

31 July 2017

Sanjana France
Democracy Services
Auckland Council
135 Albert Street
Auckland

Dear Sanjana

Decision by Watercare Services Limited ('Watercare') on the Notices of Requirement for designations for the Northern Interceptor Wastewater Project Phases 3 - 6

This letter is to advise Auckland Council ('the Council') of Watercare's decision under Section 172(1) of the Resource Management Act 1991 ('RMA') on the recommendation of Auckland Council's Independent Commissioners on the above Notices of Requirement for designations.

Auckland Council appointed Independent Commissioners to consider the Notices of Requirement and submissions received and make a recommendation under section 171 of the RMA. The Commissioners' recommendation is dated 7 June 2017 and was received by Watercare on 21 June 2017. The Commissioners' recommend that the Notices be confirmed, subject to conditions.

Watercare's decision

In accordance with Section 172(1) of the RMA, Watercare advises the Auckland Council of its decision to:

1. **Accept** the Commissioners' recommendation that the Notices be confirmed.
2. **Accept** the Commissioners' recommended conditions, except for grammatical changes or structure made throughout the conditions for consistency with the conditions imposed on the Northern Interceptor in the Shared Corridor with North Harbour 2 Watermain.

Watercare's final decision version of the conditions is provided in Attachment A. A copy of the Commissioners' recommended conditions with the amendments / rejections by Watercare shown in tracked changes is provided in Attachment B.

Please contact Keri Davis-Miller if you wish to discuss a matter relating to this letter and attached documentation.

Yours sincerely



Martin Smith
General Manager
Strategy and Planning
Watercare Services Limited

Copy to:

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**Appendix A: Watercare's conditions for the Northern Interceptor Wastewater Project
Phases 3 - 6**

REQUIRING AUTHORITY DECISION

PURPOSE AND CONDITIONS FOR EACH DESIGNATION

PURPOSE OF DESIGNATIONS

Wastewater purposes – Northern Interceptor wastewater pipelines, pumping stations, and associated infrastructure.

CONDITIONS OF DESIGNATIONS

Note: The following terms and acronyms are used in these conditions:

Term	Definition
Consultation	The process of providing information about the construction works, and receiving for consideration, information from stakeholders, directly affected parties, regarding those effects and proposals for the management and mitigation of them.
Cultural Monitor	Nominated Kaitiaki
Directly affected parties	All property owners and occupiers identified in the designation footprint
Northern Interceptor	The Northern Interceptor is comprised of Phases 1 to 6
Project stage	"Project stage" means a separable part of the project, for instance by contract area or by geographical extent.
Stakeholder(s)	The parties as listed in Appendix A
The project	The project is comprised the part of Phase 2 where Phase 2 connects with Phase 5 and Phases 3 to 6 of the Northern Interceptor project

Acronym	Description
AT	Auckland Transport
CCP	Construction Communications Plan
CLMP	Contaminated Land Management Plan
CoPTTM	Code of Practice for Temporary Traffic Management
The Council	The Auckland Council
CMP	Construction Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CPTED	Crime Prevention Through Environmental Design
EMP	Ecological Management Plan
LVMP	Landscape and Visual Management Plan
MOI	Agreement for Movement of Infrastructure
NoR 1	Notice of Requirement – NI (North Shore)

NoR 2	Notice of Requirement – NI (Waitakere)
OPW	Outline Plan of Works
PCCP	Pre-construction consultation plan
PSR	The Auckland Council's Parks, Sports and Recreation department
RMA	Resource Management Act 1991
SRMP	Auckland Council Parks, Sports and Recreation Management Plan
SRP	Site Reinstatement Plan
SSCNVMP	Site Specific Construction Noise and Vibration Management Plan
TCMP	Transpower Construction Management Plan
TMP	Traffic Management Plan
TVMP	Tree and Vegetation Management Plan

CONDITIONS:

General Accordance

1. The activity shall be carried out in general accordance with the plans and all information submitted with the application, and including the documents listed below:

Volume 1

Northern Interceptor Wastewater Project, Volume 1: Assessment of Effects on the Environment and Appendices A-G. Prepared by MWH (now part of Stantec) on behalf of Watercare. Dated 5 May 2016.

Volume 2

Technical Report A: (Assessment of Arboricultural Effects) "Arboricultural Assessment - Northern Interceptor Project: Notices of Requirement," Rev. 4. Prepared by GreensceneNZ. Dated 8 August 2016.

Technical Report B (Archaeological Assessment) "Preliminary Archaeological Assessment – Northern Interceptor Project: Notices of Requirement." Prepared by Clough & Associates. Dated July 2016.

Technical Report C (Ground Contamination Assessment) "Ground Contamination Assessment – Northern Interceptor Project: Notices of Requirement." Prepared by Tonkin + Taylor. Dated July 2016.

Technical Report D (Ecological Assessment) "Ecological Assessment – Northern Interceptor Project." Prepared by BioResearches. Dated 10 June 2016.

Technical Report E (Assessment of Ground Settlement Effects) "Assessment of Settlement Effects – Northern Interceptor Project: Notices of Requirement." Prepared by Tonkin + Taylor. Dated June 2016.

Technical Report F (Assessment of Landscape and Visual Effects) "Northern Interceptor Project: Notices of Requirement – Assessment of Natural Character Landscape and Visual Effects." Prepared by Boffa Miskell. Dated 5 October 2016.

Technical Report G (Assessment of Noise and Vibration Effects) "Assessment of Noise & Vibration Effects – Northern Interceptor Project: NOR" Rp 001 2015801A. Prepared by Marshall Day Acoustics. Dated 5 August 2016.

Technical Report H (Traffic Assessment for Construction and Operation) "Watercare Northern Interceptor Project – Traffic Assessment for Construction and Operation of Northern Interceptor, NoR – Waitakere and North Shore. Prepared by Traffic Design Group. Dated July 2016.

Volume 3

Drawing Set:

Northern Interceptor Concept Design, NoR – NI (Waitakere):

- Designation Plan 1 of 6, plot date Jun 17, 2016
- Designation Plan 2 of 6, plot date Jun 17, 2016
- Designation Plan 3 of 6, plot date Jun 17, 2016
- Designation Plan 4 of 6, plot date Jun 17, 2016
- Designation Plan 5 of 6, plot date Jun 17, 2016
- Designation Plan 6 of 6, plot date Jun 17, 2016

Typical Drawings:

- Northern Interceptor Concept Design Typical Pump Station Layout, DWG No. 80502292-01-001-D002
- Northern Interceptor Concept Design General Pump Station Layout, DWG No. 80502292-01-001-D001

Drawing Set:

Northern Interceptor Concept Design, NoR – NI (North Shore):

- Designation Plan 1 of 10, plot date Mar 24, 2017
- Designation Plan 2 of 10, plot date Jun 17, 2016
- Designation Plan 3 of 10, plot date Jun 17, 2016
- Designation Plan 4 of 10, plot date Oct 05, 2016
- Designation Plan 5 of 10, plot date Mar 07, 2017
- Designation Plan 6 of 10, plot date Mar 16, 2017
- Designation Plan 7 of 10, plot date Mar 16 2017
- Designation Plan 8 of 10, plot date Jun 27, 2016
- Designation Plan 9 of 10, plot date Jun 17, 2016
- Designation Plan 10 of 10, plot date Jun 17, 2016

Prepared by MWH (now part of Stantec) on behalf of Watercare.

Response to Section 92 Request

Section 92 request dated 21 November 2016. Responses to matters relating to landscape and visual amenity and natural character, heritage and archaeology, traffic and transportation, trees, operational air quality and hydraulic noise, parks and statutory

planning. Prepared by MWH with support from technical specialists on behalf of Watercare. Dated 23 December 2016.

Where there is inconsistency between:

- (a) The documents provided by the requiring authority and listed above and these conditions, these conditions prevail.
- (b) The information and plans lodged with the Notices of Requirement and presented in evidence on behalf of the requiring authority at the Council hearing, the most recent information and plans prevail.
- (c) The evidence presented at the Council hearing and the management plans required by the conditions of this designation and submitted through the Outline Plan of Works, the requirements of the management plans prevail.

Lapse

- 2. Subject to section 184(1) of the RMA each of these designations will lapse 20 years from the date it is included in the Auckland Unitary Plan.

PRE-CONSTRUCTION CONDITIONS

Network Utility Operators

- 3. The requiring authority must:
 - (a) Work collaboratively with network utility operators during the development of the design for the project to provide for the ongoing operation of and access to their networks;
 - (b) Work collaboratively with network utility operators during the preparation and implementation of the CMP in relation to the management of adverse effects on the assets of network utility operations;
 - (c) Undertake communication and consultation with network utility operators as soon as reasonably practicable, and at least once prior to construction timing being confirmed and construction methodology, and the duration being known.

Management plans

- 4. An Outline Plan of Works (OPW) is to be submitted to the Council prior to commencement of construction works. As part of any OPW required for the project the requiring authority shall prepare and submit the following management plans to the Council:
 - (a) Construction Management Plan (CMP)
 - (b) Construction Communications Plan (CCP)
 - (c) Auckland Council Parks, Sports and Recreation Management Plan (SRMP)
 - (d) Site Reinstatement Plan (SRP)
 - (e) Ecological Management Plan (EMP) for works located in the areas listed in condition 29
 - (f) Construction Noise and Vibration Management Plan (CNVMP)
 - (g) Traffic Management Plan (TMP)
 - (h) Tree and Vegetation Management Plan (TVMP)
 - (i) Landscape and Visual Management Plan (LVMP) where the works addressed by the OPW include the development of above-ground structures and buildings
 - (j) Contaminated Land Management Plan (CLMP)

5. The management plans identified in condition 4 are to be implemented and maintained throughout the entire construction period.
6. A Pre-Construction Consultation Plan (PCCP) is to be submitted to Council in accordance with condition 12 within 12 months of these designations being confirmed.
7. Site specific Construction Noise and Vibration Management Plans (SSCNVMP) are to be submitted to Council in accordance with conditions 58 to 60 at least 5 days prior to the commencement of the relevant activity.
8. Any substantive change to any of the management plans identified above in conditions 4, 5 and 7 shall:
 - (a) continue to achieve the objective or purpose of the management plan; and
 - (b) not result in non-compliance with other conditions of the designations.
9. Any management plan updated as a result of a substantive change is to be submitted to the Council (Team Leader – Specialist Integration Compliance) at least ten working days prior to any such substantive change taking effect.

Section 176 approval

10. In the period before construction begins on the project, the following activities undertaken by network utility operators will not prevent or hinder the project, and can be undertaken without seeking the requiring authority's written approval under section 176(1)(b) of the RMA:
 - (a) Operation, maintenance and urgent repair works of existing network utilities;
 - (b) Minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;
 - (c) Minor works such as new service connections;
 - (d) Upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.

For the avoidance of doubt, in this condition an "existing network utility" includes infrastructure operated by a network utility operator which was:

- (i) In place at the time the Notice of Requirement for the project was served on the Council on 10 October 2016; or
- (ii) Undertaken in accordance with this condition, or the section 176(1)(b) RMA process.

Advice Note:

Nothing in this condition affects the application of section 177 of the RMA, which applies where land designated for the project is the subject of an earlier designation or heritage order.

11. In the period before construction begins on the project, the following activities undertaken by PSR will not prevent or hinder the project, and can be undertaken without seeking the requiring Authority's written approval under section 176(1)(b) of the RMA:
 - (a) Operation, maintenance and urgent repair works;
 - (b) Minor renewal works;

- (c) Upgrade and replacement of existing facilities within the same location and with the same or similar effects as the existing facility.

