ENVIRONMENT COURT OF NEW ZEALAND
WELLINGTON REGISTRY
I MUA I TE KOOTI TAIAO O AOTEAROA
TE WHANGANUI-A-TARA

ENV-2023-WLG-000005

Under the	**RESOURCE MANAGEMENT ACT 1991**
In the matter of	the direct referral of application for resource consents and notices of requirement under section 87G and 198E of the Act for the Ōtaki to north of Levin Project
By	**WAKA KOTAHI NZ TRANSPORT AGENCY**
	Applicant

OPENING LEGAL SUBMISISIONS ON BEHALF OF WAKA KOTAHI NZ TRANSPORT AGENCY

17 October 2023

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MAY IT PLEASE THE COURT

PART A: INTRODUCTION

Introduction

1. These legal submissions support the notices of requirement (**NoRs**) and applications for resource consents by Waka Kotahi NZ Transport Agency (**Waka Kotahi** or the **Applicant**) (the **Application**) for the Ōtaki to North of Levin Project (the **Project**).[1]

2. The Project involves the construction of a new section of State Highway 1 (**SH1**) between Taylors Road, Ōtaki (north of the Peka Peka to Ōtaki (**PP2Ō**) expressway) and SH1 north of Levin to the east of the existing SH1.

3. Applications for resource consents and notices of requirement (**NoR**s) for designation were lodged with Manawatū-Whanganui Regional Council (**Horizons**), Greater Wellington Regional Council (**GWRC**), Horowhenua District Council (**HDC**) and Kāpiti Coast District Council (**KCDC**) (together, the **Councils**). The Application has subsequently been directly referred to this Court, with a number of submitters joining as s274 parties.

4. The Ō2NL Project has been carefully designed to address fundamental safety and resilience problems, enhance mode choice and support population and economic growth in the districts and wider regions. In short, it will create a safe, resilient, modern and fit-for-purpose state highway. It will also, through the proposed shared use path (**SUP**), facilitate walking and cycling.

Partnership

5. Waka Kotahi is privileged to be working on the Project alongside its Iwi Project Partners: Muaūpoko Tribal Authority (**MTA**) and the following hapū of Ngāti Raukawa ki te Tonga: Ngā Hapū o Ōtaki (on behalf of Ngāti Kapu), Ngāti Hikitanga, Ngāti Huia ki Poroutawhao, Ngāti Huia ki Mātau, Ngāti Kikopiri, Ngāti Ngarongo, Ngāti Pareraukawa, Ngāti Takihiku, Ngāti Tukorehe and Ngāti Wehi Wehi.

6. The inalienable connection that iwi and hapū have with the waterways, and the whenua, and the responsibility they have for the health and wellbeing of the environment, are central components of the Ō2NL Project. Waka Kotahi,

[1] Assessment of Effects on the Environment (**AEE**) at chapter 11.

MTA and the hapū of Ngāti Raukawa (together the **Project Partners**) have worked hard to reflect that connection and responsibility at every stage of the Project. The Project Partners are committed to ensuring that the Project outcomes seek to improve the health and wellbeing of te taiao, while achieving the broader safety, resilience and connectivity aims of the Project and improving the overall community wellbeing.

7. Engagement between Waka Kotahi and the Iwi Project Partners began in 2012 with initial discussions held with iwi and hapū as stakeholders. As the Project's development progressed, the Iwi Project Partners' involvement increased significantly and in late 2020 the Project Partnership was formally launched.[2] The three Project Partners then commenced development of the Cultural and Environmental Development Framework (**CEDF**),[3] one of the Project's fundamental guiding documents which is intended to provide an overarching common framework based on core principles including *"Tread Lightly, with the whenua"* and *"Create an Enduring Community Legacy"*:[4]

8. Representatives of both MTA and Ngāti Raukawa hapū acknowledge in their evidence the partnership approach of Project and the outcomes it has led to.[5] MTA Chief Executive Dianne Rump recognises that the Project is "*a huge opportunity to frame [a] new transformative narrative for what Crown Iwi partnership might look like*."[6] Lonnie Dalzell, on behalf of Waka Kotahi, echoes this sentiment in his own evidence.[7]

9. Ms Rump goes on to acknowledge that although issues still exist:[8]

> *holding this space for each Project partner to acknowledge and maintain their individual backgrounds and positions, while at the same time committing to delivering a meaningful and collaborative Project partnership, is the best way to future proof the success and momentum required for the Ō2NL Project.*

10. Lindsay Poutama, representing Ngāti Tukorehe, reinforces the Project Partners' commitment to working together and the strong support of his hapū

[2] Evidence-in-chief (**EIC**) of Dianne Rump at [36].
[3] The "Consent Version" of the CEDF was attached as Appendix Three to the AEE, however as discussed at [124] of the EIC of Lonnie Dalzell, *"The CEDF is a living document…"*
[4] EIC of Dianne Rump at [37]; EIC of Lindsay Poutama at [20].
[5] In addition to those representatives mentioned below, see also: EIC of Dean Wilson at [6]; EIC of Siobhan Karaitiana at [4]-[5]; EIC of Janelle Tamihana at [15]-[21]; EIC of Quentin Parr at [25]; EIC of Kim Tahiwi and Rawiri Rikihana at [23] and EIC of Te Kororangi Hakaraia at [52]-[53].
[6] EIC of Dianne Rump at [80].
[7] EIC of Lonnie Dalzell at [33]-[39].
[8] EIC of Dianne Rump at [26].

for the Project's key outcomes, in particular the *"economic, cultural, social and employment opportunities"* the Project will create.[9]

11. Wayne Kiriona, on behalf of the Ngāti Huia Collective, states that the project partnership with Waka Kotahi *"is an important relationship, and one that has enabled our collective to work constructively with Waka Kotahi, providing cultural feedback and guidance on all design aspects, and participating in the development of the CEDF and design workshops."*[10]

Structure of submissions

12. These legal submissions are structured as follows:

    (a) **Part A** introduces the Project;

    (b) **Part B** sets out the background and context to the Project;

    (c) **Part C** describes the applicable statutory framework;

    (d) **Part D** summarises the evidence on the environmental effects and highlights key issues for determination by the Court; [11]

    (e) **Part E** addresses the relevant regulations, policy and planning documents, and 'other matters';

    (f) **Part F** assesses the consideration of alternatives and explains why the designations are reasonably necessary for achieving the objectives of Waka Kotahi for the Project;

    (g) **Part G** addresses the proposed conditions;

    (h) **Part H** assesses the application of Part 2 of the Act to the Applications; and

    (i) **Part I** addresses the evidence to be presented at the hearing.

[9] EIC Lindsay Poutama at [23], [25] and [29].
[10] EIC of Wayne Kiriona at [10].
[11] These submissions do not reflect the memorandum filed by Ms Erika Toleman on behalf of Forest and Bird on 17 October 2023.

PART B: BACKGROUND AND CONTEXT

Project description

13. The Ō2NL Project involves the construction, operation, use, maintenance and improvement of approximately 24 kilometres of new four-lane median divided state highway, with a new SUP along its full length.

14. As shown in **Figure 1**, the proposed new section of state highway will:

    (a) begin at the northern end of PP2Ō Expressway (near Taylors Road, Ōtaki);

    (b) run generally to the east of the existing SH1 as it passes by Manakau, Kuku, Ōhau and Levin (and immediately to the east of SH57 as it passes Levin); and

    (c) reconnect to the existing SH1 just north of Levin at Heatherlea East Road. This is the point at which approximately half the traffic leaves SH1 to travel on State Highway 57 (**SH57**), making this the *"natural end point for the [P]roject".*[12]

[12] EIC of Philip Peet at [85].

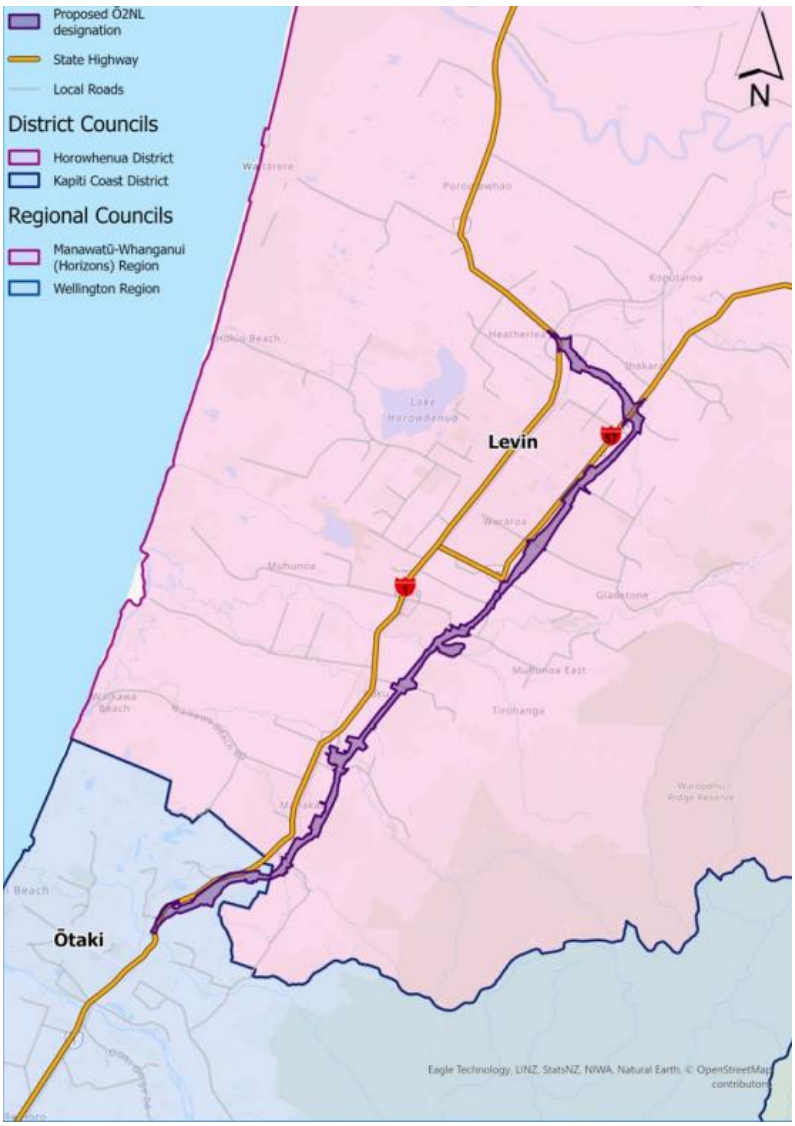

Figure 1: Ō2NL designations as lodged, AEE at page 27

15. Once constructed, SH1 from north of Levin to Wellington City will be safe, resilient, modern, and fit-for-purpose.

16. The Project includes the following key features:[13]

    (a) a half interchange with southbound ramps near Taylors Road and the PP2Ō Expressway to provide access from the current SH1 for traffic heading north or south and alternate access to Ōtaki;

    (b) a grade separated diamond interchange at Tararua Road, providing access into Levin;

    (c) two dual lane roundabouts where Ō2NL crosses SH57 and where it connects with the current SH1 at Heatherlea East Road, north of Levin;

[13] See Volume II of the Application - Supporting Information and AEE, chapter 11, at 61.

(d) four lane bridges over the Waiauti, Waikawa and Kuku Streams, the Ohau River and the North Island Main Trunk (**NIMT**) rail line north of Levin;

(e) a separated (typically) three-metre-wide SUP, for walking and cycling along the entire length of the new highway (but deviating away from being alongside the Project around Pukehou (near Ōtaki));[14]

(f) local road underpasses[15] and overpasses;[16]

(g) new local roads at Kuku East Road and Manakau Heights Road to provide access to properties located to the east of the Ō2NL Project, and local road connections between:

(a) McLeavey Road to Arapaepae South Road on the west side of the Ō2NL Project;

(b) Arapaepae South Road, Kimberley Road and Tararua Road on the east side of the Ō2NL Project;

(c) Waihou Road to McDonald Road to Arapaepae Road / SH57;

(d) Koputaroa Road to Heatherlea East Road and providing access to the new northern roundabout; and

(h) the relocation and improvement of the Tararua Road and current SH1 intersection, including the introduction of traffic signals and a crossing of the NIMT railway line.

17. Additional features of the Project include:

(a) road lighting at conflict points and road signs;

(b) median and edge barriers;

(c) stormwater treatment infrastructure;

(d) culverts to reconnect streams crossed by the Ō2NL Project and stream diversions to recreate and reconnect streams;

(e) various spoil and material supply sites;

[14] That will link into shared path facilities that are part of the PP2Ō Expressway (and further afield to the Mackays to Peka Peka expressway SUP).
[15] At South Manakau Road and Sorensons Road.
[16] At Manakau Heights Drive, North Manakau Road, Kuku East Road, Muhunoa East Road, Tararua Road and Queen Street East.

(f) noise treatment measures including 18km of high-performance low-noise road surfaces and 4.2 km of 1.1m high concrete safety barriers;[17] and

(g) planting and earthworks design measures including stream retirement planting, terrestrial ecological planting, earthworks contouring and rehabilitation, landscape restoration, and planting for mitigation of visual amenity, following a 'whole-of-landscape' approach.[18]

The need for the Project

18. The current SH1 through the Ō2NL Project Area is not fit-for-purpose as a modern state highway. Serious and long-standing safety and resilience concerns are well-documented, and predicted population growth will only exacerbate these issues while reducing the efficiency of the existing state highway network.

Safety

19. In his submission Mr Poutama describes the reality of the present road for many local residents, noting:

> *There are many whanau (families) who keep torches, hi viz vests and top hat markers in their back porches in readiness for the inevitable incident.* [19]

20. The SH1 and SH57 corridors currently hold a KiwiRAP Star Rating of 2, the worst published rating of any state highway in New Zealand.[20]

21. These concerns are also reflected in recent statistics of crashes and deaths and serious injuries (**DSI**s) in the area, as recorded by Philip Peet in Technical Assessment A (Transport) and his evidence in chief. Between 2017 and 2021:

(a) there were 14 fatal crashes and 39 serious injury crashes on SH1 and SH57 network between Ōtaki and north of Levin, resulting in 72 DSIs;[21] and

[17] EIC of Michael Smith at [13].
[18] EIC of Gavin Lister at [7].
[19] Submission of Lindsay Poutama (#53).
[20] EIC of Philip Peet at [14]; Technical Assessment A (Transport) at [129]. KiwiRAP Star Ratings are used to identify the most dangerous sections of the road network, with a 2 star road signifying major deficiencies in some road features and/or many minor deficiencies: EIC of Philip Peet at [14] and fn 2.
[21] Technical Assessment A (Transport) at [124]-[125]; EIC of Philip Peet at [14].

