Westlake and Sunnynook
- Condition 10.1(v) applies only to Notice 8 Westlake
- Condition 10.3 applies only to Notice 8 Westlake
- 11. Construction Management Conditions
- 14. Westlake Girls High School applies only to Notice 8 Westlake
- 18. Bateman: Stormwater Conditions applies only to Notice 9 Sunnynook (other than Condition 18.1(i)).

1. General Conditions

- 1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in "Volume 3 A3 Plans" forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical Reports in Volume 5, subject to the final design and the conditions set out below.
- 1.2 Prior to any works being commenced in particular location(s) of work, the Requiring Authority shall obtain all requisite resource consents for the location(s) affected under the Resource Management Act 1991.

- 1.3 Any land taken or held for the works shall be maintained to a reasonable standard until physical works commence.
- 1.4 At all times reasonable vehicular access shall be maintained to private properties not directly affected by construction and/or operation in the area affected. Where private properties are directly affected by construction and/or operations causing vehicular access to be temporarily prevented and no alternative can be utilised, the Requiring Authority shall ensure that the property owner is consulted with respect to the most suitable time for carrying out the work and the Requiring Authority shall minimise the period during which vehicular access is prevented.
- 1.5 A permanent liaison position from within the joint Project Governance Team of Auckland Council and the Requiring Authority will be appointed for the duration of the project. This person is to be available for ongoing consultation on all matters of concern to affected persons.
- 1.6 All contract documentation for physical works shall include reference to the designation conditions, any other resource consents (including conditions) and any approved mitigation or outline plan(s) held for the project.
- 1.7 Where requested by the owners, the Requiring Authority shall physically peg out the extent of the alignment in individually affected properties once the designation has been confirmed or all appeals have been determined, whichever is the later.

2. Duration of the Designation Condition deleted

3. Project Management Plans (PMP) and Outline Plans

3.1 The requiring authority shall prepare a PMP which shall include mitigation/management plans as referred to in conditions 5, 6, 7, 8, 9, 10 and 11. 3.2.

No works shall be undertaken in any particular location(s) until:

- a. The PMP, or such part(s) of the PMP as are relevant to the location(s) are approved in the manner provided for in condition 3.3; and
- b. Any outline plan(s) required by section 176A of the Resource Management Act 1991 (*RMA*) in relation to the works in the location(s), are approved in the manner provided in condition 3.3. 3.3

Approvals pursuant to condition 3.2(a) shall be obtained from the General Manager of Environmental Services, Auckland Council, and a senior regulatory officer of the Auckland Council who is at the time of the approval a member of the Project Governance Team for the management of the works (the approval officers).

Advice Note:

Where an outline plan or plans are required by section 176A RMA for works in any particular location(s) and the approval officers agree that the PMP or relevant part(s) of the PMP contains adequate details to satisfy section 176 RMA, then the Council may waive the requirement for an Outline Plan.

- 3.4 The works shall only be undertaken in accordance with an approved PMP and outline plan (where required).
- 3.5 If for any reason the PMP is not approved, the outline plan procedure under s 176A shall

apply. For the avoidance of any doubt, the mitigation/management plans prepared under conditions 5, 6, 7, 8, 9, 10 and 11 shall be included with any outline plan lodged for approval pursuant to s 176A.

4. Archaeological Mitigation Conditions

- 4.1 If construction work uncovers any archaeological remains, the Requiring Authority will immediately advise local iwi and the New Zealand Historic Places Trust and cease working in the affected area until any necessary authority required by the New Zealand Historic Places Trust is obtained. (All archaeological sites are protected under the provisions of the Historic Places Act 1993, whereby it is unlawful to modify, damage or destroy an archaeological site, whether recorded or not, without prior consent of the Historic Places Trust).
- 4.2 That all recorded archaeological sites and other cultural heritage sites in the vicinity of the works shall be clearly marked on the construction plans.
- 4.3 Any significant native trees removed from Smiths bush as part of the works to construct the busway shall be offered as gifts to Te Hao o Ngati Whatua and/or Ngati Whatua o Orakei.
- 4.4 Preliminary earthworks in the vicinity of Onewa Road and Sylvan Ave realignment will be monitored by a suitably qualified and experienced archaeologist.

5. Ecological Mitigation Conditions

- 5.1 The PMP shall include an Ecological Mitigation Plan prepared by a suitably qualified and experienced ecologist who shall have regard to:
- i. The recommendations contained in the audit by Shona Myers Natural Heritage Scientist, ARC as to planting and the implementation of mitigation measures;
- ii. The planting of appropriate plant species as identified in AC Technical Publication 148: Riparian Zone Management: Strategy for the Auckland Region, June 2001.
- 5.2 The Plan shall provide for:
- i. Planting in riparian zones where consent of the landowner is obtained;
- ii. Mitigation of potential coastal effects.
- 5.3 Wherever practicable, any disturbance of existing vegetation shall be avoided.
- 5.4 Where riparian vegetation disturbance cannot be practicably avoided, the Requiring Authority shall take care that any necessary disturbance is minimised as far as practicable. For the avoidance of doubt, this condition is not intended to prohibit necessary disturbance, which is defined as including, but is not limited to, vegetation clearance, the construction and operation of all roads, depots, storage facilities and spoil disposal areas.
- 5.5 The PMP shall include a plan of the proposed works within the eastern remnant of Smiths Bush in sufficient detail to determine the impact on existing vegetation and the Requiring Authority shall undertake its best endeavours to minimise the removal of vegetation from Smiths Bush.
- 5.6 All works within the eastern remnant of Smiths Bush shall be supervised by a suitably qualified and experienced arboriculturist.
- 5.7 As a means of attempting to retain the overall ecological viability of Smiths Bush, any vegetation removed from the eastern remnant of the bush shall be replaced where practicable in accordance with a native tree planting and maintenance regime approved under condition 3.3. and following

consultation with appropriate staff at the Auckland Council.

6. Landscape Mitigation Conditions

- 6.1 The PMP shall include a Landscape Mitigation Plan prepared by a suitably qualified and experienced landscape architect who shall have regard to:
- a. The Landscape Mitigation Plan prepared by LA4 Landscape Architects and contained in the Esmonde Interchange Project: Assessment of Environmental Effects Volume 10c; and
- b. The recommendations contained in the audits by Melean Absolum and Chris Boucher.
- 6.2 The Landscape Mitigation Plan shall provide for:
- a. The integration of the proposed works into the surrounding landscape;
- b. Appropriate consideration of the angle and extent of batter slopes;
- c. Appropriate screening of existing land-uses along Fred Thomas Drive;
- d. Design of borrow and disposal areas for excess fill to avoid significant visual impact, and to maximise integration with the general form of the surrounding landscape;
- e. Ecological mitigation measures (eg revegetation) required in accordance with the Ecological Mitigation Condition;
- f. Mitigation of effects on properties in the vicinity of the busway;
- g. Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway;
- h. Detailed designs of the acoustic barriers, retaining walls, and earth bunds in conjunction with the engineers where necessary; and
- i. The identification of existing trees and vegetation sited on the boundary of the Busway designation that ought to be retained for screening purposes.
- 6.3 The Landscape Mitigation Plan shall include details of:
- j. All proposed planting (including species, species size, densities, areas and locations);
- k. The planting programme;
- I. The maintenance programme. This programme shall include details of weed control, performance standards specifying allowable percentage survival rates, and replacement of any planting features;
- m. The sufficiency of the soil medium to sustain all planting proposed; and
- n. An appropriate maintenance regime.
- 6.4 All landscape mitigation planting shall be implemented during the first planting season following completion of the project construction works providing climatic conditions are suitable, otherwise at the first practicable opportunity thereafter. Following completion of planting, the Requiring Authority shall submit to the Auckland Council a report by the landscape architect on the implementation of the landscape plan.
- 6.5 Where practicable, any planting utilising native plants shall use plants genetically sourced from the ecological district.
- 6.6 Exposed cut and fill batters and slopes shall be re-vegetated as soon as practicable after construction.

7. Noise Mitigation Conditions

7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the NZTA Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited.

- 7.2 The PMP shall include a Noise Mitigation Plan prepared by a suitably qualified noise consultant. The purpose of the plan is to describe the methods by which noise associated with traffic using the roading and the bus stations within the designation will be made to comply with specified noise limits at all affected dwellings and schools in the vicinity of the area affected. Where the ambient sound level is required to determine design limits then this shall be done prior to construction commencing.
- 7.3 The Requiring Authority shall ensure that all construction works are carried out in accordance with NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work".
- 7.4 The PMP shall include a Construction Noise Management Plan. The purpose of the Plan is to describe the methods by which noise associated with the construction of the work will be managed to comply with condition 7.3 above. In particular, the Construction Noise Management Plan shall identify:
- a. The location of permanent acoustic fences to be installed prior to the commencement of the main construction works;
- b. Methods of managing noise;
- c. Noise monitoring methods, including details of methods, equipment, location and frequency;
- e. Contingency measures in the event of any incidence of non-compliance; and
- f. Procedures for handling noise complaints.
- 7.5 Where the requirements of condition 7.4 are unable to be met, the alternative strategies that have been developed following consultation with affected landowners will be implemented. Such alternatives may include, but not be limited to, temporary relocation of occupiers, compensation for occupiers and purchase of the affected properties.
- 7.6 Construction works shall at all times be undertaken in accordance with the Construction Noise Management Plan.
- 7.7 Where practicable, acoustic barriers required to meet NZTA Noise Guidelines in particular locations, shall be erected prior to commencement of the construction works in those locations.
- 7.8 Where temporary acoustic barriers are proposed in the Marshall Day Report, and where their retention would result in effective traffic noise reduction for residents or educational facilities, they shall be built to a standard such that the barriers will be able to remain permanently in place at heights approved under condition 3.3, taking into consideration traffic noise reduction visual and landscaping factors and consultation with adjoining property owners.

7.9 Unless:

- a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or
- b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where *additional*traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not *exceeding* 45 dBA Leq, or the ambient noise level *existing* prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4.

8. Geotechnical Mitigation Condition

8.1 A Geotechnical Mitigation Plan shall be prepared by a suitably qualified Geotechnical Engineer in consultation with Auckland Council. The plan shall be submitted to the Auckland Council prior to construction of any stage and shall take into account the recommendations of the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues' – November 2001.

9. Vibration Mitigation Conditions

- 9.1 The PMP shall include a Vibration Mitigation Plan having regard to the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001'. This Mitigation plan shall include details of how the works will comply with the requirement of German Standards DIN4150 "Structural Vibration in Buildings Effects on Structures" during construction and shall take into account the recommendations.
- 9.2 A dilapidation survey of 'at risk' buildings, as per the recommendations of the audit prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001', shall be undertaken prior to during and after completion of the construction works, provided the consent of any landowner and/or occupier can be obtained.

10 . Traffic Mitigation Conditions

- 10.1 The PMP shall include a Traffic Mitigation Plan based on its adopted design for the project. The Traffic Mitigation Plan shall include:
- a. Methods of mitigating the local and network wide effects of both the construction of individual elements of the project and the use of staging to allow sections of the project to be opened to traffic while other sections are still under construction;
- b. Methods of helping to accommodate the bus transport needs of pupils of Westlake Girls' High School through the development and operation of Westlake Station and the busway system, in the light of consultation with the School;
- c. Methods of limiting the use of the busway to emergency vehicles and no more than 350HOVs (excluding buses) per hour north of Esmonde Road, including a restriction on the access of HOVs through Constellation Drive Station to no more than 350HOVs;
- d. Details of a monitoring programme to be undertaken detailing the demand for car parking in the vicinity of the Sunnynook Station and Westlake Station prior to the opening of the Station and at regular intervals (a minimum of 2 per annum) for a minimum period of five years following the opening of the Station to the public and measures to manage any such demand. (This condition shall only apply to Notices of Requirement 8 and 9); and
- e. Details of pedestrian access to be provided within the Westlake Bus Station and along Shakespeare Road Extension (This condition shall apply only to Notice of Requirement 8).
- 10.2 In order to prevent potentially significant traffic disruption during and after construction, the existing Onewa Interchange shall continue to be fully operational (that is in the manner in which it currently operates) until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.
- 10.3 The public use of the Westlake Station shall not be allowed until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.

11. Construction Management Conditions

11.1 The PMP shall include a Construction Management Plan which shall refer to all conditions imposed on any relevant resource consents granted by the Auckland Regional Council.

- 11.2 The purpose of the Construction Management Plan is to set out methods by which any dust nuisance from construction will be avoided or minimised and by which the possibility of ground vibration during construction can be notified to adjacent land owners and occupiers. In particular, the Management Plan shall identify amongst other things:
- a. Specific methods by which dust will be managed, including cleaning vehicle tyres before vehicles enter public roads, wetting or covering surfaces and replanting disturbed areas;
- b. Contingency measures to ensure that, in the event of any dust nuisance arising, immediate remedial measures are implemented:
- c. Procedures for prior notification of the use of machinery likely to generate vibration effects beyond the area of the designation to properties where ground vibration may be felt;
- d. The means by which loss of vehicle access to be (sic) properties will minimise inconvenience to each property owner affected following consultation with affected property owners;
- e. Methods of ensuring pedestrian safety along public footpaths and particularly where works are proposed in close proximity to any school;
- f. Procedures for handling any dust and ground vibration complaints; and ·

In respect of Takapuna Normal Intermediate School the Management Plan shall include measures to address the following, in consultation with the School:

- i. Preventing students from gaining access to the construction site via the parking area off Northcote road or Smiths bush by the erection of such gates or fencing as may be agreed to by the School and the Requiring Authority;
- ii. Control of construction traffic moving between the construction site and Northcote Road so as to encourage the safe movement of students along Northcote Road; and
- iii. Minimising any adverse effects of construction on the playing field, in particular, dust nuisance.
- 11.3 The Requiring Authority shall ensure that the Construction Management Plan is complied with at all times during construction and that a copy is kept at all site offices.
- 11.4 The Requiring Authority and its contractors shall, in addition to complying with all other construction related conditions, take all reasonable steps to prevent or mitigate any nuisance or damage to adjacent properties during construction.
- 11.5 The Requiring Authority shall advise neighbouring owners and occupiers in the vicinity of the affected area of the date on which construction is to start, the expected duration of the work, and the telephone number of Site Liaison Officer who is able to respond to queries.
- 11.6 The location and extent of each stage of the site works will be identified and the Auckland Council advised of the construction timetable.
- 11.7 The earthworks contractor shall be required to maintain the stability of the land and property at the boundary of the site by the best practicable method and to monitor that such works are and remain effective.
- 11.8 Control measures shall be in place to ensure that any vehicles leaving the designated site do not deposit soil or other debris on public roads. Any such material deposited on any public road shall be cleaned up as soon as practicably possible at the Requiring Authority's expense.
- 11.9 Adequate provision shall be made during the earthworks construction for the protection of the existing public drains that traverse the designation. It is the Requiring Authority's responsibility to remedy any damages to the public drains that may occur during construction.

- 11.10 Protected vegetation areas and trees identified in the Landscape Mitigation Plan are to be retained and protected. Other sensitive areas of the site are to be identified and market for protection prior to the commencement of works.
- 11.11 Spoil from earthworks, surplus to site requirements, shall be disposed of at an approved landfill site.

12. Exmouth Road Pedestrian Overbridge

12.1 The Requiring Authority will use its best endeavours to obtain all necessary resource consents to allow reinstatement of the existing Exmouth Road pedestrian overbridge in the same or a similar location but extended to provide access across the bus lane to the foreshore. If such consents are granted the Requiring Authority shall reinstate the overbridge prior to the consents lapsing.

13. Westlake Boys High School

- 13.1 The School accessway, adjoining the western boundaries of the Altona road properties and connecting the northern and southern playing fields, shall be constructed with a minimum width of 4m and designed so that service vehicles and pedestrians can obtain safe and convenient access.
- 13.2 The western embankment adjoining the southern playing fields of the School shall be planted with *Alnus incana and Alnus rubra* at a size and spacing to be detailed within the Landscape Mitigation Plan.
- 13.3 The Requiring Authority shall use its best endeavours to undertake construction of the works in the area adjoining the northern playing fields during the School Summer holidays (approximately 10 December 31 January the following year).

14. Westlake Girls High School

- 14.1 The Requiring Authority shall use its best endeavours to ensure that the pin oak trees along the western boundary of the School are retained.
- 14.2 The Requiring Authority shall use its best endeavours to undertake construction of the works along the School boundary during the School Summer holidays (approximately 10 December 31 January the following year).

15. Takapuna Normal Intermediate School

- 15.1 A permanent 1.8 metre close boarded and battened wooden fence shall be erected along the western boundary of the school (as identified in the **attached** plan titled "Building Locations Takapuna Normal Intermediate School") prior to commencement of construction of the Busway.
- 15.2 Where the operation of the Busway results in increases in traffic noise above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any existing Takapuna Normal Intermediate School classroom with windows open (identified in the **attached** plan), then the requiring authority shall implement mitigation measures which result in the noise level not exceeding either 45 dBA Leq, or the ambient noise levels existing prior to the establishment of the Busway, whichever is higher. This noise level shall be achieved together with the ventilation requirements of the New Zealand Building Code, Clause G4 and New Zealand Standard 4303:1990 'Ventilation Requirements for acceptable indoor air quality' and in particular the requirements for educational institutions.
- 15.3 The Requiring Authority shall provide for:
- a. Replanting, or replacement where replanting is not practicable, of trees along the western boundary

that are required to be removed for construction of the Busway; and

b. Planting along the inside of the 1.8 metre fence (as described in condition 15.1) to mitigate the visual impact of the fence.

16. Smales Farm

- 16.1 The requiring authorities shall consult with a liaison person appointed by Shea Investments Limited and Betty Leila Holdings Limited in respect of:
- a. The detailed landscape plan to be prepared for the Busway in the vicinity of Smales Farm, for the purpose of ensuring that the landscaping for the Busway is integrated with the landscape development of Smales Farm; and
- b. That part of the Traffic Mitigation Plan that relates to Shakespeare Road Extension and Westlake Bus Station.

