BOARD OF INQUIRY

Peka Peka to North Ōtaki Expressway

Draft Report and Decision

of the Board of Inquiry into the

Peka Peka to North Ōtaki Expressway Proposal

Volume 2 of 2: Conditions

Produced under Section 149Q of the Resource Management Act 1991

November 2013
Prepared by the Board of Inquiry into the Peka Peka to North Ōtaki Expressway Proposal

TABLE OF CONTENTS

INDEX OF NOTICES OF REQUIREMENT AND RESOURCE CONSENTS 3

DESIGNATION CONDITIONS 14

1.1 Guide to Reading the Conditions 14

1.2 Table of Contents 16

1.3 Designation Conditions – Applying to Both NZTA and KiwiRail 17

1.4 Designation Conditions – Applying only to KiwiRail 40

1.5 Designation Conditions – Applying only to NZTA 41

RESOURCE CONSENT CONDITIONS 50

1.6 Guide to Reading the Conditions 50

1.7 Table of Contents 52

1.8 Resource Consent Conditions 54

ANNEXURE 1 85

ANNEXURE 2 89

INDEX OF NOTICES OF REQUIREMENT AND RESOURCE CONSENTS

Table 1: Designation conditions applying to both NZTA and KiwiRail, and those applying to only NZTA

	Notice of Requirement (NoR)	General Designation Conditions
NSP 13/01.001 and NSP 13/01.002	Designation Conditions applying to both NZTA and KiwiRail: - NZTA - NoR for the designation of land in the KCDP for the construction, operation and maintenance of the Expressway. - KiwiRail - NoR for the designation of land in the KCDP for the construction, operation and maintenance of a re-aligned section of the NIMT through Ōtaki.	1 - 60
	Designation Conditions applying only to KiwiRail:	60A
	Designation Conditions applying only to NZTA: - NZTA - NoR for the designation of land in the KCDP for the construction, operation and maintenance of the Expressway.	61 - 81

Table 2: Resource consents and associated conditions for - Group A: Bulk earthworks and construction erosion and sediment control

	Consent type	Activity	Scope of the application	General Conditions	Specific Conditions
NSP 13/01.003	Land use consent – s9(2)	Roading and tracking activities.	Application for bulk earthworks for the formation of the Project.	G.1-G.47	E.1-E.10
NSP 13/01.004	Land use consent – s9(2)	Vegetation clearance and disturbing of soil identified as being erosion prone.	Application for vegetation disturbance activities to construct the Project. Application for vegetation clearance over 10,000m2 in erosion-prone land.	G.1-G.47	E.1-E.10
NSP 13/01.005	Land use consent – s9(2)	Bore construction.	Application for bores as a result of earthworks that may encounter groundwater.	G.1-G47	E.1-E.10

	Consent type	Activity	Scope of the application	General Conditions	Specific Conditions
NSP 13/01.006	Water permit – s14(2)(a)	Damming and diversion of freshwater.	Application dam and divert surface water as a result of the embankments and containment bunds.	G.1-G.47	E.1-E.10
NSP 13/01.007	Water permit – s14(2)(a)	Damming and diversion of groundwater.	Application for the damming and diversion of groundwater as a result of earthworks and from de-watering during earthworks.	G.1-G.47	E.1-E.10
NSP 13/01.008	Discharge permit – s15 (1)(a)	Discharge of sediment-laden (including chemically-treated) water to water.	Application for the discharge of sediment-laden water (including chemical flocculant) from erosion and sediment control devices to water. Application for the discharge of sediment-laden water from de-watering where earthworks may encounter groundwater to water.	G.1-G.47	E.1-E.10
NSP 13/01.009	Discharge permit – s15 (1)(b)	Discharge of sediment-laden (including chemically-treated) water to land that may enter water.	Application for the discharge of sediment-laden water (including chemical flocculant) from erosion and sediment control devices to land that may enter water. Application for the discharge of sediment-laden water (including chemical flocculant) to land where it may enter water from de-watering where earthworks may encounter groundwater.	G.1-G.47	E.1-E.10

Table 3: Resource Consents and associated conditions for - Group B: Crossing, occupation and realignment of streams

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
Ōtaki River					
NSP 13/01.0010	Land use consent – s9(2)	Construction of boreholes (bores for bridge piles where they intercept groundwater).	Application for construction of bores for bridge piles.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
NSP 13/01.0011 and NSP 13/01.012	Land use consents – s13(1)(a) & s13(1)(e)	Use, placement and erection of structures (bridges and stormwater outlets), the placement of rip rap, deposition of material, and the associated diversion, disturbance and reclamation of a section of the bed of waterways in the Ōtaki River Catchment.	Application for using, erecting and placing structures in and over the bed of the Ōtaki River. Application for the diversion, disturbance and deposition of material on the bed of the Ōtaki River to facilitate construction of the structures. Application for reclamation of an area of river bed to be occupied by piles for the bridges, and the associated rip rap and rock armouring of the embankments.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.013	Land use Consent - s13(2A)(b)	Removal of vegetation in the bed of the Ōtaki River, including associated disturbance of the beds.	Application for vegetation removal in the riverbed including associated disturbance of the bed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.014	Water permit – s14(2)(a)	Diversion of surface water (temporary).	Application for a temporary diversion of the Ōtaki River to facilitate construction of the bridges in the riverbed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.015	Water Permit – s14(2)(a)	Diversion of surface water (permanent)	Application for permanent diversion of the Ōtaki River associated with the area of the bed occupied by the bridge piles.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.016	Water permit – s14(2)(a)	Damming and diversion of surface water	Application for the damming and diversion of surface water by the Expressway and a new containment bund to the north of the Ōtaki River in the event of flooding.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.017	Discharge permit – s15 (1)(a)	Discharge of concrete-laden water to water.	Application for the discharge of concrete-laden water from bridge pile construction to water.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
NSP 13/01.018	Discharge permit – s15 (1)(b)	Discharge of concrete-laden water to land that may enter water.	Application for the discharge of concrete-laden water from bridge pile construction to land in such a way that it may enter water	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
Waitohu Stream					
NSP 13/01.019	Land use consent – s9(2)	Construction of boreholes (bores for bridge piles where they intercept groundwater).	Application for construction of bores for bridge piles.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.020 and NSP 13/01.021	Land use consents – s13(1)(a) & s13(1)(e)	Use, placement and erection of structures (bridge and stormwater outlets), the placement of rip rap, the associated diversion, disturbance and reclamation of a section of the bed in the Waitohu Stream Catchment.	Application for using, erecting and placing structures in and over the bed of the Waitohu Stream. Application for the diversion, disturbance and deposition of material on the bed of the Waitohu Stream to facilitate construction of the structures. Application for reclamation of an area of river bed to be occupied by piles for the bridge and the associated rip rap and rock armouring of the embankments	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.022	Land use Consent - s13(2A)(b)	Removal of vegetation in the bed of the Waitohu Stream, including associated disturbance of the bed.	Application for vegetation removal in the stream bed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.023	Water permit – s14(2)(a)	Diversion of surface water (temporary)	Application for a temporary diversion of the Waitohu Stream to facilitate construction of the bridge in the stream bed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.024	Water permit – s14(2)(a)	Diversion of surface water (permanent)	Application for the permanent diversion of the Stream associated with the area of the bed occupied by the bridge piles.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
NSP 13/01.025	Discharge permit – s15 (1)(a)	Discharge of concrete-laden water to water.	Application for the discharge of concrete-laden water from bridge pile construction to water.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.026	Discharge permit – s15 (1)(b)	Discharge of concrete-laden water to land that may enter water.	Application for the discharge of concrete-laden water from bridge pile construction to land that may enter water.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
Mangapouri Stream					
NSP 13/01.027 and NSP 13/01.028	Land use consents – s13(1)(a) & s13(1)(e)	Use, placement and erection of structures (culvert inlet and outlet structures, and stormwater outlets), the placement of rip rap, and associated diversion, disturbance, deposition of material and reclamation of a section of the bed of the Mangapouri Stream.	Application for using erecting and placing structures in and over the bed of the Mangapouri Stream. Application for the diversion, disturbance and deposition of material on, and the reclamation of a section of the stream bed as a result of the culverts and associated structures being installed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.029	Land use Consent - s13(2A)(b)	Removal of vegetation in the bed of the Mangapouri Stream, including associated disturbance of the beds.	Application for vegetation removal in the streambed	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.030	Water permit – s14(2)(a)	Diversion of surface water (temporary).	Application for the temporary diversion of surface water to facilitate construction of the culverts.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.031	Water permit – s14(2)(a)	Diversion of surface water (permanent).	Application for the permanent diversion of surface water through the culverts once installed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
Mangaone Stream					
NSP 13/01.032 and NSP 13/01.033	Land use Consents – s13(1)(a) & s13(1)(e)	Use, placement and erection of structures (culvert inlet and outlet structures, and stormwater outlets), the placement of rip rap, associated diversion, disturbance and deposition of material and reclamation of a section of the bed of the Mangaone Stream.	Application for using, erecting and placing structures in and over the bed of the Mangaone Stream. Application for the diversion, disturbance and deposition of material on, and the reclamation of, a section of the stream bed as a result of the culvert and associated structures being installed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.034	Land use Consent - s13(2A)(b)	Removal of vegetation in the bed of the Mangaone Stream, including associated disturbance of the beds.	Application for vegetation removal in the streambed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.035	Water permit – s14(2)(a)	Diversion of surface water (temporary)	Application for the temporary diversion of surface water to facilitate construction of the culverts.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.036	Water permit – s14(2)(a)	Diversion of surface water (permanent)	Application for the permanent diversion of surface water through the culverts once installed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.037	Water permit – s14(2)(a)	Damming and diversion of surface water	Application for the installation of a bund that will dam and divert the flow of the Mangaone Stream during flood events.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
Greenwood, School, Gear, Settlement Heights, Avatar, Jewell, Cavallo, Awatea, Kumototo, Hadfield and Racecourse Catchments					
NSP 13/01.038 and NSP 13/01.039	Land use consents – s13(1)(a) & s13(1)(e)	Use, placement and erection of structures (culverts, inlet and outlet structures, and stormwater outlets); the	Application for using erecting and placing structures in and over the bed of the unnamed watercourses along the Project length. This includes permanently flowing watercourses, and	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
		placement of rip rap; the removal of an existing culvert; and associated diversion, disturbance, deposition of material and reclamations of sections of the bed of waterways along the Project length.	intermittently flowing watercourses within catchments over 50ha as depicted on Sheet GA07 in Volume 5. The details for the culverts are listed in Table 11 of the Stormwater Report, Technical Report 10 in Volume 2. Application for the diversion, disturbance and deposition of material on and the reclamation of, sections of the stream bed as a result of the culverts and associated structures being installed. Application for the removal of a culvert from the Racecourse Stream.		
NSP 13/01.040	Land use Consent - s13(2A)(b)	Removal of vegetation in the beds of various watercourses, including associated disturbance of the beds.	Application for vegetation removal in the beds of the water courses.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
	Consent type	**Activity**	**Scope of application**	**General Conditions**	**Specific Conditions**
NSP 13/01.041	Water permit – s14(2)(a)	Diversion of surface water (temporary)	Application for the temporary diversion of surface water to facilitate construction of the culverts.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.042	Water permit – s14(2)(a)	Diversion of surface water (permanent)	Application for the permanent diversion of surface water through the culverts once installed.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4
NSP 13/01.043	Water permit – s14(2)(a)	Diversion of surface water (permanent)	Application for the permanent diversion of surface water into new channels.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
NSP 13/01.044	Water permit – s14(2)(a)	Damming and diversion of surface water	Application for the installation of an undersized culvert that will dam and divert surface water in times of flood.	G.1-G.47	WS.1 – WS.14 and SW.1 – SW.4

Table 4: Resource Consents and conditions relating to - Group C: Borehole construction and taking and diversion of groundwater

	Consent type	Activity	Scope of the application	General Conditions	Specific Conditions
NSP 13/01.0045	Land use consent – s9(2)	Construction of boreholes (including bores for the purpose of abstracting groundwater).	Application for the construction of bores and the abstraction and diversion of groundwater as part of the construction of the Project.	G.1-G.47	BC1 – BC4 and GT1 – GT7
NSP 13/01.0046	Water permit – s14(2)(a)	The take and use of groundwater for bore testing, dust suppression and construction purposes.		G.1-G.47	BC1 – BC4 and GT1 – GT7

Table 5: Resource Consents and conditions relating to - Group D: Reclamation, diversion of water from wetlands and the construction of new wetlands

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
NSP 13/01.0047	Land use consent – s9(2)	Bore construction.	Application for the undertaking of earthworks in relation to wetlands where groundwater may be encountered.	G.1-G.47	E.1 – E.10
NSP 13/01.0048	Land use consent – s13(1)(e)	Reclamation of wetlands, including associated disturbance of the beds.	Application for reclamation of wetlands including the Railway Wetland area in Ōtaki and others throughout the Project extent.	G.1-G.47	WR.1

	Consent type	Activity	Scope of application	General Conditions	Specific Conditions
NSP 13/01.0049	Land use consent - s13(2A)(b)	Removal of vegetation in the bed of a wetland, including associated disturbance of the beds.	Application for the undertaking of earthworks in relation to wetlands.	G.1-G.47	VC.1
NSP 13/01.0050	Land use consent – s14(2)(a)	To dam groundwater and surface water via a new wetland.	Application for damming groundwater and surface waters for the creation of new wetland areas at Ōtaki and Mary Crest.	G.1-G.47	SW.1 – SW.4
NSP 13/01.0051	Water permit – s14(2)(a)	To permanently divert groundwater and surface water.	Application for the diversion of groundwater and surface water through a controlled means into and from wetlands at Ōtaki and Mary Crest.	G.1-G.47	SW.1 –SW.4

DESIGNATION CONDITIONS

DESIGNATION CONDITIONS

1.1 Guide to Reading the Conditions

The table below provides explanation to a number of the abbreviations, acronyms and terms used in the conditions.

Table 6: Abbreviations, Acronyms and Terms Used in the Conditions

Definitions	
AEE	Means the Peka Peka to North Ōtaki Project Assessment of Effects on the Environment Volumes 1 to 5 dated 18 March 2013
CAQMP	Means the Construction Air Quality Management Plan
CEMP	Means the Construction Environmental Management Plan
CLG	Means the Community Liaison Group
CNVMP	Means the Construction Noise and Vibration Management Plan
COPTTM	NZ Transport Agency Code of Practice for Temporary Traffic Management
CTMP	Means the Construction Traffic Management Plan
Commencement of Construction	Means the time when the works that are the subject of these designation and resource consent conditions start.
District	Means the Kāpiti Coast District
District Plan	Means the Kāpiti Coast District Plan
EED	Engineering Exception Decision
EMP	Means the Ecological Management Plan
Existing Network Utilities	Means all network utilities existing at the date of notification of this Notice of Requirement. Network utility has the same meaning as in section 166 of the Resource Management Act 1991
GWRC	Means the Greater Wellington Regional Council, including any officer of Greater Wellington Regional Council
KCDC	Means the Kāpiti Coast District Council, including any officer of Kāpiti Coast District Council
LUDP	Means the Landscape and Urban Design Plan
Manager	Means the Regulatory Manager of the Kāpiti Coast District Council
NIP	Means the Network Integration Plan

NUMP	Means the Network Utilities Management Plan
NZHPT	Means the New Zealand Historic Places Trust Pouhere Taonga
Operational	Means when construction of the Project is complete and the Project is open to traffic (be it road traffic on the Expressway or associated local roads, or rail traffic in relation to the realigned NIMT)
Outline Plan	Means an Outline Plan prepared in accordance with section 176A of the RMA
Project	Means the design, construction, maintenance and operation of the Peka Peka to North Ōtaki Expressway as in the AEE and these designation and resource consent conditions.
Requiring Authority	Means the NZ Transport Agency or the New Zealand Railways Corporation / KiwiRail Holdings Limited (trading as KiwiRail), as relevant to each designation
RMA or 'the Act'	Means the Resource Management Act 1991
Road Asset Manager	Means the Kāpiti Coast District Council's Road Asset Manager
SCMP	Means the Stakeholder and Communications Management Plan
SSEMP	Means a Site Specific Environmental Management Plan
SSTMP	Means a Site Specific Traffic Management Plan
Stage	Means a stage of the Project as identified by the Requiring Authority in the staging programme submitted to KCDC
TR	Means Technical Report
Work or Works	Means the construction, maintenance and operation of the Project, including where relevant any Stage or part thereof.
Working Day	Has the same meaning as under section 2 of the Resource Management Act 1991

***Advice Note**: The NZTA and Ngā Hapū o Ōtaki have entered into a Memorandum of Partnership (MoP) dated 2 August 2013. That Memorandum covers how the parties will continue to work together in a positive manner in relation to the future development of the Project.*

1.2 Table of Contents

Table 7: Table of Contents for the Designation Conditions

Page No.	Condition No.	Condition Content
17-18	1-5	General Conditions and Administration
18-21	6-9	Community Communications and Impact Monitoring – Construction
21	10-11	Complaints
22-24	12-18C	Management Plans – General
24-25	19-22	Construction Environmental Management Plan
25-28	23-27	Site Specific Environmental Management Plans
28-30	28-34	Construction Traffic Management Plan and Site Specific Traffic Management Plans
30-33	35-39	Construction Noise and Vibration
33-34	40-41A	Network Utilities Management Plan
34	42	Construction Lighting
34-35	43-48	Settlement Management
35-38	49-54	Archaeology and Built Heritage
38-39	55-60	Construction Air Quality Management Plan
40	60A	Operational Rail Noise (KiwiRail only)
41-43	61-73	Operational Noise and Vibration (NZTA only)
43-47	74-78	Landscape and Urban Design (NZTA only)
47	79	Operational Lighting (NZTA only)
47-48	80-81	Transport – Operational (NZTA only)

1.3 Designation Conditions – Applying to Both NZTA and KiwiRail

Table 8: Designation Conditions- - both NZTA and KiwiRail

***Advice Note**: The implementation of conditions [1 to 60] will be achieved through a combined approach, with the same conditions applying to both the NZTA and KiwiRail designations. In terms of the designations, a largely common set of conditions is proposed to apply, reflecting the requiring authorities' intention that works be carried out as an integrated project. For example, under the designation conditions, the NZTA and KiwiRail are each obliged to submit a CEMP, and associated sub-management plans, to KCDC. In this regard, the requiring authorities may jointly submit a common CEMP relating to works across the entire Project area.*

Cond no.	Conditions – applying to both NZTA and KiwiRail
	General Conditions and Administration
1.	a) Except as modified by the conditions below, and subject to final design, the Project shall be undertaken in general accordance with the information provided by the Requiring Authority in the Notice of Requirement dated 18 March 2013 and supporting documents being: i) AEE Report, dated 18 March 2013; ii) Plan Sets version 2 as provided on 26 September 2013; iii) As relates to flooding, the amended set of plans provided in Dr Webby's evidence; iv) Those plans contained in Annexure A of the joint statement of Tony Coulman and Timothy Kelly dated 28th August 2013 and Plans 5/2664/1/6504, Sheet SK60, R1 and 5/2664/1/6504, Sheet LA03, R3 as they relate to the South Ōtaki Roundabout and the Caughley access (on Lot 2 DP 454823). b) For the avoidance of doubt, none of the conditions of this designation prevent or apply to Work required for the on-going operation or maintenance of the Project following construction such as changes to street furniture or signage over time. Depending upon the nature of such Work, outline plans or outline plan waivers may be required. c) Where there is conflict between the documents listed above and conditions of this designation, these conditions shall prevail.
2.	As soon as reasonably practicable following the completion of construction of the final Stage of the Project, the Requiring Authority shall: a) Review the width of the area designated for the Project; b) Identify any areas of designated land that are no longer necessary for the on-going operation or maintenance of the Project or for on-going mitigation measures; and c) Give notice to KCDC in accordance with section 182 of the RMA seeking the removal of those parts of the designation identified in b) above.