(b) there were an additional 107 minor injury crashes and 303 non-injury crashes;[22] and

22. In 2022 there were 26 DSIs, a significantly higher figure than the annual average of 14.4 DSIs for the preceding five years.[23]

Resilience

23. SH1 is critical for providing connections within the lower North Island and further afield. The only alternative route, State Highway 2 (**SH2**), adds significant additional travel time and itself lacks resilience.

24. Events occurring between Manakau and Ohau that close SH1 increase trip time from Wellington to Levin by at least two hours.[24] In a scenario where SH1 was closed and where there was no viable alternative (except SH2), the indicative total cost per day to road users is $2-2.5 million.[25]

25. Between 2017/18 and 2021/22, there were at least 28 unplanned closures on SH1 between Ōtaki and north of Levin. There were also 135 events that caused cautions, including surface water flooding, rockfalls and dropout.[26]

26. The highest risks to the Ōtaki to north of Levin section of SH1 (in its current configuration) relate to:[27]

(a) earthquakes – five bridges have a high or significant earthquake disruption risk, four of which are located on SH1 between Manakau and Ohau and have no viable alternate route;

(b) flooding – the existing highway passes across a floodplain and is also subject to surface flooding (two recent large-scale events closed the highway – one for 90 minutes and the other for over 24 hours); and

(c) crashes –high severity crashes often occur in the Project area resulting in highway closures for several hours.

Forecast growth

27. Waka Kotahi has used a projection that an additional 16,000 people are expected to be living in the District in 2040 (compared to in 2019).[28] That will

[22] Technical Assessment A (Transport) at [127].
[23] EIC of Philip Peet at [15].
[24] Outside peak times.
[25] AEE at 14; Ōtaki to North of Levin Indicative Business Case' December 2018: Ōtaki to north of Levin Indicative Business Case – December 2018 (nzta.govt.nz) at 25.
[26] Technical Assessment A (Transport) at [141] and AEE chapter 3.1.1, fn 1.
[27] Technical Assessment A (Transport) at [5], [7], and [140]; EIC of Philip Peet at [16].
[28] AEE, chapter 3.1.3, at 14.

place additional strain on local roads and the state highway network and exacerbate safety, resilience and congestion issues.[29]

28. If growth eventuates as forecast, the number of vehicles passing through Levin daily is projected to increase by over 100% between 2019 and 2039.[30] In addition to the congestion, access and safety issues, this will result in considerable additional social and amenity effects on the Levin town centre due to SH1 running through the middle of it.

Project objectives

29. To address these serious and pressing concerns, Waka Kotahi has developed the following objectives for the Ō2NL Project for the purposes of section 171(1) of the Resource Management Act 1991 (**RMA**):[31]

    (a) Enhance safety of travel on the state highway network;

    (b) Enhance the resilience of the state highway network;

    (c) Provide appropriate connections that integrate the state highway and local road network to serve urban areas;

    (d) Enable mode choice for journeys between local communities by providing a north-south cycling and walking facility; and

    (e) Support inter-regional and intra-regional growth and productivity through improved movement of people and freight on the state highway network.

Engagement

30. Since the Project's inception, Waka Kotahi has committed to meaningful engagement and consultation. An integrated approach has been used, including:

    (a) successive phases of public consultation since 2011;[32]

    (b) engagement with the Iwi Project Partners, which evolved into the current Project Partnership arrangements;

[29] AEE at 3.1.2, at 14.
[30] From 14,100 vehicles per day in 2019 (including 1,100 heavy vehicles) to 20,000 vehicles per day in 2039 (including over 2,000 heavy vehicles), AEE at 3.1.2, at 14.
[31] See AEE, chapter 4.6, at 23.
[32] AEE at 35.1, at 169.

(c) working closely with the Councils throughout the Project's lifespan, from scoping and methodologies to site visits, review of draft reports and conditions and regular meetings;

(d) the establishment of a Project Reference Group in 2017, which in 2020 evolved into four separate Ō2NL Community Groups;[33] and

(e) other meetings with stakeholders, including affected landowners, neighbours, local government and statutory agencies, local schools, businesses and business interest groups, environmental and community interest groups and utility and other service providers.[34]

The RMA proceedings

31. In November 2022 Waka Kotahi lodged applications for NoRs and resource consents with the Councils, together with a request for direct referral to the Environment Court.

Notices of requirement

32. The NoRs lodged with HDC and KCDC sought designations to enable the Project. The extent of the proposed designations is shown on the plans and drawings in Volume III of the AEE.

Resource consents

33. Waka Kotahi lodged applications with Horizons and GWRC for a range of consents including land use consents, water permits, and discharge permits (to land, water and air) to authorise the activities necessary for the construction and operation of the Project. The relevant activities include:[35]

(a) earthworks;

(b) vegetation clearance;

(c) activities in the bed of any lake or river;

(d) taking and diversion of water;

(e) discharges:

(a) of sediment during construction; and

[33] Representing the communities of Manakau, Ohau, Levin and North Levin.
[34] AEE at 34.5, at 165.
[35] AEE at chapter 4.1, at 22.

(b) of stormwater within or to an identified rare or threatened habitat;

(c) works within a significant wetland including reclamation and land disturbance; and

(d) drainage and diversion of surface water.

Notification, submissions, direct referral and section 274 parties

34. The Application was publicly notified by the Councils on 24 January 2023. Submissions on the Project closed on 28 February 2023 and 90 submissions were received, including 27 submissions either supporting or conditionally supporting the applications, 6 neutral submissions, and one submission with components both in support and in opposition. The key issues raised by submitters included:

(a) transport/traffic issues including alternative transport options, construction traffic, general traffic volumes and provision for equestrians / horses via a bridle path;

(b) construction and operational noise and vibration;

(c) air quality (including dust);

(d) effects on water quality including groundwater, drinking water and water bores;

(e) stormwater, flooding and drainage concerns;

(f) ecological effects;

(g) social effects;

(h) landscape, visual and natural (and rural) character and amenity effects;

(i) design (including bridge and rail) and route selection;

(j) provision for network utilities;

(k) interaction with the Tara-Ika development area;

(l) effects on farm facilities and loss of productive land; and

(m) property-related effects (including business effects, access, privacy/security, and acquisition).

35. The submissions in support focussed on the Project's key benefits, including safety and efficiency improvements, resilience benefits, air quality improvements, improved amenity for residences on the existing SH1, and economic, social and community benefits.

36. The requests for direct referral were granted by the Councils on 20 January 2023. The Councils' section 87F and 198D reports were issued on 28 April 2023, and on 1 May 2023 Waka Kotahi filed a notice of motion for direct referral of the Project together with the supporting affidavit of Lonnie Dalzell.

37. At the close of the section 274 period on 22 May 2023, and following an extensive period of engagement between Waka Kotahi and submitters, 35 section 274 notices were received.

38. That number has since reduced, following mediation and expert conferencing. There are now just 11 section 274 parties who have live concerns (outside of the Project Partners).[36]

39. Issues raised by members of the community throughout the process – from early engagement stages through to the Environment Court process – have informed the options selected and contributed to key design and condition refinements as well as enhanced mitigation options for adverse environmental effects. Details of this engagement are explained in Part F of the AEE[37] and in the evidence of Mr Dalzell[38] and Waka Kotahi is grateful for the willingness of a wide range of parties to engage in a constructive discourse about the Project.

40. For a publicly notified project of this scale – which spans 24 kilometres of road and traverses two regions – the low number of submitters on the Project (and the even lower number of parties that remain) is notable. In counsel's submission this reflects the extensive engagement and careful design that Waka Kotahi has undertaken over many years and the overall level of community support for the Project.

[36] These are: Kāinga Ora, Forest and Bird, John Bent, Kāpiti Equestrian Advocacy Group and NZ Equestrian Advocacy Group, Horowhenua Equestrian Advocacy Group, Stephen Main, Rochelle Murray-Apatu, John Brown, Kevin Daly, Te Ao Turoa Environmental Centre on behalf of Rangitāne o Manawatū and Jan Windleburn. All other remaining section 274 parties are either Iwi Project Partners (MTA and the 10 hapū of Ngāti Raukawa), s274 parties in support (Speldhurst Country Residents Association and Horowhenua NZ Trust), or parties either not participating in the hearing (James McDonnell Limited and the Prouses) or in the process of withdrawing (Christine Wallis, Louise Miles and Sarah Hodge). Discussions with the Prouses are very advanced. Counsel will file any submissions that are required in respect of the Prouses' concerns by 3pm Friday 20 October 2023.
[37] AEE Part F, at 155 – 173.
[38] EIC of Lonnie Dalzell at [129]-[163].

PART C: STATUTORY FRAMEWORK

Notices of Requirement

41. Waka Kotahi is a network utility operator approved as a requiring authority under section 167 of the RMA.[39] Sections 168 to 179 of the RMA set out the process for a requiring authority giving notice of its requirement for a designation, and for the consideration of that notice.

42. Section 171(1) of the RMA frames the Court's consideration and provides that, when considering the NoR and any submissions, the Court must (subject to Part 2 of the RMA) consider the effects on the environment of allowing the requirement, having particular regard to:

    (a) any relevant provisions of a national policy statement, the New Zealand Coastal Policy Statement (**NZCPS**), a regional policy statement or proposed regional policy statement, and a plan or proposed plan;

    (b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work;

    (c) whether the work and designation are reasonably necessary for achieving the objectives of the Transport Agency for which the designation is sought; and

    (d) any other matter the Court considers reasonably necessary in order to make their recommendation on the NoRs.

43. Section 198E(6) provides that the Court may:

    (a) cancel the requirement;

    (b) confirm the requirement; or

    (c) confirm the requirement, but modify it or impose conditions on it as the Court thinks fit.

44. If the NoRs are confirmed by the Court, HDC and KCDC will then add the designations to their respective District Plans.

[39] The relevant Gazette Notices are: Resource Management (Approval of Transit New Zealand as Requiring Authority) Order 1992 (NZ Gazette, Notice Number 1994-go1500) – and refer Schedule 2, Clause 29 of the Land Transport Management Act 2003 which confirms that the order applies to NZ Transport Agency; and Resource Management (Approval of NZ Transport Agency as a Requiring Authority) Notice 2015 (NZ Gazette, Notice Number 2015-go6742) – which confirms the NZ Transport Agency as a requiring authority for the purpose of constructing or operating (or proposing to construct or operate) and maintaining cycleways and shared paths.

Outline plan

45. Under section 176A of the RMA, Waka Kotahi must submit an outline plan prior to construction commencing to allow HDC and KCDC to request changes. The requirement to submit an outline plan does not apply in certain circumstances, including where the details of the proposed public work, project, or work are incorporated into the designation.[40]

46. The Project is currently at the consent design stage,[41] with detailed design to follow. Waka Kotahi is not seeking to waive the requirement to submit outline plans, except for establishment works where a waiver is sought.[42]

47. The conditions proposed by Waka Kotahi, appended to the rebuttal evidence of Ainsley McLeod, require compliance with section 176A through conditions:

    (a) DGA2 (which requires Waka Kotahi to comply with the most recent version of an outline plan submitted to the District Council under section 176A); and

    (b) DGA6 (which requires the preparation of an outline plan, and its submission to the District Council, in accordance with section 176A[43]).

The resource consents

Bundling and the Section 104D 'gateway' tests

48. The resource consent applications are for activities which have been 'bundled' together and assigned an overall activity status of **non-complying** (the most restrictive applicable activity status).[44] Section 104D therefore applies to the Project. Under section 104D a decision maker may only grant resource consent applications for non-complying activities if **either**:

    (a) the adverse effects of the activity on the environment will be minor; **or**

    (b) the activity will not be contrary to the objectives and policies of the relevant plan or proposed plan.

49. The technical assessments on which the Project relies demonstrate that not all of the Project's adverse effects will be minor, however the Project has been designed to ensure it is not contrary to the objectives and policies of

[40] RMA, s 176A(2)(b).
[41] EIC of Grant Eccles at [113].
[42] EIC of Ainsley McLeod at [30](b).
[43] Subject to conditions DGA7 (revision of an outline plan) and DGA8 (waiving the outline plan requirement for establishment works under section 176A(2)).
[44] EIC of Grant Eccles at [43].

the relevant plans, thus meeting the 'objectives and policies' gateway test under section 104D)(1)(b).

Section 104

50. Under section 104(1) the Court must, subject to Part 2 of the RMA, have regard to:

    (a) any actual and potential effects on the environment of allowing the activities;

    (ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity;[45]

    (b) any relevant regulations and provisions of statutory planning documents; and

    (c) any other matter the Court considers relevant and reasonably necessary to determine the applications.

Sections 105 and 107

51. Sections 105 and 107 apply to the consents sought by Waka Kotahi for discharges of clean fill, discharges to air (during construction) and discharge of water or contaminants into water or onto or into land within a rare or threatened habitat in accordance with Schedule F of the One Plan[46]

52. Grant Eccles' evidence-in-chief draws together other evidence relating to the section 105 matters.[47] None of the section 107 restrictions apply[48] and the Regional Councils' planning expert, Mark St Clair, agrees that section 105 has been addressed[49] and that *"the proposed activity is consistent with Section 107 of the Act."*[50]

[45] The equivalent section for designations is section 171B.
[46] AEE at chapter 29, at 153.
[47] In particular that relating to air quality (summarised at [122]-[125] of the EIC of Grant Eccles), hydrogeology and groundwater (summarised at [133]-[138]), surface water quality (summarised at [139]-[141]) and freshwater ecology (summarised at [149]-[154]).
[48] AEE chapter 73.7, at 379.
[49] Mark St Clair (expert planning witness for the Regional Councils) also stated at [318] of his section 87F report that *"from a planning perspective, it is my view that the provisions of Section 105…have been addressed."*
[50] [323] of Mr St Clair's section 87F report.

PART D: ENVIRONMENTAL EFFECTS

Introduction

53. The Project's effects on the environment are central to the Court's consideration under sections 104 and 171 of the RMA, as well as the RMA's sustainable management purpose under section 5(2)(c), which includes "*avoiding, remedying, or mitigating any adverse effects of activities on the environment*".