17. T D Jane, L J & M F Bilton & A S & S J Church

- 17.1 Subject to access being granted by the landowners of the properties legally described as Lot 127, DP 56740 (CT 9C/703), Lot 128, DP 56740 (CT C/104) and Lot 129, DP 56740 ("the properties"), the Requiring Authority will implement the landscaping plan prepared by LA4 Landscape Architects for the properties (titled "Proposed Planting to Mitigate Busway" **attached**) and any amendments to the planting shown on the plan as reasonably agreed between the landowners and the Requiring Authority. Failing agreement within 12 months of completion of construction of the fence, the Requiring Authority shall implement the LA4 landscaping plan (or its equivalent in value).
- 17.2 The Requiring Authority shall construct a fence on the properties' western boundaries prior to construction of the Project commencing adjacent to the landowners properties. The fence shall have the following specifications:
- a. To be located along the properties' western legal boundaries at 2 metres above ground level (as at 16 May 2003) at 7 and 10 Altona Road, and at 2 metres and rising to 2.5 metres above ground level at the northern end at 9 Altona road, for the full length of the boundaries of those properties;
- b. To be constructed of exterior grade (marine) plywood having a thickness of 17.5 mm or more;
- c. Plywood panels to be bolted to a framework so as to ensure no gaps or cracks and to meet the surface of the ground at their lower edge;
- d. Fence posts and framework to be specified by engineering design;
- e. NZTA shall construct gates in the fence if requested by the landowners of 7 and 9 Altona Road; and
- f. To be certified by an engineer as having a design life of 20 years (except that certification of the design life of the fence shall not apply to any gates requested to be constructed).

Advice note:

It is the Requiring Authority's intention to construct the fence as part of the enabling works during 2003 or by April 2004 at the latest.

- 17.3 Any construction activities exceeding the Construction Standard set out in condition 7.3 between chainage 13200 to 13000 shown on the designation plan "Harbour Bridge to Constellation Drive Designation Plans Westlake Boys High School, Drawing No. 7716C609" (the affected area") shall be undertaken between the hours of 8.00am 6.00pm on weekdays only and shall exclude the two weeks following Christmas Eve. For the avoidance of any doubt, condition 7.5 relating to works exceeding the Construction Standard continues to apply to the landowners as affected parties.
- 17.4 The Requiring Authority shall undertake earthworks in the affected area in one stage.
- 17.5 The Requiring Authority shall consult with the landowners on the mitigation plans referred to in

the conditions 5, 6, 7, 8, 9, 10 and 11 on the designation insofar as the mitigation plans affect the landowners' properties

18. Bateman Property

Stormwater

- 18.1 As part of the busway construction works, NZTA and Auckland Council shall provide the following measures to address stormwater effects:
- a. NZTA shall pipe the existing drain from chainage 15100 down to 14960 (see Figs 1a 1c, attached);
- b. NZTA and Auckland Council shall widen by 4m the motorway side of the existing drain located on the eastern side of the motorway, from the level of the top of the present vertical concrete wall, from chainage 14960m to Sunnynook Road Culvert (as shown on the **attached** Figs 1a 1c), such widening shall be at a grade as flat as possible from the existing concrete wall, consistent with efficient fall:
- c. Auckland Council shall use its best endeavours to reduce the volume of debris caught on the central wall of the Sunnynook Road Culvert by reshaping the leading edge of the central wall;
- e. NZTA and Auckland Council shall undertake the following measures to avoid slope instability and scour:
- i. Provide a batter toe restraint retaining wall to buttress the lower position of the batter;
- ii. Construct a gabion wall or timber pole wall to support the toe restraint retaining wall; and
- iii. To undertake grass seedling over the four metre widening of the berm.

Advice Note:

It is recorded that Mr Bateman has agreed to provide access to NZTA and Auckland Council or their contractors to enable them to undertake any drainage improvement works required within or adjacent to the Bateman family property.

Noise

- 18.2 NZTA shall construct a concrete 0.8 metre high barrier between the Busway and the property in compliance with the letter from Marshall Day Acoustics Limited dated 18 December 2002 (attached as Appendix 1). The detailed design of this barrier is to be finalized as part of the busway detailed design.
- 18.3 NZTA shall construct a 0.8 metre high solid concrete New Jersey Barrier on top of the retaining wall between the motorway and the busway as also described in Appendix 1; the detailed design of this barrier is to be finalised as part of the busway detailed design.
- 18.4 NZTA shall construct a 1.8 metre high barrier at the rear of the Sunnynook Station between the proposed bus shelter and the end of the platform to mitigate any reflection of noise from the northbound bus shelter, the detailed design of this barrier is to be finalised as part of the busway detailed design.
- 18.5 NZTA agrees that any retaining wall to be constructed for the purposes of the Sunnynook Station shall be constructed from non-reflective materials to mitigate any potential noise effects.

Landscaping

18.6 NZTA shall undertake screen planting, consisting of native trees, shrubs and ground cover between Sunnynook Station, the busway and the property, as shown on the **attached** plan (titled "North Shore Busway Project: Amended Landscape Development for Sunnynook Bus Station, Figure 2") to provide effective screening. The planting, including the planting shown on the embankment between the busway and the motorway, will be undertaken as soon as practicable following the

construction works and within the first planting season to provide effective screening.

18.7 The landscaping and planting provided for under clause 18.6 shall be planted at Pb28 grade so that the plants are approximately 1.5 metres high when planted.

18.8 All planting shall be tended and maintained to ensure the full establishment and effectiveness of the landscaping including replacement planting where necessary.

Attachments

No attachments.

1427 Sunnynook Station

Designation Number 1427

Requiring Authority Auckland Transport

Location 168Z Sunnynook Road, Sunnynook

Rollover Designation Yes

Legacy Reference Designation 176, Auckland Council District Plan (North Shore Section)

2002

Lapse Date Given effect to (i.e. no lapse date)

Purpose

Sunnynook Station - for the construction, operation and maintenance of roads, buildings, facilities and amenities (including any ancillary structures, works, or activities) for the purpose of providing a rapid transit facility for buses and high occupancy vehicles.

Conditions

The conditions below apply:

- 1. General Conditions
- 2. Duration of Designation
- 3. PMP and Outline Plans
- 4. Archaeological Mitigation Conditions (other than 4.3 and 4.4)
- 5. Ecological Mitigation Conditions (other than 5.5, 5.6 and 5.7)
- 6. Landscape Mitigation Conditions
- 7. Noise Mitigation Conditions
- 8. Geotechnical Mitigation Conditions
- 9. Vibration Mitigation Conditions
- 10. Traffic Mitigation Conditions except that:
- Condition 10.2 shall not apply
- Condition 10.1(ii) applies only to Notice 8 Westlake
- Condition 10.1(iv) applies only to Notices 8 and 9 Westlake and Sunnynook
- Condition 10.1(v) applies only to Notice 8 Westlake
- Condition 10.3 applies only to Notice 8 Westlake
- 11. Construction Management Conditions
- 14. Westlake Girls High School applies only to Notice 8 Westlake
- 18. Bateman: Stormwater Conditions applies only to Notice 9 Sunnynook (other than Condition 18.1(i)).

1. General Conditions

- 1.1 The scope and extent of the works envisaged within the designation shall be generally in accordance with the Notices of Requirement, the plans contained in "Volume 3 A3 Plans" forming part of the documentation supporting the Notice of Requirement, and the relevant detailed plans in the Technical Reports in Volume 5, subject to the final design and the conditions set out below.
- 1.2 Prior to any works being commenced in particular location(s) of work, the Requiring Authority shall obtain all requisite resource consents for the location(s) affected under the Resource Management Act 1991.

- 1.3 Any land taken or held for the works shall be maintained to a reasonable standard until physical works commence.
- 1.4 At all times reasonable vehicular access shall be maintained to private properties not directly affected by construction and/or operation in the area affected. Where private properties are directly affected by construction and/or operations causing vehicular access to be temporarily prevented and no alternative can be utilised, the Requiring Authority shall ensure that the property owner is consulted with respect to the most suitable time for carrying out the work and the Requiring Authority shall minimise the period during which vehicular access is prevented.
- 1.5 A permanent liaison position from within the joint Project Governance Team of Auckland Council and the Requiring Authority will be appointed for the duration of the project. This person is to be available for ongoing consultation on all matters of concern to affected persons.
- 1.6 All contract documentation for physical works shall include reference to the designation conditions, any other resource consents (including conditions) and any approved mitigation or outline plan(s) held for the project.
- 1.7 Where requested by the owners, the Requiring Authority shall physically peg out the extent of the alignment in individually affected properties once the designation has been confirmed or all appeals have been determined, whichever is the later.

2. Duration of the Designation Condition deleted

3. Project Management Plans (PMP) and Outline Plans

3.1 The requiring authority shall prepare a PMP which shall include mitigation/management plans as referred to in conditions 5, 6, 7, 8, 9, 10 and 11. 3.2.

No works shall be undertaken in any particular location(s) until:

- a. The PMP, or such part(s) of the PMP as are relevant to the location(s) are approved in the manner provided for in condition 3.3; and
- b. Any outline plan(s) required by section 176A of the Resource Management Act 1991 (*RMA*) in relation to the works in the location(s), are approved in the manner provided in condition 3.3. 3.3

Approvals pursuant to condition 3.2(a) shall be obtained from the General Manager of Environmental Services, Auckland Council, and a senior regulatory officer of the Auckland Council who is at the time of the approval a member of the Project Governance Team for the management of the works (the approval officers).

Advice Note:

Where an outline plan or plans are required by section 176A RMA for works in any particular location(s) and the approval officers agree that the PMP or relevant part(s) of the PMP contains adequate details to satisfy section 176 RMA, then the Council may waive the requirement for an Outline Plan.

- 3.4 The works shall only be undertaken in accordance with an approved PMP and outline plan (where required).
- 3.5 If for any reason the PMP is not approved, the outline plan procedure under s 176A shall

apply. For the avoidance of any doubt, the mitigation/management plans prepared under conditions 5, 6, 7, 8, 9, 10 and 11 shall be included with any outline plan lodged for approval pursuant to s

4. Archaeological Mitigation Conditions

- 4.1 If construction work uncovers any archaeological remains, the Requiring Authority will immediately advise local iwi and the New Zealand Historic Places Trust and cease working in the affected area until any necessary authority required by the New Zealand Historic Places Trust is obtained. (All archaeological sites are protected under the provisions of the Historic Places Act 1993, whereby it is unlawful to modify, damage or destroy an archaeological site, whether recorded or not, without prior consent of the Historic Places Trust).
- 4.2 That all recorded archaeological sites and other cultural heritage sites in the vicinity of the works shall be clearly marked on the construction plans.
- 4.3 Any significant native trees removed from Smiths bush as part of the works to construct the busway shall be offered as gifts to Te Hao o Ngati Whatua and/or Ngati Whatua o Orakei.
- 4.4 Preliminary earthworks in the vicinity of Onewa Road and Sylvan Ave realignment will be monitored by a suitably qualified and experienced archaeologist.

5. Ecological Mitigation Conditions

- 5.1 The PMP shall include an Ecological Mitigation Plan prepared by a suitably qualified and experienced ecologist who shall have regard to:
- i. The recommendations contained in the audit by Shona Myers Natural Heritage Scientist, ARC as to planting and the implementation of mitigation measures;
- ii. The planting of appropriate plant species as identified in AC Technical Publication 148: Riparian Zone Management: Strategy for the Auckland Region, June 2001.
- 5.2 The Plan shall provide for:
- i. Planting in riparian zones where consent of the landowner is obtained;
- ii. Mitigation of potential coastal effects.
- 5.3 Wherever practicable, any disturbance of existing vegetation shall be avoided.
- 5.4 Where riparian vegetation disturbance cannot be practicably avoided, the Requiring Authority shall take care that any necessary disturbance is minimised as far as practicable. For the avoidance of doubt, this condition is not intended to prohibit necessary disturbance, which is defined as including, but is not limited to, vegetation clearance, the construction and operation of all roads, depots, storage facilities and spoil disposal areas.
- 5.5 The PMP shall include a plan of the proposed works within the eastern remnant of Smiths Bush in sufficient detail to determine the impact on existing vegetation and the Requiring Authority shall undertake its best endeavours to minimise the removal of vegetation from Smiths Bush.
- 5.6 All works within the eastern remnant of Smiths Bush shall be supervised by a suitably qualified and experienced arboriculturist.
- 5.7 As a means of attempting to retain the overall ecological viability of Smiths Bush, any vegetation removed from the eastern remnant of the bush shall be replaced where practicable in accordance with a native tree planting and maintenance regime approved under condition 3.3. and following

consultation with appropriate staff at the Auckland Council.

6. Landscape Mitigation Conditions

- 6.1 The PMP shall include a Landscape Mitigation Plan prepared by a suitably qualified and experienced landscape architect who shall have regard to:
- a. The Landscape Mitigation Plan prepared by LA4 Landscape Architects and contained in the Esmonde Interchange Project: Assessment of Environmental Effects Volume 10c; and
- b. The recommendations contained in the audits by Melean Absolum and Chris Boucher.
- 6.2 The Landscape Mitigation Plan shall provide for:
- a. The integration of the proposed works into the surrounding landscape;
- b. Appropriate consideration of the angle and extent of batter slopes;
- c. Appropriate screening of existing land-uses along Fred Thomas Drive;
- d. Design of borrow and disposal areas for excess fill to avoid significant visual impact, and to maximise integration with the general form of the surrounding landscape;
- e. Ecological mitigation measures (eg revegetation) required in accordance with the Ecological Mitigation Condition;
- f. Mitigation of effects on properties in the vicinity of the busway;
- g. Noise mitigation measures (eg noise barriers) required in accordance with the Noise Mitigation Conditions and the screening of such measures with planting between barriers and the busway carriageway;
- h. Detailed designs of the acoustic barriers, retaining walls, and earth bunds in conjunction with the engineers where necessary; and
- i. The identification of existing trees and vegetation sited on the boundary of the Busway designation that ought to be retained for screening purposes.
- 6.3 The Landscape Mitigation Plan shall include details of:
- j. All proposed planting (including species, species size, densities, areas and locations);
- k. The planting programme;
- I. The maintenance programme. This programme shall include details of weed control, performance standards specifying allowable percentage survival rates, and replacement of any planting features;
- m. The sufficiency of the soil medium to sustain all planting proposed; and
- n. An appropriate maintenance regime.
- 6.4 All landscape mitigation planting shall be implemented during the first planting season following completion of the project construction works providing climatic conditions are suitable, otherwise at the first practicable opportunity thereafter. Following completion of planting, the Requiring Authority shall submit to the Auckland Council a report by the landscape architect on the implementation of the landscape plan.
- 6.5 Where practicable, any planting utilising native plants shall use plants genetically sourced from the ecological district.
- 6.6 Exposed cut and fill batters and slopes shall be re-vegetated as soon as practicable after construction.

7. Noise Mitigation Conditions

7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the NZTA Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited.

- 7.2 The PMP shall include a Noise Mitigation Plan prepared by a suitably qualified noise consultant. The purpose of the plan is to describe the methods by which noise associated with traffic using the roading and the bus stations within the designation will be made to comply with specified noise limits at all affected dwellings and schools in the vicinity of the area affected. Where the ambient sound level is required to determine design limits then this shall be done prior to construction commencing.
- 7.3 The Requiring Authority shall ensure that all construction works are carried out in accordance with NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work".
- 7.4 The PMP shall include a Construction Noise Management Plan. The purpose of the Plan is to describe the methods by which noise associated with the construction of the work will be managed to comply with condition 7.3 above. In particular, the Construction Noise Management Plan shall identify:
- a. The location of permanent acoustic fences to be installed prior to the commencement of the main construction works;
- b. Methods of managing noise;
- c. Noise monitoring methods, including details of methods, equipment, location and frequency;
- e. Contingency measures in the event of any incidence of non-compliance; and
- f. Procedures for handling noise complaints.
- 7.5 Where the requirements of condition 7.4 are unable to be met, the alternative strategies that have been developed following consultation with affected landowners will be implemented. Such alternatives may include, but not be limited to, temporary relocation of occupiers, compensation for occupiers and purchase of the affected properties.
- 7.6 Construction works shall at all times be undertaken in accordance with the Construction Noise Management Plan.
- 7.7 Where practicable, acoustic barriers required to meet NZTA Noise Guidelines in particular locations, shall be erected prior to commencement of the construction works in those locations.
- 7.8 Where temporary acoustic barriers are proposed in the Marshall Day Report, and where their retention would result in effective traffic noise reduction for residents or educational facilities, they shall be built to a standard such that the barriers will be able to remain permanently in place at heights approved under condition 3.3, taking into consideration traffic noise reduction visual and landscaping factors and consultation with adjoining property owners.

7.9 Unless:

a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where *additional* traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not *exceeding* 45 dBA Leq, or the ambient noise level *existing* prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4.

8. Geotechnical Mitigation Condition

8.1 A Geotechnical Mitigation Plan shall be prepared by a suitably qualified Geotechnical Engineer in consultation with Auckland Council. The plan shall be submitted to the Auckland Council prior to construction of any stage and shall take into account the recommendations of the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues' – November 2001.

9. Vibration Mitigation Conditions

- 9.1 The PMP shall include a Vibration Mitigation Plan having regard to the report prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001'. This Mitigation plan shall include details of how the works will comply with the requirement of German Standards DIN4150 "Structural Vibration in Buildings Effects on Structures" during construction and shall take into account the recommendations.
- 9.2 A dilapidation survey of 'at risk' buildings, as per the recommendations of the audit prepared by Riley Consultants entitled 'Technical Review of Geotechnical and Civil Engineering Issues November 2001', shall be undertaken prior to during and after completion of the construction works, provided the consent of any landowner and/or occupier can be obtained.

10 . Traffic Mitigation Conditions

- 10.1 The PMP shall include a Traffic Mitigation Plan based on its adopted design for the project. The Traffic Mitigation Plan shall include:
- a. Methods of mitigating the local and network wide effects of both the construction of individual elements of the project and the use of staging to allow sections of the project to be opened to traffic while other sections are still under construction;
- b. Methods of helping to accommodate the bus transport needs of pupils of Westlake Girls' High School through the development and operation of Westlake Station and the busway system, in the light of consultation with the School;
- c. Methods of limiting the use of the busway to emergency vehicles and no more than 350HOVs (excluding buses) per hour north of Esmonde Road, including a restriction on the access of HOVs through Constellation Drive Station to no more than 350HOVs;
- d. Details of a monitoring programme to be undertaken detailing the demand for car parking in the vicinity of the Sunnynook Station and Westlake Station prior to the opening of the Station and at regular intervals (a minimum of 2 per annum) for a minimum period of five years following the opening of the Station to the public and measures to manage any such demand. (This condition shall only apply to Notices of Requirement 8 and 9); and
- e. Details of pedestrian access to be provided within the Westlake Bus Station and along Shakespeare Road Extension (This condition shall apply only to Notice of Requirement 8).
- 10.2 In order to prevent potentially significant traffic disruption during and after construction, the existing Onewa Interchange shall continue to be fully operational (that is in the manner in which it currently operates) until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.
- 10.3 The public use of the Westlake Station shall not be allowed until such time as the works proposed as part of the Esmonde Interchange project have been completed and the Esmonde Interchange is fully operational.