Pre-construction Consultation Plan (PCCP)

12. The requiring authority shall prepare a PCCP for the pre-construction phase of the project which shall be submitted to the Council (Team Leader Specialist Integration Compliance) within 12 months of the designation being confirmed. The PCCP must include:
 - (a) The method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding project progress, likely commencement dates of construction works, and works programming and staging; and
 - (b) Full contact details of a nominated liaison person to manage the public information system and be the point of contact for related enquiries.
13. The PCCP is to be implemented, complied with and publicly available from the date which the PCCP is submitted to Council until the date which a CCP prepared in accordance with condition 41 is submitted to Council.

Detailed design

14. During the design phase of the project, the requiring authority shall, in consultation with Auckland Transport (AT), is to consider the position of the proposed pipe in the road corridor for the purpose of ensuring that the project can be undertaken in a manner that will minimise adverse effects on the operation and maintenance of the affected road assets. To achieve this, the requiring authority shall take into account the following matters:
 - (a) Alignment and depth of pipes. Particular consideration shall be given to the depth of the pipe to provide for maintenance and renewal of road assets and for other utility services to cross the pipe;
 - (b) Location of air and scour valves (where practicable, these are to be located outside of the carriageway);
 - (c) Location of manholes; and
 - (d) Future access, operation and maintenance of the proposed assets.

Appointment of a Project Arborist

15. Prior to the commencement of design, the requiring authority shall appoint a qualified arborist (Project Arborist(s)) for the duration of the design and construction of the works. The role of the Project Arborist(s) is to:
 - (a) Provide advice to the requiring authority during the design on how the design and location of works can avoid, remedy or mitigate effects on protected trees.
 - (b) Supervise all works within the dripline of protected trees.

Advice Note:

For clarity, a "protected tree" is defined as either a) any tree greater than 4m in height or greater than 400mm in girth, or b) any tree that is scheduled in the Auckland Unitary Plan.

Vector Condition

16. There are assets owned by Vector Limited within the designated corridor, namely electricity distribution assets (including 110kV overhead lines) in vicinity of the Rosedale

Wastewater Treatment Plant 33kV overhead and underground; 11kV overhead and underground; and LV overhead and underground), gas distribution assets (up to and including the IP20 pipeline); and communications assets. The requiring authority shall consult with Vector Limited and shall enter into an infrastructure agreement (MOI) describing how the assets are to be relocated, and how the costs are to be apportioned. That agreement shall be consistent with Vector's standard "Agreement for Movement of Infrastructure", and shall be in place prior to any works taking place pursuant to the designation that might affect Vector's assets.

4 – 6 Hobsonville Road Condition

17. The top of any pipeline enabled by this Project shall be at a maximum RL level of 25 metres within the boundaries of 4 – 6 Hobsonville Road, West Harbour (Section 6 SO 445955) CT-579283.

Advice Note:

For clarity, maximum RL level means that the pipeline shall be at a depth no shallower than the RL level expressed in condition 17.

MANAGEMENT PLAN CONDITIONS

Construction Management Plan – preparation, compliance and monitoring

18. As part of the OPW to be submitted to the Council (Team Leader Specialist Integration Compliance) prior to commencement of construction works, the requiring authority shall prepare a Construction Management Plan or Plans (CMP) for the relevant project stage. The purpose of the CMP is to confirm final project details and staging of works to illustrate that the works remain within the limits and standards required by these conditions and that the construction and operation activities will avoid, remedy or mitigate adverse effects on the environment.

On request, the requiring authority shall provide a copy of the CMP(s) to interested mana whenua entities.

Construction Management Plan (CMP)

19. The CMP required by condition 18 above, must include sufficient details relating to the management of all construction activities associated with the relevant project stage to which it relates, including:
 - (a) Details of the site or project manager and the construction liaison person, including their contact details (phone, postal address, email address);
 - (b) An outline construction programme;
 - (c) The proposed hours of work;
 - (d) The measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;
 - (e) Measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean-up;

- (f) Location(s) of the site infrastructure including site offices, site amenities, contractors' yards, site access, equipment unloading and storage areas, contractor car parking, and security;
- (g) Procedures for controlling sediment run-off, dust and removal of soil, debris, demolition and construction materials (if any) from public roads or places adjacent to the work site(s);
- (h) Means of providing for the health and safety of the general public;
- (i) Procedures for responding to complaints about construction activities;
- (j) Measures to address CPTED issues at and around any construction site(s);
- (k) Procedures for the refuelling of plant and equipment;
- (l) Measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean-up;
- (m) Methods and systems to inform and train all persons working on the sites of potential environmental issues and how to avoid remedy or mitigate any potential adverse effects;
- (n) Details of information signage to inform members of the public about construction activities within parks and reserves. Details shall include, but not be limited to, works durations, impacts on recreational use of reserves and information about the project.

Traffic Management Plan (TMP)

20. A detailed TMP is to be prepared for the project and or specific project site/s by an appropriately qualified person. A draft TMP shall be provided to the relevant road controlling authority for certification at least twenty working days prior to submission to the Council. A copy of the TMP certified by the relevant road controlling authority shall be provided to the Council (Team Leader Specialist Integration Compliance) as part of any required OPW. The objective of the TMP shall be to provide a framework for the management of adverse traffic effects resulting from the project to the greatest extent practicable.
21. The TMP shall be updated as necessary to reflect any substantive change, including any substantive change agreed to by the road controlling authority.
22. The TMP must describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the project. In particular, the TMP must include:
 - (a) The traffic management measures to maintain traffic capacity and safety or to minimise the impact on traffic capacity including any restrictions (for instance limited hours of operation);
 - (b) Methods to manage the effects of access and egress from construction sites including the delivery of construction material, plant and machinery and associated noise effects;
 - (c) Measures to maintain existing vehicle access to property where practicable, or to provide alternative access arrangements when it will not be;
 - (d) Measures to maintain pedestrian and cyclist movements and to reduce the impact on mobility impaired users on roads, cycleways and footpaths adjacent to the construction works. Such access shall be safe, clearly identifiable and seek to minimise significant detours; and to maintain a cycle route where it exists, unless it is not practicable to do so for short periods in order to maintain public health and safety;

- (e) Any road, footpath, or cycleway closures and removal of kerbside parking that will be required and the nature and the duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses. In the event of any closures, the TMP shall describe the communications plan for local residents, the signage to pre-warn of closures and the organisations to be advised of the proposed footpath closures (including but not limited to the Blind Foundation);
- (f) Any proposed monitoring to measure the impact of the works on traffic and vice versa. If safety or operational issues are evident, the methodology for measures to be implemented to address these issues;
- (g) Measures to manage the proposed access to the site should access be unable to cater for two-way traffic passing at the same time, and in particular to minimise reverse movements and blocking of the road;
- (h) The availability of on-street and off-street parking if the project sites are unable to accommodate all contractor parking. This is to include an assessment of available parking (if any) for contractors on the street and to identify measures to meet and/or reduce contractor parking demand should it be found that there is insufficient on-street parking to meet that demand; and
- (i) Any proposed traffic assessments, including modelling where appropriate undertaken in consultation with the relevant road controlling authority which addresses intersection performance, capacity of affected road corridors and sites with existing high traffic and/or pedestrian movements.

Construction Noise and Vibration Management Plan (CNVMP)

- 23. A CNVMP is to be prepared by an appropriately qualified person. The CNVMP shall be submitted to the Council (Team Leader Specialist Integration Compliance) as part of any required OPW and shall be updated when necessary to ensure it is consistent with the project, plant and construction methodologies should they evolve during the project. Any change to the CNVMP that may give rise to a higher level of noise or vibration effects for any receiver than is otherwise authorised by the project noise and vibration standards shall be submitted to Auckland Council for certification (Team Leader Specialist Integration Compliance). The objective of the CNVMP is to set out the management procedures and methods to be taken in order to avoid, remedy or mitigate potential noise and vibration effects arising from construction activities on adjacent landowners and occupiers.
- 24. The CNVMP must be prepared in accordance with the Noise Management Plan requirements of Annex E2 of NZS 6803:1999 Acoustics - Construction Noise and shall describe the measures adopted to, as far as practicable, meet the noise limits conditions 51.
- 25. For predicted exceedances of less than 5 decibels (refer condition 51) monitoring shall be undertaken to confirm the actual noise levels. If the exceedance is shown to be more than 5 decibels, or the period exceeds those detailed in condition 51, then a Site-Specific Construction Noise Management Plan will be prepared in accordance with conditions 57 to 59.
- 26. The CNVMP must also describe measures to be adopted to meet the requirements of the German Standard DIN 4150-3:1999, and as a minimum shall address the following aspects with regard to construction vibration:

- (a) Vibration sources, including machinery, equipment and construction techniques to be used;
- (b) Provision for determining the buildings and structures that will require pre- and post-condition surveys;
- (c) Preparation of building and structure condition surveys on 'at risk' buildings and structures prior to, during and after completion of works, where for the purposes of this condition an 'at risk' building or structure is one at which the levels in the German Standard DIN 4150-3:1999 are likely to be approached or exceeded;
- (d) Use of building and structure condition surveys to determine the sensitivity of the building(s) and structure(s) on the adjacent sites to ground movement in terms of the Line 1-3 criteria of the German Standard DIN 4150 – 3:1999;
- (e) Identification of any particularly sensitive activities in the vicinity of the proposed works (for instance commercial activity using sensitive equipment such as radiography or mass-spectrometry) along with the details of consultation with the landowners and occupiers of the sites where the sensitive activities are located and any management measures that will be adopted based on this consultation;
- (f) The consultation undertaken by the requiring authority with affected parties to develop the proposed vibration management measures and any feedback received from those parties, along with the vibration management measures based on this consultation that will be adopted;
- (g) Methods for monitoring and reporting on construction vibration; and
- (h) Methods for receiving and responding to complaints about construction vibration.

Auckland Council Parks, Sports and Recreation Management Plan (SRMP)

- 27. Prior to commencement of the works authorised by these designations, the requiring authority shall submit a SRMP for the relevant project stage to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW. The objective of the SRMP is to minimise as far as practicable adverse effects on the recreation amenity of public parks and reserves resulting from the project.
- 28. To achieve the objective of the SRMP, the SRMP must include:
 - (a) Details of consultation undertaken by the requiring authority with Auckland Council Parks, Sports and Recreation (PSR) during the development of the detailed design and during construction within parks and reserves;
 - (b) Details of measures proposed to, where practicable, provide for the ongoing operation of and access to PSR maintained parks and reserves during construction;
 - (c) Measures to ensure suitable alternatives to the carparking that may be lost during construction activities within parks or reserves;
 - (d) Measures to coordinate as far as practicable, future works around PSR projects in parks and reserves;
 - (e) A record of all consultation undertaken in relation to the development of the SRMP, how feedback has been incorporated, and where feedback has not been incorporated, the reasons why.

Advice Note:

More information on the process can be found in the agreement titled Watercare and PSR "Watercare works on Auckland Council's Parks and Reserves Standard Approval Procedure" dated 23 March 2017, or any updated version that supersedes that document.

Ecological Management Plan (EMP)

29. An EMP developed by an appropriately qualified ecologist (Project Ecologist) is to be submitted to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW for surface works in the following locations:

- (a) Taitapu Park;
- (b) Lowtherhurst Reserve;
- (c) Tinema Stream Riparian Corridor;
- (d) The eastern abutment of the Greenhithe Bridge;
- (e) North Wainoni Park; and
- (f) North Shore Golf Course (coastal edges).
- (g) Any other public areas within the designation boundary deemed significant by the Project Ecologists that have become so since the designation was confirmed and that are of equivalent value as (a) to (f).

The objective of the EMP is to minimise as far as practicable adverse ecological effects resulting from the project. The EMP is to be implemented and maintained throughout the entire construction period.