Transport

54. The Project's transport benefits will be significant and wide-reaching, particularly in light of the current safety issues and the anticipated population growth in the area.

55. Mr Peet describes the transport effects of the Project in detail in Technical Assessment A and his evidence-in-chief. The transport experts agree on the benefits of the Project. For KCDC, David Dunlop confirms in his evidence that he supports the overall transport assessment for the Project,[51] while Tim Kelly (for HDC) states in his evidence:[52]

> *…the Ō2NL Project will create a number of positive effects and be highly beneficial for the Horowhenua District, the wider region and beyond. This is particularly so in terms of the improved safety and efficiency of the roading network*.

56. The only transport matters in dispute between Waka Kotahi and the District Councils relate to conditions addressing:

    (a) the form of the Project's southern interchange (a KCDC matter); and

    (b) whether a 'Network Integration Plan' should be required.

Transport: safety

57. Mr Peet explains that the new route will:[53]

> *be a modern, high-quality highway, and will address the fundamental safety and resilience problems impacting the current transport network and result in quicker and more reliable trips for users.*

[51] At [31].
[52] At [23].
[53] EIC of Philip Peet at [30].

58. By taking traffic off the current highway, and constructing a new section of state highway designed to remove conflicts, the chances of DSIs occurring will be significantly reduced. The Project itself is expected to save in the order of 35 DSIs every five years, which would be a reduction in DSIs of:[54]

    (a) approximately 55%, when compared against the DSI statistics on the current state highway network (including the new Ō2NL State Highway and the existing SH1 and SH57); and

    (b) approximately 10% on the local roads, when compared against the *"Do-Minimum"* scenario outlined in Technical Assessment A and Mr Peet's evidence-in-chief.[55]

59. The Project, coupled with the safety improvements that form part of the *"Do-Minimum"* scenario, will save approximately 60 DSIs per five-year period.[56]

60. The other key safety benefits described by Mr Peet include that:

    (a) the Ō2NL Project is designed to target (at least) a KiwiRAP 4 Star rating, which will be a significant improvement compared to both the current 2 Star Rating, and the 3 Star rating under the *"Do-Minimum"* scenario, for SH1 and SH57;[57]

    (b) with the inclusion of the Ō2NL Project, the percentage of the current highways along the Project's span classified as 'Medium' or 'Medium High' on the Infrastructure Risk Rating[58] will reduce from around 84% to 39%;[59]

    (c) the Ō2NL Project has been designed with a design speed greater than or equal to the proposed speed limit so it will not have a travel speed gap;[60] and

    (d) the Project is forecast to result in an overall volume reduction of approximately 7,100 vehicles per day across level crossings in the

[54] Technical Assessment A (Transport) at [225].
[55] The *"Do-Minimum"* scenario is the assumed transport network predicted for 2039, including planned growth and population increase, PP2Ō, online state highway safety improvements and HDC local road improvements. It does not include the Ō2NL Project: see Technical Assessment A (Transport) at [48](b), and the EIC of Philip Peet at [11](b).
[56] EIC of Philip Peet at [31].
[57] EIC of Philip Peet at [14] and [31]; Technical Assessment A (Transport) at [129] and [227].
[58] This is a proactive measure of risk based on infrastructure; it is less sensitive to crash history: see Technical Assessment A (Transport) at [72], and fn 12.
[59] Technical Assessment A (Transport) at [229].
[60] Technical Assessment A (Transport) at [231]. The sections that will remain at 'Medium' or 'Medium High' are on the old SH1 where traffic volumes will be significantly lower once Ō2NL is operational.

Project area, a 14% reduction compared to the "*Do-Minimum"* scenario.[61]

Transport: Resilience

61. The Project will improve New Zealand's transport network and the resilience of the roading network by removing highway traffic from the old SH1 and re-routing it onto a new, modern, safe, fit-for-purpose section of road – thus completing the key route connecting the central and lower North Island.

62. Not only will the new section of SH1 have a significantly reduced chance of road closure due to crashes and natural hazards, but the current SH1 (and SH57) will provide a continuous parallel route, which will: [62]

    (a) accommodate a portion of the trips within and through the Project area;

    (b) be available for use if the new SH1 closes due to an unplanned event.

63. The new section of SH1 will also respond much more effectively to extreme weather events and the effects of climate change than the present SH1, which will be a key advantage for freight companies using this route.[63] It has been designed to withstand:[64]

    (a) 1:100 Annual Exceedance Probability (**AEP**)[65] rain events (in 2130 and allowing for climate change), which, as discussed in the evidence-in-chief of Jack McConchie, accords with best practice and is correct and conservative[66]; and

    (b) 1:1500 year earthquake events.

64. Resilience has also been highlighted as a key benefit in submissions, including the Ia Ara Aotearoa Transporting New Zealand submission[67] and the New Zealand Heavy Haulage Association submission.[68] The elected members of HDC have also voiced their support for the Project's resilience and safety focus, stating that "*Ō2NL will make a significant contribution towards addressing these issues."*[69]

[61] Technical Assessment A (Transport) at [232].
[62] EIC of Philip Peet at [33].
[63] Technical Assessment A (Transport) at [243].
[64] Technical Assessment F (Hydrology and flooding) at [6] and [34]-[35] and AEE at chapter 41.2.3, at 210; see also EIC of Jack McConchie at [16]-[18].
[65] AEP refers to the probability of an event occurring in any given year.
[66] EIC of Jack McConchie at [19] and [160]-[170].
[67] Submission of Ia Ara Aotearoa Transporting New Zealand (#15).
[68] Submission of the New Zealand Heavy Haulage Association (#76).
[69] Submission of Mayor Wanden and the HDC elected members (#67).

Journey time savings

65. Journey times will markedly reduce compared with the *"Do-Minimum"* scenario,[70] with 11-15 minute reductions for trips from Ōtaki to destinations north of Levin and 6 minute savings for trips to Levin.[71] This will, in turn, improve reliability and result in efficiency benefits for network users, freight and logistics companies, and other people travelling through the area.[72]

The SUP and active modes

66. The Project encourages and facilitates walking and cycling through the SUP, which will run along the entire length of the new highway (deviating slightly in some locations) and connect to existing shared path facilities built as part of the PP2Ō and Mackays to Peka Peka projects.[73]

67. As Mr Peet discusses, the SUP will enable pedestrians and cyclists to travel north and south to crossings of Ō2NL which will connect to facilities to the west.[74] It also provides an opportunity for future linkages through walking and cycle paths joining the SUP from the east and west of the Project. The SUP will have important social and connectivity benefits, discussed in the evidence-in-chief of Joanne Healy.[75]

68. The Kāpiti Equestrian Group, Horowhenua Equestrian Advocacy Group, and New Zealand Equestrian Advocacy Network (together the **Equestrian parties**) request that the SUP specifically provide for equestrian use.

69. The SUP is not intended to provide for equestrian use. Mr Peet, Ms Healy and Mr Dalzell give evidence that providing for equestrian use is not required to address any RMA effect – this is a distinction between the Project and the two Kāpiti expressways where the SUPs do cater to horse riders.[76] Mr Dalzell also explains the additional costs associated with safely providing for equestrian use of the SUP.[77] Further, no experts for the councils consider that Waka Kotahi should be required to provide for equestrian use of the SUP.[78]

[70] Acknowledging the increased travel times and delays under the *"Do-Minimum"* scenario compared with the existing situation: EIC of Philip Peet at [26].
[71] EIC of Philip Peet at [34].
[72] Other submissions, including those of Helen Naylor (#9) and Speldhurst Country Estate Residents Association (#30) also highlight this key benefit.
[73] EIC of Jamie Povall at [15](i).
[74] EIC of Philip Peet at [123].
[75] EIC of Joanne Healy at [15].
[76] EIC of Philip Peet at [57]-[59], EIC of Jo Healy at [74]-[77], rebuttal of Lonnie Dalzell at [10]-[13].
[77] Rebuttal of Lonnie Dalzell at [13].
[78] EIC of Michala Lander at [15]; evidence of Helen Anderson at [132].

70. While Waka Kotahi acknowledges that providing for equestrian use of the SUP would have benefits, in simple terms it is outside the scope of the Project. There is no RMA basis for requiring Waka Kotahi to agree to the request made by the Equestrian parties.

The southern interchange

71. The Project includes a southern interchange, near Taylors Road, providing connectivity on and off the new highway. The form of the interchange was selected through a detailed consideration of alternative options.[79]

72. KCDC would prefer a different form of southern interchange, though its preferred form of southern interchange was different to its consultant expert Mr Dunlop's preferred form.[80] Subsequently, in his evidence Mr Dunlop presented an indicative interchange that aligned with KCDC's preference.[81] Mr Dunlop's view is that this form of interchange is feasible, but conceptual.[82]

73. In response, Mr Peet reiterates his consistently expressed concerns that an option along those lines would have significant cost and adverse effects implications. He also has significant safety concerns with Mr Dunlop's option.[83]

74. KCDC is no longer asking that the Court replace the proposed form of the southern interchange with its preferred design. Instead, KCDC seeks a condition that would "*allow flexibility for Waka Kotahi to provide a suitable alternative arterial connection in the vicinity of Taylors Road at the OPW stage*".[84] Waka Kotahi does not support that condition. Ms McLeod notes:[85]

    (a) the potential adverse effects associated with the KCDC option, which have not been assessed in any detail; and

    (b) the proposed condition is not required to address adverse transport effects.

[79] AEE at chapter 28.1, at 149.
[80] EIC of David Dunlop at [17]-[18].
[81] EIC of David Dunlop at [22].
[82] EIC of David Dunlop at [20].
[83] Rebuttal evidence of Phil Peet at [17]-[22]. See also the Transport Joint Witness Statement (**JWS**) ('Southern interchange' column).
[84] Evidence of Helen Anderson at [27].
[85] Rebuttal of Ainsley McLeod at [142]-[144].

Tara-Ika and the East-West Arterial

75. Plan Change 4 (**PC4**) to the Horowhenua District Plan (**HDP**) promotes the residential development of land at Tara-Ika, to the immediate east of the current SH57 as it passes Levin. The Project traverses the Tara-Ika land.

76. PC4 and its associated 'Structure Plan 13' envisages connections across the Ō2NL corridor, including an 'East-West Arterial' (**EWA**) and two 'strategic cycleways'. PC4 and the Structure Plan are silent as to who should provide those connections.[86] PC4 is not yet operative, and counsel understand that no consents to progress the anticipated development have been granted by HDC and/or Horizons.

77. Mr Dalzell confirms in his evidence that Waka Kotahi has offered to fund the construction of the EWA as it crosses the Project alignment (via an overpass).[87] However, Waka Kotahi is not proposing to authorise the EWA (or any other crossings into Tara-Ika) through this RMA process.

78. The fact that Waka Kotahi did not seek to authorise and commit to the construction of the EWA as part of this proceeding was a key focus of HDC's initial reporting in these proceedings, and the submissions and s274 notices of James McDonnell Limited (**JML**) and Kevin Daly.

79. There have been productive discussions between Waka Kotahi and HDC (in particular) as well as JML. Subsequently:

    (a) JML no longer takes issue with the approach proposed by Waka Kotahi, and has confirmed it does not wish to play any further active role in the proceeding;[88] and

    (b) Helen Anderson (planner for the District Councils) confirms that the commercial arrangement being progressed between HDC and Waka Kotahi is an appropriate mechanism for delivery of the EWA and strategic cycleways.[89]

80. Ms Anderson alludes to the possibility of the Ō2NL designation 'enabling' (but not requiring) the construction of the EWA and strategic cycleways, but

[86] As discussed in the EIC of Grant Eccles at [73].
[87] EIC of Lonnie Dalzell at [135].
[88] Reporting memorandum of counsel for JML dated 11 October 2023.
[89] Evidence of Helen Anderson at [101]-[102].

considers it is for Waka Kotahi to propose any condition.[90] For the avoidance of doubt, Waka Kotahi does not propose such an 'enabling' condition.

Ongoing access arrangements

81. Appropriate ongoing road network (including state highway) access will be provided for all residents and businesses once the Project is operational. Mr Peet explains that there will be a small number of properties that will face longer travel times for certain trips than they do now.[91] He considers those effects to be minor, particularly in the context of the overwhelmingly positive transport effects of the Project.[92]

Local road condition survey and network integration plan

82. In their evidence for the District Councils, Mr Kelly and Mr Dunlop recommend conditions requiring a local road pre and post construction condition survey and a 'network integration plan'.[93]

83. Mr Peet supports the condition survey concept; Ms McLeod has proposed a condition accordingly.[94] However, Mr Peet and Ms McLeod do not consider a network integration plan should be required by conditions, because:[95]

    (a) it is not clear what effect the requirement is intended to address; and

    (b) changes to local roads will need to be agreed with the District Councils as road controlling authorities in any event.

Design changes sought by other submitters

84. A small number of submitters seek changes to the design of the Project, including Roger McLeary and Errol Christensen (who are not s274 parties) and Jan Windleburn (who is a s274 party). Mr Windleburn opposes the disconnection of Kimberley and Arapaepae Roads and seeks elevation of the proposed highway to be over the roads.

85. Mr Peet responds to those submissions in his evidence,[96] including noting the significant cost that the elevation sought by Mr Windleburn would incur.[97]

[90] Evidence of Helen Anderson at [103]-[104].
[91] EIC of Philip Peet at [41]
[92] EIC of Philip Peet at [40].
[93] Evidence of Tim Kelly at [18]-[22] and evidence of David Dunlop at [30].
[94] Rebuttal of Ainsley McLeod at [182] and Condition DCT2.
[95] Rebuttal of Philip Peet at [26] and rebuttal of Ainsley McLeod at [184].
[96] EIC of Philip Peet at [80]-[92].
[97] EIC of Philip Peet at [88].

For completeness, Waka Kotahi does not consider those changes to be necessary in RMA effects terms, and does not propose to pursue them.

Construction traffic and access

86. Construction traffic impacts are inevitable for a highway project of this scale. That said, those effects will be less than they might otherwise be because the Project is an 'offline' highway, largely being constructed away from the existing SH1 and SH57.[98]

87. Effects relating to heavy vehicle movements and site accesses will be managed according to Waka Kotahi standard practices and to provide for safety, efficiency and ongoing access for residents and road users.[99]

88. Designation conditions are proposed to that end, with the detailed arrangements to be set out in a Construction Traffic Management Plan (**CTMP**).[100] Of particular note, Waka Kotahi and KiwiRail have agreed the approach to interaction between construction of the Project and the NIMT, and KiwiRail has subsequently withdrawn its s274 notice.[101]

89. The experts for the District Councils raise no issues with the construction traffic and access management regime proposed by Waka Kotahi.