3.	The designation shall lapse if not given effect to within 15 years from the date on which it is included in the District Plan under section 175 of the RMA.
4.	The Requiring Authority shall reimburse KCDC for its actual and reasonable costs incurred in carrying out its functions pursuant to section 36(1)(d) of the RMA in respect of the Project.
5.	Conditions [1 to 60 and 74 to 81] relate to the Project and only apply to such activities. Once construction is complete (plus any on-going requirements under these conditions, and post-construction mitigation and monitoring) these conditions no longer apply and are able to be removed (for example, at the time of the next plan review / designation roll over). Condition [60A] is a condition that relates to the management of operational rail noise.
Community Communication and Impact Monitoring – Construction	
6.	a) A Community Liaison person shall be appointed by the Requiring Authority for the duration of the construction of the Project, and for 12 months following the Project becoming Operational, to be the main and readily accessible point of contact at all times for persons affected by the construction and operation of the Project. b) The Requiring Authority shall take appropriate steps to seek to advise all affected parties of the Community Liaison person's name and contact details. c) If the Community Liaison person will not be available for any reason, an alternative contact person shall be nominated by the Requiring Authority. d) The Community Liaison person shall also be responsible for coordinating (in accordance with the SCMP provided in condition [7]) appropriate communication to the public during the construction of the Project.
7.	a) Prior to the commencement of construction, the Requiring Authority shall prepare and commence the implementation of a SCMP that sets out procedures detailing how the public and stakeholders will be communicated with throughout the construction of the Project. The stakeholders include the following, to the extent that they are affected by construction activities: i) Kāpiti Coast communities; ii) road users; and iii) residents, (including the owners of the former Rahui Factory Social Hall, the former Rahui Milk Treatment Station, Otaki Motel, Hema Te Ao Lane, 1 Rahui Road, and owners of all property between and including 230 to 250 Main Highway). b) The purpose of the SCMP is to provide a framework to: i) Inform the community of construction progress; ii) Engage with the community in order to foster good relationships and to provide opportunities for learning about the Project; iii) Provide early information on key Project milestones; and iv) Respond to queries and complaints; and v) In relation to the owners of Otaki Motel, Hema Te Ao Lane, 1 Rahui Road, and owners of all property between and including 230 to

	250 Main Highway, to describe how best endeavours will be made to consult and resolve matters relating to changes in access arrangements prior to the commencement of construction of the Rahui Road Overbridge. c) As a minimum, the SCMP shall include: i) Details of a contact person available on site at all times during construction. Contact details shall be prominently displayed at the entrance to the site(s) so that they are clearly visible to the public at all times. ii) Methods to consult on and to communicate the proposed hours of construction activities outside of normal working hours and on weekends and public holidays, to surrounding residential communities, and methods to deal with concerns raised about such hours. iii) Methods to communicate appropriate messaging to the public regarding the Ōtaki Railway Retail area during the construction of the Project, around the ongoing operation of, and vehicle access to, the area. iv) Methods to record concerns raised about hours of construction activities and, where practicable, methods that avoid particular times of day which have been identified as being particularly sensitive for neighbours. v) Any stakeholder specific communication plans required. vi) Monitoring and review procedures for the SCMP. vii) Details of communications activities proposed including: a. Publication of a newsletter, or similar, and its proposed delivery area. b. Advertising. c. Notification and consultation with individual property owners and occupiers with dwellings within 20 metres of construction activities. d. The use of the Project website for public information. d) The SCMP shall include linkages and cross-references to methods set out in other management plans where relevant. e) The SCMP shall be provided to the Manager and the CLG, at least 15 Working Days prior to the commencement of construction of the Stage or part of the Project. f) The SCMP shall be updated at least annually throughout the construction of the Project.
8.	a) The Requiring Authority shall establish a CLG at least 30 Working Days prior to the commencement of construction. b) The Requiring Authority will ensure that the CLG is resourced with at least one person in the CLG appropriately qualified in community development and social assessment. c) The purpose of the CLG shall be to provide a means for monitoring the effects of constructing the Project on the community by providing a regular forum through which information about the Project can be provided to the community. The CLG will also enable opportunities for concerns and issues to be reported to, and responded to by, the Requiring Authority. Where appropriate, the recommendations of the CLG shall be taken into account in the development of the SSEMP. d) Membership of the CLG shall be open to all interested organisations within the Project area including, but not limited to the following

	groups: i) Nga Hapū o Ōtaki; ii) Educational facilities within the Project area (including schools, kindergartens, and childcare facilities); iii) Community / environmental groups; iv) Business groups; v) Community Boards; vi) Residents organisations; vii) KCDC. e) The CLG shall hold meetings at least once every 3 months throughout the construction of the Project so that on-going information can continue to be disseminated. f) The CLG shall continue for the duration of the construction phase of the Project and for 12 months following completion of construction. g) Matters to be addressed by the CLG may include the following matters: i) Effects of construction on schools and other educational and community facilities, including effects on transport; ii) Effects of construction on housing supply and accommodation costs; iii) Extent of opportunities for tangata whenua and community involvement in mitigation implementation, ongoing monitoring and naming of areas or sites created by the Project; and iv) Extent of opportunities for local training and employment. h) The Requiring Authority shall arrange for the Community Liaison person to attend meetings of the CLG. The role of the Community Liaison person at these meetings shall be to provide the CLG with updates on construction, including any remedial responses to issues raised by the CLG. The Community Liasion person shall also convey information received from the CLG back to the Requiring Authority and the construction contractors. i) The Chairperson of the CLG (or other person appointed by the CLG) shall prepare a report for the Requiring Authority and the KCDC summarising the main points arising from each meeting of the CLG, reporting on any social impacts of the Project, along with recommendations on the measures to mitigate those effects. The Chairperson of the CLG shall ensure that a copy of the report is provided to the Requiring Authority, KCDC, and to meeting attendees within 5-10 Working Days of the meeting. The Requiring Authority shall be responsible for meeting all reasonable costs associated with the resourcing of the CLG. j) The Requiring Authority shall consider the recommendations and take reasonable steps, where practicable, to implement any recommendations that are within its statutory powers to execute under this designation. Where matters are not taken into account in preparing the SSEMP, the requiring authority shall convey to the CLG the reasons why.
9.	a) The Requiring Authority shall provide the attendees of the CLG, at least 5 Working Days before their first meeting, the construction programme, which shall include the staging of construction, the anticipated number of construction staff, and other facets that may

	impact on residents and community facilities. b) The Requiring Authority shall ensure that appropriate personnel attend meetings of the CLG to explain how the effects of construction are proposed to be managed and to respond to any questions.
	Complaints
10.	a) At all times during the Works, the Requiring Authority shall maintain a permanent register of any complaints received alleging adverse effects from, or related to, the Works. As far as practicable the register shall include: i) the name and address (where this has been provided) of the complainant; ii) the nature of the complaint; iii) location, date and time of the complaint and also of the alleged event; iv) weather conditions at the time of the event and including wind direction and approximate wind strength if the complaint relates to air quality or noise; v) the outcome of the Requiring Authority's investigation into the complaint; vi) measures taken to respond to the complaint; and vii) any other activities in the area, unrelated to the construction, which may have contributed to the complaint (such as non-Project construction, fires, traffic accidents or unusually dusty conditions generally). b) The Requiring Authority shall: i) Acknowledge the complaint within 2 Working Days, and ii) Promptly investigate, identify the urgency associated with the complaint and communicate that to the complainant; and iii) Take practicable steps to remedy or mitigate the matters giving rise to the complaint if there are reasonable grounds for the complaint within 10 Working Days of receiving the complaint or such sooner time as may be reasonably necessary in the circumstances. iv) The Requiring Authority shall also maintain a record of its responses and any remedial actions undertaken. v) This record shall be maintained on site and shall be made available to the Manager and GWRC upon request. A copy of the Complaints Register shall be provided to the Manager every month.
11.	The complaints process outlined in Condition [10] shall continue for 12 months following the Project becoming Operational. Any complaints received after this period shall be managed by the Requiring Authority in accordance with its standard complaints procedures.
	Management Plans – General
12.	The Requiring Authority shall submit a full set of design plans to KCDC for the Project or for each Stage prior to the commencement of construction in the relevant Stage. This set of plans shall show the final design of the Project including, but not limited to: i) The height, shape and bulk of the Project; ii) The location on the site of the Project;

	iii) The likely finished contour of the site; iv) The vehicular access, circulation and the provision for parking; and v) The landscaping proposed, including both soft landscape (earthworks and planting) and urban design elements (built elements such as walls, structures, barriers, signs, etc.); vi) The ecological mitigation and revegetation proposed; and vii) The location, extent and type of proposed ecological mitigation and revegetation. The various management plans required to be certified by these conditions shall accompany the set of plans. ***Advice Note:*** *The above information may be contained either partly or wholly within the management plans that are required elsewhere under these conditions.*
13.	a) All construction of the Project shall be carried out in general accordance with the design plans and management plans required by these conditions. b) The management plans provide the overarching principles, methodologies and procedures for managing the effects of the Works to achieve the environmental outcomes and performance standards required by these conditions. c) The management plans apply to the entire Project (including where it is constructed in Stages) and, for some matters, are sufficient to address construction management without the need for more specific plans. For other matters, there is a need for SSEMPs to provide the necessary level of detail to address requirements within each of the Stages. d) The management plans provide the basis for which SSEMPs will be prepared. The SSEMPs shall, collectively, set out the detailed design and construction responses to address the specific context and circumstances of all aspects of the Project. Each SSEMP must be consistent with, and be implemented in accordance with, any relevant management plan. ***Advice Note:*** *Certification of the management plans shall be on the basis that they are consistent with the conditions of the designation.*
14.	The management plans required by these designation conditions shall be developed in consultation with KCDC. Where a management plan is required to be prepared in consultation with any third party, the management plan shall demonstrate how the views of that party have been incorporated and, where they have not, the reasons why.
15.	The Requiring Authority shall submit draft copies of all management plans (as required by conditions [20, 28, 35, 40, 55, and 74]) to the Manager for comment at least 20 Working Days prior to their lodging.
16.	a) A CEMP shall be submitted to the Manager for information in accordance with condition [20]. b) The following management plans shall be submitted to the Manager for certification prior to the commencement of construction: i) CNVMP; ii) CTMP; iii) CAQMP; iv) LUDP; and

	v) NIP (in respect of those matters relevant to KCDC). c) These management plans shall be prepared in general accordance with the draft management plans included with the documents and information provided in support of the application, except as modified by the conditions and the Report of the Board of Inquiry. d) SSEMPs shall be submitted for certification in accordance with condition [23b)]. e) A copy of the management plans (including the SSEMPs) shall be made publicly accessible on the Requiring Authority's Project website.
17.	a) In order to assist KCDC with planning for staff resourcing, at least 2 months prior to the submission of the first management Plan for the Project, the Requiring Authority shall provide the Manager with a programme. The programme shall set out: i) The estimated timing for provision of the CEMP for comments; ii) The date proposed for the submission of the management plans; and iii) Expected timing for provision to KCDC, and response from KCDC, in respect of management plans (including SSEMPs); and b) The Requiring Authority shall give reasonable consideration to accommodating any concerns raised by KCDC over the proposed timing and, if requested by KCDC, the Requiring Authority shall give reasonable consideration to extending the timeframes for processing the management plans.
18.	Once construction has commenced, the Requiring Authority shall provide the Manager with an updated schedule of construction activities and timing of any further management plans that are required to be prepared for the Project at monthly intervals throughout the construction phase of the Project.
18A	a) In the event of any dispute, disagreement or inaction arising as to any certification, implementation, or monitoring required by the conditions, matters shall be referred in the first instance to the Manager and to the Requiring Authority to endeavour to resolve the dispute. If the matter is not resolved by this means the following process shall apply to determine a resolution. b) If a resolution cannot be agreed within: i) 3 months of lodging the particular management plan (including an SSEMP); or ii) 1 month of submitting a request for an amendment to a management plan (including an SSEMP); the matter shall be referred to an independent appropriately qualified expert, acceptable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree. c) The expert shall be appointed within 10 Working Days of the Requiring Authority or KCDC giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue a decision on the matter. d) The decision of the expert is binding and shall be implemented by the Requiring Authority. e) The dispute resolution process above shall be completed before any formal enforcement action is taken by KCDC, except in urgent situations. f) If the parties are unable to agree on the independent appropriately qualified expert under subclause b) the selection of that expert shall

	be decided by the national head of the professional organisation most appropriate to the nature of the dispute or their nominee (e.g. the chief executive of IPENZ if the dispute is of an engineering nature). g) For the avoidance of doubt, the process outlined in this condition [18A] shall not apply where the KCDC considers that it is required to exercise its statutory enforcement functions.
18B	a) The Requiring Authority may request amendments to any of the management plans required to be certified by these conditions, including SSEMPs, by submitting the amendments in writing to the Manager for certification at least 5 Working Days prior to those amendments being intended to be implemented. b) Any changes to management plans shall remain consistent with the overall intent of the management plan and relevant conditions in achieving the outcomes required by these conditions. c) Any changes must be prepared on the basis of advice by suitably qualified specialists, including but not limited to, ecologists, landscape architects, and engineers. d) The changes sought shall not be implemented until the Requiring Authority has received the Manager's written certification for the relevant management plan(s).
18C	Where any condition requires that a management plan or other plan be certified, if the Plan has not been certified within 3 months of lodgement, or with the agreement of the KCDC, the Requiring Authority may elect as an alternative to submit the management plan to KCDC as an Outline Plan in accordance with section 176A of the RMA, and compliance with section 176A shall be deemed to satisfy the certification requirement.
Construction Environmental Management Plan	
19.	This line has intentionally been left blank.
20.	a) The Requiring Authority shall submit a CEMP to the Manager for information at least 15 working ways prior to the commencement of the Works. b) The CEMP shall include details of: i) Staff and contractors' responsibilities; ii) Training requirements for employees, sub-contractors and visitors; iii) Environmental incident and emergency management (including the procedures required under regional consent condition [G.10]); iv) Communication and interface procedures; v) Environmental complaints management (required under these conditions); vi) Compliance monitoring; vii) Environmental reporting; viii) Corrective action; ix) Environmental auditing;

	x) CEMP review; and xi) SCMP. c) The CEMP shall also set out construction methodologies and construction timeframes, including staging.
21.	The CEMP shall be implemented throughout the period of the Works, and updated as required.
22.	A copy of the CEMP shall be held at one or more of the site offices at all times.
Site Specific Environmental Management Plans	
	Advice Note: *The SSEMPs are not part of the CEMP as they will be lodged in a staged manner throughout the course of the Project. The SSEMPs are required to be certified by KCDC (under the Project designations) and GWRC (under the relevant regional consents) in respect of their statutory functions.*
23.	a) The objective of each SSEMP is to integrate design elements with environmental management and monitoring methods, and reflect this in a set of plans for each Stage or location, in order to define how the Project will practically achieve this. b) Not less than 20 Working Days prior to the commencement of any Stage, the Requiring Authority shall prepare and submit an SSEMP to the Manager for certification that: i) The SSEMP has been prepared with inputs from suitably qualified specialists, including but not limited to ecologists, landscape architects, and engineers; ii) The SSEMP has been prepared in accordance with the management plans appended to the CEMP; iii) As a minimum, the SSEMP meets the information requirements set out in condition [25] unless alternative arrangements have been agreed in writing with the Manager and GWRC (in respect of their statutory functions). c) Where appropriate, the recommendations of the CLG shall be taken into account in the development of the SSEMP. Where matters are not taken into account in preparing the SSEMP, the Requiring Authority shall convey to the CLG the reasons why. d) Construction shall not commence until the Requiring Authority has received the Manager's written certification of the SSEMP.
24.	a) The SSEMP shall confirm final details, staging of construction, and sufficient engineering design information to ensure that the Project remains within the limits and standards approved under this designation. b) The Requiring Authority shall adhere to the requirements of each SSEMP at all times during the relevant Stage of the Project. c) An SSEMP shall be provided for each Stage, or part thereof, of the Project, including areas of associated mitigation and other construction in accordance with the Requiring Authority's Staging programme.
25.	Each SSEMP shall include, as relevant, but need not be limited to: a) A detailed design and onstruction methodology for all the Works within the area covered by the SSEMP; b) A detailed schedule of construction activities including the expected commencement date and duration of the Works in each location within the area covered by the SSEMP, and demonstrating that the area of disturbance will be kept to the minimum practicable; c) Detailed design specifications of all earthworks within the SSEMP area including disposal sites;

	d) Detailed design specifications for all erosion and sediment control measures, including supporting calculations (where appropriate, such as contributing catchment area and retention volume of structure), position of inlets/outlets, stabilisation measures proposed for structures, and any maintenance requirements; e) Detailed design of chemical treatment (if any) for each of the proposed sediment retention devices; f) Identification of the location of all discharge points to watercourses; g) Confirmation that temporary stockpiles of excavated material will be located at least 50 metres away from any flowing watercourse unless there is appropriate treatment of stormwater runoff(which may include discharging to vegetated land); h) In respect of vegetation clearance and ecological mitigation activities: i) Identification of valued habitats identified under resource consent condition [G.34] which are to be protected and retained; ii) Measures to minimise effects of vegetation clearance and habitat disturbance; iii) Identification and handling requirements of soil resource and other materials (e.g. logs) to be used for rehabilitation within the SSEMP area; and iv) The plan for implementing any relevant mitigation included within the EMP, to be certified by GWRC under the resource consent conditions or the LUDP; i) In respect of temporary and permanent stream realignment and culverting: i) Measures/methods to maintain fish passage during and following completion of the Works along the stretches of stream affected by the exercise of this designation; ii) Specific consideration of seasonal migration of native fish; iii) Details of culvert inlet/outlet protection structures e.g. pre-cast wing walls or rock rip-rap; iv) Confirmation of appropriate sizing of culverts and allowances for secondary flow paths during high flows; v) Detailed diversion plans and any other measures or details as appropriate to achieve compliance with all conditions of this designation and the objectives of the relevant management plans; vi) Confirmation that placement of excavated material in the wetted channel will be avoided, and the time spent by machinery in the wetted channel, including the number of vehicle crossings, will be minimised; and vii) Confirmation that any excess material from the bed and banks of the stream will be removed immediately on completion of the Construction; and viii) Methods for fish rescue and relocation; j) A drawing that clearly shows the location of key areas or features that are required to be avoided or otherwise protected during construction, including (but not be limited to) notable areas of bush or vegetation and heritage features; k) The identification of appropriately qualified and experienced staff to manage environmental issues onsite; l) The identification of staff who have clearly defined roles and responsibilities to monitor compliance with the SSEMP;