30. To achieve the objective of the EMP, the EMP must include the following:
- (a) Confirmation by the Project Ecologist that the SRP and TVMP have been reviewed and certified as providing adequate ecological mitigation to achieve the objective of the EMP (condition 29);
 - (b) Methods of lizard and nesting bird pre-clearance surveying;
 - (c) Details of capture-relocation methodologies and timeframes where required;
 - (d) Details of habitat enhancement/protection measures;
 - (e) Details of predator control programmes including methodologies and timeframes; and
 - (f) Details of monitoring to assess the effectiveness of the above mitigation and habitat enhancement measures.

Tree and Vegetation Management Plan (TVMP)

31. Prior to commencement of construction, the requiring authority shall prepare a TVMP. The objective of the TVMP is to provide a framework for the management of adverse arboricultural effects.
32. The TVMP is to be provided to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW.
33. To achieve the objective of the TVMP, the TVMP must include:
- (a) Details (species, size, location, age class) of the trees identified for removal by the Project Arborist;
 - (b) Contact details of the Project Arborist;
 - (c) Details of site-specific areas where arboricultural supervision monitoring and/or direction are required;
 - (d) Details of areas of continuous vegetation that will be required to be removed for the project and that require replacement re-vegetation;
 - (e) Details of site-specific re-vegetation including plant species, ground preparation, weed control measures and planting methodologies;
 - (f) Details of re-vegetation maintenance measures;

- (g) Details of where, in the opinion of the Project Arborist:
 - (i) tree protection fencing is required;
 - (ii) hand digging, probing and exploratory excavation is required;
- (h) Details of how the removal of protected trees shall be avoided where practicable; and
- (i) Details of where the removal of protected trees has been identified as being necessary and details of measures to be adopted to mitigate or remedy associated adverse arboricultural effects.

Landscape and Visual Management Plan (LVMP)

- 34. A LVMP is to be prepared for the project by a registered landscape architect. A copy of the LVMP must be provided to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW that includes the development of above-ground structures and buildings or works in the coastal environment. The objective of the LVMP is to provide a framework to avoid, remedy or mitigate the adverse landscape, natural character and visual effects of the project's above ground structures and buildings, or works in the coastal environment.
- 35. The LVMP must describe the measures that will be taken to achieve the objective of the LVMP as described in condition 34. In particular, the LVMP must describe:
 - (a) The location of above-ground structures and buildings, the landscape setting and surrounding land uses;
 - (b) The layout, architectural form and detail of proposed buildings and above-ground structures;
 - (c) Measures adopted to ensure that above-ground structures and buildings are appropriate to their context and minimise as far as practicable adverse effects on the amenity of the surroundings (including neighbouring properties) having regard to their functional nature;
 - (d) How proposed materials are sufficiently robust and minimise the potential for graffiti and vandalism;
 - (e) The extent to which the buildings are visually recessive through (for example) the use of appropriate colours, textures and modulation;
 - (f) The extent to which buildings are designed to achieve appropriate visual amenity and scale with their surroundings through such aspects as modulation of building form, articulation of building components, and use of architectural detail;
 - (g) The extent to which any planting mitigates the effects of above-ground structures, vegetation loss and enhances amenity and/or natural values of the surroundings;
 - (h) How site configuration, landscaping and planting maximises the use of CPTED principles;
 - (i) How comments from PSR (as required by condition 27) has been incorporated, and where feedback has not been incorporated, the reasons why; and
 - (j) How mitigation measures proposed in any SRP, TVMP and EMP contribute to the achievement of the LVMP objective.

Site Reinstatement Plan (SRP)

- 36. Prior to commencement of works at all surface construction sites (including but not limited to areas within private property, roads, and Auckland Council parks and reserves), the requiring authority shall prepare a SRP for the site, in consultation with the affected landowner(s). The objective of the SRP is to provide for the reinstatement of property

and assets directly affected by the project to the standard that existed prior to the works being undertaken.

37. The SRP is to be submitted to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW and shall be progressively implemented following completion of each project stage(s).
38. To achieve the objective of the SRP, the SRP must:
 - (a) Identify any existing structures, vegetation, landscape (including soil) and other features on the site to be protected during works or reinstated on completion of the works;
 - (b) Identify any existing traffic control devices (including signs, street furniture and road markings) affected by the works and to be reinstated on completion of the works;
 - (c) Provide details of the measure to be adopted to ensure the protection of any existing structures, vegetation, landscape (including soil) and other features on the site identified to be protected during works;
 - (d) Provide details of the measures to be adopted for the reinstatement on completion of works of any existing structures, vegetation, landscape (including soil) and other features on the site identified to be reinstated upon completion of works;
 - (e) Include a summary of all consultation undertaken in relation to the development of the SRP (including comments received from PSR in accordance with condition 27), how feedback has been incorporated, and where feedback has not been incorporated, the reasons why; and
 - (f) Identify the location and type of all physical works on the site.

Contaminated Land Management Plan (CLMP)

39. A CLMP shall be prepared and submitted to the Council (Team Leader Specialist Integration Compliance) as part of any required OPW to set out the framework for the management of the adverse effects relating to contaminated land during the construction of the project. The objective of the CLMP is to avoid, remedy or mitigate the adverse effects of construction on human health which may result from the disturbance of contaminated material during construction.
40. To achieve the objective in condition 39 above, the CLMP should set out the procedures for the earthworks the contractor will follow during the works, and how these procedures will be implemented. The procedures must include (but not necessarily be limited to):
 - (a) Excavation, handling and storage requirements;
 - (b) Dust and erosion control measures to prevent the discharge of contaminants;
 - (c) Health and safety procedures;
 - (d) Disposal of contaminated soils to a landfill approved to take the material;
 - (e) Procedures for identifying and managing unexpected discovery of contaminated soils or hazardous materials; and
 - (f) Appointment of a contaminated land specialist who meets the requirements of an appropriately qualified and experienced practitioner set out in the "National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Users' Guide (2012)" Ministry for the Environment.

Construction Communications Plan (CCP)

41. The requiring authority shall prepare a CCP for the construction phase of the project or for each project stage, and submit the plan to Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW. The CCP must set out:
- (a) The method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely commencement, duration and effects of works;
 - (b) Measures for consulting with mana whenua to identify any culturally sensitive sites that require cultural monitors;
 - (c) Details of prior consultation or community liaison undertaken with the parties referred to in (a) above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise;
 - (d) Full contact details for a nominated liaison person who will manage the public information system and be the point of contact for related enquiries.

Transpower NZ Construction Management Plan (TCMP)

42. The requiring authority shall prepare a TCMP for the sections of the Northern Interceptor where the pipeline or any site works are to be undertaken within 12 metres of the centreline of the HEN-OTA A 220kV transmission line in the span between Towers 88 and 89, to ensure the protection of these transmission assets. The TCMP shall demonstrate that the design and construction methodology complies with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) and will not compromise the ongoing operation, maintenance and upgrading of the HEN-OTA A transmission assets.
43. The TCMP shall be prepared in consultation with Transpower NZ Limited and a draft must be given to Transpower NZ for its review and comment at least 6 months prior to being submitted to the Council. A record of consultation and any comments provided by Transpower on the final draft must be included with the final TCMP.
44. The TCMP shall be provided to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW.
45. All works/activities are to be undertaken in accordance with the TCMP.
46. The TCMP (as required by condition 42 above) must include (but is not necessarily limited to) the following:
- (a) The name, experience and qualifications of the person/s nominated by the requiring authority to supervise the implementation of, and adherence to, the TCMP;
 - (b) Construction drawings, plans, procedures, methods and measures to demonstrate that all construction activities undertaken on the site will meet the safe distances within the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP 34:2001) or any subsequent revision of the Code, including but not limited to those relating to:
 - (i) Excavation and Construction near Towers (Section 2);
 - (ii) Building to Conductor clearances (Section 3);
 - (iii) Ground to Conductor clearances (Section 4);
 - (iv) Mobile Plant to conductor clearances (Section 5); and

- (v) People to conductor clearances (Section 9).
- (c) Details of any areas that are "out of bounds" during construction and within which additional management measures are required, such as fencing off, entry and exit hurdles and the minimum height for any hurdles. Where a safety observer is required, this shall be at the requiring authority's cost.
- (d) Details of contractor training for those working near the HEN-OTA A transmission line.

CONSTRUCTION CONDITIONS

Pre-commencement Meeting

47. Prior to the commencement of works authorised by these designations, the requiring authority shall arrange and conduct a pre-start meeting that:
 - (a) Is held at a location on the designated route;
 - (b) Is scheduled not less than five days before the anticipated commencement of works;
 - (c) Includes relevant and appropriate Council and AT representatives;
 - (d) Includes representation from the contractors who will undertake the works; and
 - (e) Is attended by the Project Arborist. The Council's project arborist shall also be invited to attend the pre-commencement meeting.

48. The requiring authority shall invite representatives from interested mana whenua entities to attend the pre-start meeting to undertake tikanga.

Advice note:

A list of self-identified mana whenua is contained in Appendix A.

49. The following information shall be made available by the requiring authority at the pre-start meeting:
 - (a) Timeframes for key stages of the works authorised by the designation;
 - (b) The designation conditions and the conditions of any resource consent approved for the relevant phase(s) of the project;
 - (c) The OPW, including all necessary management plans;
 - (d) The contact details for key contractors.

Consultation with network utility operators

50. The requiring authority shall undertake ongoing communication and consultation with network utility operators affected by the project throughout the duration of construction, including in relation to design and implementation stages to co-ordinate works and to manage effects of the project on their respective networks.

Construction noise and vibration standards

51. Noise arising from construction activities on land shall be measured and assessed in accordance with NZS 6803:1999 Acoustics - Construction Noise and shall, unless otherwise provided for in an SSCNVMP in accordance with conditions 57 to 59 comply with the noise limits set out in the following table:

Day	Time	LAeq	LAmx
Residential Receivers			
Weekdays	0630h – 0730h	55 dB	75 dB
	0730h – 1800h	70 dB	85 dB
	1800h – 2000h	65 dB	80 dB
	2000h – 0630h	45 dB	75 dB
Saturday	0630h – 0730h	45 dB	75 dB
	0730h – 1800h	70 dB	85 dB
	1800h – 2000h	45 dB	75 dB
	2000h – 0630h	45 dB	75 dB
Sundays and Public Holidays	0630h – 0730h	45 dB	75 dB
	0730h – 1800h	55 dB	85 dB
	1800h – 2000h	45 dB	75 dB
	2000h – 0630h	45 dB	75 dB
Commercial and Industrial receivers			
All	0730h – 1800h	70 dB	
	1800h – 0730h	75 dB	

52. Construction activities shall comply with the guideline vibration limits set out in the German Standard DIN 4150 – 3:1999 unless varied pursuant to conditions 23 or 57.
53. In addition to the requirements of condition 56 and subject to any variation in accordance with condition 57, vibration from construction shall also comply with the following vibration limits for the management of amenity effects:
- (a) A limit of 2mm/s PPV when measured on the foundation of any building occupied (at the time of the works being undertaken) at any office, meeting room, retail space, dwelling, visitor accommodation, retirement village, care centre, classrooms in education facilities and healthcare facilities between the hours of 7am and 10pm on any day.
 - (b) A limit of 0.3mm/s PPV when measured on the foundation of any building containing a bedroom or overnight stay facility where sleep protection is required that is occupied (at the time of the works being undertaken) between the hours of 10pm and 7am on any day.
54. The limits above may be exceeded only where an SSCNVMP has been finalised in accordance with condition 57 for the specific activity and affected receiver(s).

Advice Note:

For the purpose of condition 54, finalised means: at the completion of the time period for Council to provide comments to the Requiring Authority to be incorporated into the final version of any SSCNVMP.

55. Regenerated noise from tunnelling works shall not exceed a level of 35 dBL_{Aeq(15 min)} when measured in any occupied bedroom or sleeping area between the hours of 10pm and 7am on any day. The application of these limits shall only be investigated upon receipt of a complaint from the occupier(s).