90. A small number of submitters raise construction traffic and access issues. Mr Peet explains the specific arrangements, and his view that they will be appropriate, in his evidence.[102]

Economic benefits, enabling growth and the Levin town centre

91. There are significant economic benefits associated with the Ō2NL Project, as addressed in the evidence-in-chief of Douglas Fairgray and Mr Dalzell.[103]

92. The positive effects of construction are related to the impacts of construction-related expenditure, while the operation of the Project will stimulate strong population and economic growth in the medium to long term, expanding the size of the economy and employment levels, and growing the market for goods and services that will enhance the performance of Levin town centre.

[98] EIC of Philip Peet at [43].
[99] EIC of Philip Peet at [44].
[100] Condition DCT1 and Schedule 2 to the designation conditions.
[101] Notice of KiwiRail Holdings Limited Withdrawing Section 274 Interests, filed 14 August 2023.
[102] EIC of Phil Peet from [62].
[103] EIC of Douglas Fairgray at [16]-[40]; EIC of Lonnie Dalzell at [58].

93. Projected growth in the Horowhenua District (and growth more widely) is one of the key needs that this Project has been designed to meet. Removing SH1 traffic from the Levin town centre will also support economic growth.

94. In summary, the Project:

(a) will stimulate economic activity in the short-term (through the construction phase), and generate positive long-term economic effects in the Horowhenua District;[104]

(b) is estimated to have a net GDP impact of between $59M and $139M on the Horowhenua District in the medium (10 year) term, representing a 0.5% - 1.1% uplift in the District economy; [105]

(c) is estimated to have an overall net GDP impact of $1.166B – 1.293B of which $45-$60M may accrue to the Kāpiti Coast economy;[106]

(d) will have significant long-term economic benefits in terms of population and economy growth, which would offset any negative impacts resulting from loss of agricultural activity.[107]

(e) will contribute to an increase in retail demand and sales in the Levin town centre;[108] and

(f) will unlock wider economic benefits (**WEB**s) (including benefits to productivity, employment, competition and regional development) through increased connectivity in the region and the resulting shifts in the competitive landscape.[109]

95. Economic benefits were also a central theme in the Project's supporting submissions.[110] The elected officials of HDC submitted that: [111]

> *Ō2NL will support District growth, unlock the potential of housing growth areas, improve business opportunities, and increase the range of employment and education opportunities accessible to our community.*

[104] EIC of Douglas Fairgray at [38].
[105] EIC of Douglas Fairgray at [17].
[106] EIC of Douglas Fairgray at [35].
[107] EIC of Douglas Fairgray at [37].
[108] EIC of Douglas Fairgray at [26].
[109] EIC of Douglas Fairgray at [33]-[35]. For a full discussion of the factors informing the valuation of WEBs, see Technical Assessment O (Economics and Town Centre Impacts) at [134]-[177], which includes analogy to domestic and international case studies on the long-term benefits of infrastructure spending; see also Part G of the AEE at chapter 41.1, at 296.
[110] Including the submissions of the Horowhenua Company (#19), the Horowhenua New Zealand Trust (#35), Anthony and Nancy Young (#28) and Lynette Bailey (#37).
[111] Submission of Mayor Wanden and the HDC elected members (#67).

96. By shifting traffic away from the old SH1 and onto a new and carefully designed state highway, the Project will not only achieve significant safety and resilience benefits, but it will also facilitate and support the growth that is predicted to occur in the Horowhenua District (and beyond) in the coming years.

Cultural effects

97. The evidence filed on behalf of the respective Iwi Project Partners addresses the cultural effects of the Project.

98. Having undertaken extensive hui and korero with the Iwi Project Partners, Waka Kotahi understand that at this stage:

    (a) MTA is now *"comfortable [the conditions] cover matters of importance to MTA"*;[112] and

    (b) although the hapū of Ngāti Raukawa consider there is still work to be done on the conditions to achieve the outcomes sought, *"progress has been made"*[113] and there is a commitment to *"finding a way to work together constructively…"*[114]

99. More generally, MTA and the hapū of Ngāti Raukawa have expressed support for the Project.[115]

100. That support is on the basis of the Project's safety, resilience, economic, growth-enabling, social and connectivity benefits[116] as well as the engagement undertaken by Waka Kotahi throughout the process which has ensured iwi and hapū have a strong voice in the Project's development.[117]

101. In particular, Ms Rump, on behalf of MTA, endorses "*the safety and resilience benefits the road will bring for our wider community and those who pass through our rohe"*[118] while also acknowledging the Project's importance in a partnership context by stating *"the desire and possibility does exist to*

[112] Rebuttal of Siobhan Karaitiana at [16].
[113] Rebuttal of Wayne Kiriona at [9]. Mr Kiriona's rebuttal is on behalf of Ngāti Kapu, Ngāti Tukorehe, Ngāti Wehi Wehi, Ngāti Kikopiri, Ngāti Hikitanga, Ngāti Pareraukawa, Ngāti Huia ki Poroutawhao, Ngāti Huia ki Matau, Ngāti Takihiku and Ngāti Ngarongo).
[114] Rebuttal of Quentin Parr at [7].
[115] Acknowledging the positions expressed by some iwi witnesses that there are still some outstanding condition and CEDF matters.
[116] See, for example, EIC of Dianne Rump at [79], [83]; EIC of Kim Tahiwi and Rawiri Rikihana at [28].
[117] See [6.1] of each of the 10 section 274 notices filed by the hapū of Ngāti Raukawa. See also EIC of Quentin Parr at [30].
[118] Ms Rump does query, however, the extent to which the Project will directly benefit Muaūpoko members. See EIC of Dianne Rump at [79].

deliver a stunning hitherto unknown or seen showcase for Iwi and Crown partnership".[119]

102. Lindsay Poutama, representing Ngāti Tukorehe, *"strong[ly] support[s] the key outcomes the Project will deliver",* acknowledging the *"major concerns"* with the existing SH1 in terms of safety, resilience, noise and access.[120]

103. Dean Wilson, on behalf of MTA, also speaks to the *"strong support from Muaūpoko for the Project, thanks in large part to all of the engagement sessions that have taken place."*[121]

104. Kim Tahiwi and Rawiri Rikihana, for Ngā Hapū o Ōtaki on behalf of Ngāti Kapu, refer to the *"mutually respectful engagement [which] has resulted in a positive and inclusive process of engagement with Ngā Hapū o Ōtaki on behalf of Ngāti Kapu"* which *"has ensured that our tikanga and kawa are embedded into the development of the Project up to this point."*[122]

105. Waka Kotahi acknowledge that the Project will *"carve a scar through Papa-tū-a-nuku"*[123] and that this may result in some cultural, physical and spiritual effects that are, to an extent, unavoidable given the nature of the Project.

106. However, through the constructive ongoing korero and hui between the Project Partners, the development and implementation of the CEDF, and carefully drafted conditions and mitigation measures, significant progress has been made, as demonstrated by the evidence of:

    (a) Mr Wilson, who records that *through these careful design measures, investigations, hui and other measures, any adverse effects of the Project have been considerably reduced compared to what they could have been;*[124] and

    (b) Janelle Tamihana, on behalf of Ngāti Takihiku and Ngāti Ngarongo (Ngā hapū o Kererū), who states *"we are largely happy with where the Project is currently, and the direction it is heading in".*[125]

[119] EIC of Dianne Rump at [83].
[120] EIC of Lindsay Poutama at [25]-[28].
[121] EIC of Dean Wilson at [113].
[122] EIC of Kim Tahiwi and Rawiri Rikihana (04.07.2023) at [23].
[123] See, for example, EIC of Lindsay Poutama at [32]; EIC of Janelle Tamihana at [42]; EIC of Quentin Parr at [41].
[124] EIC of Dean Wilson at [66].
[125] EIC of Janelle Tamihana at [25]. This statement was subject to matters of particular importance that Ms Tamihana highlighted in her evidence: effects on Kōpūtōroa Stream and a legacy issue relating to Te Ripo o Hinemata Wetland.

107. There is a demonstrated shared commitment to working together in partnership.[126] As captured in the evidence-in-chief of Te Kororangi Hakaraia (on behalf of Ngāti Wehi Wehi):[127]

> *…having three Project Partners working together on a large Project traversing a wide landscape can be challenging, and there will be times that opinions differ, However, provided there is a mutual respect, a shared commitment and a clear and fair dispute resolution process established, we are confident that we as Project Partners will be able to deliver a quality project that will have multiple safety, connectivity, social, economic and cultural benefits for our whānau, hapū, iwi and the wider community.*

Other effects

Noise and vibration

108. Michael Smith on behalf of Waka Kotahi provided a detailed technical assessment on potential positive and negative noise and vibration effects of the Project.

109. The positive effects relate to traffic being removed from the existing SH1. That reduces the traffic noise levels of those dwellings, marae, business and communities that have established alongside the SH1 corridor. In summary:[128]

(a) The number of protected premises and facilities (**PPF**s) exceeding 67 dB LAeq(24h) (Category C) is predicted to reduce from 105 to 23 as a result of the Project. This is a reduction of 78%.

(b) The number of PPFs exceeding 64 dB LAeq(24h) (Categories B and C combined) is predicted to reduce from 225 to 65 as a result of the Project. This is a reduction of 71%.

(c) The number of PPFs exceeding 50 dB LAeq(24h) (WHO Guidelines) is predicted to reduce from 997 to 680 as a result of the Project. This is a reduction of 32%.

(d) A reduction of 6.9 disability adjusted life-years (DALYs) by 2039.

110. Additionally:

[126] As stated in the rebuttal of Quentin Parr at [7], the EIC of Te Kororangi Hakaraia at [52] and the EIC of Dean Wilson at [67],for example.
[127] EIC of Te Kororangi Hakaraia at [53].
[128] Technical Assessment B (Noise and Vibration) at [334], [335], [339] and [340], see also Part G of the AEE at chapter 42.2, at 224 and 225.

(a) Although Levin's main street is not considered a sensitive receptor, the Project will remove will reduce heavy vehicle traffic along this road by approximately 47%, improving the character of the noise environment in this area and adding greatly to the community's amenity.[129]

(b) The reduction in traffic on SH1 and SH57 (particularly heavy vehicles) will reduce the number of vibration events from the existing network, and thus result in a positive effect.[130]

Operational noise and vibration

111. By shifting the location of traffic the Project will change the noise environment along its route and will affect households which previously enjoyed lesser background noise levels.[131]

112. NZS 6806:2010 – Road-traffic noise (**NZS 6806**)[132] provides three noise categories (categories A, B, and C of external and internal noise amenity). The categories are in order of preference. If the highest standard cannot be met via the best practicable option (**BPO**) mitigation, the next should be, with category C providing a baseline standard to prevent adverse health effects by mitigating effects on specific PPFs where categories A and B cannot be met. [133]

113. Despite the Project's length there are only 276[134] PPFs in the vicinity of the corridor.[135] The Project, with proposed mitigation, is expected to lead to:[136]

(a) no properties along the alignment in Category C;

(b) 21[137] properties along the alignment in Category B (15 of which are already Crown owned, or will be acquired); and

(c) the remaining properties being below the Category A noise level.

[129] Technical Assessment B (Noise and Vibration) at [347].
[130] Technical Assessment B (Noise and Vibration) at [53].
[131] As noted in Technical Assessment B (Noise and Vibration) at [3] and [4]; and summarised in the AEE chapter 42.
[132] Technical Assessment B (Noise and Vibration) at [58]-[64].
[133] Technical Assessment B (Noise and Vibration) at [72]-[79].
[134] As explained in the EIC of Michael Smith since his technical assessment 2 additional dwellings were identified. One of these was Category A and the other Category B. For consistency he did not update the numbers but did update the Conditions Schedule 9 as required. Since Mr Smith's evidence, 96B Arapaepae Road has also become a category B dwelling but that is addressed in the Kāinga Ora hearing.
[135] For example, homes, schools, and marae, per NZS6806.
[136] Technical Assessment B (Noise and Vibration) at Table B.30, [326]-[334].
[137] As above this number is now 23 and includes 129 Manakau Heights Drive and 96B Arapaepae Road.

114. Mr Smith went further and also looked at residual effects (subjective disruption assessment) and international guidance on noise impacts on human health.[138]

115. Siiri Wilkening (the District Councils' noise and vibration expert), in her s198D Report stated*: "Operational traffic noise has been assessed through a multi pronged approach, with the main focus being NZS6806. The outcomes appear reasonable and as expected."*[139]

116. Consideration of mitigation options is a key part of the process, involving an assessment of different options to determine the BPO.[140] For large projects this assessment involves the input of a range of experts (for example, visual / landscape experts) in a workshop setting to consider the full range of costs (including adverse effects) and benefits of each option.[141] Specific mitigation options involve the extensive use of a High Performance Low Noise Road surface (of which presently only 3km exists in New Zealand), noise walls and the prevention of audio tactile profiled road markings in certain locations.

117. Ms Wilkening agreed with Mr Smith that *"the proposed mitigation appropriately manages the actual and potential noise effects from the operation of the new highway, and have recommended amended condition wording to ensure that the outcomes are as proposed.*[142]

118. These mitigation options are 'locked in' through conditions DRN1 – 3 and DRN5. Condition DRN4 provides for a post-construction review of the noise mitigation measures.

119. The operational noise conditions are now all agreed, apart from two technical points relating to application of the suitably qualified person (**SQP**) within Condition DRN4 and wording around how quickly the chipseal can be replaced with the final, low noise, road surface. These matters are addressed in the rebuttal evidence of Ms McLeod.