	m) Details of a chain of responsibility for managing environmental issues and details of responsible personnel; n) Details of the site access associated with construction of the Project; o) Measures to be adopted to maintain the site in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and similar construction activities; p) Location of workers' conveniences (e.g. portaloos); q) Details of the storage of fuels and lubricants (which shall require that storage be bunded or contained in such a manner so as to prevent the discharge of contaminants from spillages); r) Details of the proposed maintenance of machinery and plant to minimise the potential for leakage of fuels and lubricants; s) Location of vehicle and construction machinery access and storage during the period of site works; t) Procedures for thoroughly cleaning all machinery of unwanted vegetation (e.g. weeds), seeds or contaminants prior to entering the site and any other methods to avoid the introduction or spread of weeds or pests; u) Methods for the clear identification and marking of the construction zones including those which extend into watercourses; v) A methodology that prescribes the extent to which machinery can operate in the vicinity of watercourses so as to minimise disruption and damage to the watercourses and associated vegetation; w) Methods to manage public health and safety during the Works, and notification to the public of temporary access restrictions to the immediate construction area during the Stages of the Works; x) Confirmation that no equipment or machinery will be cleaned, or refuelled in any part of any watercourses/streams, except as otherwise specifically provided for in the CEMP or an SSEMP; y) Procedures for removing all contaminants (e.g. fuel, hydraulic oils, lubricants etc.) from the site at the end of the construction of the Project, except for those required for on-going maintenance of the network and Operational activities; z) As a schedule to the SSEMP, a SSTMP as provided by condition [34], which shall describe the measures that will be undertaken to manage the traffic effects associated with the construction of Stages of the Project; aa) Any noise mitigation measures as per condition [62] for completeness; ab) Measures to avoid or minimise adverse ecological effects, including avoiding or minimising disturbance to all areas of indigenous vegetation, habitats and trees; ac) Details of any temporary causeways the design and development of which shall occur in consultation with a suitably qualified and experienced ecologist; ad) Details of channel formation, substrate, and aquatic habitat features for the purpose of enhancing aquatic ecological function; ae) Details of the Northern Ōtaki Gateway Zone and the Southern Ōtaki Gateway Zone as per conditions [75] and [81]; af) Details of the bridge piers and abutments design; and ag) Details of reasonable legal and physical access being maintained in and around Waitohu and Ōtaki Rivers for river management and

	maintenance purposes consistent with that which existed prior to the Works.
25A	The relevant SSEMP shall be prepared in consultation with the following parties: a) Winstone Aggregates; b) Stresscrete Wellington Limited; c) The Manager, Flood Protection, GWRC; and d) Rahui Enterprises Limited. and contain details of measures to address potential construction related access and water supply, and noise and vibration effects on their respective operations.
25B	The Requiring Authority shall consult with KCDC prior to design commencing on the Ōtaki River corridor and Waitohu Stream corridor.
26.	This has intentionally been left blank
27.	This has intentionally been left blank.
Construction Traffic Management Plan and Site Specific Traffic Management Plans	
28.	a) The Requiring Authority shall submit a CTMP to the Manager for certification at least 15 Working Days prior to commencement of the Works. The purpose of the CTMP is to outline the proposed procedures, requirements and standards necessary for managing the traffic effects of the Works to achieve the outcomes and standards contained in condition [29]. b) The certified CTMP shall confirm the procedures, requirements and standards necessary for managing the traffic effects during the Work so that safe, adequate and convenient facilities for local movements by all transport modes (including rail) are maintained throughout the construction of the Project. c) Construction shall not commence until the Requiring Authority has received the Manager's written certification of the CTMP.
29.	a) In managing traffic during the Works, the Requiring Authority shall achieve the following outcomes: i) Minimise the disruption to users of local travel routes; and ii) Maintain a safe passage for all travel routes, including road, river and footpath users affected by the Work. b) The Requiring Authority shall: i) Identify local road delay triggers on local travel routes; ii) Monitor the travel times on local travel routes to determine if the delay triggers have been exceeded; and iii) Investigate additional mitigation measures to remedy any adverse effects on local traffic arising from the delay triggers being exceeded. c) In achieving the outcomes in a), the Requiring Authority shall adopt the NZTA Traffic Control Devices Manual insofar as it is relevant. d) In managing construction activities, the Requiring Authority shall comply with the following standards: i) Local traffic shall not be held up by construction activities in any one location by longer than 2 minutes, except in regard to bridge construction when the structural components are being put in place, when the maximum delay shall not exceed 5 minutes; and

	ii) Emergency services shall be provided with unimpeded access along all local roads 24 hours per day, unless bridge or wall construction requires the temporary closure of a road, in which case an Emergency Action Plan must be developed and agreed with emergency services prior to any temporary closure so that an alternative access via a detour route is available for the duration of that temporary closure.
30.	The CTMP shall be consistent with the version of the NZ Transport Agency Code of Practice for Temporary Traffic Management (COPTTM) which applies at the time the CTMP is prepared. Where it is not possible to adhere to this standard, the COPTTM's prescribed Engineering Exception Decision (EED) process will be followed, which will include appropriate mitigation measures agreed with the Road Asset Manager.
31.	The Requiring Authority shall appoint an independent party to carry out random auditing of temporary road closure/s in accordance with COPTTM at regular intervals throughout the construction of the Project. The intervals shall be stated in the CTMP. A copy of the findings of each audit shall be provided to the Manager.
32.	a) Prior to the commencement of the Work, the Requiring Authority shall undertake a pre-construction condition survey of the carriageway/s along those local roads affected by the Project for which KCDC is the road controlling authority and submit it to the Manager and the Road Asset Manager. The condition survey shall consist of a photographic or video record of the carriageway, and shall include roughness, rutting defects and surface condition. b) As soon as practicable following completion of construction of the Project the Requiring Authority shall, at its expense, conduct a post-construction condition survey of the road network affected by the Project. The post-construction condition survey shall be submitted to the Manager and the Road Asset Manager. c) The results of the pre- and post-construction surveys will be compared and, where necessary, the Requiring Authority shall at its expense arrange for repair of any damage to the carriageways and footpaths (and associated road components), for which KCDC is the road controlling authority, where that damage has resulted from the impacts of construction of the Works.
33.	a) The Requiring Authority shall carry out regular inspections of the transport network affected by the Works to ensure that all potholes and other damage resulting from construction of the Works are identified as soon as practicable. b) The Requiring Authority shall contribute fair and reasonable costs towards repair and maintenance of potholes and other damage resulting from the Works. c) Prior to construction commencing the Requiring Authority shall agree with the Road Asset Manager the nature, extent and frequency of the inspections referred to in a).
34.	a) SSTMPs shall describe the measures that will be undertaken to manage the traffic effects associated with construction of specific Stages of the Project prior to construction of the relevant Stage(s) of the Project commencing. Each SSTMP must be consistent with, and be implemented in accordance with, the CTMP. b) In particular, SSTMPs shall describe, where appropriate:

	i) Temporary traffic management measures required to manage impacts on road users during proposed working hours; ii) Assessment of delays associated with the proposed closure/s and detour routes; iii) The capacity of any proposed detour route(s) and their ability to carry the additional traffic volumes likely to be generated as a result of construction of the Project and any known safety issues associated with the detour route, including any mitigation measures the Requiring Authority proposes to put in place to address any identified safety issues; iv) Measures to maintain existing vehicle access to adjacent properties and businesses; v) Measures to maintain safe and clearly identified pedestrian and cyclist access on roads and footpaths adjacent to the Works. Where detours are necessary to provide such access the Requiring Authority shall provide for the shortest and most convenient detours which it is reasonably practicable to provide; vi) Measures to maintain passenger transport services and facilities, including school bus routes; vii) Any proposed temporary changes in speed limits; viii) Provision for safe and efficient access of vehicles to and from construction site(s); and ix) Measures that will be undertaken by the Requiring Authority to communicate traffic management measures to affected road users and stakeholders. c) The SSTMP(s) shall be appended to the relevant SSEMP when submitted to KCDC for certification.
Construction Noise and Vibration	
35.	a) The Requiring Authority shall submit a CNVMP to the Manager for certification at least 15 Working Days prior to commencement of the Works. b) The CNVMP shall address the matters in conditions [36 and 37]. c) The CNVMP shall be prepared in accordance with the requirements of Annexe E to NZS 6803:1999 and the NZTA *State highway construction and maintenance noise and vibration guide*. d) Construction shall not commence until the Requiring Authority has received the Manager's written certification of the CNVMP.
36.	The purpose of the CNVMP shall be to provide methods to manage noise/vibration appropriately for the variety of circumstances within the Project area by outlining the measures, procedures and standards for mitigating the effects of noise and vibration during construction of the Project to meet: a) The noise criteria set out in condition [38], where practicable. Where it is not practicable to achieve those criteria, alternative strategies should be described to address the effects of construction noise on neighbours; and b) The Category A vibration criteria set out in condition [39], where practicable. Where it is not practicable to achieve those criteria, a suitably qualified expert shall be engaged to assess and manage construction vibration during the activity that exceed the Category A criteria. If predicted construction vibration exceeds the Category B criteria, then activity should, where practicable, only proceed if approved by the Manager and if there is appropriate monitoring of vibration levels and effects on those buildings identified as being at

	risk of exceeding the Category B criteria, by suitably qualified experts. c) Night time (2000h – 0630h) Work in the vicinity of any noise sensitive receivers shall be avoided where practicable. Where avoidance is not practicable, measures shall be adopted to minimise or mitigate noise and vibration effects.
37.	The CNVMP shall, as a minimum, address the following: a) Description of the Works, anticipated equipment/processes and their scheduled durations; b) Hours of operation, including times and days when activities causing noise and/or vibration would occur; c) The construction noise and vibration criteria for the Project; d) Identification of affected houses and other sensitive locations where noise and vibration criteria apply including a list of Noise Sensitive Receivers (as defined in NZS 6803:1999); e) Requirements for building conditions surveys at locations close to activities generating significant vibration, prior to and after completion of construction (including all buildings predicted to exceed Category A vibration criteria in condition [39]) and processes for repair of any damage caused by the Work; f) Procedures for preparation of management schedules containing site specific information including for any activities or locations where it is not practicable to comply with the noise criteria in condition [38]; g) Mitigation options including alternative strategies where full compliance with the relevant noise and/or vibration criteria cannot be achieved; h) Methods and frequency for monitoring and reporting on construction noise and vibration; i) Stakeholder communications as per the SCMP required by condition [7]; j) Complaints processes as required by condition [10]; and k) Operator training procedures and expected behaviours under the CEMP as required by condition [20]. l) Procedures for preparing a management schedule containing site-specific information on measures to address effects of potential night-time truck movements associated with the Works on residents opposite the entrance to the Winstones site.

38. Construction noise shall be measured and assessed in accordance with NZS 6803:1999 'Acoustics – Construction Noise'. The construction noise shall comply with the following criteria for the purposes of the CNVMP:

Time of week	**Time period**	**dB $L_{Aeq(15\ min)}$**	**dB L_{AFmax}**
Residential			
Weekdays	0630-0730	60	75
	0730-1800	75	90
	1800-2000	70	85
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	75	90
	1800-2000	45	75
	2000-0630	45	75
Sundays and Public Holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75
Industrial and Commercial			
All days	0730-1800	75	
	1800-0730	80	

39. Construction vibration shall be measured in accordance with ISO 4866:2010 '*Mechanical vibration and shock – Vibration of fixed structures- Guidelines for the measurement of vibrations and evaluation of their effects on structures'.* The construction vibration shall comply with the following criteria for the purposes of the CNVMP:

Receiver	**Details**	**Category A**	**Category B**
Occupied Dwellings	Night time 2000h-0630h	0.3 mm/s PPV	1 mm/s PPV
	Daytime 0630h-2000h	1 mm/s PPV	5 mm/s PPV
Other occupied buildings*	Daytime 0630h-2000h	2 mm/s PPV	5 mm/s PPV
All other buildings	Vibration – transient	5 mm/s PPV	BS5228-2:2009* Table B.2
	Vibration – continuous	5 mm/s PPV	50% of BS5228-2:2009* Table B.2

* BS5228-2:2009 '*Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 2: Vibration'*

Network Utilities Management Plan

40. At least 15 Working Days prior to commencement of construction the Requiring Authority shall prepare a NUMP, the purpose of which shall be to outline the methodologies that shall be adopted to ensure that the design and construction of the Project adequately take account of (and includes measures to address) the safety, integrity, protection, and (where necessary) relocation of Existing Network Utilities.

41. a) The NUMP shall be prepared in consultation with the relevant infrastructure providers who have Existing Network Utilities that are directly affected by the Works and shall be implemented during construction. The NUMP shall include:
   i) Contact details for the utility owners and a protocol for liaison with them;
   ii) Measures to be used to accurately identify the location of Existing Network Utilities;
   iii) Measures for the protection, relocation and/or reinstatement of Existing Network Utilities;
   iv) Measures to seek to ensure the continued operation and supply of infrastructure services which may include, but not be limited to, any new or relocated gas pipes or other utilities being made operational prior to the termination of existing gas lines or other utilities;
   v) Measures to provide for the safe operation of plant and equipment, and the safety of workers, in proximity to live Existing Network Utilities;
   vi) Measures to manage potential induction hazards to Existing Network Utilities;
   vii) Earthwork management (including depth and extent of earthwork), for earthworks in close proximity to Existing Network Utilities;
   viii) Vibration management for construction in close proximity to existing network utilities; and
   ix) Emergency management procedures in the event of any emergency involving Existing Network Utilities.

   b) The Requiring Authority shall ensure that construction does not adversely impact on the safe and efficient operation and planned

	upgrade of Existing Network Utilities. c) A copy of the NUMP shall be provided to the Manager prior to any construction being undertaken that affect Existing Network Utilities.
41A	To avoid doubt, Existing Network Utilities that are required to be considered include: a) KCDC water supply; b) KCDC wastewater and stormwater reticulation; c) Arcus Road Water Scheme; d) Gas supply networks; e) Telecommunications networks; and f) Power supply networks.
Construction Lighting	
42.	At least 15 Working Days prior to Commencement of Construction the Requiring Authority shall identify measures to avoid, remedy or mitigate the effects of construction lighting. This shall include: a) in areas adjacent to residences, all security and construction lighting shall be installed so that it can be shielded, or directed to the required construction area to minimise light spill, glare and sky glow beyond the site so far as it is reasonably practical and to achieve compliance with relevant District Plan standards; and b) careful consideration to the location of site offices to ensure there is no obtrusive lighting effects to nearby residences
Settlement Management	
43.	In managing construction and its potential effects on ground settlement south of Mary Crest and north of Rahui Road, the Requiring Authority shall achieve the following outcomes: a) Minor road repair to existing roads such as sealing of cracks may be required during construction and the pavement may need to be reinstated on completion of the preloading and construction; the railway line may also need to be re-levelled during or soon after construction; and b) Ground settlement will be closely monitored by settlement plates / stations during and after the preloading period to assess the settlement of the adjacent ground, especially at the existing SH1 and the NIMT. Any development of cracks of the road seal should be recorded and monitored, to trigger repairs as necessary.
44.	The Requiring Authority shall establish a series of ground settlement monitoring marks to monitor potential settlement that might occur as a result of construction of embankments and drawdown of the groundwater table as part of the work. The exact locations of each type of settlement monitoring marks shall be confirmed in the relevant SSEMP and will be generally located as follows: a) At 20 m intervals along sections identified as prone to settlement due to construction of compressible ground / and preloading (namely south of Mary Crest and north of Rahui Road); and b) Adjacent to stormwater features where settlement of more than 0.1 m due to groundwater drawdown has been predicted.

45.	The Requiring Authority shall survey the settlement monitoring marks at the following frequency: a) Pre-construction – settlement at monthly intervals starting at least 1 month prior to construction commencing within 500 metres of the monitoring mark; b) During construction: i) settlement at weekly intervals during construction earthworks in the area; ii) settlement at monthly intervals after construction earthworks in the area until settlement is less than 5mm per month; and iii) settlement at 3 monthly intervals during the balance of the construction of the Project; c) Post-construction: i) settlement at 3 monthly intervals for 12 months.
46.	Immediately following each monitoring round, the Requiring Authority shall use the settlement monitoring results (together with the results of visual observation and groundwater monitoring where they may provide additional information) to reassess whether any damage has occurred or is likely to occur as a result of settlement arising from the Works. If the reassessment indicates that any damage has occurred or is likely to occur: a) the owner and occupier of the site shall be notified within 72 hours; b) the Requiring Authority shall undertake appropriate remedial or preventative action; and c) the Requiring Authority shall advise the owner and occupier of the site and the Manager of any remedial or preventative action undertaken.
47.	The Requiring Authority may reduce the frequency of settlement monitoring required by condition [45] when: a) The construction of a Stage has been completed; and b) 3 monthly monitoring has been carried out for a minimum of 6 months; and c) The monitoring indicates that no damage has occurred or is likely to occur.
48.	The Requiring Authority shall collate the results of the settlement monitoring (undertaken pursuant to condition [45]) and prepare a report that shall be made available to the Manager at the completion of the Works.
Archaeology and Built Heritage	
49.	At least 15 Working Days prior to commencement of construction the Requiring Authority shall submit the following information to the Manager: a) Any heritage monitoring requirements; b) Procedures, stand down periods and dispute resolution processes to be applied in the event of an archaeological discovery; c) Methods for transferring any relevant information to KCDC upon completion of the Work; d) The methodology for relocating the following structures: i) the Ōtaki Railway Station (within the existing site);

	ii) Clifden cottage at Bridge Lodge (to 91 Gear Road, Te Horo); and iii) the 'Beehive Kilns' at the former Merik Smíšek pottery site, 990 State Highway 1, Te Horo (within the existing site).
50.	a) In managing the construction of the Project and its effects on archaeology and built heritage, the Requiring Authority shall achieve the following outcomes: i) The use of appropriate training, methods, protocols, and procedures in relation to the possible presence of cultural or archaeological sites or material that may be discovered during construction; ii) The investigation and recording of any archaeological resources discovered during the construction of the Project and the use of that information gained to facilitate a greater general understanding of the history and cultural heritage of the Kāpiti Coast; iii) The protection of the built heritage values of the following sites or heritage structures from significant adverse effects: a) the Ōtaki Railway Station; b) Clifden cottage; c) the former Merik Smíšek pottery site (including the former Te Horo Railway Station); d) the property at 230 Main Road, Ōtaki; e) the former Rahui Factory Social Hall; and f) the former Rahui Milk Treatment Station. b) In achieving these outcomes, the Requiring Authority shall comply or be consistent with the following standards and guidelines: i) ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value 2010; and ii) Conditions contained in any archaeological authorities granted by the NZHPT under the Historic Places Act 1993. ***Advice Note**: The Requiring Authority will be seeking separate archaeological authorities from the NZHPT under section 12 of the Historic Places Act 1993, prior to the commencement of construction. The authorities are likely to include requirements for detailed investigations and monitoring effects and are also likely to require the preparation of an Heritage Management Plan (or an Archaeological Management Plan). The Requiring Authority shall actively promote the inclusion of conditions on the archaeological authorities to secure these requirements at the time of making application for these authorities.*
51.	In order to achieve the outcome specified in condition [50(a)(iii)(a) to (c)], the relocation of the Ōtaki Railway Station, Clifden cottage at Bridge Lodge, and the 'Beehive Kilns' shall be in accordance with a heritage conservation plan prepared (or, in the case of the Ōtaki Railway Station, updated) by a suitably qualified and experienced conservation architect and finalised in consultation with NZHPT.
52.	At least 15 Working Days prior to commencement of construction the Requiring Authority shall, in consultation with Nga Hapū o Ōtaki, finalise an accidental discovery protocol and provide a copy to the Manager and GWRC for information at the time the CEMP is submitted. Subject to condition [53A], the protocol shall be implemented in the event of accidental discovery of cultural or archaeological artefacts or features during construction of the Project. The protocol shall include, but not be limited to: a) Training procedures for all contractors regarding the possible presence of cultural or archaeological sites or material, what these sites or

	material may look like, and the relevant provisions of the Historic Places Act 1993 if any sites or material are discovered; b) Identification of parties to be notified in the event of an accidental discovery, who shall include, but need not be limited to, Nga Hapū o Ōtaki, the NZHPT, GWRC, KCDC and, if koiwi are discovered, the New Zealand Police; c) Setting out of procedures to be undertaken in the event of an accidental discovery (these shall include immediate ceasing of all construction in the vicinity of the discovery until authorised to proceed); and d) Setting out of procedures to be undertaken before construction under this designation may recommence in the vicinity of the discovery. These shall include allowance for appropriate tikanga (protocols), recording of sites and material, recovery of any artefacts, and consulting with Nga Hapū o Ōtaki and the NZHPT.
53.	a) The Requiring Authority shall undertake pre-construction monitoring where any works are proposed within the following areas identified as being of high archaeological potential: i) The dune area between the Waitohu Stream and the Mangapouri Stream; ii) The dune area south of Mary Crest; and iii) The grounds of the property at 230 Main Road, Ōtaki. b) Subject to condition [53A], the accidental discovery protocol referred to in condition [52] shall apply in the event of the accidental discovery of cultural or archaeological artefacts or features during that monitoring. c) The Requiring Authority shall invite a representative or representatives of Nga Hapū o Ōtaki to be present during the pre-construction monitoring.
53A	The accidental discovery protocol referred to in condition [52] shall not apply, and need not be implemented, in the event that: a) Pre-construction monitoring and construction of the Project are subject to an archaeological authority granted under section 12 of the Historic Places Act 1993; and b) That authority provides for a protocol to be implemented in the event of discovery of cultural or archaeological artefacts or features during construction of the Project, including the matters provided in condition [52a) to d)] (inclusive). ***Advice Note**: The purpose of this condition is to ensure consistency between these conditions and the conditions imposed on any archaeological authority under the Historic Places Act 1993*
54.	a) During archaeological field investigations, the Requiring Authority shall hold a series of open days associated with those investigations. b) Following completion of construction of the Project, the Requiring Authority shall, in consultation with Nga Hapū o Ōtaki, KCDC, and the New Zealand Historic Places Trust, and for the purpose of public information and education: i) Prepare a series of fixed interpretive signs and place those signs at culturally and/or archaeologically significant or strategic locations; ii) Prepare a complementary set of portable interpretive panels to be supplied to KCDC for use and distribution, based on information obtained as part of any investigations undertaken in accordance with any archaeological authorities granted under the Historic