56. The guideline vibration limits set out in the German Standard DIN 4150 – 3:1999 must not be exceeded except where the requiring authority can demonstrate to the satisfaction of the Council in advance:
- (a) That the receiving building(s) are capable of withstanding higher levels of vibration and what the new vibration limit is. The investigation required to demonstrate this must include an assessment of the building(s) by a chartered professional engineer or otherwise appropriately qualified person and a full pre-condition survey; and
 - (b) That the requiring authority has obtained the written agreement of the building owner(s) and occupier(s), that a higher limit may be applied.

Site Specific Construction Noise and Vibration Management Plan (SSCNVMP)

57. A SSCNVMP is to be prepared for any receiver or activity for which construction noise and/or vibration is predicted or measured to exceed any of the limits set out in conditions 51, 52, 53, 55 and 56 or when construction noise is either predicted or measured to exceed any of the limits set out in conditions 51, 52, 53, 55 and 56, except where the exceedance of the standards in condition 51 is less than 5 decibels and does not exceed:
- (a) 0700-2200: 1 period of up to 2 consecutive weeks in any 2 months; or
 - (b) 2200-0700: 1 period of up to 2 consecutive nights in any 10 days.
58. The SSCNVMP must establish the best practicable option (BPO) for noise mitigation to be implemented for the construction activity and must include.
- (a) a description of the works which will generate noise and or vibration levels which cannot be practicably mitigated to achieve compliance with the project noise and vibration standards;
 - (b) the days and times when the activity will be permitted to exceed the project noise and / or vibration controls;
 - (c) the proposed noise and / or vibration limits for the specific activity;
 - (d) a record of all consultation and communication specific to the reasons for and development of the SSNCMVP with the affected receiver(s);
 - (e) noise and/ or vibration monitoring to be undertaken during the specific activity; and
 - (f) a short description of alternative methods or options to complete the works or mitigate the effects that have been discounted and why.
59. Every SSCNVMP is to be submitted to the Auckland Council (Team Leader Specialist Integration Compliance) at least 5 days prior to the commencement of the activity. Any reasonable and practicable comments received from the Council within 3 days must be incorporated into the final version.

Time restrictions on construction works

60. The hours of work for surface activities shall be from 0730 to 1800 on weekdays and Saturdays unless surface activities that are planned to be undertaken outside of these hours at night or on Sundays or public holidays are specified in terms of their location, duration, timing and predicted noise and vibration levels in the CNVMP required by condition 23.
61. During the school term, the requiring authority shall manage construction activities in the vicinity of Greenhithe Road between Sunnyview Road and Wainoni Heights, and on Churchouse Road to minimise as far as practicable the number of construction vehicle

movements during the peak morning hours of 8:30am and 9:15am and the afternoon peak period of between 2:45pm and 3:30pm in the proximity of the schools.

62. Construction activities on Appleby Road should be timed so that they occur during school holiday periods.

Traffic management

63. All site access locations should achieve minimum sight distance standards. Where acceptable sight distances cannot be achieved, movements relating to the deficient sight distances should be banned and / or temporary speed limit measures imposed so as to reduce traffic operating speeds to a point at which an acceptable sight distance is achieved.
64. The TMP(s) required by condition 20 shall be consistent with the CoPTTM that applies at the time of construction taking into account any temporary speed limit or additional traffic controls that may be imposed as part of the work.
65. Any damage in the road corridor or shared paths directly caused by construction traffic shall be repaired as soon as practicable.

Tree and vegetation management

66. Any required tree pruning shall be carried out in accordance with correct arboricultural practices by a competent arboricultural contractor.
67. Re-vegetation required by the conditions above shall:
 - (a) Be undertaken within the first planting season (typically May to September) following the completion of the construction activities;
 - (b) Comprise plant species appropriate to the area, chosen for site-specific conditions and where possible, eco-sourced; and
 - (c) Be an equal mix of grade sizes between root trainer and PB12 and spaced no greater than one metre apart or as appropriate to the grade, species, type and specific location within the site being planted.
68. The removal of trees shall be carried out in accordance with acceptable arboricultural standards and practice by a suitably qualified and experienced arborist.
69. Where stand-alone trees greater than 4 metres in height are to be removed, replacement trees shall be established on a two-for-one basis. The species, size and location of the replacement trees shall be determined in consultation with the relevant asset manager or property owner.

Kauri die back

70. The requiring authority shall ensure that any works within 30 metres of any Kauri will be undertaken in accordance with best practice procedures to prevent the introduction or spread of Kauri dieback disease. Best practice procedures will be developed in conjunction with the Auckland Council (Manager Biosecurity).

Walkways/Cycleways

71. If requested to do so in writing by either AT or the relevant Local Board, the Requiring Authority shall design the supports of the identified pipebridge so as to not preclude the

potential future shared use of the pipe bridge supports for a workway/cycleway facility. The Requiring Authority shall advise both AT and the relevant Local Board of this opportunity prior to starting any design work on the pipe bridge.

Transpower Transmission Line (HEN-OTA A)

72. The requiring authority must ensure that access to the "HEN-OTA A" transmission line for maintenance work (at all reasonable times) and for emergency works (at all times) is not adversely affected by the works.
73. Should conductive material need to be used within 12 metres of HEN-OTA A Tower 88, the requiring authority must undertake a risk assessment and implement any necessary mitigation measures to control induction and transferred voltages, Earth Potential Rise and cathodic protection.
74. Unless Transpower NZ agrees otherwise, excavation or disturbance of the land around HENOTA A Tower 88 shall not:
 - (a) exceed a depth greater than 300mm within 6 metres of the outer edge of the visible foundations of the tower; or
 - (b) exceed a depth greater than 3 metres between 6 metres and 12 metres of the outer edge of the visible foundation of the tower; or
 - (c) destabilise the tower.
75. No excavated material, fill or construction material can be stockpiled or deposited under the HENOTA A transmission line that reduces the conductor to ground clearance to less than 7.5 metres vertically.
76. All machinery and mobile plant operated in association with the works shall maintain a minimum clearance distance of 4 metres from the HEN-OTA A transmission line at all times.
77. A warning sign is to be clearly displayed at the operator position on any mobile plant - "WARNING, KEEP 4M MINIMUM CLEARANCE FROM TRANSMISSION LINES AT ALL TIMES" at any location where the mobile plant can reasonably traverse under the HEN-OTA A transmission line.

POST-CONSTRUCTION

Section 176 approvals

78. Following construction of the project (or a section thereof), the following activities undertaken by network utility operators that will not prevent or hinder the project, and can be undertaken no closer than 500mm to any below ground infrastructure, can be undertaken without seeking the requiring authority's written approval under section 176(1)(b) of the RMA:
 - (a) Maintenance and urgent repair works of exiting Network Utilities;
 - (b) Minor renewal works to existing Network Utilities necessary for the on-going provision or security of supply of Network Utility Operations;
 - (c) Minor works such as new service connections; and
 - (d) Upgrade and replacement of existing Network Utilities within the same location with the same or similar effects as the existing utility;

Works greater than those described above shall be subject to the approval of the requiring authority under section 176 but approval shall not be unreasonably withheld.

Designation boundaries

79. As soon as reasonably practicable, and no later than the point at which any part or parts of the project becomes operational, the requiring authority shall:
- (a) Review the extent of the area designated for the project. This review shall include consultation with:
 - (i) AT to enable the efficient operation of the road network; and
 - (ii) PSR in relation to parks included in the designation.
 - (b) Identify any areas of designated land that are no longer necessary for construction of the project, or no longer necessary from the on-going operation and/or maintenance of the project or for on-going mitigation measures;
 - (c) Give notice to the Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified in (b) above.

Operational noise standards

80. Operational noise shall not exceed the following project criteria when measured from within the boundary of a site in a residential zone or when measured from any area of a park or reserve used for active recreation:

Time	Noise Level
Monday to Saturday 7am – 10pm	50dB L _{Aeq}
Sunday 9am - 6pm	
All other times	40dB L _{Aeq} 75dB L _{AFmax}

81. Operational noise shall be measured in accordance with New Zealand Standard NZS 6801:2008 "Acoustics – Measurement of Environmental Sound" and assessed in accordance with New Zealand Standard NZS 6802:2008 "Acoustics – Environmental Noise".

Appendix A: List of Stakeholders

Northern Interceptor NoR – NI (North Shore) and NoR – NI (Waitakere)

The following listed parties constitute stakeholder(s) for the purposes of the Pre-Construction Consultation Plan and the Construction Communications Plan.

- Ministry of Education
- Greenhithe School
- Albany Junior High School
- Auckland Council Parks, Sports and Recreation where works are proposed in the following locations:
 - Taitapu Park
 - Lowtherhurst Reserve
 - Makora Park
 - Holmes Reserve
 - Manutewhau Reserve
 - St Margarets Park
 - Esplanade Reserve (Upper Harbour Highway)
 - Collins Park
 - Wainoni Park
 - Wharepapa Reserve
 - Rosedale Park
- North Harbour Air Gun Club
- Greenhithe Pony Club
- Greenhithe Riding for the Disabled
- North Shore Dog Training Club
- Greenhithe Residents' Association
- the owner and occupier of any private land for which entry and or physical works is required.
- The owner of 15 and 16 The Knoll
- The eight mana whenua entities who have indicated ongoing interest in the Project being:
 - Ngāti Manuhiri
 - Ngāti Whātua o Ōrākei
 - Te Kawerau a Maki
 - Ngāti Maru
 - Te Akitai
 - Te Rūnanga o Ngāti Whātua;
 - Ngaati Whanaunga
 - Ngāti Paoa
- The owner and occupier of 4 – 6 Hobsonville Road
- Network utility operators with assets within or adjacent to the designation including but not limited to:
 - Radio New Zealand
 - Auckland Transport
 - New Zealand Transport Agency
 - Transpower
 - Vector

Appendix B: The Commissioners' recommended conditions with Watercare's decision shown as tracked changes

PURPOSE AND CONDITIONS FOR EACH DESIGNATION

PURPOSE OF DESIGNATIONS

Wastewater purposes – Northern Interceptor wastewater pipelines, pumping stations, and associated infrastructure.

CONDITIONS OF DESIGNATIONS

Note: The following terms and acronyms are used in these conditions:

Term	Definition
<u>Consultation</u>	<u>The process of providing information about the construction works, and receiving for consideration, information from stakeholders, directly affected parties, regarding those effects and proposals for the management and mitigation of them.</u>
Cultural Monitor	Nominated Kaitiaki
Directly affected parties	All property owners and occupiers identified in the designation footprint
Northern Interceptor	The Northern Interceptor is comprised of Phases 1 to 6
Project stage	"Project stage" means a separable part of the project, for instance by contract area or by geographical extent.
Stakeholder(s)	The parties as listed in Appendix A
The project	The project is comprised the part of Phase 2 where Phase 2 connects with Phase 5 and Phases 3 to 6 of the Northern Interceptor project

Acronym	Description
AT	Auckland Transport
CCP	Construction Communications Plan
CLMP	Contaminated Land Management Plan
CoPTTM	Code of Practice for Temporary Traffic Management
The Council	The Auckland Council
CMP	Construction Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CPTED	Crime Prevention Through Environmental Design
EMP	Ecological Management Plan
LVMP	Landscape and Visual Management Plan
MOI	Agreement for Movement of Infrastructure
NoR 1	Notice of Requirement – NI (North Shore)

NoR 2	Notice of Requirement – NI (Waitakere)
OPW	Outline Plan of Works
PCCP	Pre-construction consultation plan
PSR	The Auckland Council's Parks, Sports and Recreation department
RMA	Resource Management Act 1991
SRMP	Auckland Council Parks, Sports and Recreation Management Plan
SRP	Site Reinstatement Plan
SSCNVMP	Site Specific Construction Noise and Vibration Management Plan
TCMP	Transpower Construction Management Plan
TMP	Traffic Management Plan
TVMP	Tree and Vegetation Management Plan

PERMANENT CONDITIONS:

General conditions Accordance

1. The activity ~~is to~~ shall be carried out in general accordance with the plans and all information submitted with the ~~Notices of Requirement, application, and~~ including the documents listed below:

Volume 1

Northern Interceptor Wastewater Project, Volume 1: Assessment of Effects on the Environment and Appendices A-G. Prepared by MWH (now part of Stantec) on behalf of Watercare. Dated 5 May 2016.