120. There is no relevant New Zealand Standard or National Environmental Standard that manages operational road-traffic vibration. Consistent with Waka Kotahi guidance,[143] a Norwegian Standard, NS 817616 has been

[138] See Technical Assessment B (Noise and Vibration) at [80]-[83], and [88].
[139] Section 198D Report, Appendix 3, Ms Wilkening, at [16](c).
[140] While the BPO is defined by the RMA. Specific guideline considerations are provided in section 6.3 of NZS 6806. Mitigation options must canvas the existing situation, the 'do nothing' outcome, the 'do minimum' outcome, and other selected options for mitigation and their effect on operational noise levels.
[141] Technical Assessment B (Noise and Vibration) at [13].
[142] Section 198D Report, Appendix 3, Ms Wilkening, at [16](c).
[143] NZ Transport Agency (2013) Technical memorandum NV3 State highway noise and vibration management

applied. This Standard has been used for previous assessments of road (and rail) vibration in New Zealand and establishes a recommended criterion of 0.3mm/svw,[144] at greater than 15 metres from the edge of a new road (with some new roads showing compliance at much shorter distances). Mr Smith therefore concludes: *"As such, there will be minimal adverse operational vibration effects from the Ō2NL Project."*[145]

121. All PPFs are located considerably more than 15 metres from the indicative edge of the new highway and therefore the Project does not give rise to any adverse operational road-traffic vibration effects.[146] Ms Wilkening agrees.[147]

Construction noise and vibration

122. There are no relevant National Environmental Standards for construction noise, but both district plans[148] require use of the New Zealand Standard NZS 6803 for construction noise.[149]

123. Construction of the Ō2NL Project will include activities that generate noise; such as earthworks, paving and compaction, and piling.[150] As the construction methodology has not been developed conservative parameters[151] were applied to determine unmitigated construction noise levels. Actual noise levels after mitigation cannot reasonably be determined at this stage due to the complexities of noise sources and attenuation within the environment.

124. The fundamental principle from NZS 6803 is that as noise from construction projects is generally of limited duration, people and communities will usually tolerate a higher noise level provided it is no louder than necessary, and occurs within appropriate hours of the day.[152] To give effect to this principle, NZS 6803 gives *"recommended upper noise limits*" for three different construction durations For the Ō2NL Project, the long-term limits from NZS 6803 are applicable.[153] Compliance with the 70 dB LAeq(15min) daytime construction noise standard will generally be achieved for all receivers located more than 50 metres from construction works. Communication with

[144] Norwegian Standard NS 8176:2017 Vibration and shock – Measurement of vibration in buildings from land-based transport and guidance on evaluation of its effects on human beings.
[145] EIC of Michael Smith (04.07.2023) at [53].
[146] Technical Assessment B (Noise and Vibration) at [115] and AEE chapter 42.3 at 227- 228.
[147] Section 198D Report, Appendix 3, Ms Wilkening, at [160](b)..
[148] HDC Rule 19.6.8(c), KCDC Rule NOISE-R10.
[149] New Zealand Standard NZS 6803:1999 Acoustics – Construction noise (**NZS6803**). See Technical Assessment B (Noise and Vibration) at [116].
[150] AEE chapter 42.4, at 228.
[151] Technical Assessment B (Noise and Vibration) at [28] and [216].
[152] See Technical Assessment B (Noise and Vibration) at [119] and NZS6803 foreword.
[153] Technical Assessment B (Noise and Vibration) at [120] – [121].

the occupants of affected PPFs, and the wider community, is also critical for successful noise mitigation and specific provisions are included in the Communication Plan conditions.[154]

125. In her s198D report Ms Wilkening stated:[155]

> *Construction noise and vibration are less simple to calculate … Therefore, the construction noise and vibration assessment focuses more on the management of the effects than the level of effect. I concur with this approach and apply it similarly to my own projects.*

126. This approach is set out in the conditions which reflect industry standard construction noise mitigation practices and are proven to work well.[156]

127. DNV1 sets the limits for construction noise. Any exceedance of these limits is controlled through conditions DNV3 and 4. The Construction Noise and Vibration Management Plan (**CNVMP**) manages the noise from all relevant activities. Where limits are breached (and for some named locations) a Site-Specific Noise and Vibration Plan (**SSNVMP**) must also be prepared (Condition DNV4). Ms Wilkening agrees.[157] The SSNVMPs are prepared in accordance with the methodology in the CNVMP and specific matters to be addressed are stated in the condition, with all SSNVMPs to be provided to the District Councils for comment.

128. Ms Wilkening raises some minor technical matters and these are responded to in the rebuttal evidence of Ms McLeod.

129. In the absence of any national standards, Waka Kotahi has developed construction vibration limits based on standards from other countries. Ms Wilkening endorses this approach.[158]

130. As with noise, construction vibration is managed through conditions (DNV2), the CNVMP and SSNVMPs (Conditions DNV3 and 4).

Hydrology and flooding

131. A range of geotechnical, hydrogeological and groundwater investigations have been undertaken to support the assessment of effects of the Project.[159]

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[154] Technical Assessment B (Noise and Vibration) at [126], [130]-[135] and AEE chapter 42.5.2, at 231.
[155] Section 198D Report, Appendix 3, Ms Wilkening, at [18].
[156] AEE chapter 42.4, at 228.
[157] Section 198D Report, Appendix 3, Ms Wilkening, at [30].
[158] Section 198D Report, Appendix 3, Ms Wilkening, at [24].
[159] Technical Assessment F (Hydrology and Flooding) at [44]-[46] and onwards detailing the specific models and surveying undertaken and AEE chapter 47.1.1, at 262.

The Project has several positive effects including reducing the existing flood hazards, improving resilience, potentially increasing groundwater recharge, improving groundwater quality, and enhancing groundwater-fed water bodies.[160]

132. The assessment of the Project's hydrology impacts is informed by models that represent both the 'baseline' and 'with-scheme' environments. The 'design event' the Project was measured against was a 1% AEP with climate change RCP 6.0 to 2130.[161] This is a greater event (by at least 25%) than required under the One Plan,[162] providing considerable precaution.[163] Unsurprisingly, it was agreed during conferencing to be *"an appropriate basis for assessing effects*."[164]

133. The aim for the Project is to maintain hydraulic neutrality.[165] This is the same approach taken for the PP2Ō Expressway and Te Ahu a Turanga: Manawatū–Tararua Highway (and, in terms of the latter, endorsed by Horizons' technical expert).[166] Where this was not reasonably possible, any effects were kept away from existing habitable structures and largely to areas that are already flood prone. These areas are generally in river corridors or under pasture/trees and in most cases in areas with existing flood hazard.

134. The Project may result in some minor localised increases in water level during extreme flood events.[167] However, these effects at a Project scale are assessed as less than minor because:[168]

    (a) the increase in water level relates only to an extreme event (such as the design event);

    (b) any increase in water level is localised, of short duration, and in a rural context within which flooding already exists;

    (c) no buildings are impacted by any increase in water level;

    (d) any increase in water level beyond the designation dissipates within a short distance; and

[160] AEE chapter 47.2.1 at 263 and the rebuttal of Jack McConchie, at [83].
[161] Technical Assessment F (Hydrology and Flooding) at [114]-[116].
[162] Rebuttal of Jack McConchie, at [74].
[163] Rebuttal of Andrew Craig, at [7].
[164] Hydrogeology and Flooding JWS, 9 August 2023, Annexure A.
[165] In other words, no worsening of the existing flood situation or, where this is not achievable, keeping areas of increased flood hazard away from people: EIC of Jack McConchie, at [173].
[166] Rebuttal of Jack McConchie, at [66]-[69].
[167] See for instance, the analysis of effects at Technical Assessment F (Hydrology and Flooding) at [149] and [202].
[168] Technical Assessment F (Hydrology and Flooding) at [200]-[205] and AEE chapter 47.5 at 266.

(e) the location and design of the bridges will avoid encroachment on the active floodplain, none of the bridge structures will cause high velocity concentrations that, following mitigation by scour protection, will have more than minor effects on the surrounding environment.

135. The issue is the effect (if any) of increased flooding in certain areas and whether that should be limited by imposing thresholds/values as proposed by the council experts.

136. The councils' experts consider that a selection of thresholds (which cannot be exceeded) is required.[169] Put simply the thresholds are unsubstantiated against any adverse effects warranting mitigation. Further, if imposed, the thresholds could not be reasonably met by the Project. While it may be theoretically possible – for example if the Project was built as a bridge – that would add significantly to cost and create additional effects such as reduced resilience, visual, cultural and noise.[170]

137. As stated by Andrew Craig, Peter Kinley and the Councils' experts *"have failed to provide any evidence of actual quantifiable effects that would justify the setting of the thresholds that they have proposed. I am unaware of any robust effects justification for the levels that are proposed."*[171]

138. Mr Craig goes on to add: *"Mr Kinley regards some instances of the modelled change in flood level to be 'unacceptable.' However, he has provided no evidence as to the basis for the change being unacceptable. Thus, the thresholds that he proposes have no supporting evidence."*[172]

139. Dr McConchie opposes the approach of Mr Kinley and John McArthur. Dr McConchie states that factors such as *"the very infrequent nature, the very short duration, and the limited area of any change to the extent and depth of flood inundation outweigh the likelihood of increased flood levels when assessing the overall significance of the flooding effects. Also important is that fact that these areas are generally in pasture which does not tend to be affected adversely by short-duration, infrequent flooding."*[173]

[169] See by way of example the evidence of Peter Kinley, at the heading before [22] and at [230](b).
[170] Rebuttal of Jack McConchie, at [82] and [107]-[108].
[171] Rebuttal of Andrew Craig, at [12](b). See also the rebuttal of Jack McConchie on the same matter at [101].
[172] Rebuttal of Andrew Craig, at [25].
[173] Rebuttal of Jack McConchie, at [81].

140. The rebuttal evidence of Mr Craig is that, based on desktop research, *"well managed pasture has some natural tolerance to rare and short duration flooding exceeding the thresholds suggested by the submitters."*[174]

141. Mr Kinley, without identifying them or the basis for the effect, states there are *"40 properties that have increases in flood levels that are above the values I have recommended for urban (0.05m) and non-urban (0.1m)."*[175] Mr Craig, in his Appendix 1, addresses the locations where there are exceedances. As Mr Craig emphasises in his appendix, the flood levels in many of the areas are likely to be reduced through detailed design.

142. While the Councils' proposed conditions are not accepted for the reasons set out in the evidence of Dr McConchie and Mr Craig, Waka Kotahi has proposed Condition RGA7 that requires:

    (a) the water surface elevations to be in general accordance with the design model;

    (b) no increase in flooding of an existing habitable floor level by more than 10mm;

    (c) further reduction in flood levels as far as is reasonably practicable; and

    (d) further modelling of the final design to confirm compliance with the above and to provide the results to the regional council.

143. Finally, but importantly, if any the effects are material and quantifiable 'injurious affection' on the land then compensation is available through the Public Works Act 1981. This is not a situation where a land owner can be placed at a loss because of the Project.

<u>Kāinga Ora - Flooding</u>

144. Kāinga Ora submitted flooding evidence from Phil Jaggard. Potential flooding effects on its properties were not expressed in either its submission or section 274 notices.[176]

145. While potential leeway may be appropriate for a lay submitter Kāinga Ora is a government entity, an experienced submitter and is represented by

[174] Rebuttal evidence of Mr Craig, at [12](c).
[175] Evidence of Peter Kinley, at [36].
[176] That is why Waka Kotahi did not file any flooding evidence in chief on these matters.

experienced counsel and experienced experts. This is not an issue of the minutiae not being included;[177] it is the whole issue.

146. There must be some utility in submissions and s274 notices. If parties (especially statutory entities) are free to add new issues as they wish, that is not only unfair on other parties but also leads to an inefficient process for the Court.[178]

147. The opposite must also apply and Kāinga Ora ought to be held to the scope of its submission and notice.

148. Irrespective, Waka Kotahi has filed rebuttal evidence responding to the matters raised by Mr Jaggard. Dr McConchie's opinion is that:

    (a) in relation to 242 Muhunoa East Road, the Project *"will have no effect on flooding of the property. The only change will be to access caused by the new flyover embankment. Any stormwater design matters can be resolved easily, if necessary, during detailed design"*;[179] and

    (b) in relation to 98 and 96 Arapaepae Road, the Project *"will have no effect on the flood hazard to either 96 or 98 Arapaepae Road. While there is an existing flood hazard, with shallow inundation immediately upstream of Arapaepae Road, this does not change as a result of the Project."*[180]

149. Dr McConchie comments that: *"The reason for the low flood hazard to these properties is that they lie on a low ridge that forms a slight topographic high …Consequently, any runoff is away from and 'around' the properties rather than through them*."[181]

150. Finally, Dr McConchie addresses Mr Jaggard's concern relation to stormwater soakage not exacerbating flooding effect in the same manner as to that raised by Jon Williamson (for the Regional Councils). Dr McConchie's opinion is that: "*The conclusion of that modelling is that any effects of the Project on groundwater mounding, and the potential to exacerbate flooding, can be considered 'less than minor*'."[182]

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[177] As per *Simons Hill Station Ltd v Royal Forest & Bird Protection Society of New Zealand Inc* [2014] NZHC 1362, [2014] NZRMA 501, noting of course that was not a direct referral and related to very different facts and issue of appellants being able to appeal on another submitter's issues.
[178] See also *AFFCO NZ Ltd v Far North District Council* (1994) 1B ELRNZ 101 (PT) at 113 – 114.
[179] Rebuttal of Jack McConchie, at [90].
[180] Rebuttal of Jack McConchie, at [91].
[181] Rebuttal of Jack McConchie, at [93].
[182] Rebuttal of Jack McConchie, at [17].

Hydrogeology / groundwater

151. Alongside the hydrological analysis, detailed hydrogeological investigations have been carried out to inform the design of the Project.[183] Again, the focus has been on ensuring any potential adverse effects on groundwater are avoided and minimised, with a particular consideration of potential effects on wetlands, and groundwater effects arising from the development of material supply sites.

152. Dr McConchie's evidence is that any adverse effects will be less than minor.[184] He and Mr Williamson have engaged constructively, including through expert witness conferencing.[185] The only remaining matters at issue relate to:[186]

    (a) Material supply sites:[187] Waka Kotahi has applied for resource consents for the development of material supply sites to provide fill for the Project. While the details of those sites are not confirmed, effects have been assessed in the AEE and a conditions framework is proposed. Ms McLeod therefore considers a further condition requiring a report be prepared on the groundwater implications of the supply sites is not necessary. She has, however, worked with Dr McConchie to develop a condition, following on from the hydrogeology and groundwater joint witness statement (**JWS**). Ms McLeod's proposed condition wording differs from Mr St Clair's.[188]

    (b) Groundwater monitoring:[189] Waka Kotahi and the Regional Councils have agreed a scheme for groundwater monitoring and reporting during construction (and for a year after the highway is open). The conditions require piezometers to be located within 100m of any material supply site where active dewatering is occurring, with precise locations to be determined by a suitably qualified person.[190] On the advice of Mr Williamson, Mr St Clair proposes that this selection process be subject to peer review.[191] However, Ms McLeod (and Waka Kotahi) considers there is no clear basis for a peer review requirement.[192]

[183] Summarised in the EIC of Jack McConchie at [36]-[56].
[184] EIC of Jack McConchie at [47]-[50].
[185] Hydrogeology and Groundwater JWS dated 26 July 2023.
[186] Evidence of Jonathan Williamson at [9].
[187] Evidence of Jonathan Williamson at [17]-[22].
[188] Rebuttal of Ainsley McLeod at [106]-[108] and Condition RGW4.
[189] Evidence of Jonathan Williamson at [23]-[29].
[190] Refer to Condition RGW3.
[191] Evidence of Mark St Clair at [69]- [71].
[192] Rebuttal of Ainsley McLeod at [110]-[112].