11. Construction Management Conditions

11.1 The PMP shall include a Construction Management Plan which shall refer to all conditions imposed on any relevant resource consents granted by the Auckland Regional Council.

- 11.2 The purpose of the Construction Management Plan is to set out methods by which any dust nuisance from construction will be avoided or minimised and by which the possibility of ground vibration during construction can be notified to adjacent land owners and occupiers. In particular, the Management Plan shall identify amongst other things:
- a. Specific methods by which dust will be managed, including cleaning vehicle tyres before vehicles enter public roads, wetting or covering surfaces and replanting disturbed areas;
- b. Contingency measures to ensure that, in the event of any dust nuisance arising, immediate remedial measures are implemented;
- c. Procedures for prior notification of the use of machinery likely to generate vibration effects beyond the area of the designation to properties where ground vibration may be felt;
- d. The means by which loss of vehicle access to be (sic) properties will minimise inconvenience to each property owner affected following consultation with affected property owners;
- e. Methods of ensuring pedestrian safety along public footpaths and particularly where works are proposed in close proximity to any school;
- f. Procedures for handling any dust and ground vibration complaints; and ·

In respect of Takapuna Normal Intermediate School the Management Plan shall include measures to address the following, in consultation with the School:

- i. Preventing students from gaining access to the construction site via the parking area off Northcote road or Smiths bush by the erection of such gates or fencing as may be agreed to by the School and the Requiring Authority;
- ii. Control of construction traffic moving between the construction site and Northcote Road so as to encourage the safe movement of students along Northcote Road; and
- iii. Minimising any adverse effects of construction on the playing field, in particular, dust nuisance.
- 11.3 The Requiring Authority shall ensure that the Construction Management Plan is complied with at all times during construction and that a copy is kept at all site offices.
- 11.4 The Requiring Authority and its contractors shall, in addition to complying with all other construction related conditions, take all reasonable steps to prevent or mitigate any nuisance or damage to adjacent properties during construction.
- 11.5 The Requiring Authority shall advise neighbouring owners and occupiers in the vicinity of the affected area of the date on which construction is to start, the expected duration of the work, and the telephone number of Site Liaison Officer who is able to respond to queries.
- 11.6 The location and extent of each stage of the site works will be identified and the Auckland Council advised of the construction timetable.
- 11.7 The earthworks contractor shall be required to maintain the stability of the land and property at the boundary of the site by the best practicable method and to monitor that such works are and remain effective.
- 11.8 Control measures shall be in place to ensure that any vehicles leaving the designated site do not deposit soil or other debris on public roads. Any such material deposited on any public road shall be cleaned up as soon as practicably possible at the Requiring Authority's expense.
- 11.9 Adequate provision shall be made during the earthworks construction for the protection of the existing public drains that traverse the designation. It is the Requiring Authority's responsibility to remedy any damages to the public drains that may occur during construction.

- 11.10 Protected vegetation areas and trees identified in the Landscape Mitigation Plan are to be retained and protected. Other sensitive areas of the site are to be identified and market for protection prior to the commencement of works.
- 11.11 Spoil from earthworks, surplus to site requirements, shall be disposed of at an approved landfill site.

12. Exmouth Road Pedestrian Overbridge

12.1 The Requiring Authority will use its best endeavours to obtain all necessary resource consents to allow reinstatement of the existing Exmouth Road pedestrian overbridge in the same or a similar location but extended to provide access across the bus lane to the foreshore. If such consents are granted the Requiring Authority shall reinstate the overbridge prior to the consents lapsing.

13. Westlake Boys High School

- 13.1 The School accessway, adjoining the western boundaries of the Altona road properties and connecting the northern and southern playing fields, shall be constructed with a minimum width of 4m and designed so that service vehicles and pedestrians can obtain safe and convenient access.
- 13.2 The western embankment adjoining the southern playing fields of the School shall be planted with *Alnus incana and Alnus rubra* at a size and spacing to be detailed within the Landscape Mitigation Plan.
- 13.3 The Requiring Authority shall use its best endeavours to undertake construction of the works in the area adjoining the northern playing fields during the School Summer holidays (approximately 10 December 31 January the following year).

14. Westlake Girls High School

- 14.1 The Requiring Authority shall use its best endeavours to ensure that the pin oak trees along the western boundary of the School are retained.
- 14.2 The Requiring Authority shall use its best endeavours to undertake construction of the works along the School boundary during the School Summer holidays (approximately 10 December 31 January the following year).

15. Takapuna Normal Intermediate School

- 15.1 A permanent 1.8 metre close boarded and battened wooden fence shall be erected along the western boundary of the school (as identified in the **attached** plan titled "Building Locations Takapuna Normal Intermediate School") prior to commencement of construction of the Busway.
- 15.2 Where the operation of the Busway results in increases in traffic noise above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any existing Takapuna Normal Intermediate School classroom with windows open (identified in the **attached** plan), then the requiring authority shall implement mitigation measures which result in the noise level not exceeding either 45 dBA Leq, or the ambient noise levels existing prior to the establishment of the Busway, whichever is higher. This noise level shall be achieved together with the ventilation requirements of the New Zealand Building Code, Clause G4 and New Zealand Standard 4303:1990 'Ventilation Requirements for acceptable indoor air quality' and in particular the requirements for educational institutions.
- 15.3 The Requiring Authority shall provide for:
- a. Replanting, or replacement where replanting is not practicable, of trees along the western boundary

that are required to be removed for construction of the Busway; and

b. Planting along the inside of the 1.8 metre fence (as described in condition 15.1) to mitigate the visual impact of the fence.

16. Smales Farm

- 16.1 The requiring authorities shall consult with a liaison person appointed by Shea Investments Limited and Betty Leila Holdings Limited in respect of:
- a. The detailed landscape plan to be prepared for the Busway in the vicinity of Smales Farm, for the purpose of ensuring that the landscaping for the Busway is integrated with the landscape development of Smales Farm; and
- b. That part of the Traffic Mitigation Plan that relates to Shakespeare Road Extension and Westlake Bus Station.

17. T D Jane, L J & M F Bilton & A S & S J Church

- 17.1 Subject to access being granted by the landowners of the properties legally described as Lot 127, DP 56740 (CT 9C/703), Lot 128, DP 56740 (CT C/104) and Lot 129, DP 56740 ("the properties"), the Requiring Authority will implement the landscaping plan prepared by LA4 Landscape Architects for the properties (titled "Proposed Planting to Mitigate Busway" **attached**) and any amendments to the planting shown on the plan as reasonably agreed between the landowners and the Requiring Authority. Failing agreement within 12 months of completion of construction of the fence, the Requiring Authority shall implement the LA4 landscaping plan (or its equivalent in value).
- 17.2 The Requiring Authority shall construct a fence on the properties' western boundaries prior to construction of the Project commencing adjacent to the landowners properties. The fence shall have the following specifications:
- a. To be located along the properties' western legal boundaries at 2 metres above ground level (as at 16 May 2003) at 7 and 10 Altona Road, and at 2 metres and rising to 2.5 metres above ground level at the northern end at 9 Altona road, for the full length of the boundaries of those properties;
- b. To be constructed of exterior grade (marine) plywood having a thickness of 17.5 mm or more;
- c. Plywood panels to be bolted to a framework so as to ensure no gaps or cracks and to meet the surface of the ground at their lower edge;
- d. Fence posts and framework to be specified by engineering design;
- e. NZTA shall construct gates in the fence if requested by the landowners of 7 and 9 Altona Road;
- f. To be certified by an engineer as having a design life of 20 years (except that certification of the design life of the fence shall not apply to any gates requested to be constructed).

Advice note:

It is the Requiring Authority's intention to construct the fence as part of the enabling works during 2003 or by April 2004 at the latest.

- 17.3 Any construction activities exceeding the Construction Standard set out in condition 7.3 between chainage 13200 to 13000 shown on the designation plan "Harbour Bridge to Constellation Drive Designation Plans Westlake Boys High School, Drawing No. 7716C609" (the affected area") shall be undertaken between the hours of 8.00am 6.00pm on weekdays only and shall exclude the two weeks following Christmas Eve. For the avoidance of any doubt, condition 7.5 relating to works exceeding the Construction Standard continues to apply to the landowners as affected parties.
- 17.4 The Requiring Authority shall undertake earthworks in the affected area in one stage.
- 17.5 The Requiring Authority shall consult with the landowners on the mitigation plans referred to in

the conditions 5, 6, 7, 8, 9, 10 and 11 on the designation insofar as the mitigation plans affect the landowners' properties

18. Bateman Property

Stormwater

- 18.1 As part of the busway construction works, NZTA and Auckland Council shall provide the following measures to address stormwater effects:
- a. NZTA shall pipe the existing drain from chainage 15100 down to 14960 (see Figs 1a 1c, attached);
- b. NZTA and Auckland Council shall widen by 4m the motorway side of the existing drain located on the eastern side of the motorway, from the level of the top of the present vertical concrete wall, from chainage 14960m to Sunnynook Road Culvert (as shown on the **attached** Figs 1a 1c), such widening shall be at a grade as flat as possible from the existing concrete wall, consistent with efficient fall;
- c. Auckland Council shall use its best endeavours to reduce the volume of debris caught on the central wall of the Sunnynook Road Culvert by reshaping the leading edge of the central wall;
- e. NZTA and Auckland Council shall undertake the following measures to avoid slope instability and scour:
- i. Provide a batter toe restraint retaining wall to buttress the lower position of the batter;
- ii. Construct a gabion wall or timber pole wall to support the toe restraint retaining wall; and
- iii. To undertake grass seedling over the four metre widening of the berm.

Advice Note:

It is recorded that Mr Bateman has agreed to provide access to NZTA and Auckland Council or their contractors to enable them to undertake any drainage improvement works required within or adjacent to the Bateman family property.

Noise

- 18.2 NZTA shall construct a concrete 0.8 metre high barrier between the Busway and the property in compliance with the letter from Marshall Day Acoustics Limited dated 18 December 2002 (attached as Appendix 1). The detailed design of this barrier is to be finalized as part of the busway detailed design.
- 18.3 NZTA shall construct a 0.8 metre high solid concrete New Jersey Barrier on top of the retaining wall between the motorway and the busway as also described in Appendix 1; the detailed design of this barrier is to be finalised as part of the busway detailed design.
- 18.4 NZTA shall construct a 1.8 metre high barrier at the rear of the Sunnynook Station between the proposed bus shelter and the end of the platform to mitigate any reflection of noise from the northbound bus shelter, the detailed design of this barrier is to be finalised as part of the busway detailed design.
- 18.5 NZTA agrees that any retaining wall to be constructed for the purposes of the Sunnynook Station shall be constructed from non-reflective materials to mitigate any potential noise effects.

Landscaping

18.6 NZTA shall undertake screen planting, consisting of native trees, shrubs and ground cover between Sunnynook Station, the busway and the property, as shown on the **attached** plan (titled "North Shore Busway Project: Amended Landscape Development for Sunnynook Bus Station, Figure 2") to provide effective screening. The planting, including the planting shown on the embankment between the busway and the motorway, will be undertaken as soon as practicable following the

construction works and within the first planting season to provide effective screening.

18.7 The landscaping and planting provided for under clause 18.6 shall be planted at Pb28 grade so that the plants are approximately 1.5 metres high when planted.

18.8 All planting shall be tended and maintained to ensure the full establishment and effectiveness of the landscaping including replacement planting where necessary.

Attachments

No attachments.



Annexure 3

MDA Report
No 97245B
on the Busway

Prepared for:	Beca Carter Hollings & Ferner		
	Attention: Kathleen Bunting		
Date:	29 June 2001		
Project:	North Shore Busway Project SH1 Busway		
Report No.:	97245B		
Prepared by:	Siri Wilkening		
Reviewed by:	Graham Warren		

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1.0 Introduction

Marshall Day Acoustics has been engaged to assess the effects of noise from the proposed busway extending along SH1 from the Auckland Harbour Bridge to Constellation Drive. Noise levels were assessed comparing a 'Do-Minimum' scenario (no busway) and a 'Busway' scenario.

The Busway is a large scale project and has the potential to affect a number of people who are either living, working or studying in the vicinity, or who are travelling along SH1 on a daily basis. The proposal envisages the busway being used by buses and licensed high occupancy vehicles (HOVs) carrying two or more persons.

The project is currently in the preliminary scheme design phase thus assumptions regarding traffic flows, speeds and alignment have been necessary.

In the absence of any noise standard regarding heavy traffic or bus generated noise, it has been considered appropriate to assess predicted noise levels in accordance with the provisions of Transit New Zealand 'Guidelines for the Management of Road Traffic Noise - State Highway Improvements' (Transit Guidelines – refer Section 4.1.1).

2.0 Methodology

2.1 Noise Level Measurement

A survey of the existing noise environment was carried out in potentially affected areas by selecting ten positions in the vicinity of noise sensitive activities such as residential areas and schools. The selected locations are identified in Appendix 2.

Noise level measurements were carried out, including long term average sound level L_{eq} measurements, on which the assessment of traffic noise effects is based. Refer to Appendix 1, Glossary, for an explanation of technical terms.

As the measurement locations are close to SH1, which has high traffic volumes, the measured levels were compared with predicted traffic noise levels using known vehicle flow rates provided by Beca Carter Hollings & Ferner (refer Section 6.1.1). This procedure demonstrated good agreement between measured and predicted traffic noise levels for most measurement positions with no more than 2 decibels difference, which is within the accuracy of the prediction method. It is noted that a change of 2 decibels is generally unnoticeable in circumstances of this sort.

The above calculations were used to verify the prediction method used for determining traffic noise levels for the year 2011 (10 years from now, the Transit Design Year if the busway was built now), with and without the busway in place. If the construction of the busway is delayed there may be slight changes to the Design Noise Levels which would be taken into account at the detailed design phase.

2.2 Prediction of Traffic Noise and Assessment of Effects

Using predicted traffic flow rates for the years 2001 and 2011 for the proposed busway and SH1, traffic noise levels were calculated for the potentially affected areas adjacent to the alignment.

The calculated existing traffic noise levels for the 'Do-Minimum' scenario were used to define, in which of the three noise level areas, 'Low', 'Medium', and 'High' (refer 3.1.1), the sensitive receiver positions are located. Predicted noise levels for the Busway scenario were then used to determine the change in noise level likely to be experienced by the occupants of buildings and compliance with the Transit Guidelines assessed. Further explanation of calculations is contained in Section 3.1.3.

Preliminary noise mitigation measures are recommended, but would need to be re-examined when detailed design has been completed.

2.3 Construction Noise Effects

The determination of levels of construction noise likely to be generated by the construction of the busway were calculated by using previously measured sound power levels of typical equipment for this type of project. These levels were then compared to the noise limits specified in the New Zealand Standard NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work" in order to assess their potential effect on noise sensitive activities in the vicinity.

3.0 Noise Performance Standards

3.1 Transit Guidelines

Transit New Zealand has issued the 'Transit New Zealand's Guidelines for the Management of Road Traffic Noise – State Highway Improvements' (Transit Guidelines). This document assesses the predicted future noise level for a time 10 years from the construction of a highway in relation to the existing ambient noise level. Noise levels are measured 1m from the most exposed facade. Receiving dwellings are divided into three groups (low, medium and high ambient noise level areas) and design levels are specified accordingly. These road traffic noise criteria apply to the following types of existing facilities adjacent to State Highway improvements:

- residential buildings, excluding:
 - garages and other ancillary buildings,
 - short-term accommodation (such as hotels, motels, hospitals and caravan parks) adjacent to existing state highways (but, not on new state highway alignments) and
 - residential accommodation in buildings which have other uses (such as residential accommodation in commercial buildings)
- teaching areas in educational facilities.

3.1.1 Noise Areas

The Average Noise Design Levels for residential buildings are detailed in the 'Transit Guidelines' and are as follows:

Table 1: Average noise design levels

Noise Area	Noise Descriptor	Ambient Noise Level dBA	Average Noise Design Level dBA
	L _{eq} (24 hour)	Less than 43	55
Low	L _{eq} (24 hour)	43 – 50	Ambient + 12
Medium	L _{eq} (24 hour)	50 – 59	62
	L _{eq} (24 hour)	59 – 67	Ambient + 3
High	L _{eq} (24 hour)	67 – 70	70
	L _{eq} (24 hour)	More than 70	Ambient

The noise levels ($L_{\rm eq}$ 24 hour calculated) of Table 2 in Section 4.0 Existing Noise Environment have been used to determine the Transit noise areas as they presently exist.

3.1.2 Single Event Design Criterion

The Transit Guidelines, in addition to the specification for 'Average Noise Design Levels', set forth a criterion for a 'Single Event' noise design level.

The purpose of this criterion is to protect residents from sleep disturbance due to the passage of very noisy vehicles. Such vehicles are usually large heavy trucks, which surveys show, in a worst case scenario with speeds of 100 km/hour on a chip-sealed road, can produce a maximum noise level (L_{max}) of up to 87 dBA at 15 m from the nearside edge of the carriageway. As buses have similar noise generating characteristics to trucks this may be a matter for consideration with this project.

The Transit Guidelines prescribe a noise reduction requirement based on the distance between the closest wall of a residence and the nearside edge of the carriageway. Where a dwelling is within 12 metres of a carriageway, 3 decibels of noise reduction are required.

Dwellings that fall into the Single Event Design Criterion category are identified in Sections 7.1 to 7.4. Some of the identified dwellings may fall within the area required for the construction of the highways, or may be so severely affected by proximity to the route that they will require removal and so will no longer be affected.

3.2 North Shore City Proposed District Plan

The North Shore City Proposed District Plan contains the following noise rules regarding traffic noise:

Existing High Noise Routes

In circumstances where a residential unit is to be constructed on any site near to an existing high noise route as specified in Appendix 10D and subject to a daily noise exposure level (L_{eq} 6 am to 10 pm as defined in New Zealand Standard NZS 6801:1991 equal to or greater than L_{eq} 65 dBA on any part of the site, an Acoustic Design Report is to be obtained from a suitably qualified Acoustic Engineer confirming that the building will be constructed not to exceed a daily noise exposure of L_{eq} 40 dBA in all habitable rooms with ventilating windows open.