	Places Act 1993; and iii) Prepare and publish material (for example a booklet or series of booklets, or publication in an academic journal) suitable for a general audience that provides a summary of the archaeological findings and cultural heritage relating to the Project.
Construction Air Quality Management Plan	
55.	a) At least 15 Working Days prior to commencement of construction the Requiring Authority shall submit a CAQMP to the Manager for certification. Construction shall not commence until the Requiring Authority has received the Manager's written certification of the CAQMP. b) The purpose of the CAQMP shall be to establish methods to be used to limit dust and odour nuisance, and procedures for responding to any complaints and events in order to comply with the outcomes and standards required under condition [59 and 60]. c) The CAQMP shall include the following details: i) Identification of the sensitive locations where specific dust mitigation measures may be required, including the Former Rahui Milk Treatment Station and Social Hall, and 23, 33, and 45 Gear Road; ii) Identification of triggers and contingency measures to address identified and verified adverse effects on sensitive receptors. Contingency measures may include options such as: a) Cleaning of water tanks and replenishment of water supplies; b) Cleaning of houses; c) Cleaning of other buildings and infrastructure; and d) Cleaning of local roads in agreement with KCDC's Road Asset Manager. iii) Methods for undertaking visual monitoring of dust emissions; iv) Methods to be used to limit dust and odour nuisance; v) Procedures for responding to process malfunctions and accidental dust discharges; vi) Criteria, including consideration of weather conditions and procedures for use of water sprays on stockpiles and construction areas; vii) Implementation of Continuous Monitoring of Total Suspended Particulate (TSP) concentrations; viii) Methods for monitoring of the times of offensive odour emissions from the ground; ix) Procedures for responding to discharges of odour (including in the event of excavation of contaminated sites); x) Methods for monitoring of construction vehicle maintenance; xi) The identification of staff and contractors' responsibilities; and xii) Criteria for when a vehicle "no idling" policy will be enforced.
55A	The CAQMP shall be reviewed by a suitably qualified independent person, prior to being submitted to the KCDC for certification. Any comments and inputs received from the independent reviewer shall be clearly documented, along with clear explanation of where any comments have not been incorporated and the reasons why. For the purpose of this condition, "independent person" shall be a suitably

	qualified and experienced person who is not an employee of the Requiring Authority or does not work for any of the companies contracted to design and/or construct the Project.
56.	In managing dust arising from construction activities, the consent holder shall achieve the following outcome: a) Earthworks are managed to minimise the amount of dust received offsite.
57.	Monitoring of wind strength, wind direction, air temperature and rainfall shall be undertaken: a) In general accordance with the Good Practice Guide for Air Quality Monitoring and Data Management, Ministry for Environment, 2009; and b) Continuously for the duration of the construction phase of the Project, at a point that is representative of the local weather conditions across the construction site.
58.	The consent holder shall review the CAQMP at least annually during construction and as a result of any material change to the Work.
59.	As a result of the construction of the Project, there shall be no odour, dust or fumes beyond the site boundary caused by discharges from the site which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.
60.	Beyond the site boundary, there shall be no hazardous air pollutant caused by discharges from the site during construction that causes, or is likely to cause, adverse effects on human health, environment or property.

1.4 Designation Conditions – Applying only to KiwiRail

Table 9: Designation Conditions - only KiwiRail

Cond no.	Conditions – applying only to KiwiRail
	Operational Rail Noise
60A.	The Requiring Authority shall enter into negotiations with the relevant property owner and / or occupier prior to construction of the realigned NIMT and implement any agreed noise mitigation measures in relation to the Ōtaki Motel and 230 Main Highway, in order to achieve noise levels from rail noise of 35dB LAeq(1h) in bedrooms and 40 dB LAeq(1h) in other habitable spaces, (subject to the landowner allowing reasonable access to implement the measures) where practicable.

1.5 Designation Conditions – Applying only to NZTA

Table 10: Designation Conditions - only NZTA

Cond no.	Conditions – applying only to NZTA
	Operational Noise and Vibration
61.	For the purposes of conditions [61 to 73], the following terms mean: a) BPO – means Best Practicable Option; b) Building-Modification Mitigation – has the same meaning as in NZS6806:2010; c) Habitable Space – has the same meaning as in NZS6806:2010; d) Noise Assessment – means the Operational Noise and Vibration Assessment submitted with the NoR; e) Noise Criteria Categories – means groups of preference for time-averaged sound levels established in accordance with NZS6806:2010 when determining the selected mitigation option considered to be the BPO; i.e. Category A – primary noise criterion, Category B – secondary noise criterion, Category C – internal noise criterion; f) NZS6806:2010 – means NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads; g) PPFs – has the same meaning as in NZS6806:2010, and are generally identified in green, yellow or red on drawings NS-01 to NS-08; and h) Structural Mitigation – has the same meaning as in NZS6806:2010.
62.	The Requiring Authority shall implement noise mitigation measures with reference to the “Selected Options” Section 7 Tables 7-1 and 7-2 of TR14, that provides for the installation of 1050m of OGPA (PA10) through Otaki township from chainage 1300 to 2350 (the Stuctural Mitigation) and Building - Modification Mitigation at 14 Old Hautere Road in order to achieve the Noise Criteria categories indicated in drawings NS-01 to NS-08, where practicable and subject to conditions [63 to 73].
63.	The detailed design of the Structural Mitigation measures required to be implemented by condition [62] shall be undertaken by a suitably qualified acoustics specialist prior to the commencement of construction of the Project.
64.	Where the design of the Selected Options identifies that it is not practicable to implement a particular Structural Mitigation measure in the location or of the length included in the Selected Options required by condition [62] either: a) If the design of the Structural Mitigation measure could be changed and would still achieve the same Identified Category or Category B at all relevant PPFs, and an independent and suitably qualified person certifies to KCDC that the changed Structural Mitigation would be consistent with adopting the BPO in accordance with NZS6806:2010, the Selected Options may include the changed mitigation

	measure, or b) If the changed design of the Structural Mitigation would change the Noise Criteria Category at any PPF from Category A or B to Category C, and the Manager confirms that the changed Structural Mitigation would be consistent with adopting the BPO in accordance with NZS6806:2010, the Selected Options may include the changed mitigation measure. c) The Requiring Authority shall consult with affected property owners prior to amending the Selected Options.
65.	The Selected Options shall be implemented prior to completion of the Works, with the exception of any low-noise road surfaces, which shall be implemented within 12 months of the laying of the initial pavement surface.
66.	Prior to construction of the Project, a suitably qualified acoustic specialist shall identify those PPFs which, following implementation of all the Structural Mitigation measures included in the Selected Options, are not in Noise Criteria Categories A or B and where Building Modification Mitigation in accordance with NZS 6806:2010 may be required to achieve 40 dB $L_{Aeq(24h)}$ inside Habitable Spaces ("Category C Buildings").
67.	a) Prior to commencement of construction of the Project in the vicinity of a Category C Building, the Requiring Authority shall write to the owner and occupier of each Category C Building seeking access to such building for the purpose of measuring internal noise levels and assessing the existing building envelope in relation to noise reduction performance. b) If the owner(s) and occupier(s) of the Category C Building approve the Requiring Authority's access to the property within 12 months of the date of the Requiring Authority's letter (sent pursuant to a), then no more than 12 months prior to commencement of construction of the Project Stage, the Requiring Authority shall instruct a suitably qualified acoustic specialist to visit the building to measure internal noise levels and assess the existing building envelope in relation to noise reduction performance.
68.	Where a Category C Building is identified, the Requiring Authority shall be deemed to have complied with condition [67] above where: a) The Requiring Authority (through its acoustics specialist) has visited and assessed the building; or b) The owner of the Category C Building approved the Requiring Authority's request for access, but the Requiring Authority could not gain entry for some reason (such as entry being denied by a tenant); or c) The owner of the Category C Building did not approve the Requiring Authority's access to the property within the time period set out in condition [67b)] (including where the owner(s) did not respond to the Requiring Authority's letter within that period); or d) The owner of the Category C Building cannot, after reasonable enquiry, be contacted prior to completion of construction of the Project. If any of (a) to (d) above apply to a particular Category C Building, the Requiring Authority shall not be required to implement any Building-Modification Mitigation at that Category C Building.
69.	Subject to condition [70], within 6 months of the assessment required under condition [67b)], the Requiring Authority shall give notice to the owner of each Category C Building: a) Advising of the options available for Building-Modification Mitigation to the building; and b) Advising that the owner has three months within which to decide and advise the Requiring Authority whether to accept Building-

	Modification Mitigation for the building, and if the Requiring Authority has advised the owner that more than one option for Building-Modification Mitigation is available, to advise the Requiring Authority which of those options the owner prefers.
70.	Once an agreement on Building-Modification Mitigation is reached between the Requiring Authority and the owner of an affected building, the mitigation shall be implemented in a reasonable and practical timeframe agreed between the Requiring Authority and the owner.
71.	Subject to condition [68], where Building-Modification Mitigation is required, the Requiring Authority shall be deemed to have complied with condition [70)] above where: a) The Requiring Authority has completed Building-Modification Mitigation to the Category C Building; or b) The owner(s) of the Category C Building did not accept the Requiring Authority's offer to implement Building-Modification Mitigation prior to the expiry of the timeframe stated in condition [69b)]) above (including where the owner(s) did not respond to the Requiring Authority within that period); or c) The owner of the Category C Building cannot, after reasonable enquiry, be contacted prior to completion of construction of the Project.
72.	The Requiring Authority shall manage, and maintain the Structural Mitigation or building modification mitigationto ensure that, for a reasonable period to the extent practicable, those mitigation measures retain their noise reduction performance.
73.	A Noise Mitigation Plan shall be prepared by an independent and suitably qualified acoustics specialist 15 Working Days prior to the commencement of construction, and shall include details of: a) The Selected Options; b) Predicted noise levels, including identification of any PPFs which have changed NZS 6806:2010 noise categories; and c) Methods for post-construction validation of the Noise Assessment and to ensure the Selected Options retain their noise reduction performance.
Landscape and Urban Design	
74.	a) At least 15 Working Days prior to commencement of construction the Requiring Authority shall submit a LUDP to the Manager for certification. The LUDP shall address the matters in conditions [75 to 78]. b) Construction shall not commence until the Requiring Authority has received the Manager's written certification of the LUDP.
75.	The purpose of the LUDP is to outline the methods and measures to be implemented prior to the Works, during the construction phase, and for a defined period thereafter to avoid, remedy and mitigate adverse effects of the construction and the Project on landscape amenity. The LUDP shall document the permanent mitigation measures, as well as the necessary monitoring and management required to successfully implement those measures during construction and the transition to the Operational phase of the Project. a) The LUDP shall be prepared in consultation with: i) Keep Ōtaki Beautiful and Ngā Hapū o Ōtaki, where the construction is within or directly affects the Pare-o-Matangi reserve; ii) Ngā Hapū o Ōtaki and Ōtaki Community Board, where the construction is within or directly affects the gateway treatment areas; iii) Ōtaki Community Board with respect to the design of local road bridges;

	iv) GWRC for construction areas around the Waitohu Stream Crossing, the Mangapouri Stream Crossing, the Ōtaki River Crossing, and the Mangaone Stream and Overflow Crossings; v) The owners of the former Rahui Factory Social Hall, the former Rahui Milk Treatment Station with respect to the design and landscape surrounds of Bridge No. 4, and the service entrance to the property at the western side of the former Rahui Milk Treatment Station; vi) The owners of Pahiko, 122 SH1, Ōtaki (currently Richard and Sarah Caughley) with respect to the Southern Gateway Zone as it relates to, and is experienced from, that property including and with respect to the heritage features of its entranceway; and vii) KCDC. b) Consultation under a) shall commence at least 60 Working Days prior to submission of the finalised LUDP to KCDC. Any comments and inputs received from the parties listed above shall be clearly documented, along with an explanation of where any comments have not been incorporated and the reasons why. c) The LUDP shall provide information on how the following outcomes will be achieved: i) The urban design and landscape integration of the Project's permanent Works, including earthworked areas, bridges, noise attenuation measures, and other structures, into the surrounding landscape and topography (including the contouring of dune landforms), including but not limited to the restoration of areas used for temporary construction yards, and the reinstatement with appropriate vegetation types; ii) The mitigation of the visual and amenity effects of the Project on properties in the immediate vicinity through landscaping and urban design, generally within land acquired for the Project (but also on private properties, where appropriate, and where the relevant owner consents); iii) The retention or relocation of significant existing trees, or their replacement if their retention or relocation is not practicable; iv) The retention of areas of regenerating indigenous vegetation; v) The proposed maintenance of plantings, including the replacement of unsuccessful plantings; and vi) Coordination of landscaping with ecology works, including those required for stream diversion, any culverts, and permanent stormwater control ponds. vii) Integration of additional land into Pare-o-Matangi reserve; viii) Structures (bridges, noise mitigation structures, abutments and other built elements) are designed in reference to their landscape setting and in relation to adjoining land uses; and ix) Avoiding or minimising adverse ecological effects through avoiding or minimising disturbance to all areas of indigenous vegetation, habitats and trees.

76.	The LUDP shall be prepared by suitably qualified and experienced landscape architect, in conjunction with a suitably qualified and experienced ecologist, and shall: a) implement the principles and outcome sought by the Urban and Landscape Design Framework (TR 23); and b) be consistent with the EMP, which is required to be certified under the regional consent conditions; and c) be prepared in accordance with: i) Transit New Zealand's Guidelines for Highway Landscaping (dated December 2006) – or any subsequent updated version; ii) Transit New Zealand's "Urban Design Implementation Principles (2006)" – or any subsequent updated version; iii) Ministry of Justice [2005] National Guidelines for Crime Prevention through Environmental Design (CPTED) in New Zealand; iv) AUSTROADS Part 6 and 6A Pedestrian and Cyclist Paths and New Zealand Supplement [2008] to the AUSTROADS guide to Traffic Engineering Practice: Part 14 Bicycles; v) NZTA Bridge Manual; and d) Detail how the implementation of the design around waterways meets the objectives of the ULDF.
77.	In order to confirm that the LUDP is consistent with the ecological management measures in the EMP, a copy of the EMP shall be provided to the Manager at the same time it is submitted to GWRC under the regional resource consent conditions.
78.	The LUDP shall include details of urban and landscape design, including the following matters: a) Identification of vegetation to be retained, including retention of as many as practicable significant trees and areas of regenerating indigenous vegetation; b) Protection measures for vegetation to be retained, and make good planting along cleared edges; c) Identification and methodology for any specimen trees to be relocated; d) Proposed planting including plant species, plant/grass mixes, spacing/densities, sizes (at the time of planting) and layout and planting methods including trials; e) Planting programme – the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of each Stage of the Project; f) A requirement that planting along the extent of the Project on the Hautere Plains contain at least: i) 1000 totara trees; ii) 100 titoki trees; and iii) 100 matai trees; g) Detailed specifications relating to (but not limited to) the following: i) Vegetation protection (for desirable vegetation to be retained); ii) Weed control and clearance; iii) Pest animal management;

	iv) Ground preparation; v) Mulching; and vi) Plant supply and planting, including hydroseeding and grassing, which shall require: a) Any planting to reflect the natural plant associations of the area; b) Avoidance of ecologically damaging species; c) Where practicable, the use of mixes of plant which are of a suitable richness and diversity to encourage self-sustainability once established; and d) Any native plants to, so far as practicable, be genetically sourced from the relevant Ecological District; h) Earthworks and planting implementation and monitoring where the Project crosses rivers, streams and wetlands; i) The proposed maintenance of plantings, including the replacement of unsuccessful plantings. The maintenance period shall be 5 years for wetland and riparian plantings and define what constitutes a successful rate of plant survival at the time of final completion of the Project. j) In relation to terrestrial planting, subject to achieving the success standards in paragraphs (i) and (ii) below, there shall be a three year defects liability and maintenance period for all terrestrial planting. This period may be shorter if the success measures below are achieved earlier: i) In relation to mass planting, successful planting shall be defined as 80% canopy closure at the time of final completion of the Project whereby a sustainable plant community has been established and where plants have grown to create a canopy that shades the ground and suppresses weed growth; ii) In relation to shelter belts and amenity rural tree planting, successful planting shall be defined as 100% plant survival, with 100% of trees in full leaf at the time of final completion of the Project; iii) In relation to the planting of specimen trees, successful planting shall be defined as 100% plant survival, with 100% of trees in full leaf at the time of final completion of the Project, with the trees to have a habit of growth that is normal to the species and are to be sound, healthy and vigorous with normal and well-developed branch systems at the time of final completion of the Project; Final completion of the Project for the purpose of this condition means the time when the last work(s) within an identified Stage are completed; k) Relevant details of bridge piers and abutments design to address the location of piers and the treatment of abutments, their scale, and materials; l) Consideration of: i) The landscape character of the area; ii) Visual mitigation for adjacent dwellings; iii) The integration of the Project into the natural environment, including streams;

	iv) CPTED principles in urban areas. m) The Requiring Authority shall consult with KCDC prior to the detailed design for the following: i) The final shaping of the earthworks through and on the edges of dune landscapes, particularly at Mary Crest and Waitohu Plateau; ii) Design and mitigation measures for the Gateway Zones, including how landscaping treatment will be integrated with the destination signage for Ōtaki that is to be provided in each of the Gateway Zones in accordance with condition [81]; and iii) Design and mitigation measures for the three local road bridges (the Ramp, the Rahui Road bridge and Te Horo bridge) and the South Otaki Interchange bridge; iv) Connections around the bridge environments by allowing for links to the existing and proposed Kāpiti CWB system, as understood at the time of the Project design development; v) Design and mitigation measures around Waitohu Stream and Ōtaki River; vi) Design and mitigation measures around Pare-o-Matangi reserve, including: a) Relocation or replacement of identified specimen trees; and b) Any culverting of the Mangapouri Stream.
Operational Lighting	
79.	Lighting of the Project shall be designed and screened to minimise the amount of lighting overspill and illumination of residential areas, and shall ensure that: a) All Project lighting is designed in accordance with "Road Lighting Standard AS/NZS1158"; and b) All other lighting is designed in accordance with the relevant rules of the District Plan.
Transport – Operational	
80.	a) The Requiring Authority shall prepare, in collaboration with KCDC and GWRC (the latter in respect of the public transport elements), a NIP for the Project, or relevant Project Stages, to demonstrate how the Project integrates with the existing local road network and with future improvements planned by KCDC and GWRC. b) The NIP shall include details of the Works at the interface between the Project and the local road and public transport network, and shall address such matters as lane configuration and operational strategies, signage and provision for bus stops. c) The objectives of the NIP shall include preserving or enhancing the level of service of local roads at junctions with the Project (noting that actual levels of service in the future will depend on future land uses). d) The Requiring Authority shall submit the NIP for certification to the Manager at least 20 Working Days prior to commencement of construction of the Project. e) Works identified in the NIP which are the responsibility of the NZTA, including any Work associated with the relocation of bus stops, will be undertaken at the time the Project is constructed.