Volume 2

Technical Report A: (Assessment of Arboricultural Effects) "Arboricultural Assessment - Northern Interceptor Project: Notices of Requirement," Rev. 4. Prepared by GreensceneNZ. Dated 8 August 2016.

Technical Report B (Archaeological Assessment) "Preliminary Archaeological Assessment – Northern Interceptor Project: Notices of Requirement." Prepared by Clough & Associates. Dated July 2016.

Technical Report C (Ground Contamination Assessment) "Ground Contamination Assessment – Northern Interceptor Project: Notices of Requirement." Prepared by Tonkin + Taylor. Dated July 2016.

Technical Report D (Ecological Assessment) "Ecological Assessment – Northern Interceptor Project." Prepared by Bioresearches. Dated 10 June 2016.

Technical Report E (Assessment of Ground Settlement Effects) "Assessment of Settlement Effects – Northern Interceptor Project: Notices of Requirement." Prepared by Tonkin + Taylor. Dated June 2016.

Technical Report F (Assessment of Landscape and Visual Effects) "Northern Interceptor Project: Notices of Requirement – Assessment of Natural Character

Landscape and Visual Effects." Prepared by Boffa Miskell. Dated 5 October 2016.

Technical Report G (Assessment of Noise and Vibration Effects) "Assessment of Noise & Vibration Effects – Northern Interceptor Project: NOR" Rp 001 2015801A. Prepared by Marshall Day Acoustics. Dated 5 August 2016.

Technical Report H (Traffic Assessment for Construction and Operation) "Watercare Northern Interceptor Project – Traffic Assessment for Construction and Operation of Northern Interceptor, NoR – Waitakere and North Shore. Prepared by Traffic Design Group. Dated July 2016.

Volume 3

Drawing Set:

Northern Interceptor Concept Design, NoR – NI (Waitakere):

- Designation Plan 1 of 6, plot date Jun 17, 2016
- Designation Plan 2 of 6, plot date Jun 17, 2016
- Designation Plan 3 of 6, plot date Jun 17, 2016
- Designation Plan 4 of 6, plot date Jun 17, 2016
- Designation Plan 5 of 6, plot date Jun 17, 2016
- Designation Plan 6 of 6, plot date Jun 17, 2016

~~Typical drawings: (**Note:** the project is to be carried out in general accordance with the typical pump station drawings listed)~~

Typical Drawings:

- Northern Interceptor Concept Design Typical Pump Station Layout, DWG No. 80502292-01-001-D002
- Northern Interceptor Concept Design General Pump Station Layout, DWG No. 80502292-01-001-D001

Drawing Set:

Northern Interceptor Concept Design, NoR – NI (North Shore):

- Designation Plan 1 of 10, plot date Mar 24, 2017
- Designation Plan 2 of 10, plot date Jun 17, 2016
- Designation Plan 3 of 10, plot date Jun 17, 2016
- Designation Plan 4 of 10, plot date Oct 05, 2016
- Designation Plan 5 of 10, plot date Mar 07, 2017
- Designation Plan 6 of 10, plot date Mar 16, 2017
- Designation Plan 7 of 10, plot date Mar 16 2017
- Designation Plan 8 of 10, plot date Jun 27, 2016
- Designation Plan 9 of 10, plot date Jun 17, 2016
- Designation Plan 10 of 10, plot date Jun 17, 2016

Prepared by MWH (now part of Stantec) on behalf of Watercare.

Response to Section 92 Request

Section 92 request dated 21 November 2016. Responses to matters relating to landscape and visual amenity and natural character, heritage and archaeology, traffic and transportation, trees, operational air quality and hydraulic noise, parks and statutory planning. Prepared by MWH with support from technical specialists on behalf of Watercare. Dated 23 December 2016.

Where there is inconsistency between:

- (a) The documents provided by the requiring authority and listed above and these conditions, these conditions prevail.
- (b) The information and plans lodged with the Notices of Requirement and presented in evidence on behalf of the requiring authority at the Council hearing, the most recent information and plans prevail.
- (c) The evidence presented at the Council hearing and the management plans required by the conditions of this designation and submitted through the Outline Plan of Works, the requirements of the management plans prevail.

Lapse

- 2. Subject to section 184(1) of the RMA each of these designations will lapse 20 years from the date it is included in the Auckland Unitary Plan ~~on 31 December 2038.~~

~~4—6 Hobsonville Road~~

- ~~3. The top of any pipeline enabled by this project is required to be at a maximum RL level of 25 within the boundaries of 4—6 Hobsonville Road, West Harbour (Section 6 SO 445955) CT 579283.~~

Advice Note:

For clarity, "maximum RL level" means that the pipeline is to be at a depth no shallower than the RL level expressed in this condition.

Note: refer also to conditions 75 and 76 which address operational noise.

PRE-CONSTRUCTION CONDITIONS

Network Utility Operators

- 43. The requiring authority must:
 - (a) Work collaboratively with network utility operators during the development of the design for the project to provide for the ongoing operation of and access to their networks;
 - (b) Work collaboratively with network utility operators during the preparation and implementation of the CMP in relation to the management of adverse effects on the assets of network utility operations;
 - (c) Undertake communication and consultation with network utility operators as soon as reasonably practicable, and at least once prior to construction timing being confirmed and construction methodology, and ~~the~~ duration being known.

Management plans

54. An Outline Plan of Works ("OPW") is to be submitted to the Council prior to commencement of construction works. As part of any OPW required for the project the requiring authority ~~must~~shall prepare and submit the following management plans to the Council:
- (a) Construction Management Plan ("CMP")
 - (b) Construction Communications Plan ("CCP")
 - (c) Auckland Council Parks, Sports and Recreation Management Plan ("SRMP")
 - (d) Site Reinstatement Plan ("SRP")
 - (e) Ecological Management Plan ("EMP") for works located in the areas listed in condition 29
 - (f) Construction Noise and Vibration Management Plan ("CNVMP")
 - (g) Traffic Management Plan ("TMP")
 - (h) Tree and Vegetation Management Plan ("TVMP")
 - (i) Landscape and Visual Management Plan ("LVMP") where the works addressed by the OPW include the development of above-ground structures and buildings
 - (j) Contaminated Land Management Plan ("CLMP")
65. The management plans identified in condition 4 are to be implemented and maintained throughout the entire construction period.
76. A Pre-Construction Consultation Plan ("PCCP") is to be submitted to ~~the~~ Council in accordance with condition 12 within 12 months of these designations being confirmed.
87. Site specific Construction Noise and Vibration Management Plans ("SSCNVMP"~~s~~) are to be submitted to ~~the~~ Council in accordance with conditions 58 to 60 at least ~~five~~5 days prior to the commencement of the relevant activity.
98. Any substantive change to any of the management plans, ~~except for the PCCP, must:~~ identified above in conditions 4, 5 and 7 shall:
- (a) continue to achieve the objective or purpose of the management plan; and
 - (b) not result in non-compliance with other conditions of the designations.
109. Any management plan updated as a result of a substantive change is to be submitted to the Council (Team Leader – Specialist Integration Compliance) ~~for certification~~ at least ten working days prior to any such substantive change taking effect.

Section 176 approval

110. In the period before construction begins on the project, the following activities undertaken by network utility operators will not prevent or hinder the project, and can be undertaken without seeking the requiring authority's written approval under section 176(1)(b) of the RMA:
- (a) Operation, maintenance and urgent repair works of existing network utilities;
 - (b) Minor renewal works to existing network utilities necessary for the on-going provision or security of supply of network utility operations;
 - (c) Minor works such as new service connections;

- (d) Upgrade and replacement of existing network utilities in the same location with the same or similar effects as the existing utility.

For the avoidance of doubt, in this condition an "existing network utility" includes infrastructure operated by a network utility operator which was:

- (i) In place at the time the Notice of Requirement for the project was served on the Council on 10 October 2016; or
- (ii) Undertaken in accordance with this condition, or the section 176(1)(b) RMA process.

Advice Note:

Nothing in this condition affects the application of section 177 of the RMA, which applies where land designated for the project is the subject of an earlier designation or heritage order.

4211. In the period before construction begins on the project, the following activities undertaken by PSR will not prevent or hinder the project, and ~~may~~can be undertaken without seeking the requiring Authority's written approval under section 176(1)(b) of the RMA:
- (a) Operation, maintenance and urgent repair works;
 - (b) Minor renewal works;
 - (c) Upgrade and replacement of existing facilities within the same location and with the same or similar effects as the existing facility.

Pre-construction Consultation Plan (PCCP)

4312. The requiring authority ~~is to~~shall prepare a PCCP for the pre-construction phase of the project which ~~must~~shall be submitted to the Council (Team Leader Specialist Integration Compliance) ~~for comment (if any)~~ within 12 months of the designation being confirmed. The PCCP must include:
- (a) The method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding project progress, likely commencement dates of construction works, and works programming and staging; and
 - (b) Full contact details of a nominated liaison person to manage the public information system and ~~to be~~ the point of contact for related enquiries.
4413. The PCCP is to be implemented, complied with and publicly available from the date which the PCCP is submitted to ~~the~~ Council until the date ~~on~~ which a CCP prepared in accordance with condition 41 is submitted to ~~the~~ Council.

Detailed design

4514. During the design phase of the project, the requiring authority shall, in consultation with Auckland Transport ("AT"), is to consider the position of the proposed pipe in the road corridor for the purpose of ensuring that the project can be undertaken in a manner that will minimise adverse effects on the operation and maintenance of the affected road assets. To achieve this, the requiring authority ~~is to~~shall take into account ~~of~~ the following matters:

- (a) Alignment and depth of pipes. Particular consideration ~~must~~shall be given to the depth of the pipe to provide for maintenance and renewal of road assets and for other utility services to cross the pipe;
- (b) Location of air and scour valves (where practicable, these ~~are to be~~ located outside of the carriageway);
- (c) Location of manholes; and
- (d) Future access, operation and maintenance of the proposed assets.

Walkways/cycleways

- ~~16. If requested to do so in writing by either AT or the relevant Local Board, the requiring authority is to design the supports of the identified pipebridge so as to not preclude the future potential for shared use of its supports for a walkway/ cycleway facility. The requiring authority must advise both AT and the relevant Local Board of this opportunity prior to starting any design work on the pipebridge.~~

Project arborist

Appointment of a Project Arborist

- ~~15.~~ Prior to the commencement of design, the requiring authority ~~is to~~shall appoint a qualified arborist ("Project Arborist"(s)) for the duration of ~~both the design and the construction of the project works.~~ The role of the Project Arborist(s) is to:
- a. Provide advice to the requiring authority during the design ~~phase~~ on how the design and location of works can avoid, remedy or mitigate effects on protected trees.
 - b. Supervise all works within the dripline of protected trees.

Advice Note:

For clarity, a "protected tree" is defined as either a) any tree greater than 4m in height or greater than 400mm in girth, or b) any tree ~~which~~that is scheduled in the Auckland Unitary Plan.