(c) Stormwater devices and flooding: Mr Williamson and Dr McConchie agreed in in the Hydrogeology and Groundwater JWS that consent condition RSW1 should be amended to require stormwater management devices to be designed, located, and operated in a manner that will not cause or exacerbate groundwater related flooding. Mr St Clair proposes a condition to that end.[193] However, Ms McLeod considers that condition to be problematic in certainty and enforceability terms, and that it is not necessary given the existing condition requirements and Dr McConchie's assessment that any effects will be less than minor.[194]

Water takes

153. Waka Kotahi proposes to abstract water from streams across the Project area to enable construction. These water takes are necessary to address the potential environmental effects of construction, particularly dust.[195] Dr McConchie explains that the takes proposed are relatively small in the context of the relevant streams, and will have only very small effects.[196]

154. There has been a large volume of Waka Kotahi and Regional Council evidence and reporting on water takes.[197] That said, the abstraction regime has essentially been agreed, with conditions proposed by Waka Kotahi to ensure consistency with the allocation regimes in the Regional Plans, and to manage any potential environmental effects.

155. The differences between Waka Kotahi and the Councils are limited to condition details,[198] including:

(a) Mr St Clair proposes 'standard conditions' for water measuring devices/systems,[199] whereas Ms McLeod proposes that the conditions simply refer to the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 (which cover the same considerations).[200]

(b) Mr St Clair proposes that the water take consents be granted for a 10 year term, but will expire if construction is completed before the end of

[193] Evidence of Mark St Clair at [74].
[194] Rebuttal of Ainsley McLeod at [115].
[195] Rebuttal of Jack McConchie at [28].
[196] EIC of Jack McConchie at [58] and [262]-[265].
[197] Prepared by Dr McConchie for Waka Kotahi, Mr Thompson for GWRC and Ms Stout for Horizons, as well as a JWS.
[198] As per the Evidence of Mike Thompson, Michaela Stout and Mark St Clair.
[199] EIC of Mark St Clair at [29]-[30].
[200] Rebuttal evidence of Ainsley McLeod at [63]-[67] and proposed Condition RWT1.

that term.[201] Ms McLeod proposes a more standard 10 year term of consent, which counsel respectfully submit is the lawful approach.[202]

(c) Mr St Clair proposes that Condition RWT1 require abstraction from the Waikawa Stream cease when the minimum flow is reached at the point of abstraction as opposed to at the upstream flow recorder.[203] Relying on the JWS and the evidence of Dr McConchie, Ms McLeod considers the condition already addresses the uncertainty of instream flow at the point of abstraction, and so does not support that change.[204]

156. Waka Kotahi considers that the conditions as proposed by Ms McLeod appropriately provide for and regulate the proposed water abstraction.

Water quality, erosion and sediment control and operational stormwater

157. Keith Hamill assessed the potential effects of the Project on surface water quality. He explained that the key potential effects during construction arise from sediment discharges, use of hazardous substances, and vegetation clearance; while the key potential operational effects arise from stormwater discharges.[205]

158. Potential effects during construction from the use of hazardous substances will be addressed through the consent conditions, including the Hazardous Substances Procedure that will form part of the Erosion and Sediment Control Plan.[206]

159. Potential effects of woodchip leaching arising from vegetation clearance during construction will specifically be addressed through the Ecology Management Plan.[207]

160. Mr Hamill liaised with Gregor McLean in respect of sedimentation effects during construction, and with Nick Keenan in respect of operational stormwater discharges. Those matters, which have been a focus of Waka Kotahi and the Councils' reporting and evidence (as is usual for major highway projects) are discussed below.

[201] Evidence of Mark St Clair at [35].
[202] Rebuttal evidence of Ainsley McLeod at [68] – [72].
[203] Evidence of Mark St Clair at 40.
[204] Rebuttal of Ainsley McLeod at [73] – [74].
[205] EIC of Keith Hamill at [14], referring to Technical Assessment H (Water Quality).
[206] EIC of Keith Hamill at [18], and as required by Schedule 8 of the proposed consent conditions.
[207] EIC of Keith Hamill at [20], and as required by Schedule 7 of the proposed consent conditions.

Erosion and sediment control

161. In line with its usual practice, Waka Kotahi proposes a careful and detailed erosion and sediment control (**ESC**) regime for the construction of the Project. The approach, following the Auckland Council Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region (GD05), and Waka Kotahi Erosion and Sediment Control Guidelines for State Highway Infrastructure, has been applied in a range of previous Waka Kotahi projects including Te Ahu a Turanga and PP2O.[208]

162. An overall ESC Plan will be prepared and certified by the Regional Councils, with the details of the ESC measures to be implemented set out in Site Specific Erosion and Sediment Control Plans.[209]

163. Experts for Waka Kotahi (Mr McLean and Mr Hamill in particular), the Regional Councils (Kerry Pearce and Logan Brown) and the District Councils (Justine Bennett) engaged productively on ESC matters, including via expert conferencing that also involved Project Iwi Partners representatives.[210]

164. Mr Pearce confirms he is generally comfortable with the approach and conditions proposed by Waka Kotahi in respect of ESC.[211] Ms Bennett confirms she has no outstanding ESC issues, except that she considers the conditions should specifically require the ESCP to be provided to the District Councils for information.[212] Neither Ms Anderson or Mr St Clair support that recommendation.[213]

165. The only other outstanding point, raised by Mr Pearce and Mr Brown for the Regional Councils, is ensuring the conditions appropriately require escalating 'management responses' where there is poor performance of an erosion and sediment control device.[214] Ms McLeod has proposed updated conditions which align in substance with what Mr St Clair proposed.[215]

166. On that basis, subject to confirming condition drafting, counsel understand the approach to and conditions for ESC to be agreed with the Councils.

[208] EIC of Gregor McLean at [14].
[209] See the 'RES' conditions, in particular RES2-RES 7.
[210] See the ESC JWS dated 8 August 2023.
[211] Evidence of Kerry Pearce at [10]-[11].
[212] Evidence of Justine Bennett at [13].
[213] Evidence of Mark St Clair at [46]; evidence of Helen Anderson at [71].
[214] Evidence of Kerry Pearce at [14]-[18] and evidence of Logan Brown at [36]-[40].
[215] Rebuttal of Ainsley McLeod at [119]-[120] and Condition RES1.

Stormwater

167. Mr Keenan led the design of a concept stormwater management system for the Project.[216] That system applies industry best practice effects mitigation strategies, including a 'treatment train' approach incorporating vegetated batter slopes, treatment swales and constructed wetlands before stormwater is discharged to the receiving environment. Stormwater runoff treatment will be provided over approximately 95% of the Project road surface.[217]

168. Mr Hamill explains that the Project is therefore expected to result in a net reduction in road related contaminants entering waterways of all the major catchments crossed by the route. This is because traffic will be shifted from the current SH1 and SH57, which have no formal stormwater treatment, to the new highway which will have extensive stormwater treatment. [218]

169. The final design of the Project stormwater management system must meet the operational stormwater standards in Condition RSW1, including general accordance with the relevant Waka Kotahi and Wellington Water guidelines.

170. Following reporting, expert witness conferencing and evidence exchange, the experts for the Regional Councils (Stu Farrant) and District Councils (Ms Bennett) are comfortable in principle with the proposed approach to stormwater management design, and the standards that need to be met.[219]

171. Mr Brown considers an additional standard should be included requiring a 75% reduction in total suspended solids. Mr Keenan considered that is an unnecessarily complex and onerous operational standard given the nature of the effects in question, and that more standard observation and monitoring techniques will suffice.[220]

172. The outstanding concerns for Mr Farrant and Ms Bennett relate to the level of formal Regional Council involvement in confirming the final design, and in oversight of the maintenance by Waka Kotahi of its state highway stormwater treatment asset.

[216] Shown in AEE Volume III - Drawings
[217] EIC of Nicholas Keenan at [16].
[218] EIC of Keith Hamill at [22].
[219] Evidence of Stuart Farrant and Justine Bennett.
[220] Rebuttal of Nicholas Keenan at [32]-[37], see also rebuttal of Ainsley McLeod at [86]-[87].

173. The Council experts seek an additional condition requiring certification that the stormwater management devices meet the Condition RSW1 standards. Mr Keenan and Ms McLeod consider that is unnecessary, because:[221]

(a) the standards in condition RSW1 require a best practice outcome; and

(b) the system will be designed by professionals following those standards, who can be expected to follow the guidelines addressed in RSW1.

174. Waka Kotahi supports the view taken by Mr Keenan, and the conditions as proposed by Ms McLeod. Counsel note that RSW1 specifically requires the final design drawings must be provided to the Regional Councils for information. Ms McLeod has added Condition RSW1(h), requiring the reports that will be prepared as required by the guidelines to also be provided to the Regional Council information. RSW2 then requires the 'as built' drawings to be provided to the Regional Councils and Project Iwi Partners.

175. The conditions provide sufficient oversight of the final design for the Regional Councils, and as Ms McLeod notes, there is no clear effects basis for requiring certification.[222]

176. The Regional Councils seek a detailed new condition framework requiring the preparation and certification by the Regional Councils of a Stormwater Operation and Management Plan.[223] Waka Kotahi supports the opinions of Mr Keenan and Ms McLeod that this is not necessary, noting:[224]

(a) the standards in RSW1 already direct the operation and maintenance of the system by Waka Kotahi; and

(b) the potential effects do not warrant a certified management plan that will be 'live' for the duration of the operational consents for the Project.

177. Finally, in response to section 274 party John Bent's concerns about the discharge of floating contaminants and litter to the receiving environment, Ms Bennett has proposed condition wording (RSW1(d)) to address this issue while keeping design options open. Mr Keenan and Ms McLeod support this approach, and Waka Kotahi are hopeful this will resolve Mr Bent's concerns.[225]

[221] Rebuttal of Nick Keenan at [8]-[16] and rebuttal of Ainsley McLeod at [75]-[78].
[222] Rebuttal of Ainsley McLeod at [78].
[223] New RSW conditions proposed by Mr St Clair and shown in the conditions attached to the rebuttal of Ainsley McLeod.
[224] Rebuttal of Nicholas Keenan at [17] – [24] and rebuttal of Ainsley McLeod at [81]-[85].
[225] Rebuttal of Nicholas Keenan at [46] and rebuttal of Ainsley McLeod at [189]-[192].

Air quality

Operational effects

178. A detailed modelling assessment was undertaken for the Project to predict ambient concentrations of NO2, PM10, and particulate matter smaller than 2.5 µm (PM2.5) from vehicle emissions for the opening year (2029) and the design year (2039) with and without the Project. The results indicated low concentrations of pollutants for all scenarios with no exceedances of the relevant ambient air quality standards. All modelled scenarios result in a reduction in concentrations for the 'With Project' scenario when compared to the 'Without Project / Do Minimum' for the corresponding year.[226]

179. Overall, Andrew Curtis predicted the Project will improve air quality within the Project area because of improved traffic flows.[227]

Construction effects

180. Potential construction effects of the Project on air quality primarily relate to nuisance dust from activities such as excavation, fill, stockpiling and haulage of material. The evidence of Mr Curtis is that following mitigation, including the measures in the Construction Air Quality Management Plan (**CAQMP**):

    (a) the potential adverse effects of dust on sensitive receivers will be as follows:

        (a) for properties within 50m of earthworks it is likely that the residual dust effects may be such that residents notice increased dust levels and potentially get annoyed on occasions such that additional investigations, monitoring and mitigation may be required (and is proposed in Condition RAQ1A);[228]

        (b) for properties located within 50m – 200m of earthworks the conditions requiring mitigation measures and a comprehensive CAQMP (which contains all appropriate mitigation measures) will ensure that residents at these distances are unlikely to notice any changes in dust levels;[229] and

[226] Technical Assessment C (Air Quality), at [15] and [17].
[227] Technical Assessment C (Air Quality), at [20].
[228] EIC of Andrew Curtis, at [15].
[229] EIC of Andrew Curtis, at [16].

(c) for properties located greater than 200m from earthworks it is generally accepted that beyond 200m the potential for dust effects is very low.[230]

(b) dust will have a 'low' or 'very low' level of effect on ecological areas;[231] and

(c) exhaust fumes from construction vehicles will have a negligible effect.[232]

181. In his section 87F Report Peter Stacey raised some concerns about the effectiveness of the mitigation measures in the CAQMP, in particular in relation to rainwater tanks. A number of submitters also raised similar concerns. In his evidence Mr Stacey's sole remaining concern related to inspections of rainwater tanks within 50m of earthworks (or the haul road).

182. Following conferencing and evidence exchange Condition RAQ1A has been amended to respond to the matters raised and, most recently, to require at least monthly turbidity monitoring of roof water collection systems when located close to dust generating construction activities, unless contingency measures have been put in place.[233]

Landscape, visual and natural character

183. The potential effects of the Project on landscape, visual amenity and natural character values have been assessed in a manner consistent with *'Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines'* (2022).[234]

184. Central to the Project's approach to landscape, visual and natural character is the CEDF. It provides the key principles to ensure continuity of design direction and is intended to integrate the mitigation recommended by different disciplines to amplify the benefits of mitigation measures through a coordinated design.[235] The CEDF, developed in partnership between Waka Kotahi, MTA and Ngāti Raukawa hapū, is a 'live' document that will be developed during the detailed design process.[236]

[230] EIC of Andrew Curtis, at [12].
[231] EIC of Andrew Curtis, at [18].
[232] EIC of Andrew Curtis, at [19].
[233] Rebuttal of Ainsley McLeod, at [118].
[234] Technical Assessment D (Landscape, Visual and Natural Character) at [35].
[235] EIC of Gavin Lister at [26].
[236] Rebuttal of Gavin Lister at [25].