81.	a) The Requiring Authority shall establish signage at the two gateway zones to Ōtaki to promote Ōtaki town centre as a destination; b) The gateway destination signage will be designed by the Requiring Authority in consultation with KCDC, the Ōtaki Community Board, and Nga Hapū o Ōtaki, and shall be integrated into the landscape treatment for the gateway zones; and c) To avoid doubt, destination signage between theProject and local roads will meet all relevant NZTA design standards, and will be in general accordance with the 'Signage Layout' Plan in the Plan Set.

RESOURCE CONSENT CONDITIONS

RESOURCE CONSENT CONDITIONS

1.6 Guide to Reading the Conditions

The suite of conditions to manage effects of the Project has been numbered as identified in Table 11 below:

Table 11: Resource Consent Reference Used in Conditions

NZTA regional resource consents	
G	General conditions applying to all relevant consents and permits
WS	Conditions applying to consents and permits for Work in watercourses
E	Conditions applying to consents and permits for earthwork and erosion and sediment control activities
BC	Conditions applying to consents and permits for the construction of boreholes
GT	Conditions applying to consents and permits for the taking of groundwater
VC	Conditions applying to consents for the removal of vegetation in the beds of watercourses and a wetland, including the associated disturbance of their beds
WR	Conditions applying to consents for the partial reclamation of the wetland relating to the Peka Peka to North Ōtaki Project alignment (the 'Railway wetland'), including the associated disturbance of its bed.
SW	Conditions applying to operational stormwater discharge.

The table below provides explanation to a number of the abbreviations, acronyms and terms used in the conditions.

Table 12: Abbreviations, Acronyms and Terms Used in the Conditions

Definitions	
AEE	Means the Peka Peka to North Ōtaki Project Assessment of Effects on the Environment Volumes 1 to 5 dated 18 March 2013
AEP	Means Annual Exceedance Probability
BECLMP	Means the Bulk Earthworks Contaminated Land Management Plan
CEMP	Means the Construction Environmental Management Plan
Commencement of Construction	Means the time when the works that are the subject of these designation and resource consent conditions start.

EMP	Means the Ecological Management Plan
Environmental Incident	Means actual or potential instances of pollution, as well as unauthorised activities covered in the Resource Management Act 1991, that have, or may have, an adverse effect upon the environment. Infringements of consent conditions may be considered to be environmental incidents.
ESCP	Means the Erosion and Sediment Control Plan
GWRC	Means the Greater Wellington Regional Council, including any officer of Greater Wellington Regional Council
KCDC	Means the Kāpiti Coast District Council, including any officer of Kāpiti Coast District Council
Manager	Means the Manager, Environmental Regulation, Greater Wellington Regional Council
Operational	Means when Construction is complete and the Project is open to traffic (be it road traffic on the Expressway or associated local roads, or rail traffic in relation to the realigned NIMT)
Project	Means the design, construction, maintenance and operation of the Peka Peka to North Ōtaki Expressway as in the AEE and these designation and resource consent conditions.
Project Environmental Manager	Means the person responsible for environmental management during construction, as nominated in the Construction Environmental Management Plan
Project Footprint	Means the extent of the earthworks required for the Project construction and associated cuts and fills
SSEMP	Means a Site Specific Environmental Management Plan
Stage	Means a Stage of the Project as identified by the consent holder in the staging programme submitted to GWRC.
Stabilisation	Means making an area resistant to erosion. This may be achieved by using indurated rock or through the application of base course, grassing, or other method to the satisfaction of the Manager, on a surface that is not otherwise resistant to erosion. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once 80% vegetative ground cover has been established over the entire area. “Non-stabilised” areas are those which do not meet the definition of “stabilised”.
TR	Means Technical Report
Water Body	Has the same meaning as under section 2 of the Resource Management Act 1991
Work or Works	Means the construction, maintenance and operation of the project, including where relevant any Stage or part thereof.
Working Day	Has the same meaning as under section 2 of the Resource Management Act 1991

1.7 Table of Contents

Table 13: Table of Contents for the Resource Consent Conditions

Page No.	Condition No.	Condition Content
Application of conditions * Except as specified otherwise, the General Conditions shall apply to all resource consents as relevant. In addition, a number of resource consents are to have specific conditions apply.		
54	G.1-G.2	General Conditions and Administration
54-55	G.3-G.4	Pre-Construction Administration
55	G.5-G.6	Consent Lapse and Expiry
55	G.7	Review of Consents
55-56	G.8-G.9	Complaints
56-57	G.10-G.11	Incidents
57	G.12	Staff Training
57-58	G.13-G.14	Staging and Programme Conditions
58	G.15	Annual Report
58-60	G.16-G.22	Management Plans – General
60-61	G.23-G.27	Construction Environmental Management Plan
61-64	G.28-G.30	Site Specific Environmental Management Plans
64-67	G.31-G.37	Ecological Management Plan
67-71	G.38-G.45	Ecological Monitoring
71-72	G.46-G.46A	Ecological Mitigation
73	G.47	Revegetation Monitoring
Consent conditions for Works in Watercourses		
73-75	WS.1-WS.9	General Conditions
75	WS.10-WS.11	Conditions During Construction
75-76	WS.12-WS.14	Temporary Culverts
Consent conditions for Earthworks and Erosion and Sediment Control		
76-77	E.1-E.2	Erosion and Sediment Control Plan

Page No.	Condition No.	Condition Content
77	E.3-E.5	Erosion and Sediment Control Monitoring
77-78	E.6-E.8	Erosion and Sediment Control
78	E.9	Chemical Treatment (Flocculation)
78-79	E.10	Bulk Earthworks Contaminated Land Management Plan
Consent conditions for Borehole Construction		
79-80	BC.1-BC.4	General Conditions
Consent conditions for Taking and Using Groundwater		
80-81	GT.1-GT.3	Groundwater Monitoring
81-82	GT.4-GT.7	Groundwater Take and Use
Consent conditions for Wetland Reclamations and Vegetation Clearance		
82	WR.1	General Conditions – Wetland Reclamation
82	VC.1	General Conditions – Vegetation Clearance
Consent conditions for Stormwater Discharges		
82-84	SW.1-SW.4	Stormwater Conditions

1.8 Resource Consent Conditions

Table 14: Resource Consent Conditions

Except as specified otherwise, the General Conditions shall apply to all resource consents as relevant.

Cond no.	Condition – NZTA
General Conditions Applying to All Consents	
General Conditions and Administration	
G.1	a) The Project shall be undertaken in general accordance with the plans and information submitted with the application as documented as consent numbers [NSP 13/01.003 – NSP 13/01.51], subject to such amendments as may be required by the following conditions of consent. The plans and information include: i) AEE Report, dated 18 March 2013 ii) Plan Sets version 2 as provided on 26 September 2013; iii) As relates to flooding, the amended set of plans provided in Dr Webby's evidence: iv) Those plans contained in Annexure A of the joint statement of Tony Coulman and Timothy Kelly dated 28th August 2013 and Plans 5/2664/1/6504, Sheet SK60, R1 and 5/2664/1/6504, Sheet LA03, R3 as they relate to the South Ōtaki Roundabout and the Caughley access (on Lot 2 DP 454823). b) Changes to or replacement of any of the plans and information specified in paragraph a) of this condition presented in support of the application at the Board of Inquiry hearing. c) Where there is conflict between the documents lodged and the conditions, the conditions shall prevail. Where there is an inconsistency between the information and plans lodged with the application and at the Board of Inquiry hearing, the most recent plans and information shall prevail.
G.2	Subject to the consent holder holding or obtaining appropriate property rights to enable it to do so, the consent holder shall permit the agents of the GWRC to have access to relevant parts of the respective properties at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements and/or to take samples to enable GWRC to undertake its monitoring functions in relation to the Project.
Pre-Construction Administration	
G.3	a) The consent holder shall arrange a pre-construction site meeting between GWRC and any other relevant party nominated by GWRC, including the primary contractor, at least 10 Working Days prior to commencement of construction in any Stage (as identified in the staging programme plan submitted under condition [G.13]). b) In the case that any of the invited parties, other than the representative of the consent holder, does not attend this meeting, the

	consent holder will have been deemed to have complied with this condition, provided the invitation requirement is met. c) The consent holder shall ensure that additional site meetings are arranged between the consent holder, the Manager and any other relevant party nominated by the Manager, at appropriate intervals, and not less than every 6 months following commencement of construction.
G.4	The consent holder shall ensure that a copy of this consent, and all relevant documents and plans referred to in this consent, are kept on site at all times and presented to any GWRC officer on request.
Consent Lapse and Expiry	
G.5	Pursuant to section 125(1) of the Act, the consents NSP 13/01.003 – NSP 13.01/051 shall lapse 15 years from the date of commencement of this consent in accordance with section 116 of the Act, unless they have been given effect, surrendered or cancelled at an earlier date.
G.6	Pursuant to section 123(c) of the Act, the consents NSP 13/01.003 – NSP 13.01/051 shall expire 35 years from the date of commencement in accordance with section 116(5) of the Act.
Review of Consents	
G.7	The Manager, may review any or all conditions of this consent by giving notice of their intention to do so pursuant to section 128 of the Act, at any time within 6 months of the first, third, fifth, seventh and ninth anniversaries of the date of commencement of the Works authorised by this consent for any of the following purposes: a) To address any adverse effects on the environment, which may arise from the exercise of this consent, and which it is appropriate to address at that time; and b) To review the adequacy of the construction, Operational, maintenance, and monitoring requirements for this consent, and incorporate any modifications necessary to address any adverse effects on the environment arising from the exercise of this consent.
Complaints	
G.8	a) At all times during the Works, the consent holder shall maintain a permanent register of any complaints received alleging adverse effects from, or related to, the exercise of this consent. As far as practicable, the register shall include: i) The name and address of the complainant (where this has been provided); ii) The nature of the complaint; iii) Location, date and time of the complaint and also of the alleged event; iv) Weather conditions at the time of the event (as far as practicable), including wind direction and approximate wind strength if the complaint relates to air discharges; v) The outcome of the consent holder's investigation into the complaint; vi) Measures taken to respond to the complaint; and

	vii) Any other activities in the area, unrelated to the Project, which may have contributed to the complaint (such as non-Project construction, fires, or unusually dusty conditions generally). b) The consent holder shall i) Acknowledge the complaint within 2 Working Days, and ii) Promptly investigate, identify the urgency associated with the complaint and communicate that to the complainant; and c) Take practicable steps to remedy or mitigate the matters giving rise to the complaint if there are reasonable grounds for the complaint within 10 Working Days of receiving the complaint or such sooner time as may be reasonably necessary in the circumstances.The consent holder shall also maintain a record of its responses and any remedial actions undertaken. d) This record shall be maintained on site and shall be made available to the Manager and KCDC upon request. The consent holder shall provide the Manager with a copy of the complaints register every month.
G.9	The complaints process under condition [G.8] shall continue for 12 months following the Project becoming Operational. Any complaints received after this period shall be managed by the consent holder in accordance with its standard complaints procedures.
Incidents	
G.10	a) The consent holder shall comply with the relevant incident requirements as specified in this condition. If an incident occurs for which there is no incident procedure set out in these conditions the process outlined below in b)-d) shall apply. b) The consent holder shall notify the Manager and KCDC as soon as practicable within 1 working day after identifying that any contaminants (including sediment) have been released in the construction of the Project and entered any Water Body due to any of the following: i) Discharges from non-stabilised areas that are not treated by erosion and sediment control measures required under this consent; ii) Failure of any erosion and sediment control measures; iii) Discharge of a hazardous substances, including cement, to a Water Body; iv) Failure of any temporary stream diversion; v) Unconsented removal, loss, or damage to vegetation or other habitats; vi) Any other incident which either directly or indirectly causes, or is likely to cause, adverse ecological effects in any Water Body that are not authorised by a resource consent held by the consent holder; or c) If any of the incidents specified in b), or any other environmental incident occur, the consent holder shall: i) Establish control measures, where these have failed or have not been implemented in accordance with the relevant management plan, as soon as practicable; ii) Liaise with the Manager to establish what remediation or rehabilitation is required and whether such remediation or rehabilitation is practical to implement;

	iii) Carry out any remedial action as required by and to the satisfaction of the Manager; and iv) Maintain a permanent record of the incident at the site, which shall include the date and time of the incident, the nature, manner and cause of the release of the contaminants, weather conditions at the time of the incident, the steps taken to contain any further release, and the steps to remedy any adverse ecological effects on the Water Body. d) The notification in c) shall be either by telephone or email, or via an alternative method as agreed with the Manager.
G.11	The consent holder shall, if requested by the Manager in response to a complaint or incident or other reasonable request that relates to managing an adverse effect that is directly related to the construction of the Project, carry out a review of any management plan required by these conditions. The consent holder shall submit the revised management plan to the Manager for certification that: a) The reason(s) for requiring the review have been appropriately addressed; and b) Appropriate actions and a programme for implementation are provided for if required.
Staff Training	
G.12	a) The consent holder shall ensure that personnel responsible for supervising earthworks (i.e. foremen, supervisors and managers) undergo environmental awareness training, required by the CEMP. This training shall occur prior to the commencement of any earthworks or earthworks Stage and shall be given by a suitably qualified and experienced person certified by the Manager to deliver practical on-site training. b) Specifically, training may include (as relevant): i) Design details for the erosion and sediment control measures and associated methodologies; ii) Details of any stream diversions or other in-stream work and works in wetlands, briefing on the values of the streams and wetlands, the objectives for stream and culvert design and construction erosion and sediment control measures, the requirements of native fish for fish passage, and the sensitivity of the receiving environment to sediment discharges; iii) For supervisory and management personnel likely to be involved in any work involving vegetation clearance or significant habitat disturbance, briefing on the values of any significant areas of vegetation or habitat that are to be retained, and the methods that shall be used to identify and protect them during construction; and iv) Briefing on the requirements for cultural ceremonies to occur before the commencement of work. c) The environmental awareness training shall include a process and programme for training of new staff members joining the Project team, and for any staff moving to a new SSEMP area within the Project. This obligation to provide environmental awareness training shall continue for the duration of the earthworks.
Staging and Programme Conditions	
G.13	The consent holder shall submit to the Manager 2 months prior to the Commencement of Construction a detailed programme outlining: a) The proposed staging of the Work; b) The anticipated submission dates of the CEMP and management plans as required by conditions [G.18 and G.23] and any other

	plans; c) The anticipated submission dates of SSEMPs, which will be submitted for certification in accordance with the condition [G.28] prior to the commencement of work at each applicable Stage of construction.
G.14	The consent holder shall provide the Manager with an updated schedule of construction activities and timing of management plans for the Project at monthly intervals throughout the construction phase of the Project. Each monthly update schedule shall demonstrate how it fits into the overall staging plan programme required by condition [G.13].
Annual Report	
G.15	The consent holder shall provide an annual monitoring report to the Manager by the 30 of June each year (or on an alternative date as agreed to by the Manager). The purpose of this report is to provide an overview of the monitoring and reporting work undertaken, and any environmental issues that have arisen during the construction of the Project. As a minimum, this report shall include: a) All monitoring data required in accordance with the conditions of these resource consents and a summarised interpretation of this data; b) Any reasons for non-compliance or difficulties in achieving compliance with the conditions; c) Any Work that has been undertaken to improve the environmental performance of the site or that is proposed to be undertaken in the up-coming year; d) Recommendations on alterations to the monitoring required and how and when these will be implemented through changes to the relevant management plans; and e) Any other issues considered relevant by the consent holder.
Management Plans – General	
G.16	a) All Work shall be carried out in general accordance with the management plans and other documents and plans required by these conditions. b) The management plans shall provide the overarching principles, methodologies and procedures for managing the effects of construction of the Project to achieve the environmental outcomes and performance standards required by these conditions. c) The management plans shall apply to the entire Project and, for some matters, are sufficient to address construction management without the need for more specific plans. For other matters, there is a need for SSEMPs to be prepared which shall provide the necessary level of detail to address requirements within each of the construction Stages. d) The management plans provide the basis for which SSEMPs will be prepared. The SSEMPs shall, collectively, set out the detailed design and construction responses to address the specific context and circumstances of all aspects of the Project. Each SSEMP shall be consistent with, and be implemented in accordance with, any relevant management plan. ***Advice Note**: Certification of the management plans shall be on the basis that they are consistent with the conditions of the resource consent.*

G.17	Where a management plan is required to be prepared in consultation with any third party, the management plan shall demonstrate how the views of that party have been incorporated and, where they have not, the reasons why.
G.18	The consent holder shall submit draft copies of all management plans (as required by these conditions) to the Manager for comment at least 40 Working Days prior to commencement of construction.
G.19	a) A CEMP shall be submitted for information in accordance with condition [G.23] below. b) Management plans that shall be appended to the CEMP, and submitted for certification by GWRC, are: i) ESCP; ii) BECLMP; iii) GMP; and iv) EMP. c) These management plans shall be prepared in general accordance with the draft management plans included with the documents and information provided in support of the Applications, except as modified by the conditions and the Report of the Board of Inquiry. The management plans listed in b) shall be submitted to the Manager for certification at least 20 Working Days before the commencement of construction. Where the management plans include details of monitoring and mitigation Works which are to be carried out some time prior to the commencement of construction, and potentially prior to the submission of the CEMP and main body of the management plan, the consent holder may with agreement of the Manager submit those sections of the plans in advance for certification. Work shall not commence until the consent holder has received the Manager's written certification for the management plans. d) SSEMPs shall be submitted for certification in accordance with condition [G.28]. e) A copy of the certified management plans (including the SSEMPs) will be made publicly accessible on the Consent Holder's Project website.
G.20	The management plans are not required to include all details for every Stage of Work at the time the plan is submitted for certification to the Manager. If further details are to be provided for later Stages of Work, the management plan shall specify which Stages require further certification at a later date. Further details shall be submitted to the Manager prior to construction commencing in the relevant Stage.
G.21	The Consent Holder may request amendments to any of the management plans required by these conditions by submitting the amendments in writing to the Manager for certification at least 10 Working Days prior to any changes taking effect. Any changes to management plans shall remain consistent with the overall intent of the management plan and relevant conditions in achieving the outcomes required by these conditions. The changes sought shall not be implemented until the Consent Holder has received the Manager's written certification for the relevant management plan(s).