Vector Limited Condition

- ~~16.~~ There are assets owned by Vector Limited within the designated corridor, namely electricity distribution assets (including 110kV overhead lines) in vicinity of the Rosedale Wastewater Treatment Plant 33kV overhead and underground; 11kV overhead and underground; and LV overhead and underground), gas distribution assets (up to and including the IP20 pipeline); and communications assets. The requiring authority ~~is to~~shall consult with Vector Limited and ~~is to~~shall enter into an infrastructure agreement ("MOI") describing how the assets are to be relocated, and how the costs are to be apportioned. That agreement ~~is to~~shall be consistent with Vector's standard "Agreement for Movement of Infrastructure", and ~~must~~shall be in place prior to any works taking place pursuant to the designation that might affect Vector's assets.

4 – 6 Hobsonville Road Condition

- ~~17.~~ The top of any pipeline enabled by this Project shall be at a maximum RL level of 25 metres within the boundaries of 4 – 6 Hobsonville Road, West Harbour (Section 6 SO 445955) CT-579283.

Advice Note:

For clarity, maximum RL level means that the pipeline shall be at a depth no shallower than the RL level expressed in condition 17.

MANAGEMENT PLAN CONDITIONS

Construction Management Plan – preparation, compliance and monitoring

~~19~~18. As part of the OPW to be submitted to the Council (Team Leader Specialist Integration Compliance) prior to commencement of construction works, the requiring authority ~~must~~shall prepare a Construction Management Plan or Plans ("CMP") for the relevant project stage. The purpose of the CMP is to confirm final project details and staging of works to illustrate that the works remain within the limits and standards required by these conditions and that the construction and operation activities will avoid, remedy or mitigate adverse effects on the environment.

On request, the requiring authority ~~is to~~shall provide a copy of the CMP(s) to interested mana whenua entities.

Construction Management Plan (CMP)

~~20~~19. The CMP required by condition 18 above, must include sufficient details relating to the management of all construction activities associated with the relevant project stage to which it relates, including:

- (a) Details of the site or project manager and the construction liaison person, including their contact details (phone, postal address, email address);
- (b) An outline construction programme;
- (c) The proposed hours of work;
- (d) The measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;
- (e) Measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean-up;
- (f) Location(s) of the site infrastructure including site offices, site amenities, contractors' yards, site access, equipment unloading and storage areas, contractor car parking, and security;
- (g) Procedures for controlling sediment run-off, dust and removal of soil, debris, demolition and construction materials (if any) from public roads or places adjacent to the work site(s);
- (h) Means of providing for the health and safety of the general public;
- (i) Procedures for responding to complaints about construction activities;
- (j) Measures to address CPTED issues at and around any construction site(s);
- (k) Procedures for the refuelling of plant and ~~for~~ equipment;
- (l) Measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean-up;

- (m) Methods and systems to inform and train all persons working on the sites of potential environmental issues and how to avoid remedy or mitigate any potential adverse effects;
- (n) Details of information signage to inform members of the public about construction activities within parks and reserves. ~~The details are to~~ Details shall include, but not be limited to, works durations, impacts on recreational use of reserves and information about the project.

Traffic Management Plan (TMP)

2120. A detailed TMP is to be prepared for the project and or specific project site/s by an appropriately qualified person. A draft TMP ~~must~~ shall be provided to the relevant road controlling authority for certification at least twenty working days prior to submission to the Council. A copy of the TMP certified by the relevant road controlling authority is ~~to~~ shall be provided to the Council (Team Leader Specialist Integration Compliance) as part of any ~~OPW~~ required OPW. The objective of the TMP ~~is~~ shall be to provide a framework for the management of adverse traffic effects resulting from the project to the greatest extent practicable.
2221. The TMP ~~is to~~ shall be updated as necessary to reflect any substantive change, including any substantive change agreed to by the road controlling authority.
2322. The TMP must describe the measures that will be taken to avoid, remedy or mitigate the traffic effects associated with construction of the project. In particular, the TMP must include:
- (a) The traffic management measures to maintain traffic capacity and safety or ~~to~~ minimise the impact on traffic capacity including any restrictions (for instance limited hours of operation);
 - (b) Methods to manage the effects of access and egress from construction sites including the delivery of construction material, plant and machinery and associated noise effects;
 - (c) Measures to maintain existing vehicle access to property where practicable, or to provide alternative access arrangements when it will not be;
 - (d) Measures to maintain pedestrian and cyclist movements and ~~to~~ reduce the impact on mobility impaired users on roads, cycleways and footpaths adjacent to the construction works. Such access ~~must~~ shall be safe, clearly identifiable and seek to minimise significant detours; and to maintain a cycle route where it exists, unless it is not practicable to do so for short periods in order to maintain public health and safety;
 - (e) Any road, footpath, or cycleway closures and removal of kerbside parking that will be required and the nature and the duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses. In the event of any closures, the TMP ~~is to~~ shall describe the communications plan for local residents, the signage to pre-warn of closures and the organisations to be advised of the proposed footpath closures (including but not limited to the Blind Foundation);
 - (f) Any proposed monitoring to measure the impact of the works on traffic and vice versa. If safety or operational issues are evident, the methodology for measures to be implemented to address ~~these~~ these issues;

- (g) Measures to manage the proposed access to the site should access be unable to cater for two-way traffic passing at the same time, and in particular to minimise reverse movements and blocking of the road;
- (h) The availability of on-street and off-street parking if the project sites are unable to accommodate all contractor parking. This is to include an assessment of available parking (if any) for contractors on the street and to identify measures to meet and/or reduce contractor parking demand should it be found that there is insufficient on-street parking to meet that demand; and
- (i) Any proposed traffic assessments, including modelling where appropriate undertaken in consultation with the relevant road controlling authority which addresses intersection performance, capacity of affected road corridors and sites with existing high traffic and/or pedestrian movements.

Construction Noise and Vibration Management Plan (CNVMP)

~~2423.~~ A CNVMP is to be prepared by an appropriately qualified person. ~~The objective of the CNVMP is to set out the management procedures and methods to be taken in order to avoid, remedy or mitigate potential noise and vibration effects arising from construction activities on adjacent landowners and occupiers.~~ The CNVMP is ~~to~~shall be submitted to the Council (Team Leader Specialist Integration Compliance) as part of any ~~OPW~~ required OPW and ~~is to~~shall be updated when necessary to ensure it is consistent with the project, plant and construction methodologies should they evolve during the project. Any change to the CNVMP that may ~~result in~~give rise to a higher level of noise or vibration effects for any receiver than is otherwise authorised by the project noise and vibration standards ~~must~~shall be submitted to the Auckland Council for certification (Team Leader Specialist Integration Compliance). The objective of the CNVMP is to set out the management procedures and methods to be taken in order to avoid, remedy or mitigate potential noise and vibration effects arising from construction activities on adjacent landowners and occupiers.

~~2524.~~ The CNVMP must be prepared in accordance with the Noise Management Plan requirements of Annex E2 of NZS 6803:1999 Acoustics - Construction Noise and ~~is to~~shall describe the measures adopted to, as far as practicable, meet the noise limits in ~~these conditions~~ 51.

~~2625.~~ For predicted exceedances of less than 5 decibels, (refer condition 51) monitoring ~~is to~~shall be undertaken ~~by the requiring authority to confirm the actual noise levels.~~ If the exceedance is shown to be more than 5 decibels, or the period exceeds ~~that those~~ detailed in condition ~~47~~51, then a Site-Specific Construction Noise Management Plan ~~must~~will be prepared ~~in accordance with conditions 57 to 59.~~

~~2726.~~ The CNVMP must also describe measures to be adopted to meet the requirements of the German Standard DIN 4150-3:1999, and as a minimum ~~is required to~~shall address the following aspects with regard to construction vibration:

- (a) Vibration sources, including machinery, equipment and construction techniques to be used;
- (b) Provision for determining the buildings and structures that will require pre- and post-condition surveys;

- (c) Preparation of building and structure condition surveys on 'at risk' buildings and structures prior to, during and after completion of works, where for the purposes of this condition an 'at risk' building or structure is one at which the levels in the German Standard DIN 4150-3:1999 are likely to be approached or exceeded;
- (d) Use of building and structure condition surveys to determine the sensitivity of the building(s) and structure(s) on the adjacent sites to ground movement in terms of the Line 1-3 criteria of the German Standard DIN 4150 – 3:1999;
- (e) Identification of any particularly sensitive activities in the vicinity of the proposed works (for instance commercial activity using sensitive equipment such as radiography or mass-spectrometry) along with the details of consultation with the landowners and occupiers of the sites where the sensitive activities are located and any management measures that will be adopted based on this consultation;
- (f) The consultation undertaken by the requiring authority with affected parties to develop the proposed vibration management measures and any feedback received from those parties, along with the vibration management measures based on this consultation that will be adopted;
- (g) Methods for monitoring and reporting on construction vibration; and
- (h) Methods for receiving and responding to complaints about construction vibration.

Auckland Council Parks, Sports and Recreation Management Plan (SRMP)

~~2827.~~ Prior to commencement of the works authorised by these designations, the requiring authority ~~must~~shall submit a SRMP for the relevant project stage to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW. The objective of the SRMP is to minimise as far as practicable adverse effects on the recreation amenity of public parks and reserves resulting from the project ~~as far as practicable~~.

~~2928.~~ To achieve the objective of the SRMP, the SRMP must include:

- (a) Details of consultation undertaken by the requiring authority with Auckland Council Parks, Sports and Recreation (PSR) during the development of the detailed design and during construction within parks and reserves;
- (b) Details of measures proposed to ~~provide~~, where practicable, provide for the ongoing operation of and access to PSR maintained parks and reserves during construction;
- (c) Measures to ensure suitable alternatives to the carparking that may be lost during construction activities within parks or reserves;
- (d) Measures to coordinate as far as practicable, future works around PSR projects in parks and reserves ~~as far as practicable~~;
- (e) A record of all consultation undertaken in relation to the development of the SRMP, how feedback has been incorporated, and where feedback has not been incorporated, the reasons why.

Advice Note:

More information on the process can be found in the agreement titled Watercare and PSR "Watercare works on Auckland Council's Parks and Reserves Standard Approval Procedure" dated 23 March 2017, or any updated version that supersedes that document.

Ecological Management Plan (EMP)

~~30~~29. An EMP developed by an appropriately qualified ecologist ("Project Ecologist") is to be submitted to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW for surface works in the following locations:

- (a) Taitapu Park;
- (b) Lowtherhurst Reserve;
- (c) Tinema Stream Riparian Corridor;
- (d) The eastern abutment of the Greenhithe Bridge;
- (e) North Wainoni Park; and
- (f) North Shore Golf Course (coastal edges); and
- (g) Any other public areas within the designation boundary deemed significant by the Project Ecologists that have become so since the designation was confirmed and that are of equivalent value as (a) to (f).

The objective of the EMP is to minimise as far as practicable adverse ecological effects resulting from the project ~~as far as practicable~~. The EMP is to be implemented and maintained throughout the entire construction period.

~~31~~30. To achieve ~~its~~the objective of the EMP, the EMP must include the following:

- (a) Confirmation by the Project Ecologist that the SRP and TVMP have been reviewed and certified as providing adequate ecological mitigation to achieve the objective of the EMP (condition 29);
- (b) Methods of lizard and nesting bird pre-clearance surveying;
- (c) Details of capture-relocation methodologies and timeframes where required;
- (d) Details of habitat enhancement/protection measures;
- (e) Details of predator control programmes including methodologies and timeframes; and
- (f) Details of monitoring to assess the effectiveness of the above mitigation and habitat enhancement measures.

Tree and Vegetation Management Plan (TVMP)

~~32~~31. Prior to commencement of construction, the requiring authority ~~is to~~shall prepare a TVMP. The objective of the TVMP is to provide a framework for the management of adverse arboricultural effects.