All areas adjacent to SH1 and the proposed busway are defined in the Plan as being near an existing high noise route. Therefore, new dwellings in the vicinity are required to comply with above rules.

Dwellings not existing at the time of construction of the busway are not protected by the Transit Guidelines Average Noise Design Levels. However, due to the traffic noise rule of the District Plan new dwellings will have to be designed to achieve a suitable internal noise level of L_{eq} 40 dBA. Compliance with this District Plan noise rule is the responsibility of the contractor, builder or owner of the new dwelling, not the roading authority's. No additional sound insulation would need to be provided to existing houses.

Although the above rule does not relate to houses already existing at the time of construction of the busway, it is noted that none of these houses would be exposed to a noise level increase to 65 dBA or above solely due to the operation of the busway. Higher noise levels are caused by increased traffic on SH1.

3.3 Proposed Auckland Regional Plan: Coastal

The Proposed Auckland Regional Plan: Coastal contains the following provisions regarding noise in Chapter 35.

35.1 Introduction

Noise generated from within the coastal marine area is controlled by this Plan. This includes ... construction noise generated from within the coastal marine area.

35.5.5

Noise generated from construction (including maintenance, repair and demolition) of all structures... and from reclamation and dredging, shall comply with the requirements of NZS 6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work".

It is predicted that any construction activity would comply with the noise limits as set out in NZS6803P provided that the mitigation measures recommended in Paragraph 9 are implemented.

4.0 Existing Noise Environment

An understanding of the existing noise environment is needed in order to assess the traffic noise impact of the proposed busway. The present ambient noise levels in the areas, through which the busway would pass, are controlled by existing significant traffic volumes on SH1. However, some areas, especially around the proposed bus stations, are less affected by traffic noise

due to greater distances from SH1. The busway alignment as presently designed would carry traffic closer to these areas.

Short duration measurements of 10 to 15 minutes of the existing noise environment in the vicinity of the proposed busway were carried out at ten sites as shown in Appendix 2, Figures 1 to 12, labelled I to X. Short-term measurements were conducted on 8 and 9 August 2000 and on 1 November 2000 during the peak traffic times between 7.00 am and 10.00 am, and were generally in accordance with New Zealand Standards NZS 6801 "Measurement of Sound" and NZS 6802 "Assessment of Environmental Sound".

Additionally, ambient noise levels were measured with continuous data logging equipment over a period of five to six days at three positions that were found to be affected due to close proximity to the proposed busway alignment. These positions were Takapuna Park Retirement Village (1), Altona Road (2) and Cockayne Crescent (3). Noise surveys were carried out between 9 May and 14 May2001.

The measured noise levels were then compared to calculated noise levels using morning peak hour traffic flow rates as provided by Beca Carter Hollings & Ferner (for comparison with short duration measurements) and 24 hour traffic flow rates as provided by Opus International Consultants (for comparison with continuous noise surveys). This process was undertaken in order to ensure the reliability of the prediction methods utilised (refer Section 6.2).

The results of these measurements and the predicted levels are summarised in Table 2 below.

Table 2: Existing and Predicted Noise Levels (dBA)

No	Position/Chainage	Time	Average Noise Level L _{eq,1hr} (1) derived	Average Noise Level L _{eq,24hr} derived (2)	Average Noise Level L _{eq,24hrs} calculated ⁽³⁾
Shor	t duration noise measurements				
I	Nelson Street east / 7870	7.40 am	59	59	64
II	Karaka St Extension / 11280	7.00 am	66	65	70
Ш	Takapuna Intermediate School / 11540	7.50 am	57	57	55
IV	Campbell Burns Retirement Home / 11630	7.45 am	57	57	56
V	Westlake Girls High School / 12310	8.05 am	60	61	61
VI	Westlake Boys High School – Top of steps / 12930	9.10 am	58	58	56
VII	Westlake Boys High School – north west corner / 13120	8.40 am	69	70	68
VIII	Lyttelton St, by Tristam Ave / 13880	7.30 am	66	66	64

IX	Newport Place / 14360	7.10 am	69	69	69
Χ	Kapiti PI, by Sunnynook Rd / 14920	8.00 am	58	59	60
				Average Noise Level L _{eq,24hr} measured	Average Noise Level L _{eq,24hrs} calculated
Long	g duration noise surveys				
1	Puriri Park Retirement Village	9-14 May 01	N/A	67	69
2	Altona Road	9-14 May 01	N/A	67	69
3	Cockayne Crescent	9-14 May 01	N/A	66	67

⁽¹⁾ Derived from 15 minute measurements

- (2) It was assumed that the 10 minute $L_{\rm eq}$ is similar to the 1 hour $L_{\rm eq}$ for a similar traffic flow characteristic. The $L_{\rm eq,24\,hr}$ derived was obtained from a graph depicting the "Mean Derivation of Hourly $L_{\rm eq}$ from 24 Hour $L_{\rm eq}$ for Traffic Noise on Highways". This graph was established from a number of traffic noise measurements at positions along SH1.
- (3) Using morning peak hour traffic flows

Refer to Appendix 1, Glossary for an explanation of technical terms.

The calculated noise levels generally show good agreement with the measured noise levels with differences of not more than 2 decibels in most cases.

Larger discrepancies with 5 decibels difference occurred at Positions I and II respectively. These discrepancies are probably due to characteristics of the measurement location such as shielding, area of absorbing ground between noise source and receiver or traffic speeds of vehicles in the vicinity.

Short term measurements of 10 to 15 minutes are indicative only when addressing more-or-less continuous noise sources such as traffic in circumstances of this sort where large variations in traffic flow occur during a 24-hour period. Noise surveys using continuous data logging equipment address more accurately the noise environment for positions that are affected by this type of noise. The survey results at Positions 1, 2 and 3 show good agreement of measured and calculated noise levels with differences of up to 2 decibels.

5.0 Busway Alignment and Operation

The alignment of the proposed busway is described in detail in the 'North Shore Busway Scheme Assessment' (Dec 2000) and the Assessment of Environmental Effects.

In summary, the busway is proposed to travel along the eastern and western side of SH1 from the Auckland Harbour Bridge until reaching the proposed Onewa Road Interchange reconstruction. From Onewa Road Interchange both busway lanes (north and south) are proposed to travel along the eastern side of SH1 to Constellation Drive. The busway will be routed under the proposed east/west link at Esmonde Interchange, under Northcote Road, over Wairau Road and Tristam Ave and under Sunnynook and Sunset Roads. North Shore City streets will intersect with the busway at Akoranga Drive, Westlake Girls

High School and Constellation Drive, providing station facilities, plus an 'on-line' station in Sunnynook.

Along this alignment there are a number of areas that require particular consideration in relation to traffic noise such as schools and bus stations linking into the local roading network. These are more closely examined in Section 7.

The busway is proposed to be operated between 6.00 am and 12.00 am, with maximum usage during morning and afternoon peaks. Traffic on the busway would be composed of buses and HOVs. HOVs would only be permitted to travel south into the city during the am peak period, while buses would travel in both directions during the whole operational period.

Buses are divided into express services and local feeder services. Local feeder buses arrive and depart from the stations servicing the suburbs. Express buses join and leave the busway at designated stations along the alignment and only stop at selected bus stops in the suburbs thus reducing travel times for passengers. All bus stations have connections to line haul bus services.

Outside peak periods buses would still be using the busway and not the motorway due to restricted access to the stations from SH1.

6.0 Predicted Noise Levels

6.1 Traffic Flow Rates

The most important factors in predicting traffic noise levels are the number of vehicles and the speed at which they travel. Other factors, which also influence the noise level generated by road traffic, are the percentage of heavy vehicles, the road gradient, and the road surface type.

The motorway would carry up to 12 times the traffic volume of the busway in the peak hour; however, the busway would be in close proximity to noise sensitive activities. Therefore, the noise generated by either road was calculated separately and then added together to give a total noise level. This method ensures clarity about which road would control the noise level in affected areas.

This method has been used to show that traffic on the busway is predicted to have no appreciable, or only minimal, effect on noise levels in adjacent areas. Where the noise level is raised by traffic on the busway, suitable noise mitigation measures can be implemented to reduce noise to a level at which traffic on the busway has no acoustic impact on noise sensitive activities in the vicinity.

The am peak hour has been chosen as a basis of the calculations as a time when traffic on the busway is greatest due to a maximum number of buses servicing the rush hour passenger transport, and when HOVs are permitted on the busway.

The main traffic flow on SH1 would be along the eastern side, the same side as the busway. Our calculations show that with increased vehicle flow during rush hour and decreased speed, the noise level is similar to smaller vehicle numbers and higher speed, thus producing a similar noise levels during am

and pm peaks for residents in the vicinity. However, during the afternoon peak no HOVs are permitted to travel on the busway thus reducing the noise level generated by the busway.

As the busway is to be used from 6.00 am to 12.00 am, additional calculations have been carried out for three representative positions along the busway using 24 hour traffic flows. These calculations were included to ensure that a complete description of possible effects has been evaluated. The positions are the same as chosen for the long term noise surveys (See Table 2 in Paragraph 4.0).

6.1.1 Traffic Volume Figures—SH1

Traffic volume figures on which calculations are based were provided by Beca Carter Hollings & Ferner and, for SH1, are set out in Table 3. These figures exclude traffic on the busway but include 6% heavy traffic on SH1.

Table 3: Traffic Flow Figures—SH1

Road/Yea	ar	Average number of vehicles am peak hour	Average number of vehicles 24 hour
Auckland 2001 2011 2011	I Harbour Bridge to Onewa Road do-minimum do-minimum with Busway	12,215 13,088 14,284	130,286 147,223 147,223
Onewa R 2001 2011 2011	Road to Esmonde Road do-minimum do-minimum with Busway	9,610 10,451 10,444	129,356 146,172 146,172
Esmonde 2001 2011 2011	Road to Northcote Road do-minimum do-minimum with Busway	7,338 7,700 7,776	99,870 112,853 112,853
Northcote 2001 2011 2011	e Road to Tristam Ave do-minimum do-minimum with Busway	6,778 7,259 7,401	97,604 110,293 110,293
Tristam A 2001 2011 2011	ve to Sunnynook Road do-minimum do-minimum with Busway	5,208 5,933 6,036	77,999 88,139 88,139
Sunnynoo 2001 2011 2011	ok Road to Constellation Drive do-minimum do-minimum with Busway	5,568 6,027 6,119	68,288 77,165 77,165

Note that predicted traffic volumes in 2011 for the morning peak hour are slightly higher for the 'Busway' scenario than for the 'Do-Minimum' scenario.

We have been informed by Beca Carter Hollings & Ferner that this may happen due to the changed traffic flow characteristics introduced by the busway. In particular, vehicles that were queued up during rush hour traffic before the operation of the busway would now be able to be included in the am peak hour traffic count.

However, the effect of the increase in vehicle numbers on noise levels is negligible in all cases with vehicle numbers increasing by only up to 2% (a change in noise level would be less than 0.2 decibels which is under these circumstances not noticeable). Only between Auckland Harbour Bridge and Onewa Road is the increase predicted to be 8 %. However, there are no residential dwellings in the immediate vicinity of the busway and SH1 at this point, so no appreciable adverse effect is predicted.

When assessed over a 24 hour period, traffic numbers are predicted to be the same for traffic on SH1. Traffic flow characteristics that may be changed for specific peak times would balance out over a day long period.

6.1.2 Traffic Volume Figures—Busway

Traffic numbers on the busway are composed of buses and specially licensed high occupancy vehicles carrying 2 or more passengers (HOVs). HOVs are permitted on the busway only during the morning peak hour and then travelling south. The maximum number of HOVs would be limited to 350 vehicles between Constellation Drive and Esmonde Road, 950 vehicles between Esmonde Road and Onewa Road and 1300 vehicles from Onewa Road travelling south.

Buses would use the busway between 6.00 am and 12.00 am with peak times in the morning and afternoon rush hours. Bus numbers have been provided by Beca Carter Hollings & Ferner. We understand that these numbers are estimates only and may vary by up to \pm 20%. Calculations have been made considering all these circumstances. The following Table 4 contains bus numbers for the busway only as used in the calculations.

Table 4: Traffic Flow Figures—Busway for the year 2011

Alignment/Direction	Number of buses am peak hour + 20%/average/- 20%	Total number of buses 24 hr (6am—12 am) (am peak/Interpeak/pm peak per hour)
Auckland Harbour Bridge to Onewa Road North	84 / 70 / 56	1200 (100 / 50 / 100)
Onewa Road to Auckland Harbour Bridge South	180 / 150 / 120	1200 (100 / 50 / 100)
Onewa Road to Akoranga/AUT Station (north of Esmonde Rd) North	65 / 54 / 43	960 (80 / 40 / 80)
Akoranga/AUT Station to Onewa Road South	142 / 120 / 96	960 (80 / 40 / 80)
Akoranga/AUT Station to Westlake/Smales Station (north of Northcote Rd) North	53 / 44 / 35	840 (70 / 35 / 70)
Westlake/Smales Station to Akoranga/AUT Station South	108 / 90 / 72	840 (70 / 35 / 70)
Westlake/Smales Station to Constellation Dr Station North	43 / 36 / 29	840 (70 / 35 / 70)
Constellation Dr Station to Westlake/Smales Station South	79/ 66 /53	840 (70 / 35 / 70)

Further information from Beca Carter Hollings & Ferner contained bus numbers for local bus network links and buses leaving and joining the busway along the route. Relevant information relating to this is contained in Paragraphs 7.1.1 to 7.1.3, dealing with the assessment of effects of the bus stations, and is summarised in Appendix 4.

6.2 Traffic Noise Prediction

The method used for the prediction of traffic on the proposed busway was that of the British Department of Transport: Calculation of Road Traffic Noise, and modified for New Zealand conditions. This method takes into consideration the factors referred to in 6.1 above and also the many other variables relating to the propagation of road traffic noise. Note, that this prediction method considers the special amount of heavy traffic relating to light passenger vehicles thus including the effects of buses which are defined as heavy vehicles.

Noise levels were calculated for identified noise sensitive activities along the proposed alignment. Each of these sites is discussed in detail in the following Section 7.

Calculations of the peak am hour showed that the variations in bus numbers (± 20%) made no significant difference in noise level for adjacent sites due to the controlling noise being generated by traffic on SH1.

Calculation of noise levels for a 24 hour period supported the findings of am peak hour results.

7.0 Assessment of Effects

The following assessment of effects is structured in paragraphs dealing with bus stations, intersections and interchanges, schools, retirement homes and residential areas. Each of these sections contains a detailed assessment of noise level changes due to the operation of the busway.

7.1 Bus Stations

Bus stations serving two different purposes are proposed to be constructed along the busway.

Bus stations at Esmonde/Akoranga Roads and Westlake Girls High School will provide a link into the local roading network system, thus making them more accessible for patrons. These stations have public drop-off areas, provisions for taxis and short-term parking, and allow for local buses transporting passengers to the busway route to enter the station.

The bus station at Sunnynook Road is a small on-line station without access to local roads. Passengers are expected to be from the adjacent communities and the commercial area along Sunnynook Road. Constellation Station has not been assessed because we understand that it forms a separate application made by the North Shore City Council.

7.1.1 Akoranga/AUT Bus Station (Chainage 10350 to 10500)

This bus station is positioned just north of the Esmonde Road/Akoranga Drive interchange. In conjunction with the establishment of the busway and associated facilities, a new Esmonde/Akoranga Link consisting of a new overbridge, on- ramps and off-ramps is proposed to be constructed (see 7.2.2).

Local feeder buses are predicted to amount to 102 servicing the station in the morning peak hour. Express buses stopping at this station would amount to up to 65 northbound and up to 142 southbound buses. Buses joining and leaving the busway at Akoranga/AUT Station are expected to number thirty and ten respectively.

The busway is proposed to carry up to 950 HOVs south of this bus station. These vehicles are permitted to travel south into Auckland and during morning peak time only.

The bus station is equipped with a Kiss n' Ride facility (area for passengers to be dropped off from private vehicles) and a connection across the Barry's Point Reserve to the Fred Thomas Drive Extension. This link is called the Akoranga Station Link Road. Akoranga Station Link Road is some 300 m distant from Rosmini College and approximately 150 m from offices in Barrys Point Road. It is predicted that the construction and operation of this Link would have no appreciable effect on any noise sensitive activities. Likewise, activities at the Kiss n' Ride facility are predicted to have essentially no effect on any noise sensitive activities due to distance and small traffic numbers compared to SH1 and the busway.

The station is sufficiently distant from any noise sensitive activities with approximately 220 m across SH1 to Akoranga Campus. It is predicted that no noise level increase would occur due to the establishment of the bus station, and no residential or educational facilities are predicted to be adversely affected.

The station (A) is shown on Figure 3 in Appendix 2. The construction of the Akoranga/Esmonde Interchange is assessed in detail in Paragraph 7.2.2.

7.1.2 Westlake Bus Station (Chainage 12030 to 12200)

Westlake Bus Station is located between Westlake Girls High School and Northcote Road adjacent to the Smales Farm development. The land required for the construction of the station would be obtained from the areas presently occupied by the school and business development. Short-term car parking and a pick-up and drop-off facility would be provided east of the station.

Predicted bus numbers for this station show up to 90 local feeder buses visiting the station during the peak morning hour. Express services would comprise of 30 buses joining the busway and 14 buses leaving it at Westlake Station. 350 HOVs traversing though the station are the maximum permitted number for this section of busway.

The Westlake Station is predicted to cater for a large number of passengers with Westlake Girls High School, Smales Farm Business Park and the North Shore Hospital in the immediate vicinity of the station. Bus number predictions show that this station would have the highest number of local and express buses arriving and departing during morning peak hour.

The position of Westlake Station is in the vicinity of noise sensitive activities such as the high school and the proposed business development containing offices and a childcare centre.

Westlake Girls High School

There are two existing buildings (B in Figure 6) on the western side of the teaching complex of Westlake Girls High School approximately 20 m from the local and feeder bus lane and platform. These buildings are used for Woodwork classes and are less noise sensitive than other teaching areas of the school. The existing noise level at the facade of these classrooms has been calculated to be 60 dBA. The Transit Guidelines specify a Design Level of the ambient noise level plus 3 decibels to be met._The Design Level is therefore 63 dBA L_{eq} 24 hours. The predicted noise level at the facade of these buildings in 2011 in the 'Do-Minimum' scenario is 61 dBA L_{eq} 24 hours. In the event of the busway being built the noise level is predicted to be 63 dBA L_{eq} 24 hours which complies with the Transit Guidelines criterion.