G.21A	a) The Consent Holder shall lodge SSEMPs, in accordance with the timeframe outlined in the relevant conditions, for certification by the Manager. Work shall not commence until the Consent Holder has received the Manager's written certification of the relevant SSEMPs. b) If the Consent Holder seeks to make a 'minor' change to a SSEMP, the change shall be submitted to the Manager for certification at least 2 working ways prior to the Work commencing. For the purpose of this condition, 'minor change' is as defined in the relevant management plan. The Consent Holder shall maintain a record of minor changes to SSEMPs which shall be forwarded to the Manager within 2 Working Days of each update. c) If the Consent Holder seeks to make a more than minor change to a SSEMP, the change shall be submitted to the Manager for certification at least 5 Working Days prior to construction commencing.
G.22	a) In the event of any dispute, disagreement or inaction arising as to any certification, implementation, or monitoring required by the conditions, matters shall be referred in the first instance to the Manager and to the consent holder to endeavour to resolve the dispute. If the matter is not resolved by this means the following process shall apply to determine a resolution. b) If a resolution cannot be agreed within: i) 3 months of lodging the particular management plan (including an SSEMP); or ii) 1 month of submitting a request for an amendment to a management plan (including an SSEMP); the matter shall be referred to an independent appropriately qualified expert, acceptable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree. c) The expert shall be appointed within 10 Working Days of the consent holder or GWRC giving notice of their intention to seek expert determination. The expert shall, as soon as possible, issue a decision on the matter. d) The decision of the expert is binding and shall be implemented by the consent holder. e) The dispute resolution process above shall be completed before any formal enforcement action is taken by GWRC, except in urgent situations. f) If the parties are unable to agree on the independent appropriately qualified expert under subclause b) the selection of that expert shall be decided by the national head of the professional organisation most appropriate to the nature of the dispute or their nominee (e.g. the chief executive of IPENZ if the dispute is of an engineering nature) g) For the avoidance of doubt, The process outlined in this condition [G.22(e)] shall not apply where GWRC considers that it is required to exercise its statutory enforcement functions.
Construction Environmental Management Plan	
G.23	The consent holder shall submit a CEMP to the Manager for information at least 20 Working Days prior to commencement of construction. The CEMP shall be in general accordance with the draft CEMP submitted with the application. The CEMP shall include, as appendices, the management plans required under conditions [G.31, E.1, and E.10, GT.1], which must be certified prior to

	commencement of construction.
G.24	The CEMP shall include details of: a) Staff and contractors' responsibilities; b) Training requirements for employees, sub-contractors and visitors; c) Environmental incident and emergency management (including the procedures required under condition [G.10]); d) Communication and interface procedures; e) Environmental complaints management (required under condition [G.8]); f) Compliance monitoring; g) Environmental reporting; h) Corrective action; i) Environmental auditing; j) CEMP review; and k) SCMP. The CEMP shall also set out construction methodologies and construction timeframes, including staging.
G.25	The CEMP shall be implemented throughout the entire period of Work, and updated as required.
G.26	A copy of the CEMP shall be held at one or more of the site offices at all times.
G.27	If the CEMP (excluding any certifiable management plans) is required to be revised as a result of any updated or new design information, the revisions shall be submitted to the Manager for information within 5 Working Days of the revision being made.
Site Specific Environmental Management Plans	
	Advice Note: *The SSEMPs are not part of the CEMP as they will be lodged in a staged manner throughout the course of the Construction of the Project. The SSEMPs are required to be certified by GWRC (under these consents) and KCDC (under the Project designations) in respect of their statutory functions.*
G.28	a) The objective of each SSEMP shall be to integrate design elements with environmental management and monitoring methods, and reflect this in a set of plans for each Stage or location, in order to define how the Project will practically achieve this. Not less than 20 Working Days prior to the commencement of construction for any Stage or location, the consent holder shall prepare and submit an SSEMP to the Manager for certification that: i) The SSEMP has been prepared with inputs from suitably qualified specialists, including but not limited to ecologists, landscape architects, and engineers; ii) The SSEMP has been prepared in accordance with the certified management plans appended to the CEMP; and iii) As a minimum, the SSEMP meets the information requirements set out in condition [G.30] unless alternative arrangements

	have been agreed in writing with the Manager and KCDC (in respect of their statutory functions). b) Construction shall not commence until the consent holder has received the Manager's written certification of the relevant SSEMP. c) The management plans required to be certified under these conditions must have been certified prior to the consent holder submitting the first SSEMP, unless otherwise agreed in writing with the Manager.
G.29	a) Each SSEMP shall confirm final details, staging of Work, and sufficient engineering design information to ensure that the Project remains within the limits and standards approved under this consent. b) The consent holder shall adhere to the requirements of each SSEMP at all times during and following the relevant Stage of the Project.
G.30	Each SSEMP shall include, as relevant, but need not be limited to: a) A detailed design and construction methodology for all Works within the area covered by the SSEMP; b) A detailed schedule of construction activities including the expected commencement date and duration of construction in each location within the area covered by the SSEMP, and demonstrating that the area of disturbance will be kept to the minimum practicable; c) Detailed design specifications of all earthworks within the SSEMP area including disposal sites; d) Detailed design specifications for all erosion and sediment control measures, including supporting calculations (where appropriate, such as contributing catchment area and retention volume of structure); position of inlets/outlets; Stabilisation measures proposed for structures, and any maintenance requirements; e) Detailed design of chemical treatment (if any) for each of the proposed sediment retention devices; f) Identification of the location of all discharge points to watercourses; g) Confirmation that temporary stockpiles of excavated material will be located at least 50 metres away from any flowing watercourse unless there is appropriate treatment of stormwater runoff (which may include discharging to vegetated land); h) In respect of vegetation clearance and ecological mitigation activities: i) Identification of valued habitats identified under condition [G.33a)i)] which are to be protected and retained; ii) Management of measures to minimise effects of vegetation clearance and habitat disturbance; iii) Identification and handling requirements of soil resource and other materials (e.g. logs) to be used for rehabilitation within the SSEMP area; and iv) The plan for implementing any relevant mitigation included within the EMP or the LUDP to be lodged under the designation conditions; i) In respect of temporary and permanent stream realignments and culverting: i) Measures/methods to maintain fish passage during and following completion of construction along the stretches of stream affected by the exercise of this consent;

	ii) Specific consideration of seasonal migration of native fish; iii) Details of culvert inlet/outlet protection structures e.g. pre-cast wing walls or rock rip-rap; iv) Confirmation of appropriate sizing of culverts and allowances for secondary flow paths during high flows; v) Detailed diversion plans and any other measures or details as appropriate to achieve compliance with all conditions of this consent and the objectives of the relevant management plans; vi) Confirmation that placement of excavated material in the wetted channel will be avoided, and the time spent by machinery in the wetted channel, including the number of vehicle crossings, will be minimised; ~~and~~ vii) Confirmation that any excess material from the bed and banks of the stream will be removed immediately on completion of construction; and viii) Methods for fish rescue and relocation; j) A drawing that clearly shows the location of key areas or features that are required to be avoided or otherwise protected during construction, including (but not be limited to) notable areas of bush or vegetation and heritage features; k) The identification of appropriately qualified and experienced staff to manage environmental issues onsite; l) The identification of staff who have clearly defined roles and responsibilities to monitor compliance with the SSEMP; m) Details of a chain of responsibility for managing environmental issues and details of responsible personnel; n) Details of the site access for all Work associated with construction of the Project; o) Measures to be adopted to maintain the site in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and similar construction activities; p) Location of workers' conveniences (e.g. portaloos); q) Details of the storage of fuels and lubricants (which shall require that storage be bunded or contained in such a manner so as to prevent the discharge of contaminants from spillages); r) Details of the proposed maintenance of machinery and plant to minimise the potential for leakage of fuels and lubricants; s) Location of vehicle and construction machinery access and storage during the period of site Works; t) Procedures for thoroughly cleaning all machinery of unwanted vegetation (e.g. weeds), seeds or contaminants prior to entering the site and any other methods to avoid the introduction or spread of weeds or pests; u) Methods for the clear identification and marking of the construction zones including those which extend into watercourses; v) A methodology that prescribes the extent to which machinery can operate in the vicinity of watercourses so as to minimise disruption and damage to the watercourses and associated vegetation; w) Methods to manage public health and safety during the Works, and notification to the public of temporary access restrictions to the immediate area during the Staged construction; x) Confirmation that no equipment or machinery will be cleaned, or refuelled in any part of any watercourses/streams, except as

	otherwise specifically provided for in the CEMP or an SSEMP; y) Procedures for removing all contaminants (e.g. fuel, hydraulic oils, lubricants etc.) from the site at the end of the construction of the Project, except for those required for on-going maintenance of the network and operational activities; z) As a schedule to the SSEMP, a SSTMP as provided by condition [34], which shall describe the measures that will be undertaken to manage the traffic effects associated with the construction of specific parts of the Project; aa) Any noise mitigation measures as per condition [62]; ab) Measures to avoid or minimise adverse ecological effects, including avoiding or minimising disturbance to all areas of indigenous vegetation, habitats and trees; ac) Details of any temporary causeways, the design and development of which shall occur in consultation with a suitably qualified and experienced ecologist; ad) Details of channel formation, substrate, and aquatic habitat features for the purpose of mitigating or enhancing aquatic ecological function; ae) As relevant, details of the Northern Ōtaki Gateway Zone and the Southern Ōtaki Gateway Zone as per conditions [75] and [81]; and af) As relevant, details of the bridge piers and abutments design. ag) Details of reasonable legal and physical access being maintained in and around Waitohu and Ōtaki Rivers for river management and maintenance purposes consistent with that which existed prior to the commencement of the Work.
Ecological Management Plan	
G.31	The consent holder shall submit the EMP to the Manager for certification at least 20 Working Days prior to the commencement of construction. The EMP shall be in general accordance with the draft EMP submitted with the application. The EMP shall be submitted as an appendix to the CEMP.
G.32	a) The purpose of the EMP is to: i) Detail the ecological management programme that will be implemented to appropriately manage effects of the Project on the environment during the construction phase and once the Project is Operational; ii) Document the permanent mitigation measures, including the restoration, management and maintenance of ecological mitigation, as well as the mechanisms for developing relevant mitigation and restoration plans for terrestrial and freshwater habitat; iii) Ensure that mitigation has been successful by establishing post-construction monitoring and response procedures; and iv) Ensure that any long-term effects are appropriately managed through monitoring, adaptive management and implementation of appropriate responses. b) The EMP shall be prepared by a suitably qualified and experienced ecologist and finalised in consultation with Nga Hapū o Ōtaki

	and KCDC. Construction shall not commence until the consent holder has received the Manager's written certification of the EMP.
G.33	The EMP shall include, but not be limited to, the following: a) Information on how the following outcomes will be achieved: i) Minimise loss of valued vegetation and habitats, including ecological site Cottle's Bush, Hautere Bush F, Te Hapua Road Forest, and at Mary Crest, and Ōtaki Railway Wetland ; ii) Minimise loss of mature native trees; iii) Minimise construction effects on freshwater bodies, including those arising from temporary and permanent diversions and causeways on matters such as fish passage, stream habitat and water quality; iv) Minimise effects on identified wetlands resulting from hydrological changes to water tables; and v) Minimise effects on fish and fish habitat during stream work; vi) Minimise effects on threatened native fauna and rare habitats. b) Details of how the consent holder, in achieving the outcomes in [a)], shall comply or be consistent with the management triggers and thresholds established in the relevant conditions and within the EMP; c) Details of habitat offset mitigation proposed including the proposed timing of implementation; d) A Fish Rescue and Relocation Plan including the proposed timing of implementation; e) A lizard management plan (including survey) shall be developed for Cottle's Bush, Hautere Bush F and Te Hapua Bush, following standard survey methods and protocols from the Department of Conservation. f) A survey for Powelliphanta traversii otaki of Cottle's Bush and Hautere Bush F shall be undertaken following the survey methods detailed in the Department of Conservation Recovery Plan, and if the snails are found then a management plan shall be developed for their recovery and relocation. g) Details of the monitoring (including its purpose and methods) to be undertaken pre-construction, during construction, and post-construction as required by condition [G.38]; h) Details of the remedial/response actions proposed; i) Methods to guide the salvage, storage and relocation of elements of any valued habitat of indigenous flora and fauna (including felled logs) identified in [a)i)] that has been lost as a result of the Project, where practicable, including provision for transfer of elements of the affected habitat to ecological mitigation sites; j) Details of each new waterway diversion channel. If full details are not available at the time the EMP is submitted, full details shall be provided in the relevant SSEMPs; and k) Details of measures proposed to avoid adverse effects on ecological site at Mary Crest, including: i) Minimising the loss of native vegetation from the bush and the small patch of raupo immediately to the east; and ii) Minimising the groundwater drawdown effects on the Mary Crest Bush and Wetland.

	l) Methods to minimise construction and Operational effects arising from temporary causeways on matters such as fish passage, stream habitat and water quality.
G.34	a) The EMP shall include a Revegetation and Mitigation Strategy (details of which shall be included as part of the relevant SSEMP (as required by condition [G.28])). The Revegetation and Mitigation Strategy shall cover all revegetation, other proposed mitigation, maintenance and monitoring requirements as set out in the EMP for the following areas: i) the exposed edges of Hautere Bush F, Cottle's Bush and Te Hapua Road Forest; ii) the restored remnant of the Ōtaki Railway Wetland; iii) the two new wetland areas – the Kennedy Wetland and the wetland at Mary Crest; iv) the area of mitigation established under condition [G.46]; v) the area identified for swamp forest/wetland habitat creation at Mary Crest; and vi) riparian planting along the Mangaone, Settlement Heights, Jewell and Mary Crest streams, b) All revegetation mitigation as set out in the EMP (including fencing and pest/weed control) shall be subject to a 3-year maintenance period except the riparian and wetland plantings which shall be maintained for a period of 5 years from the time of planting. c) All revegetation mitigation in a) above shall have stock excluded. d) Within six months of the completion of the maintenance period for each revegetation area, the consent holder shall engage a suitably qualified ecologist to carry out a full review of the success of the revegetation in that area. The results of the review shall be provided to the Manager for certification within one month of the review being undertaken and shall: i) confirm that the revegetation has met the requirements of the EMP (or not); and ii) identify any remedial actions that need to be carried out. e) Where any remedial actions are required, the consent holder shall provide a programme and description of remedial actions and any additional monitoring or maintenance to the Manager for certification and within one month of obtaining certification effect the programme but having regard to weather and appropriate planting seasons.
G.35	Areas to be specifically identified within the EMP include: a) Any area to be subject to a QEII covenant, including reasons why and any specific measures required to protect and enhance that area; and b) Specific techniques to manage effects on peripatus in the area of bush on Steven's property.
G.35A	The consent holder shall ensure that the ecological mitigation works and areas (including the Mary Crest swamp forest planting) required under condition [G.46] and any other additional ecological mitigation that may be required are legally protected on an ongoing basis. The consent holder shall not take active steps for the sale or disposal of any of the land required for revegetation planting as identified in condition [G.46] until an appropriate covenant and/or encumbrance (or similar legal mechanism) is registered against each relevant

	title. The mechanisms to achieve ongoing protection of the ecological mitigation areas in condition [G.46] shall be set out in the EMP.
G.35B	The consent holder shall implement the mitigation works required under condition [G.46] on a staged basis (unless otherwise agreed to by the Manager) during construction to minimise as far as practicable the lag between the construction effects and the works required to mitigate those effects. Mitigation which is not impacted by construction activities (that is the mitigation is located where it is not affected by bulk earthworks) shall be completed within 1 year of commencing construction, unless an alternative timeframe is otherwise agreed to by the Manager. The consent holder shall ensure that all other mitigation required under condition [G.46] for each stage of construction has been completed no later than 1 year following completion of bulk earthworks within that Stage. For the purpose of this condition 'bulk earthworks' means the cut to fill, excavation and blading required to regrade an area, and does not include works associated with stabilisation of areas or maintenance. Within 2 Working Days of completing bulk earthworks, the consent holder shall confirm in writing that date of completion to the Manager.
G.36	The EMP shall be consistent with the LUDP that is required to be submitted to KCDC under the designation conditions.
G.37	At least 15 Working Days before submitting the EMP to GWRC for certification, the consent holder shall submit a copy of the draft EMP to KCDC for comment. Any comments received shall be supplied to the Manager when the EMP is submitted, along with a clear indication of any comments that have not been incorporated and an explanation of the reasons why.
Ecological Monitoring	
G.38	Monitoring shall be carried out in accordance with the EMP as required by condition [G.33g)] in order to: a) Collect baseline information for 6 months in the year prior to commencement of construction on freshwater turbidity as set out in condition [G.39]; b) Monitor freshwater ecology during construction to identify changes in condition arising from the Project; c) Survey for NZ Pipit south of Mary Crest and in the dunes north of Ōtaki in the spring or summer prior to the commencement of construction in those areas; d) Survey for Banded Dotterel in the vicinity of the proposed Ōtaki River bridge crossing immediately prior to and during bridge construction; e) Monitor vegetation and freshwater ecology following completion of the Project to confirm mitigation requirements outlined in condition [G.46] are successfully achieved; and f) Undertake monitoring of fish passage as required by condition [WS.9].
G.39	a) The consent holder shall undertake pre-construction monitoring of water turbidity for 6 months in the Ōtaki River, Waitohu, Mangapouri and Mangaone streams. b) This pre-construction monitoring shall be undertaken to enable construction turbidity triggers to be set in the EMP and ESCP. The

	sampling design and procedures for turbidity and flow monitoring to generate trigger levels shall be detailed in the EMP. c) Turbidity monitoring shall be undertaken under a range of flow conditions at upstream and downstream locations which are consistent with the construction monitoring locations using a portable turbidimeter. d) Two triggers shall be set to inform adaptive management and response procedures on site; a gross exceedance trigger and an elevated level trigger. These triggers will be determined using: i) 6 months of pre-construction data from the waterways identified in a); and ii) information collected from the Transmission Gully and MacKays to Peka Peka projects (if any). e) The consent holder shall provide a report on the results of the pre-construction turbidity monitoring and the proposed construction turbidity triggers with the EMP. f) This is left intentionally blank. g) The consent holder shall review the trigger levels on a quarterly basis in response to project experience, environmental performance and other relevant information to ensure that the purpose set out in (b) is being met.
G.40	a) Prior to the commencement of any construction involving stream diversion of the waterways affected by the Project, surveys for brown mudfish within those areas directly affected by the Project will be carried out by a suitably qualified ecologist (who has prior experience with mudfish surveys): i) These surveys will include (subject to the length of affected waterway being long enough to contain the stated number of traps), at a minimum, the setting in appropriate mudfish habitat of 20 fine meshed (4mm) gee-minnow traps and six fine meshed (4 mm) fyke nets over 2 consecutive nights at each stream site to be surveyed. Fyke nets will contain a "large fish exclusion" compartment. ii) Where site conditions preclude carrying out the method detailed above, suitable alternatives will be discussed with the Manager. iii) Mudfish that are located in the surveys shall be transferred to safe locations in the same waterway prior to commencement of construction following the procedures set out in the Fish Rescue and Relocation Plan. iv) Results of the mudfish survey will be provided to the Manager within 10 Working Days following completion of the data collection and will inform the fish transfer requirements (as set out in the Fish Rescue Relocation Plan) for the diversion. v) Full details of the proposed mudfish survey methodology shall be submitted to the Manager for certification prior to undertaking the survey. The survey shall be carried out in accordance with the certified methodology.
G.41	The consent holder shall undertake the following monitoring during construction (in accordance with the methods, locations, frequency, reporting and all operation and maintenance procedures as outlined in the EMP): a) During the construction phase sediment effects are managed using the ESCP turbidity inspection/response process as outlined in the flowchart in Annexure 1. This management process involves:

	i) Setting the rainfall triggers for turbidity monitoring as set out in the ESCP; ii) Turbidity monitoring occuring upstream and downstream of the construction site on waterways at which construction is underway when the rainfall trigger has been exceeded; iii) Turbidity monitoring, as set out in the EMP, occuring at the time the rainfall trigger is exceeded and be repeated 24 and 48 hours after that exceedance; and iv) Ecological investigations where there is a gross exceedance triggered and/or as informed by the results of the repeated turbidity monitoring. b) Monitoring of the effects of the construction on waterways, until all construction Works affecting that waterway have been completed, by measuring fine and coarse (sand) sediment deposits, oil and grease on a monthly basis, aquatic invertebrates and fish on a quarterly basis: i) As set out in the EMP; and ii) In the same 4 waterways as for turbidity monitoring in condition [G.39] plus one intermittent waterway chosen in accordance with the process in the EMP.
G.42	The construction turbidity monitoring set out in condition [G.41(a)] shall use the turbidity triggers set in the EMP (using the process set out in the EMP and condition [G.39]). During construction, until the relevant earthwork area discharging to the monitored waterways are stabilised, should the gross exceedance trigger be exceeded in any of the three required monitoring events following an exceedance of the rainfall trigger, or the elevated level trigger be exceeded at the 48 hour monitoring, the following responses shall be implemented by the consent holder a) Within 24 hours of the trigger breach carry out and record in writing a full audit of the condition of all erosion and sediment control measures within the earthworks area discharging to the monitored waterway; b) Remedy any causes on site that may have contributed to the trigger breach as soon as practicable, and record what remedial measures were undertaken; c) Notify the Manager within 1 Working Day of the trigger breach, including providing details of the percentage change in turbidity and any remedial measures taken; d) If the NTU threshold remains generally elevated above the trigger for more than 48hrs, then macro-invertebrate sampling shall be undertaken following Protocols C1 or C2, as set out in Protocols for Sampling Macro-invertebrates in Wadeable Streams, MfE 2001 (for hard and soft-bottomed streams, respectively) within 2 Working Days at upstream and downstream sites agreed to by the Manager (known discharge points shall be specified in the EMP). All laboratory analysis of these samples shall include a full macro-invertebrate count; e) Within 10 Working Days of the collection of the macro-invertebrate samples, a report shall be provided to the Manager which has been prepared by a suitably qualified and experienced aquatic ecologist, and which includes the following:

	i) The results of the macro-invertebrate sampling; ii) The causes of the discharge, the response to remedy the cause and measures proposed to avoid a recurrence of this cause; and iii) An assessment undertaken by a suitably qualified and experienced aquatic ecologist which details whether the following thresholds have been exceeded: a) A decline in the Quantitative Macro-invertebrate Community Index (QMCI) score of 1.5 or greater from the corresponding upstream monitoring site or baseline monitoring scores; or b) A decline of greater than 20% in sensitive invertebrate taxa (in this case taxa with a QMCI score of ≥ 5) compared to the upstream monitoring site or baseline monitoring scores; and f) If the levels in (e)(iii) are exceeded, mitigation measures shall be undertaken, in accordance with the adaptive management process outlined in the EMP. As part of the report required above the consent holder shall, in consultation with the Manager, detail what mitigation measures are proposed and the timeframes for implementing these. The consent holder shall implement the mitigation measures approved by the Manager. These measures shall be implemented to the Manager's satisfaction and within the timeframe specified by the Manager.
G.43	The consent holder shall undertake the following monitoring post-construction in accordance with the methods, locations, frequency, reporting and all operation and maintenance procedures as outlined in the EMP: a) Monitoring the following areas of native bush and wetlands: i) Planted exposed edges of Hautere Bush F, Cottle's Bush and Te Hapua Road Forest; ii) The restored remnant of the Ōtaki Railway Wetland; iii) The two new wetland areas – the Kennedy Wetland and the wetland at Mary Crest; iv) the area of mitigation established under condition [G.46]; v) The area identified for swamp forest / wetland creation at Mary Crest; b) The monitoring in a) above shall occur for 5 years post-construction; and c) Aquatic ecology monitoring shall include: i) Monitoring, at the same 5 waterways and sites used for construction monitoring, for 2 years post-construction for: a) Fine and coarse (sand) sediment, aquatic macroinvertebrates and fish for 2 years; b) Inspection of fish passage as set out in condition [WS.9]; ii) Monitoring of aquatic invertebrates in remnant Ōtaki Railway Wetland and the newly established Kennedy and Mary Crest wetlands for 5 years post-construction; and iii) Riparian buffer monitoring shall be undertaken in the areas proposed for offset waterway mitigation for a period of 5 years post-construction.

G.44	The consent holder shall ensure that: a) All ecological monitoring required under the EMP shall be undertaken by suitably qualified and experienced ecologists. b) The results of all monitoring carried out pursuant to the EMP shall be: i) Available for inspection during normal office hours where such data is available; ii) Submitted to the Manager at quarterly intervals; and iii) Summarised and submitted as part of the annual report required under condition [G.15].
G.45	Except for exceedance of the turbidity trigger level set out in condition [G.42] in the event of an exceedance of any limit set for monitoring in the EMP, or any management trigger level set in the EMP, during or post-construction, the consent holder shall: a) Notify the Manager of the exceedance within 1 working day of the exceedance being identified; b) Investigate a plausible cause-effect association with the Project. If the adaptive management trigger level exceedance is not assessed by a suitably qualified expert(s) to be attributable either partially or fully to the Project, the consent holder shall not be held liable for any remediation or mitigation measures; c) Should the exceedance be linked either partially or fully to the Project, the following steps shall be undertaken by the consent holder: i) Notify the Manager of the causes of the exceedance within 5 Working Days of identifying the exceedance; ii) Within a timeframe approved by the Manager, identify the on-site practice that is generating the effect; iii) Implement measures necessary to prevent future exceedances and to alter the operational measure in consultation with the Manager; iv) Remedy or mitigate the effects of the exceedance to the satisfaction of the Manager; v) Obtain certification of any necessary amendments to management plans or other documents and obtaining any necessary resource consents; vi) Undertake further monitoring approved by the Manager to assess the effectiveness of the measures implemented to avoid, remedy or mitigate the exceedance and cause of the exceedance; and vii) In the event that the measures implemented to avoid, remedy or mitigate the effects of the exceedance or cause of the exceedance actions are unsuccessful, in the opinion of the Manager, the consent holder will implement appropriate remedial actions and further monitoring within a timeframe and which have been approved by the Manager and obtain necessary resource consents for those measures; and d) Provide a written report to the Manager within 10 Working Days of each exceedance which includes details of the exceedance, reasons for the exceedance and measures implemented in responses to the exceedance.
Ecological Mitigation	
G.46	a) The consent holder shall, in accordance with the timeframes in condition [G.35B] provide restoration of vegetation, wetlands, and

	streams for the purposes of ecological mitigation as follows; i) The consent holder shall: a) Use best endeavours to plant at least 1.5ha of edge and inter-planting of indigenous terrestrial forest species (Ecosystem Type WF2). The planting shall be in and around one of the established remnants identified on Exhibit 10, which is not already legally or physically fenced for protection. Following planting the consent holder shall ensure the full area (including existing remnant) is fenced and legally protected; and b) Create a minimum of 1.1 ha of landscaped and planted indigenous wetland habitat, including restoration of swamp forest and wetland habitat at Mary Crest, as mitigation for the loss of indigenous habitat; and c) Planting of swamp forest species at Mary Crest in the area stipulated on Annexure B to the Joint Statement of Ecological experts and planting low growing native wetland species in the remaining 25% of the attenuation basin. OR ii) If after using best endeavours Option (i) is not achievable, the consent holder shall: a) Plant a minimum of 1.5ha of appropriate indigenous forest species at a suitable site within Ecosystem Type WF2 but outside of roadside batter slopes, as agreed to by the Manager; and b) Create a minimum of 1.6 ha of landscaped and planted indigenous wetland and forest habitat, including restoration of swamp forest and wetland habitat at Mary Crest, as mitigation for the loss of indigenous habitat; and c) Planting of swamp forest species at Mary Crest in the area stipulated on Annexure B to the Joint Statement of Ecological experts and planting low growing native wetland species in the remaining 25% of the attenuation basin. b) A minimum of 2601 linear metres of riparian planting to a minimum of 20m each side of the waterbody, unless agreed otherwise by the Manager (for example the waterbody is close to a road or property boundary). c) Landscape and visual mitigation shall be comprised of: i) Approximately 17,700 m^2, comprising landscape treatments including grass, specimen trees, and visual screening at the Pare-o-Matangi reserve; and ii) Approximately 380,000 m^2 (38ha) of native planting landscape treatments (including specimen trees and visual screening) over the Project length; d) These mitigation areas shall closely correspond to the maps entitled Plan Set “Landscape and Visual”; and Plan Set “Proposed Ecological Mitigation Sites”, and Annexure 2 to these conditions unless otherwise agreed with the Manager.
G.46A	Prior to the breeding season before the commencement of construction of the Ōtaki River bridge, the consent holder shall prepare suitable habitat for Banded Dotterel nesting upstream of the Ōtaki River bridge in a location to be agreed with the Manager. The consent holder shall remove woody weeds from the nesting area prior to the breeding season and control woody weeds during construction of the Ōtaki River bridge. Details of the location, area and maintenance regime for the proposed area of nesting habitat

	shall be included in the EMP.
Revegetation Monitoring	
G.47	The ecological mitigation required in condition [G.46] for loss or modification of any wetland, riparian or terrestrial habitat shall comprise, as far as practicable, mitigation that reflects the indigenous habitat types and wetland classes lost, and the ecological functioning of those areas, and that is based on development of similar representative vegetation communities.
Consent conditions for works in watercourses	
General Conditions	
WS.1	The consent holder shall use natural rock and soil material, where practicable, to reclaim/fill the stream bed. All fill material shall be placed and compacted so as to minimise any erosion and/or instability.
WS.2	The consent holder shall seek to ensure that all construction authorised by this consent are undertaken in the dry bed of the stream as far as practicable, and are completed before the flow of the stream is diverted into that portion of the stream bed.
WS.3	The consent holder shall design and construct all diversions in a manner that seeks to maintain stream flows (both volume and velocity) in a similar state to its natural state at the time of commencement of construction, unless otherwise agreed by the Manager. All diversions shall be built to avoid velocity or structural barriers to fish passage, unless otherwise agreed by the Manager. Design of all diversions shall occur in consultation with an appropriately qualified and experienced aquatic ecologist.
WS.4	Culverts and bridges on various watercourses (as specified in TR 12) shall be designed to facilitate fish passage, in accordance with the GWRC publication Fish Friendly Culverts and Rock Ramps in Small Streams (or equivalent industry standard methods). Specific requirements to facilitate fish passage in respect of the Mangapouri and Mangaone Streams are as follows: a) The design of the Project crossings of the Mangapouri Stream shall be constructed from over-depth box culvert sections in order to incorporate a minimum 0.5m thick layer of cobbles along the invert with the cobble layer either fixed in place or sized large enough to be immobile under design flood conditions. b) The design of the Project (eastern) crossing of the Mangaone Stream shall be constructed from over-depth box culvert sections in order to incorporate a minimum 0.5m thick layer of existing gravel bed material along the invert.
WS.5	Within 20 Working Days of the completion of each permanent stream diversion, the consent holder shall provide evidence in writing to the Manager that an appropriately qualified and experienced engineer and an appropriately qualified and experienced aquatic ecologist have inspected the completed diversion works, and are satisfied that they have been constructed according to the SSEMP stream diversion plan(s) that was certified by the Manager.
WS.6	The design of the waterway crossings shall also meet the following performance criteria: a) Waterway crossings shall be designed in accordance with the NZTA Bridge Manual, with the following exceptions and additions: i) Freeboard for the Ōtaki River Bridges above the modelled level for the 1% AEP flood, plus climate change to 2130 (mid range) estimated, shall be at least 1.7m.

	ii) Freeboard for the Waitohu Stream Bridge above the modelled level for the 1% AEP flood, plus climate change to 2130 (mid range) estimated, shall be at least 1.2m. iii) The design of the Expressway and relocated NIMT Railway Crossings of the Mangapouri Stream shall be designed to operate under free surface flow conditions for the 1% AEP flood plus climate change to 2130 (mid range) estimated with a freeboard of at least 0.3m. iv) Freeboard for the Project (western) crossing of the Mangaone Stream above the modelled level for the 2% AEP flood, plus climate change to 2130 (mid range) estimated, shall be at least 0.6m. b) The Lucinsky Overflow Culvert on the local link road between Gear Road and Te Horo Beach Road shall be designed to pass between 80% and 120% of the total flow volume diverted by the existing Lucinsky Overflow in the 1% AEP flood, plus climate change to 2130 (mid range) estimated. c) Bridge abutment, culvert and river/stream bank protection Works shall not impede the passage of flood flows and shall be tied in appropriately with any adjacent river protection works constructed and maintained by GWRC.
WS.7	For any Work that will occur within the wetted channel of any waterway outside of the period from 1st March to 31st July, the consent holder shall, in consultation with GWRC, develop a specific programme and methodology to manage migration of native fish. The programme and methodology shall be developed with reference to the Freshwater Fish Spawning and Migration Calendar (Hamer 2007) and the programme shall be included as part of the SSEMP to be certified by GWRC prior to the relevant work occurring.
WS.8	The maximum extent of reclamation or diversion of all Water Bodies for the Project shall not exceed 2750 linear metres.
WS.9	a) Unless otherwise approved by the Manager, the consent holder shall engage an appropriately qualified and experienced aquatic ecologist and an appropriately qualified and experienced engineer to jointly undertake the following: i) A visual inspection of all structures and works (including new permanent diversions) where fish passage is required, one year after installation; and ii) A visual inspection of all structures and works (including new permanent diversions) where fish passage is required, four years after installation. b) If it is found that fish passage may be restricted, inspections and appropriate remedial actions shall be repeated by the consent holder (for the specific structure/area of works/scour protection where the restriction occurs) annually until the Manager is satisfied that fish passage is being appropriately provided for. c) A visual inspection shall be carried out (as above) in order to determine the following: i) That the substrate bed of the Water Body is being retained within the culverts, pipes and new stream channels, or appropriate baffle or rock fixtures are in place; ii) Whether there are any signs of erosion or scour of the stream bed or banks around the structures/works/depositions; iii) The condition of the structures/works.

	iv) That stream flow velocities are not increased in any areas within the structures/works or upstream/downstream of the structures/works that could compromise fish passage (e.g. baffles and rock protection are adequate and in good condition); and v) Whether there is debris that could block the passage of fish or increase velocities. d) The consent holder shall submit a joint report from a suitably qualified and experienced ecologist and a suitably qualified and experienced engineer to the Manager within 1 month of undertaking the inspections required in (a) above. e) The consent holder shall implement the measures/works required to address any actual or potential effects on fish passage within three months of submitting the report to the Manager, unless otherwise agreed with the Manager.
Conditions During Construction	
WS.10	The Works shall be regularly inspected and maintained by the consent holder so that: a) The waterway within the culverts remains substantially clear of debris during construction; b) Any erosion of the stream banks or bed that is attributable to, and is within 20m up or downstream of, the stream works authorised by this consent is remedied as soon as practicable by the consent holder; and c) Fish passage through the structure or any new permanent diversion is not impeded. ***Advice Note**: Maintenance does not include any Works outside the scope of the application. Any additional construction (including structures, reshaping or disturbance to the stream bed) following completion of the construction as proposed in the application may require further resource consents.*
WS.11	For Works in the bed of the Ōtaki River and Waitohu Stream, the SSEMP(s) submitted for certification under condition [G.28] shall include details of the following matters: a) Construction methods and sequencing, including how weather forecast information will be factored into timing of Works; b) A protocol for flood warnings and procedures for the safe and timely evacuation of plant and equipment from the riverbed in the event of a flood warning being received; c) Measures to ensure that all plant and equipment (except temporary staging equipment and formwork for pier construction) used for in-stream works are capable of being evacuated safely and quickly from the riverbed in the event of a flood warning being received; d) Measures to ensure that, where practicable, plant and equipment used for in stream works are operated away from and above flowing water; and e) Measures to ensure that all plant and equipment used for in-stream works incorporate features for preventing spills of fuel, oil, and other contaminants.
Temporary Culverts	
WS.12	All temporary culverts shall be designed to meet the following criteria unless otherwise agreed with the Manager: a) To pass a 50% AEP flood event without heading up (as assessed at the time of commencement of construction);

	b) Culverts to be installed 300mm below stream bed level in order to provide a continuous wetted perimeter to facilitate the passage of native fish species; and c) Minimum size of any temporary culvert shall be not less than 600mm in diameter.
WS.13	Unless otherwise agreed in writing with the Manager, upon removal of any temporary crossing, the consent holder shall reinstate the stream bed and margins to, as far as practicable, a natural state to closely match the upstream and downstream riparian and in-stream habitats and visual appearance.
WS.14	Unless otherwise agreed in writing with the Manager, all temporary stream crossings shall be removed within 2 years of their installation.
Conditions applying to consents for Earthworks and Erosion and Sediment Control	
Erosion and Sediment Control Plan	
E.1	a) The consent holder shall submit an ESCP to the Manager for certification at least 20 Working Days prior to Commencement of Construction in accordance with condition [G.19]. b) The purpose of the ESCP is to describe the methods and practices to be implemented to minimise the effects of sediment generation and yield on the aquatic receiving environments associated with the Project. In addition, the ESCP shall: i) Outline the BPO principles to which the ESCP shall adhere; ii) Be developed in accordance with the objectives outlined in the NZTA's Environmental Plan; iii) Ensure construction and maintenance activities avoid, remedy or mitigate effects of soil erosion, sediment run-off and sediment deposition; iv) Identify areas susceptible to erosion and sediment deposition and implement erosion and sediment control measures appropriate to each situation with particular emphasis on high-risk areas, including the northern dunescape, Ōtaki River, and the Railway Wetland area; v) Identify an adaptive monitoring and management regime; and vi) Use bio-engineering and low-impact design practices where practicable. c) The ESCP shall be prepared by a suitably qualified specialist and finalised in consultation with Nga Hapū o Ōtaki. Work shall not commence until the consent holder has received the Manager's written certification for the ESCP.
E.2	The consent holder shall include site specific construction erosion and sediment control measures within the SSEMPs, for all land disturbing activities including in-stream work. The purpose of the erosion and sediment control detail in the SSEMP is to allow the consent holder and GWRC to further develop methodologies to be implemented throughout the duration of the Works to address the specific characteristics of various sites along the route. In addition, the SSEMPs shall: a) Be consistent with the CEMP (as relevant) and the ESCP. b) Ensure that any changes to the SSEMP shall be certified by the Manager prior to the amendment being implemented in

	accordance with condition [G.21]. ***Advice Note**: These SSEMPs will be developed within the context of the principles and practices of the ESCP and will allow for innovation, flexibility and practicality of approach to erosion and sediment control. The SSEMPs will also enable ongoing adaption (subject to certification by the Manager) to changing conditions throughout the Project lifetime.*
Erosion and Sediment Control Monitoring	
E.3	The consent holder shall carry out monitoring and management in accordance with the ESCP and the SSEMP, and shall ensure that: a) The proposed erosion and sediment control measures have been installed in accordance with the ESCP and SSEMP and industry best practice; b) Management is carried out in accordance with best practice; c) Erosion and sediment control measures are functioning in accordance with the ESCP and SSEMP throughout the duration of the construction of the Project; and d) The sediment discharge implications of any impeded drainage to ground, such as by deposition of fine sand, are a particular focus of site control monitoring, with appropriate remedial action taken as required.
E.4	a) In the event of either a failure of erosion and sediment control devices or where a storm event exceeds the design volume of the device, and where the discharge is to a perennial or intermittent fresh Water Body, a suitably qualified ecologist shall be notified within 24 hours, who shall then inspect the relevant area to determine whether there has been a serious impact on the affected area's ecological values. b) The consent holder shall prepare a report on the effects of the failure and any recommended measures that may be required to remedy the effects. The report shall be submitted to the Manager for approval within 5 Working Days of the event. c) The consent holder shall ensure that after reasonable mixing no further serious impacts shall occur within the receiving environment. d) The remedial measures shall be implemented within 10 Working Days of the approval of the Manager.
E.5	The consent holder shall carry out inspections, at a minimum frequency of weekly, of all working areas of the site in order to ensure they are well maintained and that erosion and sediment control devices remain effective.
Erosion and Sediment Control	
E.6	Prior to any earthwork commencing within each area of the Works (other than those required to establish erosion and sediment control measures), a certificate signed by an appropriately qualified and experienced sediment control practitioner shall be submitted to the Manager to certify that the erosion and sediment control measures (including clean and dirty water diversion channels, silt fences, decanting earth bunds, sediment retention ponds, sediment retention ponds, rock filters and chemical treatment systems) for that area have been constructed in accordance with the relevant SSEMP. The certificate is to be provided to the Manager at least 2 Working Days prior to the commencement of construction in that area of Work.