32. The TVMP is to be provided to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW.

33. To achieve ~~its~~the objective of the TVMP, the TVMP must include:

- (a) Details (species, size, location, age class) of the trees identified for removal by the Project Arborist;
- (b) Contact details ~~for~~of the Project Arborist;
- (c) Details of site-specific areas where arboricultural supervision monitoring and/or direction are required;
- (d) Details of areas of continuous vegetation that will be required to be removed for the project and that require replacement re-vegetation;
- (e) Details of site-specific re-vegetation including plant species, ground preparation, weed control measures and planting methodologies;

- (f) Details of re-vegetation maintenance measures;
- (g) Details of where, in the opinion of the Project Arborist:
 - (i) tree protection fencing is required;
 - (ii) hand digging, probing and exploratory excavation is required;
- (h) Details of how the removal of protected trees shall be avoided where practicable; and
- (i) Details of where the removal of protected trees has been identified as being necessary and details of measures to be adopted to mitigate or remedy associated adverse arboricultural effects.

Landscape and Visual Management Plan (LVMP)

34. A LVMP is to be prepared for the project by a registered landscape architect. A copy of the LVMP must be provided to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW that includes the development of above-ground structures and buildings and/or works in the coastal environment. The objective of the LVMP is to provide a framework to avoid, remedy or mitigate the adverse landscape, natural character and visual effects of the project's above ground structures and buildings, and/or works in the coastal environment.
35. The LVMP must describe the measures that will be taken to achieve ~~its~~the objective of the LVMP as described in condition 34. In particular, the LVMP must describe:
 - (a) The location of above-ground structures and buildings, the landscape setting and surrounding land uses;
 - (b) The layout, architectural form and detail of proposed buildings and above-ground structures;
 - (c) ~~Measures to be adopted~~ to ensure that above-ground structures and buildings are appropriate to their context and ~~to minimise as far as practicable~~ as far as practicable adverse effects on the amenity of the surroundings (including neighbouring properties) ~~as far as practicable~~ having regard to their functional nature;
 - (d) How proposed materials are sufficiently robust and minimise the potential for graffiti and vandalism;
 - (e) The extent to which the buildings are visually recessive through (for example) the use of appropriate colours, textures and modulation;
 - (f) The extent to which buildings ~~have been~~ are designed to achieve appropriate visual amenity and scale with their surroundings through such aspects as modulation of building form, articulation of building components, and use of architectural detail;
 - (g) The extent to which any planting ~~will mitigate~~ mitigates the effects of above-ground structures, vegetation loss and enhances amenity and/or natural values of the surroundings;
 - (h) ~~How the site configuration, landscaping and planting~~ maximises the use of CPTED principles;
 - (i) ~~How comments from PSR have~~ (as required by condition 27) have been incorporated, and where feedback has not been incorporated, the reasons why; and
 - (j) How mitigation measures proposed in any SRP, TVMP and EMP contribute to the achievement of the LVMP objective.

Site Reinstatement Plan (SRP)

36. Prior to commencement of works at all surface construction sites (including but not limited to areas within private property, roads, and Auckland Council parks and reserves), the requiring authority ~~must~~shall prepare a SRP for the site, in consultation with the affected landowner(s). The objective of the SRP is to provide for the reinstatement of property and assets directly affected by the project to the standard that existed prior to the works being undertaken.
37. The SRP is to be submitted to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW and ~~is to~~shall be progressively implemented following completion of each project stage(s).
3738. To achieve ~~its~~the objective of the SRP, the SRP must:
- (a) Identify any existing structures, vegetation, landscape (including soil) and other features on the site to be protected during works or reinstated on completion of the works;
 - (b) Identify any existing traffic control devices (including signs, street furniture and road markings) affected by the works and to be reinstated on completion of the works;
 - (c) Provide details of the measure to be adopted to ensure the protection of any existing structures, vegetation, landscape (including soil) and other features on the site identified to be protected during works;
 - (d) Provide details of the measures to be adopted for the reinstatement on completion of works of any existing structures, vegetation, landscape (including soil) and other features on the site identified to be reinstated upon completion of works;
 - (e) Include a summary of all consultation undertaken in relation to the development of the SRP (including comments received from PSR in accordance with condition 27), how feedback has been incorporated, and where feedback has not been incorporated, the reasons why; and
 - (f) Identify the location and type of all physical works on the site(s).

Contaminated Land Management Plan (CLMP)

3839. A CLMP ~~is to~~shall be prepared and submitted to the Council (Team Leader Specialist Integration Compliance) as part of any required OPW to set out the framework for the management of the adverse effects relating to contaminated land during the construction of the project. The objective of the CLMP is to avoid, remedy or mitigate the adverse effects of construction on human health which may result from the disturbance of contaminated material during construction.
3940. To achieve ~~its~~the objective in condition 39 above, the CLMP ~~is to record~~should set out the procedures for the earthworks that the contractor will be followedfollow during the works, and how ~~these~~these procedures will be implemented. The procedures must include (but not necessarily be limited to):
- (a) Excavation, handling and storage requirements;
 - (b) Dust and erosion control measures to prevent the discharge of contaminants;
 - (c) Health and safety procedures;
 - (d) Disposal of contaminated soils to a landfill approved to take the material;
 - (e) Procedures for identifying and managing unexpected discovery of contaminated soils or hazardous materials; and

- (f) Appointment of a contaminated land specialist who meets the requirements of an appropriately qualified and experienced practitioner as set out in the "National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Users' Guide (2012)" Ministry for the Environment.

Construction Communications Plan (CCP)

4041. The requiring authority ~~is to~~shall prepare a CCP for the construction phase of the project or for each project stage, and ~~to~~ submit the plan to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW. The CCP must set out:
- (a) The method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely commencement, duration and effects of works;
 - (b) Measures for consulting with mana whenua to identify any culturally sensitive sites that ~~may~~ require cultural monitors;
 - (c) Details of prior consultation or community liaison undertaken with the parties referred to in (a) above, including outlining any measures developed with such persons or groups to manage or to mitigate any adverse effects or inconvenience that may arise;
 - (d) Full contact details for a nominated liaison person who will manage the public information system and be the point of contact for related enquiries.

Transpower NZ Construction Management Plan (TCMP)

4142. The requiring authority ~~must~~shall prepare a TCMP for the sections of the Northern Interceptor where the pipeline or any site works are to be undertaken within 12 metres of the centreline of the HEN-OTA A 220kV transmission line in the span between Towers 88 and 89, to ensure the protection of these transmission assets. The TCMP ~~is to~~shall demonstrate that the design and construction methodology complies with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) and will not compromise the ongoing operation, maintenance and upgrading of the HEN-OTA A transmission assets.
4243. The TCMP ~~is to~~shall be prepared in consultation with Transpower NZ Limited and a draft must be ~~provided~~given to Transpower NZ for its review and comment at least 6 months prior to being submitted to the Council. A record of consultation and any comments provided by Transpower on the final draft must be included with the final TCMP.
44. The TCMP ~~is to~~shall be provided to the Auckland Council (Team Leader Specialist Integration Compliance) as part of any required OPW. ~~All works/activities are to be undertaken in accordance with the TCMP.~~
45. All works/activities are to be undertaken in accordance with the TCMP.
4346. The TCMP (as required by condition 42 above) must include (but is not necessarily be limited to) the following:
- (a) The name, experience and qualifications of the person/s nominated by the requiring authority to supervise the implementation of, and adherence to, the TCMP;
 - (b) Construction drawings, plans, procedures, methods and measures to demonstrate that all construction activities undertaken on the site will meet the safe distances set

~~out~~ within the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP 34:2001) or any subsequent revision of the Code, including but not limited to those relating to:

- (i) Excavation and Construction near Towers (Section 2);
 - (ii) Building to Conductor clearances (Section 3);
 - (iii) Ground to Conductor clearances (Section 4);
 - (iv) Mobile Plant to conductor clearances (Section 5); and
 - (v) People to conductor clearances (Section 9).
- (c) Details of any areas that are "out of bounds" during construction and within which additional management measures are required, such as fencing off, entry and exit hurdles and the minimum height for any hurdles. Where a safety observer is required, this ~~is to~~ shall be at the requiring authority's cost;
- (d) Details of contractor training for those working near the HEN-OTA A transmission line.

CONSTRUCTION CONDITIONS

Pre-commencement Meeting

4447. Prior to the commencement of ~~the~~ works ~~authorized~~ authorised by these designations, the requiring authority ~~is to~~ shall arrange and conduct a pre-start meeting that:

- (a) Is held at a location on the designated route;
- (b) Is scheduled not less than five days before the anticipated commencement of works;
- (c) Includes relevant and appropriate Council and ~~Auckland Transport~~ AT representatives;
- (d) Includes representation from the contractors who will undertake the works; and
- (e) Is attended by the Project Arborist. The Council's project arborist ~~is~~ shall also ~~to be~~ invited to attend the pre-commencement meeting.

4548. The requiring authority ~~is to~~ shall invite representatives from interested mana whenua entities to attend the pre-start meeting to undertake tikanga.

Advice note

A list of self-identified mana whenua is contained in Appendix A of ~~these conditions~~.

4649. The following information ~~is to~~ shall be made available by the requiring authority at the pre-start meeting:

- (a) Timeframes for key stages of the works authorised by the designation;
- (b) The designation conditions and the conditions of any resource consent approved for the relevant phase(s) of the project;
- (c) The OPW, including all necessary management plans;
- (d) The contact details for key contractors.

CONSTRUCTION CONDITIONS

Consultation with network utility operators

- ~~47~~50. The requiring authority ~~must~~shall undertake ongoing communication and consultation with network utility operators affected by the project throughout the duration of construction, including in relation to design and implementation stages to co-ordinate works and to manage effects of the project on their respective networks.

Construction noise and vibration standards

- ~~48~~51. Noise arising from construction activities on land ~~is to~~shall be measured and assessed in accordance with NZS 6803:1999 Acoustics - Construction Noise and shall, unless otherwise provided for in an SSCNVMP certified by the Council, must in accordance with conditions 57 to 59 comply with the noise limits set out in the following table:

Day	Time	LAeq	LMax
Residential Receivers			
Weekdays	0630h – 0730h	55 dB	75 dB
	0730h – 1800h	70 dB	85 dB
	1800h – 2000h	65 dB	80 dB
	2000h – 0630h	45 dB	75 dB
Saturday	0630h – 0730h	45 dB	75 dB
	0730h – 1800h	70 dB	85 dB
	1800h – 2000h	45 dB	75 dB
	2000h – 0630h	45 dB	75 dB
Sundays and Public Holidays	0630h – 0730h	45 dB	75 dB
	0730h – 1800h	55 dB	85 dB
	1800h – 2000h	45 dB	75 dB
	2000h – 0630h	45 dB	75 dB
Commercial and Industrial receivers			
All	0730h – 1800h	70 dB	
	1800h – 0730h	75 dB	

- ~~49~~52. Construction activities ~~are to~~shall comply with the guideline vibration limits set out in the German Standard DIN 4150 – 3:1999 unless varied pursuant to ~~these~~ conditions 23 or 57.
- ~~50~~53. In addition to the requirements of ~~these conditions~~ condition 56 and, subject to any variation in accordance with condition 57, vibration from construction ~~must~~shall also comply with the following vibration limits for the management of amenity effects:

- (a) A limit of 2mm/s PPV when measured on the foundation of any building occupied (at the time of the works being undertaken) at any office, meeting room, retail space, dwelling, visitor accommodation, retirement village, care centre, classrooms

in education facilities and healthcare facilities between the hours of 7am and 10pm on any day.

- (b) A limit of 0.3mm/s PPV when measured on the foundation of any building containing a bedroom or overnight stay facility where sleep protection is required that is occupied (at the time of the works being undertaken) ~~facility~~ between the hours of 10pm and 7am on any day.

54. The limits above may be exceeded only where a ~~certified~~ an SSCNVMP ~~provides for exceedances~~ has been finalised in accordance with condition 57 for the specific activity and affected receiver(s).

Advice Note:

For the purpose of condition 54, finalised means: at the completion of the time period for Council to provide comments to the Requiring Authority to be incorporated into the final version of any SSCNVMP.