A new road is proposed to link the station with the Smales Farm and Taharoto Road, extending Shakespeare Road south along the high school boundary, in close proximity to classrooms accommodating the Music Department of the school located along the southern school boundary (C in Figure 6). The road kerb is approximately 7.5 m from the closest classroom facade and classrooms are approximately 1.5 m below the proposed road level, thus being partially shielded from traffic on this road.

Shakespeare Road Extension is planned to be a public road catering for traffic from Smales Farm Business Park and school buses. Traffic numbers for 2011 for the Shakespeare Road Extension are predicted to be approximately 1000 vehicles in the am peak hour. Bus number predictions are only available for the year 2005. Approximately 40 to 60 buses are predicted to enter the station via Shakespeare Road Extension and 24 to 52 buses would leave the station, both in the am peak hour. For our calculations we have assumed the higher number for the year 2011.

School hours are from 8.45 am to 3.15 pm. School buses servicing Westlake Girls High School are predicted to amount to up to 25 buses dropping students off between 8.30 am and 8.45 am, and the same number picking pupils up between 3.15 pm and 3.30pm. These buses are operating outside school hours and would, therefore, not affect the teaching activities during the school hours.

Noise levels predicted to be received by the southern classrooms have been assessed in two parts.

- 1. If the Shakespeare Road extension was built and operated before the busway, the predicted ambient noise level at the Music Department would be 63 dBA in 2001. Table 2 in Paragraph 4.1 shows that the classrooms are in the High Noise Area under these circumstances and the Design Level would be 66 dBA. The noise level predicted after the busway is operational in 2011 and buses use the link road is 66 dBA. This level just complies with the Design Level.
- 2. If the link road was built in conjunction with the busway, and is a feature of it through the service provided to the busway, then traffic on this road should not be considered as contributing to the ambient noise level. The noise level at the south facing classrooms of the Music Department generated by existing traffic on the motorway only is predicted to be 56 dBA. Table 2 in Paragraph 4.1 shows these classrooms are in the Medium Noise Area and the Design Level would be 62 dBA. In the event of the busway and the link road being constructed simultaneously, the predicted noise level at the facade of the most exposed classroom would be 67 dBA. This noise level is 5 decibels above the Design Level.

Mitigation of the predicted noise level of 67 dBA by 5 decibels could be achieved by installation of an acoustic barrier along the common boundary of the link road school and school. This fence would need to be approximately 2 metres high with no gaps between fence and ground. Such a fence could provide 5 to 10 decibels of traffic noise reduction depending on the final level of the new road.

The internal noise level of the classrooms of the Music Department is predicted to be approximately 20 decibels lower than the noise level at the facade with all doors and windows closed. Therefore, with the acoustic barrier constructed along the common boundary of Shakespeare Road Extension and Westlake Girls High School, the internal noise level in these rooms are predicted to be less than 40 dBA. This would be an acceptable noise level in classrooms.

The above mentioned classrooms also fall within the Single Event Design Criterion category. The Single Event Design Criterion is intended to protect

the sleep of residents close to roads. Therefore, it is not relevant to a school situation. However, due to noise mitigation measures necessary to reduce the average noise level at the school to the Transit Design Level, the 2 m high barrier as recommended would fulfil the 3 decibels reduction required by the Transit Guidelines.

The school is within the vicinity of the proposed Kiss n' Ride (drop-off) facility at the station which would be located opposite the southern facade of the Woodwork Department and separated from the school by the proposed Shakespeare Road Extension. Traffic generated by activities relating to this area has been taken into account in the traffic numbers on Shakespeare Road Extension. No further adverse effects are predicted for the school provided that recommended acoustic barriers be installed.

Smales Farm Business Park

The Smales Farm Business Park (D in Figure 6) is at present undeveloped where it is adjacent to the link road. The site is zoned Business 7a and therefore not protected by the Transit Guidelines. However, it is likely that this site will be developed in the future to accommodate office buildings and associated facilities. It is possible that noise sensitive activities such as offices could be established adjacent to the link road. It is recommended that all potentially affected buildings on this site be constructed so as to ensure an appropriate internal noise environment for future occupants.

7.1.3 Sunnynook Bus Station (Chainage 14840 to 14960)

Sunnynook Bus Station is, unlike the other three stations, a small on-line station without integration with local bus networks. Only buses already on the busway can service this station which is understood to be intended to cater for the adjacent communities and businesses only. A bus station on Sunnynook Road provides a link to local bus services. A maximum of 350 high occupancy vehicles and a total of up to 122 buses on the busway would be travelling through the station.

The closest residential dwellings in the vicinity of Sunnynook Station are in Sunnynook Road 24 m east from the city bound platform (E in Figure 10). Houses in Kapiti Place are approximately 20 m from the busway in the vicinity of the station.

The predicted noise level in Sunnynook Road for existing traffic flows in 2001 is 62 dBA. The Transit Guidelines Design Level is 65 dBA for this area (ambient noise level plus 3 decibels). Noise levels in 2011 without the busway are predicted to be 63 dBA and with the busway in place 66 dBA, thus mitigation would be required to decrease the noise level by 1 decibel. This can be achieved by installing a 0.8 m high acoustic barrier along the top of the embankment containing the bus station.

7.2 Interchanges, Intersections and Ramps

Intersections, on-ramps and off-ramps have the potential to increase noise levels in areas previously little affected by traffic noise. Ramps may decrease distances between traffic and residential activities thus increasing traffic noise levels.

7.2.1 Onewa Road Interchange (Chainage 8200 to 8700)

The Onewa Road Interchange will replace the existing Onewa Road southbound on-ramp and off-ramp and also cater for traffic on the busway. The eastern and western alignments of the busway would combine on the eastern side of SH1 just north of Onewa Road. This will require two overbridges to be built. New on-ramps and off-ramps connect the busway with Onewa Road, thus making it accessible for the local bus network and HOVs travelling south. Northbound on and off-ramps remain unchanged.

The proposed southbound off-ramp would cross the motorway north of the existing northbound motorway off-ramp and connect into Onewa Road. All ramps would cater for local and busway traffic simultaneously. Busway traffic from Onewa Road will only be permitted to travel south into Auckland. Northbound busway traffic may travel north along the busway or leave the busway into Onewa Road.

The noise level at residences at Sylvan Ave (G in Figure 2) being approximately 20 m from the new southbound on-ramp and thus closest to the new interchange is predicted to be 62 dBA in 2001. The Design Level would be 65 dBA (ambient noise level plus 3 decibels). If no busway was constructed the noise level is predicted to be 63 dBA in 2011. In the event of the busway and the interchange being constructed the noise level is predicted to increase by 2 decibels to 65 dBA, thus meeting the Transit criterion.

We understand concerns have been raised about dwellings in Waimana Ave being affected by the construction of the northbound busway lane between Stafford Road and Onewa Interchange. The busway would be elevated to a level similar to the dwellings in Waimana Ave. The closest residential dwelling is approximately 102 m distant from the northern bus lane. The existing noise level at these dwellings in 2001 is predicted to be 67 dBA. This would require a Design Level of 70 dBA to be met as it is in the High Noise Area. Without the busway being constructed, a noise level of 68 dBA is predicted at these houses for the Design year. With the busway being operational the noise level is predicted to be 69 dBA, thus complying with the Transit Design Level.

7.2.2 Akoranga/Esmonde Interchange (Chainage 9650 to 10650)

Esmonde/Akoranga Interchange is located in the vicinity of the existing Takapuna/Devonport motorway exit. A new Esmonde Road/Akoranga Drive Link would cross SH1, and Fred Thomas Drive would be extended to the south to join the new alignment. As the new Fred Thomas Drive alignment is not yet decided, no comments can be made as yet concerning potential noise effects.

The interchange would affect largely Business and Recreation zoned land. Akoranga Campus (H in Figure 3) is in the vicinity of the new northbound on-ramp. However, at approximately 100 m distance it is sufficiently far from the new alignment not to be affected.

7.3 Schools

Schools are particularly noise sensitive activities and are protected under the Transit Guidelines. There are three schools in the immediate vicinity of the proposed busway, which are examined in the following paragraphs.

7.3.1 Takapuna Intermediate School (Chainage 11460 to 11650)

Takapuna Intermediate School (I in Figure 5) is located east of SH1 bordering Northcote Road to the south. The sports fields are located closest to the motorway thus providing some distance attenuation to the classrooms along the eastern site boundary.

An existing noise level of 55 dBA in 2001 places the nearest classrooms in the Medium Noise area with a Design Level of 62 dBA. Noise level predictions for 2011 without the busway in place result in a noise level of 56 dBA at nearest classrooms. If the busway was constructed the noise level would increase by 1 decibel to 57 dBA, which is well within the Design Criterion.

7.3.2 Westlake Girls High School (Chainage 12120 to 12610)

Westlake Girls High School is in close proximity to the motorway. Teaching facilities are located in the south eastern portion of the site and separated from SH1 by sports fields.

The effects of the proposed Westlake Station and associated road are discussed in detail in Paragraph 7.1.2. Installation of some form of noise mitigation measure along the southern school boundary opposite the teaching facilities is recommended to mitigate noise levels generated by the proposed Shakespeare Road Extension between Westlake Station and Taharoto Road.

Buildings on the western side of the teaching complex containing the Woodwork classrooms (Jin Figure 6) are approximately 70 m distant from SH1 and 55 m from the proposed busway alignment. Calculations show that the existing noise level at these classrooms is 61 dBA. The Design Level would be 64 dBA (ambient noise level plus 3 decibels). Without the busway the noise level at the facade of the closest classroom is predicted to be 62 dBA in 2011. With the busway in place the noise level is predicted to be 63 dBA which complies with the Transit Guideline Design Level.

7.3.3 Westlake Boys High School (Chainage 12760 to 13100)

Westlake Boys High School is located between Wairau Road and Altona Road. Its sports fields are adjacent to SH1.

The closest teaching area (K in Figure 7) is approximately 142 m from the motorway and the proposed busway. In 2001 the existing noise level has been calculated to be 56 dBA. The appropriate Design Level for the Medium noise area is 62 dBA. Without the busway being constructed in 2011 the noise level at the facade is predicted to be 57 dBA. With the busway the noise level increases by 1 decibel to 57 dBA which is well below the Design Level.

7.4 Retirement Homes

Retirement homes cater for the elderly, sometimes especially sensitive members of society. These people often do not have the means or the possibility of removing themselves from noisy activities. Retirement homes are protected under the Transit Guidelines.

7.4.1 Takapuna Park Retirement Village (Chainage 11020 to 11140)

Takapuna Retirement Village (V in Figure 4) is in Puriri Street with the closest dwellings approximately 20 m from the near edge of the SH1 carriageway. The construction of the busway would decrease the distance from traffic on the busway to the closest dwelling to 4 m.

We understand that part of the retirement village may be acquired to enable access to the busway construction site and facilitate safe construction activity. Some of the dwellings currently occupied by the retirement village are within the, to-be-acquired, land and may be partially or fully removed. Recommendations regarding these affected dwellings can be made when detailed engineering drawings are available.

The next closest dwelling on the retirement village site is 23 m from the near edge of the motorway. The busway alignment is proposed to run along the western site boundary at 8 m distance.

Existing noise levels at the retirement home have been predicted to be 69 dBA. Long term noise measurements resulted in a noise level of 67 dBA at one of the most exposed facades. This places the retirement home in the High noise area with a Design level of 70 dBA. Noise level predictions at the closest affected facade for the year 2011 without the priority lane show a noise level of 70 dBA. With the priority lane in place the predicted noise level for the year 2011 is 72 dBA and 71 dBA for + /-20% bus numbers respectively.

The increase in noise level of up to 2 decibels is due to traffic on the priority lane. Therefore, noise mitigation in the form of a noise barrier with a minimum height of 0.8 m from chainage 11000 to 11160 is predicted to reduce the received noise level to the Design Level of 70 dBA.

This position was one of the three where long duration data logging equipment was used to assess 24 hour noise levels. The above calculations were done using am peak hour traffic flows. If traffic flows for a 24 hour period are used the results do not change significantly. Noise level predictions at the closest affected facade for the year 2011 without the priority lane show a noise level of 69 dBA. This places the site in the High Noise Area as set out in the Transit Guidelines and the Design Noise Level is 70 dBA. With the priority lane in place the predicted noise level for the year 2011 is 71 dBA.

The increase in noise level of 1 decibel is due to traffic on the priority lane. Therefore, noise mitigation in the form of a noise barrier with a minimum height of 0.8 m from chainage 11000 to 11160 is predicted to reduce the received noise level by at least 1 decibel.

However, this barrier is predicted not to achieve the required 3 decibels reduction in noise level for the Single Event Design Criterion. One dwelling is within 8 m of the proposed busway alignment thus falling into the Single Event

Design Criterion category. A 1.5 m barrier is predicted to reduce noise levels by 3 decibels or more and is recommended at this location.

7.4.2 Campbell Burns Retirement Home (Chainage 11600 to 11650)

The Campbell Burns Retirement Home (L in Figure 5) has been assessed in detail in our report No. 97245B(i) of 4 December 2000. The retirement home is located on the south eastern corner of Northcote Road and SH1. Northcote Road is elevated in the vicinity of the home leading onto a motorway overbridge. Therefore, some of the motorway traffic is shielded from the retirement home by the bridge retaining structure.

Existing noise levels for the year 2001 are predicted to be 57 dBA which places the retirement home in the Medium noise area. The Design level is 62 dBA. Noise level predictions for 2011 without the busway show a noise level of 58 dBA at the most exposed facades of the retirement home. Calculation of the noise level with the busway gives a result of 59 dBA.

Notwithstanding the above, this retirement home is proposed to be purchased by Transit for construction access purposes.

7.4.3 Parklane Retirement Village (Chainage 14530 to 14780)

Parklane Retirement Village is south of Sunnynook Road with small dead end streets branching off to the north. Dwellings in Oxford Drive (Sin Figure 10) are 48 m from the motorway. The proposed busway would be at a distance of 32 m from the most exposed facade.

Existing noise levels at the most exposed facade are predicted to be 61 dBA. The Design level is 64 dBA (ambient noise level plus 3 decibels) as set out in the Transit Guidelines. Calculation of the predicted noise level without busway results in a noise level of 62 dBA With the busway in place the predicted noise level at the most exposed facade in Oxford Drive is 64 dBA, so no noise mitigation measures would be required.

Other dwellings of the retirement village (W in Figure 10) are currently protected from motorway traffic noise by an approximately 3 m high bund in the motorway reserve and an additional landscaped bund on site. The proposed busway alignment would require a cut into part of the existing motorway bund to accommodate the busway. The bund, in its entirety is proposed to be retained in a manner so as to maintain existing shielding.

The closest dwelling used for residential purposes is 34 m from SH1 and 18 m from the proposed busway alignment. An existing noise level in 2001 of 58 dBA has been predicted for these dwellings. The Design level is 62 dBA with the dwellings being in the Medium Noise Area. The predicted noise level at the most affected facade of the retirement village for 2011 without the busway is 59 dBA. With the busway in place the noise level is predicted to be 60 dBA, thus no mitigation would be required.

7.5 Residential Areas

There are many residential areas along SH1 which are already subject to high ambient noise levels. The impact of the establishment of the busway on these areas is assessed in detail in the following paragraphs.

7.5.1 Stafford Road/Nelson Ave (Chainage 7750 to 7900)

The closest residential dwellings in this area are 86 m from the proposed busway alignment. They are shown as M in Figure 1. Sites closer to SH1 are not used for residential purposes at present and are, therefore, not considered here.

In 2001 the existing noise level is predicted to be 64 dBA. The Transit Guidelines require a Design Level of 67 dBA to be met. Calculations of the 'Do-Minimum' scenario in 2011 without the busway being constructed result in a noise level of 65 dBA. With the busway the predicted noise level is 67 dBA. This complies with the Design Level.

7.5.2 Karaka Street/ Puriri Street (Chainage 11000 to 11280)

Residential dwellings in Karaka and Puriri Streets (N in Figures 4 and 5) are as close as 20 m to SH1 and would only be 10 m to 14 m distant from the busway. The Takapuna Park Retirement Village is located in this area and has been discussed in detail in Section 7.4.1.

Noise level predictions for the year 2001 (existing traffic flow) show a noise level of 69 dBA at the most affected facade, thus the Design level is 70 dBA. Noise level predictions in 2011 without the busway result in 70 dBA at the most affected facades. With the busway in place the predicted noise level for the year 2011 is 72 dBA and 71 dBA for + /-20% bus numbers respectively.

The increase in noise level of up to 2 decibels is due to traffic on the busway. Therefore, noise mitigation measures in the form of a noise barrier from chainage 11000 to 11280 with a minimum height of 0.8 m is recommended. This would reduce the received noise level to the Design Level of 70 dBA.

Some dwellings in this area are within the Single Event Design Criterion category. Karaka and Puriri Streets have dwellings at a distance of 10 to 12 m from the busway. A 1.5 m high barrier is predicted to mitigate by 3 decibels or more as required by the Transit Guidelines.

7.5.3 Wairau Road (Chainage 12660 to 12720)

East of SH1 and north of Wairau Road is a small Residential 4a area (O in Figure 7) that would be adjacent to the proposed busway alignment. SH1 crosses Wairau Road on an over-bridge, hence provides partial shielding for the residential dwellings below.

Calculations show a facade noise level of 65 dBA for 2001 with existing traffic flows. The Design Level is ambient noise level plus 3 decibels, thus being 68 dBA. The "Do-minimum" scenario without the busway being built results in a predicted noise level of 66 dBA for the most affected dwelling in the vicinity. With the busway being constructed the noise level is predicted to be 67 dBA. This noise level complies with the Transit Guidelines design criterion.

7.5.4 Altona Road (Chainage 13100 to 13200)

Residential dwellings in Altona Road (Pin Figure 7) are approximately 30 m from the near lane of SH1. With the construction of the busway this distance would decrease to 18 m to the closest facades.

The existing noise level at the nearest facade with traffic flows in 2001 is predicted to be 69 dBA. 24 hour noise measurements have also been carried out for a position at Altona Road resulting in a noise level of 67 dBA. The dwellings are in the High noise area and the Design Level is 70 dBA as set out in Table 2.

The predicted noise level in 2011 without the busway in place is 70 dBA. With the busway being constructed the noise level is predicted to remain at 70 dBA. No noise mitigation measures are required.