E.7	A copy of the "as-built(s)" and the certified SSEMPs shall be kept on site, and all erosion and sediment control measures (including staging boundaries and particularly the extent of exposed areas) shall be updated as soon as practicable as changes are made. As-built plans shall be prepared by a suitably qualified person and shall be accompanied by text detailing the relevant earthworks methodology, constraints and likely progressions, and shall be revised as required to enable clear interpretation as to the day-to-day operation and management of erosion and sediment control measures, provided that such revisions are in general accordance with the SSEMPs.
E.8	No erosion and sediment control measures shall be removed or decommissioned from a site, or Stage before the entire area is stabilised, unless such removal and decommissioning is in accordance with the CEMP or a SSEMP, and the Manager has been informed not less than 2 Working Days prior.
Chemical Treatment (Flocculation)	
E.9	a) Chemical treatment shall be used to improve the treatment efficiencies of all sediment retention ponds unless it can be demonstrated through bench testing that chemical treatment will not provide any benefit. Detail of this shall be included in the relevant SSEMP. b) Each SSEMP where chemical treatment is proposed shall include, but need not be limited to: i) Specific design details of the chemical treatment system; ii) Monitoring, maintenance (including post-storm) and contingency programme (including a Record Sheet); iii) Details of optimum dosage (including catchment specific soil analysis and assumptions, and consideration of any environmental effects); iv) Procedures for carrying out an initial treatment trial; v) A spill contingency plan; vi) A performance monitoring plan; and vii) Details of the person or bodies that will hold responsibility for the maintenance of the chemical treatment system and the organisational structure which will support the system.
Bulk Earthworks Contaminated Land Management Plan	
E.10	***Advice Note**: if necessary, depending on the results of detailed site investigations (once access to sites is readily available), the consent holder shall apply for additional regional consents and/or for district consents under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health.* a) The consent holder shall submit the BECLMP to the Manager for certification at least 20 Working Days prior to the commencement of construction. The BECLMP shall be in general accordance with the draft BECLMP submitted with the application. The BECLMP shall be submitted as an appendix to the CEMP. b) The purpose of the BECLMP is to provide a framework and general procedures for the management of contaminated soil and other

	contaminated materials/structures potentially present in ground that may be disturbed or require removal to complete the Project. c) The BECLMP shall include: i) A summary of previous contaminated land assessments undertaken within the Project footprint; ii) Indicative management procedures for handling and stockpiling of contaminated soils; iii) General procedures for site worker health and safety related to contaminated soil; iv) Indicative procedures should unexpected contaminated soil be encountered during construction; and v) A basis for assessing whether contaminated soils may remain or should be removed from the site. d) Construction shall not commence until the Consent Holder has received the Manager's written certification of the BECLMP.
Consent conditions for Borehole Construction	
General Conditions	
BC.1	a) The location, design, implementation and operation of monitoring bores shall be in general accordance with the resource consent application. b) Within one month after completion of all monitoring bore installations, the consent holder shall submit to the Manager a copy of the borehole logs and details of the piezometer installations. c) Within one month after completion of each water supply well, the consent holder shall submit to the Manager a copy of the driller's bore log form (as completed by the driller who constructed the bore) and details of the well installation. d) The bore shall be constructed and maintained in accordance with the New Zealand Environmental Standard for Drilling of Soil and Rock (NZS 4411:2011). e) In the event of the bore being decommissioned or abandoned, the bore will be backfilled in accordance with NZS 4411:2011.
BC.2	A stepped rate pumping test shall be carried out in the water supply bore to determine the volume of water that can be abstracted from the bore. The stepped rate test shall be followed by a constant rate pumping test of at least 8 hours duration at the desired pumping rate. Monitoring of water levels in at least one observation bore shall be carried out during the constant rate test.
BC.3	Within 3 months of the completion of the pumping test, the consent holder shall submit a report to the Manager, which contains but need not be limited to, the following information: a) Presentation of and analysis of the collected pumping test data; b) Use results to simulate drawdown at any potentially affected neighbouring boreholes; c) An assessment of the potential effect on nearby streams / wetlands; and d) An assessment on the risk of saline intrusion. The effect of the abstraction well on the existing surrounding water supply wells shall be assessed based on this information. This information shall also be used to confirm monitoring measures during abstraction, and identify any proactive monitoring of the ability of existing consented and permitted water takes to continue to obtain water.

BC.4	If so requested by the Manager, the consent holder shall make its bore available for monitoring of water levels and water quality.
Conditions applying to consents for Taking and Using Groundwater	
Groundwater Monitoring	
GT.1	In managing the construction of the Project and the potential for changes to the groundwater levels to occur, the consent holder shall prepare a GMP. The consent holder shall submit the GMP to the Manager for certification at least 20 Working Days prior to commencement of construction. The GMP shall be submitted as an appendix to the CEMP. The GMP shall achieve the following outcomes: a) That there shall be no changes to the groundwater levels that result in a significant change to wetland hydrological conditions; and b) That there shall be no permanent changes to the ability of existing bore owners to abstract water (including at maximum consented rates or volumes) from their existing water supply bores. The definition of and means by which these outcomes will be measured and achieved shall be confirmed in the GMP and through the monitoring and reporting required under GT.2 and GT.3. Construction shall not commence until the Consent Holder has received the Manager's written certification of the GMP.
GT.2	The consent holder shall implement measures identified in the GMP to manage the groundwater level as part of any relevant SSEMP. The purpose of the measures to manage groundwater level in the GMP is to set out the best practicable options for groundwater monitoring and management and procedures to minimise changes in groundwater levels. The groundwater level detail in the GMP shall include information regarding: a) the schedule of groundwater monitoring bores identifying piezometer depth, screen length and geological unit; b) the locations of groundwater monitoring bores shown on plans; c) the locations of monitoring stations; d) duration of monitoring pre and post construction; e) monitoring frequency; f) monitoring methods; g) reporting requirements including identification of departure from 'natural' groundwater levels; h) details of mitigation options including, if appropriate, triggers for implementation of mitigation measures; i) response management, including minimum flow cut-offs or any other restrictions on the operation of the construction water supply bores; j) review procedures; k) definition of terms (e.g. 'significant change' and 'proactively monitor'); and l) Surveys and monitoring of existing groundwater users within 500m of any abstraction well, and within 500m of the Project footprint between stations 4100 and 4400, unless otherwise agreed to by the Manager.

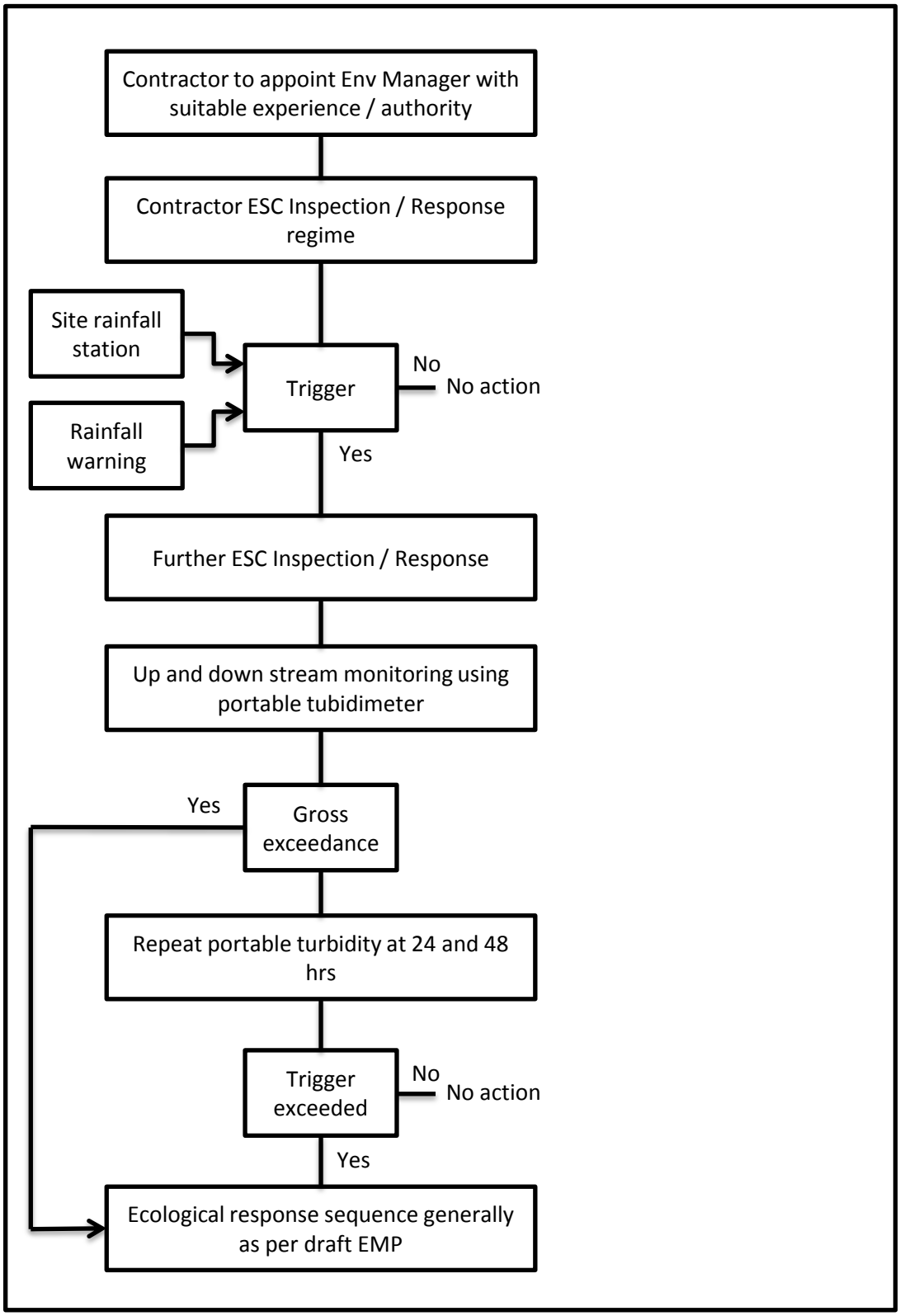
GT.3	At 6 monthly intervals during construction, and for 12 months following completion of construction within each Stage, the consent holder shall review and report the results of monitoring as compared with expected effects on groundwater levels assessed from groundwater modelling and the established range of groundwater levels determined from groundwater monitoring prior to the construction. This review will have regard to the final construction methodology and progress at the time of the review. In addition, an annual report will be prepared and submitted to the Manager by 1 May each year that describes: a) The groundwater monitoring that has been undertaken since the commencement of construction; b) The actual and potential effects arising from the groundwater level changes c) Any remedial or mitigation measures that have been implemented; d) Any changes to proposed remedial and mitigation measures; and e) Any changes proposed for the future monitoring programme or to alert levels.
Groundwater Take and Use	
GT.4	Groundwater take and use a) The location, design, implementation and operation of the groundwater takes shall be in general accordance with the consent application. b) The rate at which water is taken from the water supply bores, other than for well testing, including simulation of effects shall not exceed: i) 110,000 m^3/year at a maximum of 300 m^3/day (cumulatively, across all bores); and ii) a maximum pumping rate of 35 litres/sec from each bore.
GT.4A	The consent holder shall, subject to landowner access being provided, survey the water supply wells within 500m of any abstraction well, and within 500m of the Project footprint between stations 4100 and 4400, to obtain a list of existing water supply wells, their depths, and abstraction volumes and rates. This shall be used to develop proactive monitoring measures to assess the impact of the abstraction of water for construction.
GT.5	The consent holder shall undertake the following: a) Install and maintain a water meter on each water supply bore prior to the commencement of the take and for the duration of the abstraction from the point of take. The water meter shall measure both cumulative water abstraction and the instantaneous rate of take, and be capable of providing a pulse counter output; and b) The water meter shall be calibrated to ensure that the error does not exceed +/- 5%. The water meter shall be installed in accordance with manufacturer's specifications. ***Advice Note**: Where any consumptive water take for site office use exceeds 5 litres/second, the Resource Management (Measuring and Reporting of Water Takes) Regulations 2010 will apply*.
GT.6	The consent holder shall proactively monitor and ensure that existing groundwater users (consented and permitted users) who cannot

	use their own water supply due to construction of the Project receive a replacement water supply. The consent holder shall avoid adversely affecting KCDC's public water supply bores and shall ensure access to those bores for maintenance and servicing is maintained throughout the Project. a) A replacement water supply shall be provided within 2 Working Days of monitoring results identifying a change in ability to use their own water supply. b) The replacement water supply shall result in not less than the volume and quality of water which existed prior to the monitoring results identifying a change in ability to use their own water supply.
GT.7	The consent holder shall notify the registered drinking-water supply operators concerned and KCDC, as soon as reasonably practicable, if an event occurs due to the Project that may have a significant adverse effect on the quantity or quality of the water at any registered drinking-water supply abstraction point.
Consent conditions for Wetland Reclamations and Vegetation Clearance	
Conditions - Wetland Reclamation	
WR.1	The effects will be managed under the relevant General Conditions applicable to the proposed wetland reclamation.
Conditions - Vegetation Clearance	
VC.1	The effects will be managed under the relevant General Conditions applicable to the proposed clearance of vegetation.
Consent conditions for Stormwater Discharge	
Stormwater Conditions	
SW.1	Operational stormwater discharge from the Project shall meet the following performance criteria: a) Project stormwater shall be treated before discharge to the receiving environment in accordance with the NZTA publication *Stormwater Treatment Standard for State Highway Infrastructure 2010*, or equivalent industry standard methods. b) The peak rate of stormwater discharge from the Project at any point shall not exceed 100% (urban areas) or 100% (rural areas) of the pre Project peak discharge from the same footprint, in each of the 50%, 10% and 1% AEP critical duration storm events, except where stormwater from the Project discharges into the Ōtaki River or to ground, or where it has been shown through modelling set out in TRs 9 and 10, or by similar modelling to the satisfaction of the Manager, that attenuation is not needed. c) Project stormwater shall be attenuated before discharge to the receiving environment, except where those flows are directed to the Ōtaki River, local soakage, or a dedicated attenuation basin, or otherwise addressed, in accordance with the NZTA publication *Stormwater Treatment Standard for State Highway Infrastructure 2010*.
SW.2	The effects of the Project embankment, waterway crossings and stormwater discharge on flood behaviour shall be evaluated using hydraulic modelling in the following manner: a) Hydraulic effects shall be assessed using appropriate modelling techniques against the 1% AEP flood, with climate change to

	2130 (mid-range) estimated, and shall provide a sensitivity evaluation against high range climate change scenarios to 2130. The hydraulic assessments shall consider the effects of potential culvert blockages, debris raft formation on bridge piers, ~~and~~ river/stream bed aggradation and geomorphological changes. The results of the assessments shall be used to inform the Project design. b) The effects of any loss of flood plain storage due to fill embankments shall be offset by: i) provision of equivalent alternative flood storage volume; ii) provision of additional flood containment; iii) attenuating runoff; iv) removing downstream constraints; or v) a combination of the above. c) Culvert and bridge waterway crossings, and any additional flood storage, shall be designed so that the predicted maximum extent and peak levels of flood inundation due to the Project for the 1% AEP flood (with climate change to 2130 (mid-range) estimated) is contained within: i) the designation; or ii) the predicted maximum extent of flood inundation that existed prior to the Work for the 1% AEP flood (with climate change to 2130 (mid-range) estimated), and is not more than 100mm (50mm in relation to the Mangapouri Stream) above peak levels that existed prior to the Work; or iii) where c)i) or ii) cannot be met, the reports required by f) below shall describe: a) the consultation with relevant landowners about inundation effects, which shall include provision by the consent holder of information about Public Works Act 1981 processes; and b) the details of any mitigation required or any alternative mechanisms that will be provided to address inundation effects. d) Notwithstanding a) to ~~d~~c) above, in respect of the Ōtaki River Floodplain, the residual effects of an over-design flood overtopping or causing breaching of the Chrystall's Bend extended stopbank (0.2% AEP flood with climate change to 2130 (mid range) estimated), including potential debris raft formation on bridge piers, shall be assessed for the purpose of detailed design of the vertical alignment of the Project embankment across the floodplain, the Ōtaki Overflow Culvert and the secondary containment bund shown on Sheet GM02 of Drawing 5/2664/1/6504 (Rev 1). e) The effects of bridge abutment, culvert and river/stream bank protection Works on flood flow patterns and sediment transport and erosion processes shall be appropriately assessed. f) The final flood inundation modelling and hydraulic and stormwater management design shall be prepared for the Project according to the Staging identified in the programme, and a report on the design of the Works shall be prepared for each Stage. The report on the design of the Works, the hydraulic models (including inputs and outputs to those models), reporting on the model

	investigations, the hydraulic and effects assessments (in SW.2 a)-c) and WS.6), supporting design calculations, the hydraulic design report(s) and drawings for the hydraulic design shall be independently peer reviewed (at a cost to the consent holder) by a suitably qualified and experienced engineer, with the engineer agreed by the Manager and KCDC. The report and the results of the peer review shall be provided to the Manager and KCDC at least 20 Working Days prior to the commencement of any construction in that Stage that might affect hydrology and flood risk (including embankments, waterway crossings and stormwater discharges). The consent holder shall implement any recommendations in the peer review or an alternative design detail agreed with the peer reviewer. g) Any monitoring results and reports prepared under this condition are to be made available to the public upon request.
SW.3	Post-construction, the consent holder shall ensure that the Manager, Flood Protection, GWRC is provided with reasonable access to watercourses for river/stream maintenance purposes as follows: a) Physical and legal access shall be provided to the Waitohu Stream; and b) Physical access along the Ōtaki River shall be provided up river from existing SH1 along the true right bank and downriver from SH1 on the true left bank, suitable for heavy vehicles (including laden truck and trailer units), including during flood conditions. This shall be to at least the extent that access was available prior to the Work.
SW.4	The consent holder shall consult with the Manager, Flood Protection, GWRC about maintenance schedules for the Waitohu Stream, Mangapouri Stream, Ōtaki River, and Mangaone Stream Works. The consent holder shall use its best endeavours to enter into a maintenance agreement to ensure that the maintenance around bridges is consistent with GWRC's maintenance regime up and downstream of the bridges.

ANNEXURE 1


Contractor to appoint Env Manager with suitable experience / authority
Contractor ESC Inspection / Response regime
Site rainfall station
Rainfall warning
Trigger
No
No action
Yes
Further ESC Inspection / Response
Up and down stream monitoring using portable tubidimeter
Yes
Gross exceedance
Repeat portable turbidity at 24 and 48 hrs
Trigger exceeded
No
No action
Yes
Ecological response sequence generally as per draft EMP

ANNEXURE 2

DISCLAIMER: Every effort has been made to ensure that the information presented here is accurate and up to date. Wellington Regional Council accepts no responsibility for actions based on this information.

0 80 160 320 480 640
Metres

Drawn by:
Tim Park, 22/07/11

1:16,306@ A3

N

Projection: NZTM