5455. Regenerated noise from tunnelling works ~~are~~ shall not ~~to~~ exceed a level of 35 dBL_{Aeq(15 min)} when measured in any occupied bedroom or sleeping area between the hours of 10pm and 7am on any day. The application of these limits ~~will~~ shall only be investigated ~~only~~ upon receipt of a complaint from the occupier(s).

5256. The guideline vibration limits set out in the German Standard DIN 4150 – 3:1999 must not be exceeded except where the requiring authority can demonstrate to the satisfaction of the Council in advance ~~that:~~

- (a) That the receiving building(s) are capable of withstanding higher levels of vibration and what the new vibration limit is. The investigation required to demonstrate this must include an assessment of the building(s) by a chartered professional engineer or otherwise appropriately qualified person and a full pre-condition survey; and
- (b) That the requiring authority has obtained the written agreement of the building owner(s) and occupier(s), that a higher limit may be applied.

Site Specific Construction Noise and Vibration Management Plan (SSCNVMP)

5357. A SSCNVMP is to be prepared for any receiver or activity for which construction noise and/or vibration is predicted or measured to exceed any of the limits set out in conditions ~~48-51, 52, 53, 55 and 56~~ or when construction noise is either predicted or measured to exceed any of the limits set out in ~~these~~ conditions 51, 52, 53, 55 and 56, except where the exceedance of the standards in condition ~~47~~ 51 is less than 5 decibels and does not exceed:

- (a) 0700-2200: 1 period of up to 2 consecutive weeks in any 2 months; or
- (b) 2200-0700: 1 period of up to 2 consecutive nights in any 10 days.

5458. The SSCNVMP must establish the best practicable option (BPO) for noise mitigation to be implemented for the construction activity ~~at a specific site/area~~ and must include.

- (a) a description of the works which will generate noise and or vibration levels which cannot be practicably mitigated to achieve compliance with the project noise and vibration standards;
- (b) the days and times when the activity will be permitted to exceed the project noise and / or vibration controls;
- (c) the proposed noise and / or vibration limits for the specific activity;
- (d) a record of all consultation and communication specific to the reasons for and development of the SSNCMVP with the affected receiver(s);
- (e) noise and/ or vibration monitoring to be undertaken during the specific activity; and
- (f) a short description of alternative methods or options to complete the works or mitigate the effects that have been discounted and why.

~~5559.~~ Every SSCNVMP is to be submitted to the Auckland Council (Team Leader Specialist Integration Compliance) ~~for certification at least 5 days prior to the commencement of the activity at the specific site/area. If no response is. Any reasonable and practicable comments received from the Council within three working3 days, the SSCVNP will must be deemed to have been certified and work in the relevant area may commence.~~ incorporated into the final version.

Time restrictions ~~for~~ on construction works

~~5660.~~ The hours of work for surface activities ~~are to~~ shall be from 0730 to 1800 on weekdays and Saturdays unless surface activities that are planned to be undertaken outside of these hours at night or on Sundays or public holidays are specified in terms of their location, duration, timing and predicted noise and vibration levels in the CNVMP required by condition 23.

~~5761.~~ During the school terms, the requiring authority ~~must~~ shall manage construction activities in the vicinity of Greenhithe Road between Sunnyview Road and Wainoni Heights, and on Churchouse Road to minimise as far as practicable the number of construction vehicle movements ~~as far as practicable~~ during the peak morning hours of 8:30am and 9:15am and the afternoon peak period of between 2:45pm and 3:30pm in the proximity of the schools ~~in these locations.~~

~~5862.~~ Construction activities on Appleby Road ~~are to~~ should be timed so that they occur during school holiday periods.

Traffic management

~~5963.~~ All site access locations ~~are to~~ should achieve minimum sight distance standards. Where acceptable sight distances cannot be achieved, movements relating to the deficient sight distances ~~are not permitted~~ should be banned and / or temporary speed limit measures ~~must be imposed in order~~ so as to reduce traffic operating speeds. to a point at which an acceptable sight distance is achieved.

~~6064.~~ The TMP(s) ~~are to~~ required by condition 20 shall be consistent with the CoPTTM ~~applying that applies~~ at the time of construction, taking into account ~~of any~~ temporary speed limit or additional traffic controls that may be imposed as part of the works.

~~6165.~~ Any damage in the road corridor or shared paths directly caused by construction traffic ~~is to~~ shall be repaired ~~by the requiring authority~~ as soon as practicable.

Tree and vegetation management

6266. Any required tree pruning ~~required~~ must/shall be carried out in accordance with ~~recognised~~ correct arboricultural practices by a competent arboricultural contractor.

6367. Re-vegetation required by ~~these~~ the conditions ~~must~~ above shall:

- (a) Be undertaken ~~during~~ within the first planting season (typically May to September) following the completion of the construction activities;
- (b) Comprise plant species appropriate to the area, chosen for site-specific conditions and ~~eco-sourced~~ where possible, eco-sourced; and
- (c) Be an equal mix of grade sizes between root trainer and PB12 and spaced no greater than one metre apart or as appropriate to the grade, species, type and specific location ~~on~~ within the site being planted.

6468. ~~Tree removals must~~ The removal of trees shall be carried out in accordance with ~~correct~~ acceptable arboricultural standards and practice by an ~~appropriately~~ a suitably qualified and experienced arborist.

6569. Where stand-alone trees greater than 4 metres in height are to be removed, replacement trees ~~must~~ shall be established on a two-for-one basis. The species, size and location of the replacement trees ~~is to~~ shall be determined in consultation with the relevant asset manager or property owner.

Kauri die back

6670. The requiring authority ~~must~~ shall ensure that any works within 30 metres of any Kauri will be undertaken in accordance with best practice procedures to prevent the introduction or spread of Kauri dieback disease. Best practice procedures ~~are to~~ will be developed in conjunction with the Auckland Council (Manager Biosecurity).

Walkways/Cycleways

71. If requested to do so in writing by either AT or the relevant Local Board, the Requiring Authority shall design the supports of the identified pipe/bridge so as to not preclude the potential future shared use of the pipe bridge supports for a workway/cycleway facility. The Requiring Authority shall advise both AT and the relevant Local Board of this opportunity prior to starting any design work on the pipe bridge.

Transpower Transmission Line (HEN-OTA A)

6772. The requiring authority must ensure that access to the "HEN-OTA A" transmission line for maintenance work (at all reasonable times) and for emergency works (at all times) is not adversely affected by the works.

6873. Should conductive material need to be used within 12 metres of HEN-OTA A Tower 88, the requiring authority must undertake a risk assessment and implement any necessary mitigation measures to control induction and transferred voltages, Earth Potential Rise and cathodic protection.

6974. Unless Transpower NZ agrees otherwise, excavation or disturbance of the land around HENOTA A Tower 88 ~~must~~ shall not:

- (a) exceed a depth greater than 300mm within 6 metres of the outer edge of the visible foundations of the tower; or
- (b) exceed a depth greater than 3 metres between 6 metres and 12 metres of the outer edge of the visible foundation of the tower; or
- (c) destabilise the tower.

~~7075.~~ No excavated material, fill or construction material ~~is to~~can be stockpiled or deposited under the HENOTA A transmission line that reduces the conductor to ground clearance to less than 7.5 metres vertically.

~~7476.~~ All machinery and mobile plant operated in association with the works ~~must~~shall maintain a minimum clearance distance of 4 metres from the HEN-OTA A transmission line at all times.

~~7277.~~ A warning sign ~~is to be clearly displayed by the requiring authority at the operator position on any mobile plant - "WARNING, KEEP 4M MINIMUM CLEARANCE FROM TRANSMISSION LINES AT ALL TIMES" at any location where the mobile plant might~~can reasonably traverse under the HEN-OTA A transmission line.

POST-CONSTRUCTION

Section 176 approvals

~~7378.~~ Following construction of the project (or a section thereof), the following activities undertaken by network utility operators that will not prevent or hinder the project, and can be undertaken no closer than 500mm to any below ground infrastructure, ~~may~~can be undertaken without seeking the requiring authority's written approval under section 176(1)(b) of the RMA:

- (a) Maintenance and urgent repair works of exiting Network Utilities;
- (b) Minor renewal works to existing Network Utilities necessary for the on-going provision or security of supply of Network Utility Operations;
- (c) Minor works such as new service connections; and
- (d) Upgrade and replacement of existing Network Utilities within the same location with the same or similar effects as the existing utility;

Works greater than those described above ~~are~~shall be subject to the approval ~~by~~of the requiring authority under section 176 but approval ~~is~~shall not ~~to be~~ unreasonably withheld.

Designation boundaries

~~7479.~~ As soon as reasonably practicable, and no later than the point at which any part or parts of the project becomes operational, the requiring authority ~~is to~~shall:

- (a) Review the extent of the area designated for the project. This review ~~must~~shall include consultation with:
 - (i) AT to enable the efficient operation of the road network; and
 - (ii) PSR in relation to parks included in the designation.
- (b) Identify any areas of designated land that are no longer necessary for construction of the project, or no longer necessary from the on-going operation and/or maintenance of the project or for on-going mitigation measures;
- (c) Give notice to the Council in accordance with section 182 of the RMA for the removal of those parts of the designation identified in (b) above.

Operational noise standards

- ~~75~~80. Operational noise ~~must~~shall not exceed the following project criteria when measured from ~~inside~~within the boundary of a site in a residential zone or when measured from any area of a park or reserve used for active recreation:

Time	Noise Level
Monday to Saturday 7am – 10pm	50dB LAeq
Sunday 9am - 6pm	
All other times	40dB LAeq 75dB LA _{Fmax}

- ~~76~~81. Operational noise ~~is to~~shall be measured in accordance with New Zealand Standard NZS 6801:2008 "Acoustics – Measurement of Environmental Sound" and assessed in accordance with New Zealand Standard NZS 6802:2008 "Acoustics – Environmental Noise".

Appendix A: List of Stakeholders

Northern Interceptor NoR – NI (North Shore) and NoR – NI (Waitakere)

The following listed parties constitute stakeholder(s) for the purposes of the Pre-Construction Consultation Plan and the Construction Communications Plan.

• The Ministry of Education
• Greenhithe School
• Albany Junior High School
• Auckland Council PSR where works are proposed in the following locations: <ul style="list-style-type: none"> ○ <i>Taitapu Park</i> ○ <i>Lowtherhurst Reserve</i> ○ <i>Makora Park</i> ○ <i>Holmes Reserve</i> ○ <i>Manutewhau Reserve</i> ○ <i>St Margarets Park</i> ○ <i>Esplanade Reserve (Upper Harbour Highway)</i> ○ <i>Collins Park</i> ○ <i>Wainoni Park</i> ○ <i>Wharepapa Reserve</i> ○ <i>Rosedale Park</i>
• North Harbour Air Gun Club
• The North Shore Golf Club
• Greenhithe Pony Club
• Greenhithe Riding for the Disabled
• North Shore Dog Training Club
• Greenhithe Residents' Association
• The owner and occupier of any private land for which entry and/or physical works is required.
• The owner of 15 and 16 The Knoll
• The eight mana whenua entities who have indicated ongoing interest in the Project being: <ul style="list-style-type: none"> ○ Ngāti Manuhiri ○ Ngāti Whātua o Ōrākei ○ Te Kawerau a Maki ○ Ngāti Maru ○ Te Akitai ○ Te Rūnanga o Ngāti Whātua; ○ Ngaati Whanaunga ○ Ngāti Paoa
• The owner and occupier of 4 – 6 Hobsonville Road
• Network utility operators with assets in or adjacent to the designation, including but not limited to: <ul style="list-style-type: none"> ○ Radio New Zealand ○ Auckland Transport ○ New Zealand Transport Agency ○ Transpower NZ ○ Vector Ltd