7.5.5 Lyttelton Avenue (Chainage 13880 to 14250)

Lyttelton Ave (Q in Figures 8 and 9) extends east along SH1 with the closest houses being 40 m from the southbound motorway lanes and 23 m from the southbound motorway off-ramp. Most houses are up to 4 m below road level and thus slightly shielded from traffic on SH1. The busway is proposed to be level with the dwellings, therefore no shielding would be present.

Calculations of the predicted noise level in 2001 show a noise level of 63 dBA. The Design Level (ambient noise level plus 3 decibels) is 66 dBA. In 2011 the predicted noise level without the busway in place is 64 dBA. In the event of the busway being constructed the noise level at the most exposed facade is predicted to be 66 dBA. This noise level complies with the Transit Design Level.

7.5.6 Newport Place (Chainage 14250 to 14600)

Houses at the northern end of Newport Place (R in Figure 9) are in close proximity to SH1 and are not shielded from motorway traffic noise.

Noise level prediction using existing traffic flow in 2001 result in a noise level of 64 dBA at the most exposed facade. This noise level falls into the high noise area and the Design Level is 67 dBA (ambient noise level plus 3 decibels). The predicted noise level for 2011 without the busway is 65 dBA. The predicted noise level with the busway is 68 dBA, thus requiring noise mitigation of 1 decibel.

A 0.8 m high barrier beside the carriage way on top of the fill would be sufficient to achieve 1 decibel noise reduction and compliance with the Transit Guideline Design Level.

7.5.7 Kapiti Pl/Cockayne Cres to Salamanca Rd (Chainage 14940 to 16300)

Dwellings in Kapiti Place (T in Figure 10) are in the vicinity of Sunnynook Station and have been discussed in detail in Paragraph 7.1.3. Residential areas extend north of Kapiti Place along SH1 to Sunset Road. Dwellings are at varying distances from the carriageway with the closest ranging from 36 m to 50 m from the kerb. The area is marked U in Figures 10 and 11.

The busway is proposed to be constructed between SH1 and the residential area, thus decreasing the distance to the houses by 20 to 30 m.

The existing noise level for 2001 at affected residential dwellings has been calculated to be 67 dBA. A long term noise survey resulted in a noise level of 66 dBA. This places the area in the High noise area with a Design Level of 69 dBA (ambient noise level plus 3 decibels).

Noise level predictions for the year 2011 without the busway being built are between 64 dBA and 67 dBA. The Design Level is 67 dBA to 70 dBA. With the busway in place predicted noise levels for the closest residential dwellings range from 65 dBA to 69 dBA, thus complying with the Design Levels.

8.0 Noise Mitigation Measures

There are a number of measures which can be taken in the course of the design and construction of the busway which would result in mitigation of the generation and propagation of road traffic noise.

8.1 Road Surface

The use of Friction Course or similar low road noise generating surface material is of significant advantage in reducing road tyre interaction noise. The use of coarse Chip Seal could result in the generation of noise levels of in excess of 5 decibels higher than for Friction Course. Our calculations have assumed the use of Friction Course road surface for SH1 and the proposed busway.

8.2 Barriers

The utilisation of barriers can be an effective method of controlling the transmission of road noise. The installation of barriers so as to interrupt line of sight between roadway and receiver can result in up to 10 decibels reduction of traffic noise for receivers.

In locations where the road is elevated above surrounding land, barriers do not need to be particularly high to achieve interruption of line of sight.

There are only five sites where the construction of barriers is recommended for the busway project. They are discussed in detail in Paragraphs 7.1.2 Westlake Bus Station, 7.1.3 Sunnynook Station, 7.4.1 Takapuna Park Retirement Home, 7.5.2 Karaka Street/Puriri Street and 7.5.6 Newport Place.

8.3 Insulation of Houses

In situations where the use of barriers is impractical, acoustic insulation of existing houses and schools can be improved. New dwellings and other buildings containing noise sensitive activities must have appropriate acoustic insulation incorporated during construction to ensure an acceptable indoor noise environment as required by the North Shore Proposed District Plan (7.1.2 Smales Farm Business Park Development).

Insulation of dwellings will, of course, only reduce internal noise levels thereby protecting against sleep disturbance and interference with

conversation, television and radio listening etc. No improvement in the outdoor environment will result as with the installation of barriers.

9.0 Construction Noise

This section comprises a brief description of key construction issues, and an assessment of construction noise.

9.1 Construction Methodology

The Construction Statement by Beca Carter Hollings & Ferner contains the following about the time frame in which the busway and associated facilities could be built:

"While the time periods for the sector construction may vary as a result of the final design and specification requirements or contractors methodologies, the separable sections identified are a suitable sub division of the project and may be constructed in sequence or combined and the total construction period controlled."

Further, it is stated that the construction of major interchanges will be carried out following a stringent timeframe and traffic management to avoid congestion. This is of great importance in the acoustic context because it ensures that the time in which construction noise affects neighbouring residents and students is kept to a minimum.

Due to above statement the reduced noise limit for an extended construction period has not been adopted. It is unlikely that construction activities would exceed 18 weeks at any one position excluding bridges. The feasibility of such a time frame has also been established in other roading projects of similar scale.

9.2 Construction Noise Limits

The North Shore City Proposed District Plan contains the following regarding construction noise.

g) Any construction, maintenance and demolition noise shall comply with the provisions of NZS6803P:1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Works".

The noise limits specified in this standard for residences are set out in full in Appendix 3.

Table 1 of this Standard gives a recommended upper limit of L_{10} 75 dBA and L_{max} 90 dBA for construction noise received in residential areas during daytime (7.30 am to 6.00 pm). The noise levels are to be measured 1 metre from the most exposed door or window.

The North Shore Proposed District Plan refers to NZ\$6803P:1994 in Paragraph 10.5 (g). Therefore, the assessment was done in accordance with this standard. It is noted that there is a newer Standard available. NZ\$6803:1999 sets a daytime noise limit of 75 dBA $L_{\rm eq}$ which equates to 78 dBA $L_{\rm 10}$. Thus, the noise limits of the 1994 standard are 3 decibels more stringent than for the 1999 standard requiring a 75 dBA $L_{\rm 10}$ daytime noise limit to be met. The

assessment is, therefore, conservative. It is acknowledged that NZ\$6803:1999 is less stringent in some aspects and would therefore be easier to comply with. However, we have applied the 1984 standard to this project in order to be consistent with the North Shore Proposed District Plan and other construction projects which take place in the area under the jurisdiction of this Council.

Predicted levels of construction noise for various different items of plant likely to be used at different distances are given in Table 5 below.

Table 5: Construction Equipment and Noise Levels

Plant	Sound Power Level dBA	Noise Level @ 20 m dBA	Noise Level @ 50 m dBA	Noise Level @ 100 m dBA
Scraper	118	84	76	70
Bulldozer	116	82	74	68
Hydraulic excavator	116	82	74	68
Dump truck	114	80	72	66
Roller	106	72	64	58
SP compactor	100	66	58	52
Grader	116	82	74	68
Loader	117	83	75	69
Pile Drill	111	77	69	63

It can be seen from above table that, for construction work closer than 50 m to any residential dwelling, it would be difficult to comply with the NZS6803P noise limit of 75 dBA L_{10} . For houses at a distance of about 50 metres, with machinery working continuously predicted noise levels approach the upper limit of acceptability.

Maximum noise levels vary widely and are dependent on type, operation load and maintenance level of the equipment. Measurements of machinery in similar construction projects show maximum noise levels around 93 dBA at 10 m distance which would drop to 79—86 dBA at a distance of 50 m. Noise mitigation measures have been recommended for all dwellings closer than 50 m from the construction activity. Therefore, compliance with the L_{max} noise limits of 90 dBA is predicted to be generally achieved in addition to the compliance with the L_{10} noise limits.

The L_{95} noise level reflects noise from continuous stationary equipment such as generators. Due to the character of this project it is unlikely that stationary equipment would be used. Main noise sources are predicted to be from earthmoving machinery. Compliance with the L_{95} noise level could be managed on site by positioning critical machinery at sufficient distance from residences and managing operation times.

Noise mitigation measures which could be used during the construction period include the erection of temporary acoustic barriers, the use of quiet machinery, the drilling of bridge piles (rather than driving) and the shortening of construction times in the vicinity of residential sites. In some areas the removal of dwellings appears to be necessary due to close proximity or coinciding land use.

Detailed assessment of affected positions will need to be conducted after final engineering drawings are available. Section 9.3 contains a preliminary detailed site assessment regarding the potential impact of construction noise and recommendations of possible noise mitigation measures.

9.3 Construction Noise Assessment

The following Table 6 gives a summary of areas affected by construction noise and possible mitigation measures. This assessment is preliminary only and is subject to finalised alignment and engineering design. Drawings available at the time of production of this report are not appropriate for making final decisions about mitigation measures for some dwellings.

Construction time in the vicinity of any residential or other noise sensitive areas should be kept to a minimum and a tight time frame maintained. When relocation of residents is recommended it may be sufficient to do so only during the operation of heavy earthmoving machinery such as excavators, graders and bulldozers. During the road surface preparation operation the construction noise level would be considerably lower than during the initial phase, and residents may wish to return to their homes during this period.

We understand the it is proposed to consult individually with those properties shown in orange on the mitigation plans in order to determine the appropriate form of additional mitigation required. The options that would be discussed include especially high barriers, temporary relocation and compensation options.

Recommended barriers would have to be of a minimum standard comprising 12 mm ply wood, 9 mm fibre cement or 20 mm timber, tightly constructed with no gaps between barrier and ground surface. The minimum height requirement depends on surrounding terrain, but should always break line of sight between the noise sensitive position and the noise source.

In some instances both the relocation of residents and the construction of a temporary acoustic barrier is recommended. This takes into account residents moving back into their homes after the initial construction phase is finished and then requiring protection from noisy equipment operating along the alignment during less noisy construction works such as the laying of base course, asphalting and drain laying.

Table 6: Areas affected by Construction Noise

Area	Chainage/ Description	Address	Distance to Construction Activity	Possible Mitigation Measures
Sylvan Avenue	Onewa Interchange	1 and 3 Sylvan Ave	N/A	To be purchased by Transit NZ
	go	5 Sylvan Ave	8 m	Temporary acoustic barrier along property boundary on top of cutting
Puriri Street	11020—11260	17A	40 m	Temporary acoustic barrier
		19 Puriri St	0 m — 2 m	Additional noise mitigation measures (consultation with residents) and acoustic barrier to mitigate construction and operational noise, parts to be purchased by Transit NZ
		13A—13C Puriri St	N/A	To be purchased by Transit NZ
		5,7,11 Puriri St	28 m	Temporary acoustic barrier
		1,3,5A,9 Puriri St	4 m — 14 m	Additional noise mitigation measures (consultation with residents) and temporary acoustic barrier
Campbell Burns Retirem. Home	11600—11650	44 Northcote Rd	N/A	To be purchased by Transit NZ
Westlake Girls High School	12130—12330	2 Wairau Road	48m west classrooms	Temporary acoustic barrier
riigii scriooi			5m—7m sth classrooms	No noisy construction work during school hours, vacate affected classrooms, acoustic barrier_to mitigate construction and operational noise
Wairau Road	12660—12720	35,37,41 Wairau Rd	5 — 28 m	Select quiet construction equipment and drill bridge columns and temporary acoustic barrier at ground level and at bridge level depending on construction progress
Area	Chainage/ Description	Address	Distance to Construction Activity	Possible Mitigation Measures
Altona Road	13100—13200	7,8,9,10 Altona Rd	5 — 10 m	Temporary acoustic barrier on top of cutting, and additional noise

				mitigation measures (consultation with residents)
Lyttelton Avenue	13880—14250	24,26,30,32,44,46 Lyttleton Ave	4 m — 20 m	Temporary acoustic barrier and additional noise mitigation measures (consultation with residents)
Newport Place	14250—14600	19 Newport Place and 8 Baltimore Place	30 m — 36 m	Acoustic barrier to mitigate construction and operational noise
Parklane Retirement Village	14600—14850	108 Becroft Drive	20 m — 32 m	Temporary acoustic barrier to break line of sight to construction site, part to be purchased by Transit NZ
Sunnynook Road	14860—14920	145 Sunnynook Rd	16 m	Acoustic barrier to mitigate construction and operational noise
		166 Sunnynook Rd	10 m	Additional noise mitigation measures (consultation with residents) and acoustic barrier to mitigate construction and operational noise
Kapiti Place	14940—5100	9,11,17,19,23 Kapiti Pl	2 m —6 m	Additional noise mitigation measures (consultation with residents) and temporary acoustic barrier
Cockayne Cres	15100—15440	30,34 Cockayne Cres	Appr. 20 m	Additional noise mitigation measures (consultation with residents) and temporary acoustic barrier
		Full length of street	Appr. 30 m	Temporary acoustic barrier
Salamanca Road	15440—16040	Full length between construction site and Salamanca Rd, Tahu Cres, Aralia Rd	10 m — 30 m	Temporary acoustic barrier

Note: Temporary acoustic barriers are recommended for the mitigation of construction noise only, Acoustic barriers to mitigate construction and operational noise are recommended as permanent barriers.

The above mentioned dwellings proposed to be purchase by Transit NZ, additional noise mitigation measures and positions of temporary barriers are shown in Figures 1 to 12 in Appendix 2, permanent barriers are shown in Figures I to V in Appendix 2.

10.0 Conclusions

The operation of a busway extending along the eastern side of SH1 north of the Auckland Harbour Bridge would have no more than minor noise effects on neighbouring residential and educational facilities provided that some noise mitigation measures were implemented. The provision of such mitigation measures would ensure that the Design criteria of the Transit Guidelines are complied with.

The road surface of the busway should be Friction Course to minimise tyre noise generation. Barriers should be erected along the southern boundary of Westlake Girls High School in the vicinity of the teaching facilities adjacent to the proposed link road from Westlake Bus Station to Taharoto Road, beside Takapuna Park Retirement Village, adjacent to the busway alignment at Karaka and Puriri Streets, along Sunnynook Station and at Newport Place.

Once completed, the busway is predicted to only slightly increase the noise level by up to 3 decibels for some areas in the vicinity. In order to put this into context, it is noted that this increase is likely to be just noticeable by the receivers. It is generally considered that in circumstances of this type, the smallest increase in noise level that can be detected by human hearing is 3 decibels.

Construction noise will have to be managed and monitored carefully and every possible precaution taken to avoid prolonged construction activities in close proximity of residential dwellings and schools. It would be desirable for heavy machinery not to use completed parts of the busway so as to shorten and reduce the noise received from construction activities. Some dwellings may need to be removed in order to construct the busway. In some instances a consultation process involving residents of the most affected dwellings is recommended in order to comply with the construction noise limits.

Appendix 1

Glossary of Terminology

dBA A measurement of sound pressure level which has its frequency

characteristics modified by a filter so as to more closely

approximate the frequency bias of the human ear.

L_{eq} The time averaged noise level (on a log/energy basis).

L₁₀ The noise level which is equalled or exceeded for 10% of the

measurement period. L_{10} is an indicator of the mean maximum noise level and is used in New Zealand as the descriptor for

intrusive noise (in dBA).

L_{max} The maximum sound pressure level measured during the sampling

period.

Noise A sound that is unwanted by, or distracting to, the receiver.

NZS 6801 New Zealand Standard NZS 6801:1991 "Measurement of Sound"

NZS 6802 New Zealand Standard NZS 6802:1991 "Assessment of

Environmental Sound".

NZS 6803 New Zealand Standard NZS 6803P:1984 "The Measurement and

Assessment of Noise from Construction, Maintenance and

Demolition Work".

Appendix 2

Figures 1 to 12

- I X Measurement Positions (see Paragraph 3.0)
- A U Noise sensitive areas assessed in this report (see Section 7)

Recommended location of noise mitigation measures (Temporary acoustic barriers, additional noise mitigation measures necessary and dwellings to be purchased by Transit NZ)

Figures I to V

Permanent barriers to mitigate construction and operational noise

Appendix 3

New Zealand Standard 6803P Recommended Upper Limits (dBA) for Levels of Construction Work Noise Received in Residential

Noise Level (dBA)									
Period	Weekdays		Saturdays		Sundays and Public Holidays				
_	L ₁₀	L ₉₅	L _{max}	L ₁₀	L ₉₅	L _{max}	L ₁₀	L ₉₅	L _{max}
0630-0730	60	45	70	* *	* *	* *	* *	* *	* *
0730-1800	<i>7</i> 5	60	90	<i>7</i> 5	60	90	* *	* *	* *
1800-2000	70	55	85	* *	* *	* *	* *	* *	* *
2000-0630	* *	* *	* *	* *	* *	* *	* *	* *	* *

^{**} At these times the relevant provisions in the NZS 6802 shall apply. This may mean that no noisy construction work can take place during these hours

6.1 Adjustments to noise level limits

- 6.1.1 Where the construction work is of short duration (not exceeding 15 calender days) the noise limits may be relaxed up to a maximum of 5 dBA.
- 6.1.2 If construction work is of more than 18 weeks duration the limits may be lowered by 5 dBA for the duration of the construction.

Annexure 4

Letter from MDA dated November 2017 re Changes to Acoustic Wall



84 Symonds Street PO Box 5811 Wellesley Street Auckland 1141 New Zealand T: +64 9 379 7822 F: +64 9 309 3540 www.marshallday.com

21 November 2017

Auckland Transport Private Bag 92250 Auckland 1142

Attention: Alice Ge

Dear Alice

WESTLAKE GIRLS HIGH SCHOOL EVENT CENTRE – BUSWAY BARRIER WALL MODIFICATIONS PROPOSAL

It is proposed to demolish the existing school hall, and replace it with a new auditorium and foyer. The new building will be significantly closer to Shakespeare Road Extension than the existing school hall. However, the existing school hall was of poor acoustic quality, with large doors and high louvred windows facing the road. The new facility has been designed to provide appropriate acoustic insulation from external noise sources, including traffic on Shakespeare Road Extension.

The construction of the new auditorium will require the partial removal of the noise wall that was installed as part of the Busway project. The barrier was designed to provide protection for the music department and the existing school hall.

The existing barrier is intended to be retained in front of the music department. A return barrier is proposed to provide shielding for the music rooms, while allowing road access to the school site from Shakespeare Road Extension. A lower 1.3m high barrier is proposed to be installed in front of the new auditorium (refer to attached plan being drawing number SK-035- titled *Acoustic Wall Extents*). This barrier is to be constructed from 3mm thick zinc coated steel panels with lapped vertical joints.