185. The evidence of Gavin Lister is that although the Project will have adverse landscape, visual and natural character effects:[237]

(a) those effects have been substantially avoided through the selection of the proposed route;

(b) for unavoidable remaining adverse effects, measures have been proposed using a whole-of-landscape approach (including through the CEDF) which will effectively mitigate such effects; and

(c) the whole-of-landscape approach will in fact have some positive landscape outcomes.

186. Following expert conferencing and the exchange of evidence there is now consensus between Waka Kotahi's experts and the Councils' experts as to landscape and visual effects, subject to two minor points:

(a) In terms of the CEDF, Julia Williams and Graeme McIndoe recommended changes to condition DTW5 to ensure greater certainty in terms of the CEDF and Waka Kotahi's Guidelines.

Mr Lister and Ms McLeod agree with the intent of these recommended changes, and Ms McLeod has reflected this in the updated set of conditions[238] (albeit as an amendment to condition DGA6, not DTW5).[239]

(b) In terms of the design review audit process, Ms Williams and Mr McIndoe recommend condition amendments requiring the involvement of (respectively) a landscape architect and urban designer in the audit process.

Again, this point is generally supported and is addressed through amendments to condition DTW5, with the exception of the explicit reference to various disciplines which neither Mr Lister nor Ms McLeod consider is necessary.[240]

187. Amelia Geary (representing Forest and Bird) expresses support for the whole-of-landscape approach adopted by the Project Partners, but considers that the level of detail that has been applied to ecological planting conditions and management plans should also apply to landscape planting. Mr Lister

[237] EIC of Gavin Lister at [10] and [29].
[238] Appendix A to the rebuttal of Ainsley McLeod.
[239] Rebuttal of Gavin Lister at [21], [24], [25]; rebuttal of Ainsley McLeod at [145]-[148].
[240] Rebuttal of Gavin Lister at [26]-[29]; rebuttal of Ainsley McLeod at [149]-[151].

discusses the difference between ecological planting and landscape planting in his rebuttal evidence,[241] and explains why it is appropriate to use different approaches for the *"separate workstream[s]."*

188. In terms of effects on natural character, while there is a high degree of agreement between Nicholas Goldwater and James Lambie, Mr Goldwater does not consider the amendments proposed by Mr St Clair (and endorsed by Mr Lambie) to condition RWB(a)(iii) are necessary. Mr Goldwater's view is that these amendments would place an onerous 'life of project' obligation on Waka Kotahi, especially considering the proposed terrestrial and wetland offset planting (not the natural character planting) will be the key measures used to address the Project's residual effects.[242]

189. Mr Lister also explains why the proposed approach to natural character planting outside the designation is the *"best practicable approach",* in response to comments from Ms Geary.[243]

Social

190. Ms Healy carried out a detailed Social Impact Assessment to assess the social effects of the Project.[244] As would be expected given the transport and connectivity benefits the Project will deliver, the social effects of the Project are largely positive.[245]

191. However, Ms Healy and Waka Kotahi acknowledge that the Project will create adverse social effects during both the construction and operation phase. These are geographically concentrated, mostly at the 'sub-local' scale where residents are in close proximity to the Project.[246]

192. Ms Healy carefully assesses those adverse effects, reflects on the avoidance and mitigation measures proposed by other technical experts (for example in respect of noise), and recommends additional mitigation measures.[247] Ms Healy stresses the importance of communication before and during the construction phase, which is provided for in the designation conditions.[248]

[241] Rebuttal of Gavin Lister at [13]-[15].
[242] Rebuttal of Nicholas Goldwater at [23]-[24].
[243] Rebuttal of Gavin Lister at [16]-[17].
[244] Technical Assessment E (Social Impact).
[245] Summarised by Ms Healy at [15]-[19] of her EIC
[246] EIC of Joanne Healy at [20].
[247] EIC of Joanne Healy, as summarised at [20]-[41].
[248] Conditions DCE1–DCE3 and Schedule 5 (Objectives and content of the Communications Plan).

193. Ms Lander confirms in her evidence for the District Councils that she has no outstanding issues in respect of Ms Healy's assessment, and is comfortable with the conditions proposed by Waka Kotahi to address social effects.[249]

Terrestrial and wetland ecology

194. The Project passes through the Horowhenua lowlands, which have been almost entirely converted to intensive agriculture following European settlement. The consideration of alternative Project routes prioritised avoiding remaining higher value ecological habitats.

195. Mr Goldwater explains that, as a result:[250]

(a) over 95% of the indicative Project construction footprint comprises pasture and cropping land, houses and gardens, and quarries, road and rail corridors;

(b) all 'High' and 'Very value forest habitats have been avoided.

196. The Project will, unavoidably, pass through:[251]

(a) areas of 'Low' to 'Moderate' value terrestrial habitats; and

(b) wetland habitat, most (but not all) of which is grazed, exotic-dominated and of relatively low ecological value.

197. Waka Kotahi has placed a strong emphasis on avoiding and minimising the effects of the Project on those habitats (as well as the values associated with the pasture and other developed land), and on addressing the inevitable residual effects through a carefully devised offset and compensation package. This approach is in line with the ki uta ki tai (mountains to the sea) principles the Project is following, as described by Mr Dalzell.[252]

198. Mr Goldwater explains that the avoidance and minimisation measures proposed include:[253]

(a) physical delineation, biosecurity and seasonal clearance protocols;

[249] Evidence of Michala Lander at [10]. It is acknowledged that some s274 parties may still have residual social effects concerns.
[250] EIC of Mr Goldwater at [13] – [15].
[251] EIC of Mr Goldwater at [14] – [15].
[252] EIC of Mr Dalzell at [71].
[253] EIC of Mr Goldwater at [17] – [21].

(b) salvaging and relocating lizards and snails where clearance is to occur, and other tailored measures to reduce fauna mortality during construction and once the Project is operational;

(c) remedial restoration of habitats within the construction buffer, and measures to minimise 'edge effects'; and

(d) direct transfer of vegetation from the higher-value impacted wetland sites to other sites within the proposed designations (this measure is alongside the wetland restoration offset discussed below).

199. There will be residual effects on ecological values after those avoidance and mitigation measures are implemented. Mr Goldwater has worked closely with Waka Kotahi and the Iwi Project Partners to develop an offset and compensation package to address those effects. In line with best practice, Mr Goldwater has applied the Biodiversity Offset Accounting Model (**BOAM**) approach to inform a package which will deliver an overall 'Net Gain' in indigenous biodiversity. That package includes:[254]

(a) approximately 7.5ha of terrestrial vegetation offset planting (broken down into specific categories as per Condition REM7);

(b) replacement planting of specific trees to be removed from treeland habitats, at ratios of between 1:1 and 50:1 (per Condition REM8);

(c) 4.9ha of wetland restoration and 0.48ha of open water creation (per Condition REM9); and

(d) the establishment of a lizard relocation area, protected by a predator-proof fence (as per Condition REM10).

200. Indicative sites have been identified for these offset and compensation measures, including:

(a) terrestrial offset planting is to be carried out at pasture sites within the proposed designations;[255]

(b) wetland restoration and open water sites creation is to be carried out through a combination of:[256]

[254] EIC of Mr Goldwater at [23] – [29].
[255] Refer to the Planting Concept Plans: updated versions attached to the EIC of Mr Lister. See also the EIC of Mr Goldwater at [154].
[256] Explained in more detail in Technical Assessment J: Terrestrial Ecology at [272] – [294].

(a) rehabilitation of up to three proposed material supply sites, near the Waikawa Stream and Ohau River; and

(b) restoration planting at Te Ripo O Hinemata wetland at Koputaroa (six kilometres northeast of Levin).

201. Waka Kotahi is committed to implementing the offset and compensation measures: Condition REM13 provides that construction of the Project cannot commence until all sites (including any necessary access agreements) are confirmed.

202. The avoidance, minimisation, offset and compensation measures are expressly provided for in the proposed conditions.[257] The 'REM' conditions applicable to the offset and compensation measures cover detailed requirements for including pest plant and animal control, and monitoring and reporting against specified performance targets. For the planting offsets, those requirements extend out to 15 years post-planting as a safeguard to ensure 'Net Gain' is achieved.[258]

203. The detailed methodology for the ecology measures will be set out in an Ecology Management Plan (**EMP**) that will be subject to certification by the Regional Councils.

204. The careful assessment of terrestrial and wetland ecological values and effects, and the proposed measures to address those effects, has been reflected in the submissions and reporting on ecology matters. In particular:

(a) Following engagement with Waka Kotahi and its experts, DOC decided not to make a submission on the Project and confirmed it was comfortable with the proposed approach to ecology (and conditions as lodged).

(b) Reporting by the experts for the Regional Councils (James Lambie) and District Councils (Bryn Hickson-Rowden) was thorough, but to a large extent focussed on matters of detail.

205. The terrestrial ecology JWS demonstrates a high degree of alignment between the experts.[259] The only outstanding matters raised by Mr Lambie

[257] The 'RTE' and 'REM' conditions.
[258] As per REM19, which provides for a report on outcomes 15 years after planting.
[259] The JWS was signed by Mr Goldwater, Mr Lambie, Mr Hickson Rowdon, Ms Kairaitiana on behalf of MTA and Mr Quentin Parr on behalf of the hapu of Ngāti Raukawa.

and Mr Hickson-Rowden in their evidence have been addressed by Mr Goldwater in rebuttal as follows:

(a) In response to Mr Lambie:

(1) Mr Goldwater does not consider it necessary for the conditions to require the terrestrial offset planted areas to be subject to pest plant control on a permanent basis. He emphasises that the BOAM does not rely on that level of control for 'Net Gain' to be reached, that the Horizons Regional Pest Management Plan 2017 – 2037 places obligations on Horizons and landowners in any event, and that Waka Kotahi has not previously been subject to a 'permanent pest plant control' requirement in conditions.[260]

(2) Similarly, and as explained above in respect of natural character effects, Mr Goldwater does not consider a condition requirement to maintain natural character plantings to ensure they remain indigenous-dominant is appropriate or necessary.[261] However, there is agreement that it is not necessary to apply the same standards to landscape and natural character planting that are to be applied to ecology offset planting, as sought by Forest and Bird (as sought by Ms Geary).[262]

(3) Mr Goldwater is comfortable with updates to condition REM19 to provide for a final 25 year inspect of offsetting sites, if the 15 year inspection indicates that is warranted.[263]

(b) In response to Mr Hickson-Rowden, Mr Goldwater supports additions to the list of tasks that must be carried out by a 'suitably qualified person',[264] but does not consider it necessary to require all buffer planting to be carried out before the end of the last planting season during the construction period.[265]

[260] Rebuttal evidence of Mr Goldwater at [25] – [28].
[261] Rebuttal evidence of Mr Goldwater at [24].
[262] Rebuttal evidence of Mr Goldwater at [8] – [18] where re refers to the EIC of Mr Lambie.
[263] Rebuttal evidence of Mr Goldwater at [31]. This has been included in Ms McLeod's updated REM19.
[264] Rebuttal evidence of Mr Goldwater at [33].
[265] Rebuttal evidence of Mr Goldwater at [34] – [35].

Freshwater ecology

206. Alex James explains his assessment of the values of the five stream catchments traversed by the Project, the effects on those values, and the measures proposed to address effects.[266]

207. Construction effects will be minimised by:

    (a) a combination of avoiding works during fish migration periods, the capture and relocation of fish and macroinvertebrates before works, and providing for appropriate fish passage through temporary culverts / diversions;

    (b) best practice ESC measures, as described above;

    (c) safeguards to minimise contamination from machinery and construction materials; and

    (d) the cautious approach that is proposed to water abstraction.

208. With these measures in place, construction effects have been assessed as "Very Low" or "Low", except that sedimentation effects on Stream 17 and Stream 19 have been assessed as "Moderate".[267]

209. Operational effects will be minimised by:[268]

    (a) the use of bridges to cross the Ohau River, Waikawa Stream, Manakau Stream and Waiauti Stream;

    (b) providing appropriate fish passage through all culverts;

    (c) implementing best-practice stormwater management measures, as discussed above; and

    (d) limiting operational highway lighting to intersections only (therefore limiting any effects on freshwater taxa).

210. However, there will be an unavoidable permanent loss and modification of freshwater habitat for culvert installation and stream reclamation. While stream diversions will reduce the overall stream length lost, there will be residual effects that need to be offset.[269]

[266] EIC of Dr James.
[267] EIC of Dr James at [18] – [25].
[268] EIC of Dr James at [26] – [31].
[269] EIC of Dr James at [28] – [29].

211. The offsetting proposed is a riparian fencing and planting scheme, to be undertaken along existing streams in the affected catchments.[270] This is a well-recognised approach to offsetting for stream loss and modification, used by Waka Kotahi on recent previous projects (including Mt Messenger and Te Ahu a Turanga).

212. As with those previous projects, at the time of this hearing potential sites have been identified and discussions with landowners have begun, but not yet been concluded.[271] Again, Condition REM13 requires Waka Kotahi to confirm and secure all the offset sites before construction commences.

213. For all effects other than permanent habitat loss and modification, Dr James assesses that once mitigation measures are applied the effects will be no greater than "Low" (and in some instances will be positive).[272] Stream habitat loss / modification effects will be "Very High" without effects management, but the offsetting scheme is designed to achieve no net loss / net gain.[273]

214. As with the terrestrial and wetland ecology actions, all the proposed freshwater ecology actions are secured by conditions,[274] with detailed methodologies to be set out in the EMP.

215. DOC did not make a submission on the basis it was satisfied with the approach taken to ecology and the conditions proposed. Dr James addresses the few submissions that raised freshwater ecology matters in detail in his evidence. Of those submitters, Fish and Game and Public Health Services did not join the Court proceedings, while Maria Storey and Louise Miles have now withdrawn.

216. Dr James also responded in detail to the reporting of Mr Brown and Mr Hickson-Rowden. Engagement between the experts, including in expert conferencing and evidence exchange, has substantially narrowed issues.