EXISTING DESIGNATION CONDITIONS

Shakespeare Road Extension is part of the Busway designation, which contains a number of noise performance requirements. The following conditions set out the noise performance standards for the Busway, including Shakespeare Road Extension:

"7. Noise Mitigation

7.1 The project shall, as a minimum standard, be designed and constructed to comply with the limits within the Transit NZ Guidelines for the Management of Traffic Noise for State Highway Improvements and with the acoustic report 'North Shore Busway Project, SH1 busway, Report No 97245B' by Marshall Day Acoustic Limited.

7.2 The PMP shall include a Noise Mitigation Plan prepared by a suitably qualified noise consultant. The purpose of the plan is to describe the methods by which noise associated with traffic using the roading and the bus stations within the designation will be made to comply with specified noise limits at all affected dwellings and schools in the vicinity of the area affected. Where the ambient sound level is required to determine design limits then this shall be done prior to construction commencing.

[...]



7.9 Unless:

a. Otherwise agreed between Ministry of Education (MOE) and the requiring authority; or b. MOE agrees to compensation with the Requiring Authority for the noise effects from the Busway and associated new works; where additional traffic noise resulting from the Busway or associated new works increases above 45 dBA Leq (0830 to 1530 hrs Monday to Friday) in any classroom, then the requiring authority shall, immediately following commissioning of the Busway, implement mitigation measures which result in the noise level not exceeding 45 dBA Leq, or the ambient noise level existing prior to the establishment of the Busway, whichever is the higher. This noise level shall be achieved together with the ventilation requirements of The New Zealand Building Code, Clause C4."

Noise mitigation determined to be required for Westlake Girl's High School in accordance with MDA report 97245B, included a 2m high barrier between Shakespeare Road Extension and the school.

PREDICTED NOISE EFFECTS

The new auditorium will consist of a solid concrete wall facing Shakespeare Road Extension. Any glazing proposed will be at a level below the road, and will be fully shielded by the proposed 1.3m high barrier. In addition, overlapping barriers are proposed between the vehicle access and the auditorium, and a return barrier consisting of a 2m high concrete block wall between the vehicle access and the music department, to provide full shielding from traffic on the road.

These measures will ensure that the internal noise level of 45 dB L_{Aeq} can be achieved as required by the designation conditions in the music classrooms and in the new Event Centre.

Overall, the music department is predicted to experience no change in noise effects. The new auditorium will result in lower internal noise levels than were experience in the old school hall, due to the improved façade construction. The barriers as proposed will ensure that compliance with Designation condition 7.9 is achieved.

A minor change to the existing designation conditions is being sought from Auckland Council to provide for the proposed changes to the acoustic wall, as the removal of that wall is not provided for in Report 97245B.

Yours faithfully

MARSHALL DAY ACOUSTICS LTD

Fin Williamy

Siiri Wilkening

Associate



Annexure 5

Written approval from WGHS

Written approval of affected persons



PART A (to be completed by applicant)

PART A - APPLICATION	PO							
Applicant(s) Name: (please write all names in full)	Auckland Transport							
RMA number;	Changes to designation conditions being Designation 1426 west lake Bussiation							
Address of proposed activity:	Shakespeare Rd adjoining Westlake Girls High School.							
Brief description of prop Conditions 7	0							
removal of	& part of the existing 2m high accoustic wall.							
Plan references (Including	etitle, Author and dated): NOR prepared by Burton Consultants dated chitect Ltd plans dated Sept 2017, being:							
80.30-A	, bo.31-A; bo.32-A; bo.33-A; - bo.02-A; bo.os-A; and sk-035 (No.2017).							
,	ag sought (Describe area(s) of non compliance):							
Notice of conditions.	Requirement by Audeland Transport to change of dosignation 1426							
PART B (to be complet	ted by Persons and/or Organisations Providing Written Approval)							
PART 5 - AFFECTED P	rson(s)							
full name: (in print)	WESTLAKE GIRLS HIGH LENDOL							
Full name: (in print)	Full name: (in print)							
Full name: (in print)								
Address of affected property	2 USAIRUK GO MILAGO POSTCODE							
Phone:	489-4189 Mobile 627 224-0888							
(100 Mon. As 1) 18								

I arm/we are the OWNER(S)/OCCUPIER(S) (delete one) of the property.

I have authority to sign on behalf of all the other OWNERS/OCCUPIERS (delete one) of the property.

Please note: the approval of all the legal owners and the occupiers of the affected property will be necessary.

- 1 I/We have been given details of the proposal and plans to which I/we are giving written approval.
- 2 I/We have signed each page of the plans in respect of this proposal. These need to accompany this form.
- 3 I/We understand that by giving my/our written approval, the Council when considering the application cannot take account of any actual or potential effects of the activity on my/our property.
- 4 Further, I/we understand that at any time before the determination of the application, I/we may give notice in writing to the Council that this approval is withdrawn.

Note: You shot contact the Cu	uld only sign belo stomer Service Te	w if you fully understa earn a The Council who	nd the proposal. If yo can provide you with	u require the Reso Information.	ource Consent Process to be explained you can
Signature(s):	X	Aud		Date: 2	30/11/2017
Signature(s):	.,			Date	<i>t-1</i>
Signature(s):				Date:	A CONTROL OF THE CONT

PRIVACY INFORMATION

The information you have provided on this form is required so that your application can be processed under the RMA, so that statistics can be collected by the Council. The details may also be made available to the public on the Council's website. These details are collected to inform the general public and community groups about all consents which have been issued through the Council. If you would like to request access to, or correction of your details, please contact the Council.

UNITARY PLAN UPDATE REQUEST MEMORANDUM

TO

Phill Reid, Manager Planning, Auckland-wide

FROM

Sisira Jayasinghe, Planner, Planning Central & South



DATE SUBJECT 15 February 2018

This memorandum requests an update to Auckland Unitary Plan Operative in part

Reason for update	
Chapter	Chapter K
Section	Schedules and Designations
Designation only	
Designation #	Auckland Transport 1693
Location:	3 Payne Lane and 45 Waller Street, Onehunga
Lapse Date	Not applicable.
Type of Designation	Removal
Purpose	Council car park
Changes to text (shown in underline and strikethrough)	Designation 1693 (strikethrough version of text) is attached.
Changes to diagrams	Not applicable.
Changes to spatial data	Remove mapping of Designation 1693 as per the attachment in the Auckland Unitary Plan Operative in part.
Attachments	Team Leader approved Section 182(2) Decision Report

Prepared by: Sisira Jayasinghe

Text entered by: Bronnie Styles

Planner, Planning Central & South

Planning Technician

Signature:

Signature:

Maps prepared by:

Aching Konyak – Geospatial Analyst Aucklandwide Reviewed by:

Sisira Jayasinghe, Planner, Planning Central & South

Signature:

Signature

Manager

Signature

1693 Car Park - Waller Street

Designation Number	1693
Requiring Authority	Auckland Transport
Location	3 Payne Lane and 45 Waller Street, Onehunga
Rollover Designation	Yes
Legacy Reference	Designation H10-36, Auckland Council District Plan (Isthmus Section) (1999)
Lapse Date	Given effect to (i.e. no lapse date)

Purpose

Council car park.

Conditions

- 1. All activities, works and buildings not fully described in the notice of requirement shall be the subject of either:
- a. A new notice of requirement, which shall be publicly notified pursuant to section 168 of the Resource Management Act; or
- b. A notice to alter the designation pursuant to section 181 of the Resource Management Act, which notice shall be publicly notified unless the alteration is minor and affected persons agree in accordance with the provisions of section 181(3) of the Act.

Attachments

No attachments.

Designation Schedule - Auckland Transport (2/3)

Central

Number	Description	Location
1550	Car park	73-83 Customs Street West, Auckland
1551	Car park	22-28 Beresford Square, Auckland Central
1552	Car park	24 Mercury Lane, Auckland Central
1553	Car park	20 Upper Queen Street, Auckland Central
1554	Car park	52-56 High Street, Auckland Central
1555	Car park	299 Queen Street, Auckland Central
1556	Transport Centre (Britomart Station)	12 Queen Street to Britomart Place, Auckland Central
1557	Public off-street parking	72 Fanshawe Street, Central Auckland
1558	Building line for road widening purposes	The Strand, Parnell
1559	Public off-street parking	23 Graham Street, Central Auckland
1560	Building line for road widening purposes	110 Nelson Street, 217-223 Hobson Street and 54, 86-88 Cook Street, Auckland Central
1562	Building line for road widening purposes	75 Queen Street (near Customs Street), Auckland Central
1564	Road widening	86 Federal Street, 68 Victoria Street West, and 99, 109-125 Albert Street, Auckland Central
1565	Proposed pedestrian mall	128-130 Hardinge Street, Central Auckland
1567	Proposed building line for road widening purposes	34-38 Greys Avenue, Central Auckland
1568	Public off-street parking	109-111 Onehunga Mall, Onehunga
1571	Building line for road widening purpose	101-107 Beaumont Street, Auckland Central
1572	Public open space / road.	2 Westhaven Drive, Auckland Central

1573	Public open space / road.	109 Fanshawe Street, Auckland Central
1575	Road	164-188 Beaumont Street, Auckland Central
1576	Council car park and proposed reserve	11-15 Dedwood Terrace and 1 Jervois Road, St Marys Bay
1577	Council car park	16 Redmond Street, Ponsonby
1578	Council car park	5-7 Margaret Street. Ponsonby
1579	Council car park	2 Pompallier Terrace, Ponsonby
1583	Building line for road widening	86-98 Patiki Road, Avondale
1584	Building line for road widening	37-41 and 55-91 Patiki Road, Avondale
1585	Building line for road widening	1-15 Meola Road, Pt Chevalier
1587	Building line for road widening	21 Newton Road and 582 Karangahape Road, Newton
1588	Building line for road widening	204-234 Great North Road, Newton
1589	Building line for road widening	150 Great North Road, Newton
1590	Building line for road widening	12-18 Monmouth Street, Newton
1591	Building line for road widening	204-234 Great North Road, Newton
1592	Building line for road widening	1, 21-63, 81, 2-48, 60-74 New North Road and 1- 13, 21-27A, 29-35 Mount Eden Road
1593	Building line for corner cut off	99-107 Khyber Pass Road, Newton
1594	Building line for road widening	46-50, 54 and 68 Upper Queen Street and 62 Randolph Street, Newton
1595	Council car park	226/228 Symonds Street, Newton
1596	Council car park	3 Burleigh Street
1599	Building line for road widening	11-13 and 19-33 Falcon Street and 2 Akaroa Street, Parnell
1601	Council car park	112 Parnell Road, 1 Bath Street, Garfield Street, Parnell

1602	Council car park	32 St. Heliers Bay Road, St Heliers
1603	Building line for road widening	9-19 and 29 Patiki Road and 257-315, 367-489, 533-563, 597-653, 667, 699-705, 713-767, 658-660, 670-718 Rosebank Road, and 2-6 Eastdale Road, Avondale
1604	Building line for road widening	1404 Great North Rd, Pt Chevalier
1605	Council car park	16 Huia Road, Pt Chevalier
1606	Council car park	1-9 Parr Road (North), Pt Chevalier
1609	Building line for road widening	322-336, 388, 390-394, 400-432, 574-628, 756- 764, 383-399, 445-455, 597-621, 869-911 New North Road, 2 New Bond Street and 2 Western Springs Road
1610	Council car park	820 Great North Road, Western Springs
1611	Road widening	240-242, 250-256 Balmoral Road and 43, 87-89, 81-85 St Lukes Road and 107 Taylors Road, St Lukes
1612	Council car park	2 Walters Road, Mt Eden
1613	Council car park	430-432 New North Road, Kingsland
1614	Passenger transport route	135, 161, 174, 178, 191-217, 312-328, 336-346, 371, 389-409, 400-412, 422-458, 486, 494, 506, 635-641, 655, 666-672, 669-673, 692, 825, 863, 905, 913-917, 921, 926-946A, 929-931, 935-941, 968-972, 1037-1043, 1047, 1055, 1057A, 1059, 1067, 1079-1079A, 1087-1099, 1196-1198, 1202, 1208, 1212-1216, 1230, 1244, 1288, 1292-1300, 1302-1304, 1308-1308A, 1312, 1318-1326 and 1330-1340 Dominion Road, 33A-35 Brentwood Avenue, 386-388 Mount Albert Road, 2 Onslow Road, 1A Invermay Avenue, 14 Quest Terrace and 41 Denbigh Avenue
1615	Building line for road widening	60 and 64 Sandringham Road and 57-59 Walters Road, Sandringham
1616	Building line for road widening	14-18 22, 26, 44-56, 43-81, 90, 94-96 Mt Eden Road and 2,3 Enfield Street, Mt Eden
1617	Building line for road widening	1 Gillies Avenue, Newmarket

1618	Building line for road widening	Between Nos. 2 and 350 Great South Road (north side), Epsom
1619	Building line for road widening	1-21, 2-236, 69-105, 242-248, 254-262, 272-280, 286-294, 300-350, 421-485, 495-525, 535-555 and 575 Great South Road, 2-8 Manukau Road, 1,2 and 21 Otahuri Crescent, 1 Sunnyvale Road and 1 Mapau Road, Greenlane
1620	Proposed Eastern Transport Corridor	Starts at Orakei Point carries on to Meadowbank, Glen Innes and Panmure (some underground)
1621	Building line for road widening	2-4 Woodward Street and 1081 New North Road , Waterview
1622	Council car park	984 New North Road, Mt Albert
1623	Council car park	867c New North Road, Mt Albert
1624	Building line for road widening	756-764 New North Road
1625	Council car park	12 Kitchener Road, Sandringham
1626	Building line for road widening	34-36, 88-102, 104B, 108, 122-126, 132-138, 142-156, 218-230 Balmoral Road and 15 Douglas Road, Balmoral
1627	Building line for road widening	59 The Drive, Epsom
1628	Council car park	4-8 Essex Road, Mt Eden
1629	Council car park	132 Green Lane West
1630	Council car park	6 Clonbern Road, Remuera
1631	Council car park	539 Remuera Road, Remuera
1633	Land required for regional road	1,3, 32-66 and 59-59A Mountain Road, 474, 480-482, 486-492 and 510 Ellerslie-Panmure Highway, 5 and 7 Fraser Road, 1-21A, 2 and 21B Morrin Road, 39A-39B Tainui Road and 71, 130 and 140 Jellicoe Road, Point England
1634	Council car park	Stratton Lane, Glen Innes
1636	Council car park	59 Rosebank Road, Avondale

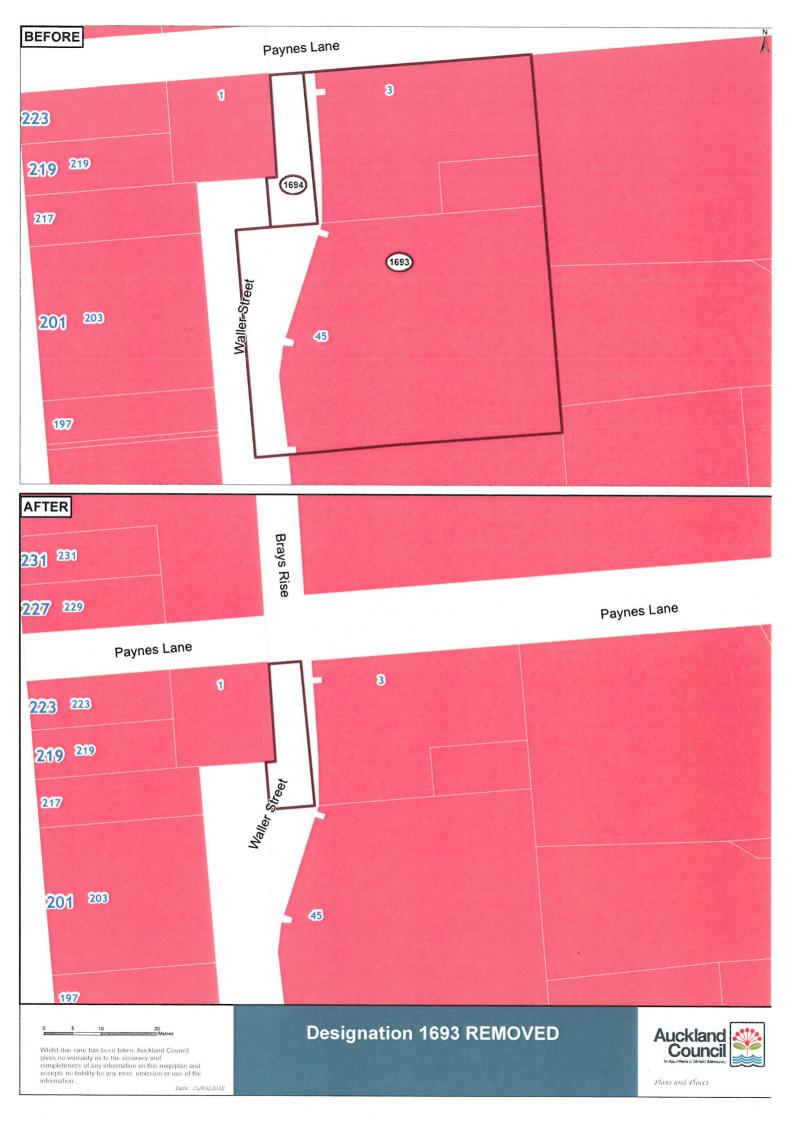
1638	Building line for road widening	7 Tiverton Road, Blockhouse Bay
1639	Building line for road widening	2-14 Owairaka Avenue and 1-1A Tyburnia Avenue, Hillsborough
1640	Building line for road widening	210-220 Richardson and 192-220 Stoddard Road, Hillsborough
1641	Council car park	219 Stoddard Road, Mt Roskill
1642	Building line for road widening	179 Mt Albert Road, 167-169 Mt Albert Road and 3 Owiraka Avenue
1643	Building line for road widening	181-245, 251, 259-335, 334A-340A, 346-352, 349-357, 356-368, 371A-457, 386-446, 448-536, 459A-649, 546-560, 590-620, 636, 644-650, 653-663, 660A, 664-668, 669-673, 670-684, 679-681, 688-698, 693-699, 707-711 and 717-725 Mt Albert Road, 685 Sandringham Road Extension, 1-1A May Road, 8-12 Mount Roskill Road, 1001, 1288C Dominion Road, 30 Erson Avenue, 18-18A Jasper Avenue, 1 and 2 Scout Avenue, 944 Mount Eden Road, 282 St. Andrews Road, 111 Pah Road and 704-717 Manukau Road
1644	Building line for road widening	250-252, 256 Mt Albert Road and 692 Sandringham Road, Sandringham
1645	Council car park	360-366 Mt Albert Road, Mt Roskill
1646	Building line for road widening	955-981 Mt Eden Road, Three Kings
1647	Building line for road widening	682-710, 726-740 Great South Road, east side, Penrose
1648	Building line for road widening	1 Robert Street, Ellerslie
1649	Building line for corner cut off	41 Robert Street, Ellerslie
1650	Council car park	179- 181 Ladies Mile
1651	Council car park	132 Main Highway and 6 Arthur St Ellerslie
1652	Building line for corner cut off	141 Ladies Mile Ellerslie
1653	Building line for road widening	193-205 Main Highway south side and 2 Cawley Street, Ellerslie

1654	Building line for corner cut off	24 Wilkinson Road
1655	Building line for road widening	341-357, 387-393, 406-424, 421-439, 456-470, 459 and 535 Ellerslie Panmure Highway, 1-1A Ferndale Road, 1 Barrack Road and 1 Harding Avenue
1656	Building line for road widening	7-27, 16-34 Lagoon Drive and 7-17 Queens Road, Panmure
1657	Building line for road widening	39-87, 80, 114-170, 153-155, 214-258, 261-279, 289-301, 570, 576-590, 660-684 and 645 Mt Wellington Highway, 56 Panorama Road, 459 Ellerslie-Panmure Highway, 2 Hamlin Road, 3 and 7 Triangle Road and 2A Ryburn Road, Mt Wellington
1658	Council car park	11-13 Lagoon Drive, Panmure
1660	Council car park	28-30 Pilkington Road, Panmure
1661	Council car park	32-34 Lagoon Drive, Panmure
1662	Council car park	7 Kings Road, Panmure
1663	Council car park	7-13 Pilkington Road, Panmure
1664	Building line for road widening	136-140, 144-148, 150-154, 158-160 Queens Road north side, Panmure
1665	Proposed service lane	144-160 Queens Road, Panmure
1666	Council car park	580 Richardson Road, Hillsborough
1667	Building line for corner cut off	143 and 145 Trafalgar Street, Onehunga
1668	Building line for road widening	722, 726-792 Manukau Road, Onehunga
1669	Building line for road widening	1-11 and 6-10 Campbell Road, Onehunga
1670	Council car park	760-770 Manukau Road
1671	Building line for road widening	1-5 Campbell Road and 802,810 Manakau Road, Onehunga
1672	Building line for road widening	118-126 Symonds Street, 725 Mount Albert Road and 17 Erson Avenue, Onehunga

1673	Building line for road widening	802-810, 822 Manukau Road south of Mt Smart Road intersection, Onehunga		
1674	Building line for corner cut off	415 Onehunga Mall, Onehunga		
1675	Building line for road widening	581-655, 862-880, 894 Great South Road, Penrose		
1676	Building line for road widening	Off Mt Wellington Highway on south side, Mt Wellington		
1677	Building line for road widening	950-952, 970-992, 998-1006, 1120, 514-540, 562-618, 791-793, 805, 851, 475-583, 617-649 Great South Rd and 2,10 Beatley Street, Penrose		
1679	Road widening	57 Waipuna Road and 4 Carbine Road , Mt Wellington		
1680	Council car park	580 Blockhouse Bay Road, Blockhouse Bay		
1681	Building line for corner cut offs	467 Hillsborough Road		
1682	Building line for corner cut offs	427-433 Hillsborough		
1683	Building line for road widening	77 Selwyn Street, Onehunga		
1684	Pedestrian access way	47 Hill Street, Onehunga		
1685	Building line for road widening	31-33, 35, 3, 39, 41, 45, 167-171, 270-274, 327, 333 and 343 Neilson Street, 8 and 10 Gloucester Park Road, 10 O'Rorke Street, 6-10 Selwyn Street and 9 Alfred Street, Onehunga		
1686	Building line for corner cut offs	24 Selwyn Street and 39-41 Princess Street, Onehunga		
1687	Council car park	81-97 Church Street, Onehunga		
1688	Building line for road widening	119, 131-135, 151 Arthur Street and 250 Onehunga Mall, Onehunga		
1689	Corner Cut Offs	130 Church Street and 115 Galway Street, Onehunga		
1691	Council car park	1 Waiapu Lane, Onehunga		

1692	Council car park	9-21 Waller Street South, Onehunga
1694	Proposed service lane	3 Paynes Lane, Onehunga
1695	Building line for road widening	175-243 Neilson St (south side), Onehunga
1696	Proposed Road	13 Miami Parade and 69 Captain Springs Road, Te Papapa
1697	Building line for road widening road widening and corner cut off	153, 156A Captain Springs Road and 231-241, 252, 253-259 Church Street, Te Papapa
1699	Proposed road	57 Angle Street, Te Papapa
1700	Proposed roading network	60 and 69 Captain Springs Road and and 13 and 59 Miami Parade, Te Papapa
1701	Proposed Road	59 Miami Parade, Te Papapa
1702	Building line for road widening and corner cut off	273, 287, 291-305 Neilson Street and 2 Angle Street, Te Papapa
1703	Building line for road widening	365-381, 340-396 Church Street and 2 Beasley Avenue, Southdown
1704	Council car park	89 Atkinson Avenue, Otahuhu
1705	Council car park	21-25 Mason Avenue, Otahuhu
1706	Council car park	35 Hall Avenue, Otahuhu
1708	Proposed service lane	259-287 Great South Road, Otahuhu
1709	Proposed service lane	10-18 Station Road, 5-7 Mason Avenue and 303-337, Otahuhu
1710	Council car park	12-16 High St, Otahuhu
1711	Corner cut off	83 Walmsley Road, Otahuhu
1713	Construction, operation and maintenance of the Waterview Walking and Cycling Facility	Various – proposed shared path 2.4km in length connecting Alan Wood Reserve to Great North Road (near Alford Street)
1714	City Rail Link (CRL)	Various locations

1715	Newmarket Level Crossing Project	Lot 1 DP 57235, PT DP 23351, Lot 1 DP 206508, Allotment 37 SECT 4 SBRS OF Auckland, DP		
		24765, Pt Allotment 35 SECT 4 SBRS OF		
		Auckland, Lot 1 DP 53284		



SECTION 182(2) DECISION BY A TEAM LEADER UNDER DELEGATED AUTHORITY

DECISION ON A NOTICE OF REMOVAL OF A DESIGNATION UNDER SECTION 182(2) OF THE RESOURCE MANAGEMENT ACT 1991 – DESIGNATION 1693 CAR PARK – WALLER STREET, ONEHUNGA

TEAM LEADER:

Marc Dendale, Team Leader, Planning

Central & South, Auckland Council

REQUIRING AUTHORITY:

Auckland Transport

COUNCIL DECISION

Pursuant to section 182(2) of the RMA, the Auckland Transport is advised that the Notice of Removal to the Auckland Transport designation 1693 Car Park – Waller Street, Onehunga in the Auckland Unitary Plan has been considered under delegated authority and Council AGREES to uplift the designation 1693 Car Park – Waller Street, Onehunga from the portion of land as indicated on the map attached to the Notice and referenced by Council as Designation 1693. The amendment to the designation will be incorporated into the next scheduled update of the Auckland Unitary Plan without further formality.

REASONS FOR THE DECISION

The Auckland Transport for which the removal of designation is sought has confirmed that it no longer requires that part of the land within the designated-area.

The removal of the designation would have a less than minor effect on the Onehunga area. The Maungakiekie-Tāmaki Local Board has endorsed the proposal to remove the car park.

The removal of the designation is consistent with Part 8 of the Resource Management Act 1991.

Name:

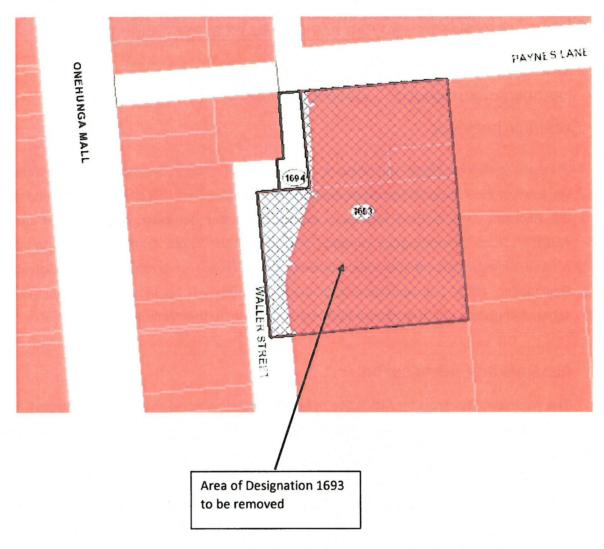
Marc Dendale

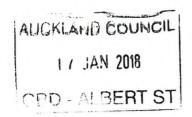
Signed:

Date:

Map – Removal of Designation 1693 – Car park – Waller Street









6 Henderson Valley Road, Henderson, Auckland 0612 Private Bag 92250, Auckland 1142, New Zealand Ph 09 355 3553 Fax 09 355 3550

9 January 2017

Auckland Council Private Bag 92300 Auckland 1142

Attention: John Duguid

Dear John

NOTICE TO REMOVE A DESIGNATION UNDER SECTION 182 OF THE RESOURCE MANAGEMENT ACT 1991

Please find attached a Form 23 Notice under Section 182(1) of the Resource Management Act 1991 (RMA) advising Auckland Council that Auckland Transport is removing Designation 1693 from the Auckland Council Unitary Plan (Operative in Part) (AUP (OP)) in relation to Waller Street Car Park located at 3 Paynes Lane and 45 Waller Street, Onehunga.

In accordance with section 182(1) of the RMA, the Form 23 notice has been sent to the landowner and occupier (Auckland Council) directly affected by the removal of Designation 1693. Please remove Designation 1693 from the AUP (OP) as soon as practicable.

Please direct all correspondence relating to this application to Nicola Bishop, Senior Planner. If you have any queries, please do not hesitate to contact Nicola on (09) 448 7206 or email Nicola.Bishop@at.govt.nz.

Yours sincerely

Nesh Pillay

Acting Planning Integration Manager - Property and Planning

Infrastructure Division



Form 23

Notice of removal of designation

Section 182 of the Resource Management Act 1991

To:

Auckland Council (owner and occupier)

Auckland Transport gives notice that it no longer requires the following designation:

Auckland Transport Designation 1693 for a 'Council car park' from the Auckland Council Unitary Plan (Operative in Part) in relation to Waller Street Car Park located at 3 Paynes Lane and 45 Waller Street, Onehunga.

The sites are legally described as:

- Section 2 Survey Office Plan 488412 (Computer Freehold Register 717716); and
- Section 4 Survey Office Plan 488412 (Computer Freehold Register 717717).

Auckland Transport requests the unitary authority to amend the unitary plan accordingly as required by Section 182 of the Resource Management Act 1991.

Date 9 January 2018.

Signature on behalf of requiring authority

Jane Small

Group Manager, Property and Planning

Auckland Transport

Address for service of requiring authority:

Auckland Transport

Private Bag 92250

Auckland 1142

Telephone: DDI +64 9 448 7206, Mob 021 896 421

Fax/email: nicola.bishop@at.govt.nz

Contact person: Nicola Bishop, Senior Planner, Planning Integration Team

UNITARY PLAN UPDATE REQUEST MEMORANDUM

TO

Phill Reid, Manager Planning, Auckland wide

FROM

Sisira Jayasinghe, Planner, Planning Central & South



DATE

24 January 2018

SUBJECT

Designation to be updated in the AUPOP in accordance with

s182 of the Resource Management Act 1991

Reason for update				
Chapter				
Section	GIS Viewer Auckland Unitary Plan			
Designation only				
Designation #	Watercare Services Limited 9465			
Location:	6 Baddeley Avenue, (Madills Farm Recreation Reserve), Kohimarama			
Lapse Date	15 years from when the circumstances in section 175(1) of the Resource Management Act 199 apply			
Type of Designation	Partial removal			
Purpose	Kohimarama Wastewater Storage Tank			
Changes to text (shown in underline and strikethrough)	Not applicable			
Changes to diagrams	Not applicable			
Changes to spatial data	Refer to the Team Leader approved Decision report.			
Attachments	Team Leader approved Decision Report			

Prepared by:

Sisira Jayasinghe

Planner, Planning Central & South

Text entered by:

Bronnie Styles

Planning Technician

Signature:

Signature:

NIA

Maps prepared by:

Reviewed by:

Aching Konyak – Geospatial Analyst Aucklandwide

Signature

Sisira Jayasinghe Planner, Planning Central & South

Signature:

Manager

Phill Reid,

Manager Planning, Auckland wide

Signature

SECTION 182(2) DECISION BY A TEAM LEADER UNDER DELEGATED AUTHORITY

DECISION ON A NOTICE OF PARTIAL REMOVAL TO A DESIGNATION UNDER SECTION 182(2) OF THE RESOURCE MANAGEMENT ACT 1991 -DESIGNATION - 9465 WATERCARE SERVICES LIMITED - KOHIMARAMA WASTEWATER STORAGE TANK - 6 BADDELEY AVENUE, (MADILLS FARM RECREATION RESERVE), KOHIMARAMA.

TEAM LEADER:

Joao Machado

REQUIRING AUTHORITY: Watercare Services Limited

COUNCIL DECISION

Pursuant to section 182(2) of the RMA, Watercare Services Limited is advised that the Notice of Partial Removal to Watercare Services Limited Designation 9465 "Kohimarama Wastewater Storage Tank, 6 Baddeley Avenue, (Madills Farm Recreation Reserve), Kohimarama" in the Auckland Unitary Plan (operative in part) has been considered under delegated authority and Council AGREES to uplift the designation "9465 Kohimarama Wastewater Storage Tank, 6 Baddeley Avenue, (Madills Farm Recreation Reserve), Kohimarama" from the portion of land as indicated on the map attached to the Notice and referenced by Council as Designation 9465. The amendment to the designation will be incorporated into the next scheduled update of the Auckland Unitary Plan (operative in part) without further formality.

REASONS FOR THE DECISION

The Requiring Authority for which the partial removal of designation is sought has confirmed that it no longer requires that part of the land within the designated area.

Condition 18 of Designation 9465 requires that following the issue of the practical completion certificate for the proposed storage tank, Watercare shall give notice to the Council in accordance with section 182 of the RMA for removal of those areas of the Designation no longer necessary for the construction, on-going operation, maintenance, and protection of storage tank. Hence this partial removal of Designation complies with designation conditions.

The partial removal of designation would have a less than minor effect on the remainder of Watercare Services Limited Designation 9465.

The partial removal of designation is consistent with Part 8 of the Resource Management Act 1991.

Name:

Joao Machado

Team Leader, Planning - Central/South

Signed:

Date:

Map showing partial removal of Designation 9465 "Kohimarama Wastewater Storage Tank, 6 Baddeley Avenue, (Madills Farm Recreation Reserve), Kohimarama



Part of the Designation area to be removed from the Designation 9465 – Kohimarama Wastewater Storage Tank



Watercare Services Limited

73 Remuera Road, Remuera Auckland 1050, New Zealand Private Bag 92521 Wellesley Street, Auckland 1141, New Zealand

> Telephone +64 9 539 7300 Facsimile +64 9 539 7334 www.watercare.co.nz

18 December 2017

Auckland Council Private Bag 92300 Auckland 1143

Attention: Celia Davison

Manager - Planning South and Central

Removal of part of Designation 9465, at 6 Baddeley Avenue (Madills Farm), Kohimarama

We write in pursuant to Section 182(1) of the Resource Management Act to undertake the following:

 Reduce the area of Designation 9465 Kohimarama Wastewater Storage Tank under the Auckland Unitary Plan Operative in Part (AUP).

The legal description of the property from which part of the designation is to be removed is:

- Lot 1 DP 204517
- Lot 2 DP 93072

The part of the designation that is to be removed is that shown on the attached plan titled "Part Removal of Designation on Lot 1 DP 204517."

Please find attached:

- Form 23 Notice of Removal/Removal of Part of Designation
- Certificate of Title
- Conditions to Designation 9465
- WSL GIS Map Part removal of Designation on Lot 1 DP 204517
- AUP GIS Map Part removal of Designation on Lot 1 DP 204517

Watercare requests the Auckland Council amend the AUP Operative in Part accordingly as required by Section 182 of the Resource Management Act 1991.

Yours sincerely

Mark Bourne

Manager, Infrastructure & Environmental Planning

Watercare Services Limited

Map showing partial removal of Designation 9465 "Kohimarama Wastewater Storage Tank, 6 Baddeley Avenue, (Madills Farm Recreation Reserve), Kohimarama



Part of the Designation area to be removed from the Designation 9465 – Kohimarama Wastewater Storage Tank

Form 23

Notice of Removal and Part Removal of Designation

Section 182 Resource Management Act 1991

To Auckland Council

Watercare Services Limited (WSL) gives notice under Section 182 (1) to Auckland Council and to the owner of the land that designation 9465 relates (Auckland Council, Parks, Sports and Recreation) that it no longer requires part the following designation:

 Designation 9465 - Kohimarama Wastewater Storage Tank under the Auckland Council Unitary Plan Operative in Part (AUP) on 6 Baddeley Avenue, Kohimarama; legally described as Lot Lot 1 DP 204517 and Lot 2 DP 93072

Condition 18 of Designation 9465 requires that, following issue of the practical completion certificate for the proposed storage tank, Watercare shall give notice to the Council in accordance with section 182 of the Act for removal of those areas of the designation no longer necessary for the construction, on-going operation, maintenance, and protection of the storage tank.

Watercare has reviewed the current designation boundary and identified an area no longer required for the on-going operation, maintenance, and protection of the Kohimarama storage tank. The proposed amendment to the current designation boundary is shown in the attached plans.

Watercare requests that Auckland Council amend the AUP accordingly as required by Section 182 of the Resource Management Act 1991.

	18	*	12-	201	7	
			• • • • • •	• • • • • • •		
Date						

Signature on behalf of requiring authority:

Address for service of requiring authority

Watercare Services Limited Private Bag 92521 Wellesley Street Auckland 1141

Telephone:

022 0116507

Email:

Lindsay.Wilson@water.co.nz

Contact person:

Lindsay Wilson

Cc: Allan Walton, Principal Property Advisor, Auckland Council
Remy De La Peza, Manager Land Advisory Services, Auckland Council

Designation Plan - Proposed Amendment to Designation 9465 - Kohimarama Storage Tank









Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information.

Partial removal of Designation 9465



Plans and Places