217. There is no remaining dispute between Dr James and Mr Hickson-Rowden.[275] The only remaining point in dispute is between Dr James and Mr Brown and relates to the details of the offset regime. While Mr Brown considers Waka Kotahi should ensure that pest plant management at the

[270] EIC of Dr James at [28].
[271] EIC of Dr James at [87] – [89].
[272] EIC of Dr James at [26] – [31].
[273] EIC of Dr James at [29].
[274] In particular, REM11.
[275] Rebuttal evidence of Dr James at [8] – [11].

riparian offset planting sites is carried out permanently,[276] Dr James responds (similarly to Mr Goldwater in respect of terrestrial planting offset sites) that:[277]

(a) the offsetting scheme does not rely on the permanent and complete control of pest plants in order to achieve the intended outcomes;

(b) the Horizons Regional Pest Management Plan 2017-2037 sets out pest plant management obligations for Horizons and landowners; and

(c) Waka Kotahi has not previously been subject to a 'permanent pest plant control' requirement in conditions.

Productive land

218. There are no issues between Waka Kotahi and the Councils in relation to productive land, however for completeness:

(a) The Project has a potential adverse effect on productive land through the loss of production on, and fragmentation of, land parcels[278] and may have an impact in terms of the economies of scale of existing productive uses and physical disruption or impediments to the operation of productive properties.[279]

(b) A minimum of 229.5ha and a maximum of 358.7ha of highly productive land will be affected by the Project. The difference between the minimum and maximum area of productive land that could be lost is about 134.3 ha (in reality much of this 134.3 ha area will be brought back into production following the completion of construction and reduction of the designation boundaries).[280]

(c) At a district level, the area of highly productive land that will no longer be available for productive use as a result of the Project is small, given there is about 43,766 ha of highly productive land in Horowhenua.[281]

(d) It is not possible to avoid the loss of productive land (including highly productive land), given the nature of the Project and the rural environment it traverses, however the Project has been assessed as

[276] EIC of Mr Brown at [51] – [55].
[277] EIC of Dr James at [12] – [23].
[278] Technical Assessment N (Productive Land) at [67].
[279] AEE chapter 54.2, at 292.
[280] AEE chapter 54.2 to 54.4, at 292 and 293.
[281] AEE chapter 54.2, at 292.

consistent with the National Policy Statement on Highly Productive Land (**NPS-HPL**) as discussed at chapter 54.2 of the AEE.

(e) Any measures necessary to address subsequent effects on individual properties will be dealt with through the land acquisition process for the Project under the Public Works Act 1981.

Other effects no longer at issue between the parties[282]

219. The following effects are no longer in contention: contaminated land, archaeology and built heritage.

220. For the avoidance of doubt, these areas were subject to technical assessment and evidence,[283] however Waka Kotahi understand that there are no issues remaining between any of the parties in respect of contaminated land, archaeology or built heritage.

PART E: REGULATIONS, POLICY AND PLANNING DOCUMENTS AND OTHER MATTERS

Introduction

221. There is a considerable degree of consensus between the planners as to the Project's consistency with the relevant regulations, policy and planning documents, and *"other matters"*[284]. As stated in the district planning evidence of Ms Anderson:[285]

> *…having particular regard to the s171(1) matters, there are no District Plan specific matters that remain outstanding or are in dispute. The remaining issues between Council witnesses and Waka Kotahi witnesses relate to conditions only.*

222. In his evidence-in-chief, Mr Eccles also highlights the *"general agreement between the Waka Kotahi technical specialists and their counterparts"* noting the *"significant exception is with regards to [flooding]*:[286]

[282] There are no issues as relating to economic effects.
[283] See Technical Assessment I (Contaminated land) and the EIC of Kathryn Halder; Technical Assessment L (Archaeology) and the EIC of Daniel Parker; and Technical Assessment N (Productive land) and the EIC of Ian Bowman.
[284] In the RMA section 104(1)(c) and 171(1)(d) sense.
[285] Evidence of Helen Anderson at [10].
[286] EIC of Grant Eccles at [22]-[23].

223. Given the very few matters remaining in dispute, a high-level overview of the relevant regulations and the planning and policy framework is provided in this part of the submissions, followed by:

(a) a discussion about the enabling nature of the relevant policies, with reference to the Supreme Court's *Port Otago* decision[287] and the High Court's recent *Southern Cross* decision[288]; and

(b) a brief summary of the remaining matters in dispute (flooding and, to a lesser extent, ecology).

National policy direction

224. There is agreement between the planners that the Project is consistent with all the applicable National Policy Statements and National Environmental Standards.[289]

Regional planning matters

225. There is also a high level of agreement (subject to the exceptions discussed below) between Mr Eccles and Mr St Clair as to the Project's consistency with the relevant regional policy statements and regional plan provisions; that is the Horizons One Plan, GWRC's Proposed Natural Resources Plan (**PNRP**),[290] GWRC's Regional Policy Statement for the Wellington Region (**RPS**).[291]

226. The primary matter that remains outstanding is the application of the Regional provisions to flooding. These are addressed below.

District planning matters

227. As above, there are no District Plan matters that remain outstanding between the planning experts.[292]

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[287] *Port Otago Ltd v Environmental Defence Society Inc* [2023] NZSC 112 (***Port Otago***).
[288] *Southern Cross Healthcare Ltd v Eden Epsom Residential Protection Society Inc* [2023] NZHC 948 (***Southern Cross***).
[289] EIC of Grant Eccles at [18]. The higher order documents are addressed in the EIC of Grant Eccles at [172]-[207], in the section 198D report of Helen Anderson at [51]-[62], and in the section 87F report of Mark St Clair at [47](b)-(d) and [153]-[185]. The evidence of Helen Anderson comments that *"Many of the issues identified in my s198D Report…have been resolved"* and *"The remaining [District] issues…relate to conditions only"* at [9]-[10]. The evidence of Mr St Clair comments that *"A number of the issues identified within my s87F report have been addressed"* and that the remaining outstanding matters are *"described…above"* at [106]. Neither Ms Anderson's not Mr St Clair's evidence raises any outstanding national policy direction issues.
[290] All planners agreed during expert conferencing this is now operative as of 28 July 2023 and there are no implications for the Project: JWS of planning experts (10, 11 and 14 August 2023), Annexure A, item 4.
[291] These matters are addressed at [217]-[258] of the EIC of Mr Eccles, [186]-[299] of Mr St Clair's section 87F report and [84]-[93] of the evidence of Mark St Clair.
[292] The relevant district plan provisions (as well as transport and/or district plans and strategies) are addressed at [259]-[303] of Mr Eccles' evidence-in-chief.

Other matters

228. Mr Eccles' view, which is not disputed by the other planners, is that there are no *"other matters"* to which the Court must have regard that are an impediment to the granting of consents or confirmation of NoRs.[293] Mr Eccles and Ms McLeod assess these other matters that are potentially relevant to the Court's decision. In short, these other relevant matters support granting the necessary consents and confirming the NoRs for the Project.

Enabling policies

229. As set out in the evidence-in-chief of Mr Eccles, Chapter 3 (Infrastructure) of the One Plan *"strongly support[s] the establishment and operation of regionally and nationally important infrastructure (including the road network as identified in the [Regional Land Transport Plan (**RLTP**)])."*[294] Mr Eccles explains that the Project is infrastructure *"of regional and national importance"*.[295]

230. Mr St Clair and Mr Eccles both consider there is a *"tension"* between two of the relevant policies (Policy 9-3b and Policy 3-3b), however (acknowledging the expert opinion of the planning experts) in counsel's submission there is no such *"tension"* when the polices are considered in light of the Supreme Court's findings in *King Salmon*[296] and *Port Otago.*[297]

231. The *"tension"* referred to is between two directive policies; Mr St Clair states:[298]

> *Policy 9-3 b. is important because it requires that the establishment of the project must be avoided, unless it will not cause <u>any adverse effects</u> on the environment (my emphasis). In turn, Policy 3-3 b. requires that a consent authority must allow for <u>minor adverse effects</u> from the establishment of new infrastructure (my emphasis).*

232. In counsel's submission, the phrasing in Policy 9-3 of *"will not cause any adverse effects"* has the same meaning as (and should therefore be read as) *"avoid any adverse effects".*

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[293] EIC of Grant Eccles at [307].
[294] EIC of Grant Eccles at [3].
[295] EIC of Grant Eccles at [4].
[296] *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38, [2014] 1 NZLR 593 (***King Salmon***).
[297]
[298] Evidence of Mark St Clair at [89]. Mr Eccles agrees with Mr St Clair that there is a tension at [20] of his rebuttal evidence.

233. As the Supreme Court held in *King Salmon, "avoid"* does not prohibit minor, transitory or beneficial effects.[299] Reading provisions otherwise would make them *"unworkable".*[300]

234. This point was recently reiterated by the Supreme Court in *Port Otago:*[301]

> *The Court [in King Salmon] noted, however, that what was to be avoided with respect to those policies was, in that case the adverse effects on natural character and that the prohibition of minor or transitory effects would not likely be necessary to preserve the natural character or coastal environments.*

235. Read in light of the Supreme Court's decisions, there is no tension between Policies 3-3 and 9-3 because both policies allow for minor and transitory effects (explicitly in the case of Policy 3-3 and implicitly in the case of Policy 9-3).

236. In counsel's submission the flooding effects at issue in this case are clearly *"minor or transitory"*, relying on the evidence of Dr McConchie and Mr Craig that:

    (a) *"the few areas…where there may be effects on flooding outside of the designation are generally overflow channels across either the wider aggradation surface or the contemporary floodplains of rivers and streams. In most cases, these areas already have an existing flood hazard."*[302]

    (b) *"the flooding effects of the Project are minor and acceptable…based on the very infrequent nature, the short duration and limited extent of flood inundation effects."*[303]

    (c) *"well managed pasture has some natural tolerance to rare and short duration flooding"* and *"long durations of flooding do not occur at or near the designation on account of the Project."*[304]

237. In short, there is no conflict to resolve and the Project's *"minor and transitory"* flooding effects are provided for under both Policy 3-3 and Policy 9-3.

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[299] *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38, [2014] 1 NZLR 593 at [145].
[300] *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38, [2014] 1 NZLR 593 at [144].
[301] *Port Otago Ltd v Environmental Defence Society Inc* [2023] NZSC 112 at [64], citing *King Salmon* at [145].
[302] Rebuttal of Jack McConchie at [75].
[303] Rebuttal of Jack McConchie at [86].
[304] Rebuttal of Andrew Craig at [12](b).

238. Even if there were, in Mr Eccles' opinion any *"tension"* between policies can be resolved without the need to impose the conditions proposed by Mr St Clair, in light of the Supreme Court's *"guidance"* for addressing conflicts between policies.[305] Mr Eccles steps through the process outlined by the Supreme Court at [22]-[25] of his rebuttal evidence and concludes *"I do not share the view of Mr St Clair that Policy 9-3 can be relied upon to justify the flooding conditions proposed in his evidence…"*[306]

239. Finally, counsel refer to the High Court's recent *Southern Cross* decision which emphasised the directive nature of enabling policies. The High Court observed that:[307]

> *Many of the policies in the [RPS] are concerned with achieving positive outcomes rather than with controlling or restricting negative outcomes. Given that most positive outcomes will be achieved by private actors, rather than by the Council, it is only natural that these policies use verbs such as "enable", "encourage" or "promote" rather than a verb such as "require"…there is some force in Mr Casey's submission that, on the Environment Court's approach, a negative direction would always be given more weight than a positive one.*

240. The High Court's logic applies equally to this case, where the key policies (in particular those contained in Chapter 3 of the One Plan) are enabling and – regardless of whether they use words such as *"avoid"* – are directive. Following the High Court's approach in *Southern Cross,* these policies should be afforded significant weight accordingly.

Remaining matters in dispute

Flooding

241. Policies 3-3, 9-3 and 9-5 of the One Plan, and Policy 51 of the RPS, relate to the flooding effects of the Project and are addressed in the rebuttal evidence of Mr Eccles[308], Mr Craig[309] and of Dr McConchie.[310]

242. Dr McConchie's evidence[311] in relation to flooding is summarised above, and his "*conclusion in my [EIC] that the flooding effects of the Project are minor and acceptable remains unchanged after considering Councils' evidence."*[312]

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[305] *Port Otago Ltd v Environmental Defence Society Inc* [2023] NZSC 112 at [75]-[76].
[306] Rebuttal of Grant Eccles at [25].
[307] *Southern Cross Healthcare Ltd v Eden Epsom Residential Protection Society Inc* [2023] NZHC 948 at [119].
[308] Rebuttal of Grant Eccles at [19]-[32].
[309] Rebuttal of Andrew Craig at [23]-[28] and [32]-[33].
[310] Rebuttal of Jack McConchie at [65]-[118].
[311] Which Mr Craig is in *"general support of"* at [8] of his rebuttal.
[312] Rebuttal of Jack McConchie at [86].

243. Mr Eccles' evidence is that:

(a) the Councils' proposed flooding conditions "represent an ultra-precautionary approach that does not recognise the circumstances and is not consistent with the enabling direction of Policy 3-3"; nor is it accepted as appropriate by either Dr McConchie or Mr Craig;[313] and

(b) the flooding conditions attached to Ms McLeod's rebuttal evidence *"better represent an appropriate balance between recognising the precautionary flood modelling approach adopted by Waka Kotahi at this concept stage of design…and setting realistic flooding related parameters that must be achieved by the final design of the Project and that meet the intent of the District and Regional Plans and Policy Statements."*[314]

Ecology

244. There is a confined dispute between Waka Kotahi and the Regional Councils in respect of the One Plan provisions and the proposed planting to offset residual ecological effects.

245. Mr Lambie and Mr Brown for the Regional Councils consider that the conditions should require that the legal arrangements for the offset planting areas be in perpetuity, and that pest-plant control requirements should be ongoing, in order to meet One Plan Policy 13-4(d)(v).[315] That clause provides that an offset must "*have a significant likelihood of being achieved and maintained in the long term and preferably in perpetuity*".

246. Waka Kotahi does not support the amendments to Condition REM13 proposed by Mr St Clair, and does not consider they are necessary to ensure consistency with One Plan Policy 13-4(d)(v). That position is supported by Mr Goldwater, Dr James and Ms McLeod, who set out that:[316]

(a) the terrestrial and riparian planting offset schemes do not rely on in-perpetuity pest plant control;

[313] Rebuttal of Grant Eccles at [27].
[314] Rebuttal of Grant Eccles at [28].
[315] As discussed in the evidence of Mark St Clair from [54].
[316] Rebuttal of Nicholas Goldwater at [25]-[28]; rebuttal of Alexander James at [18] – [23]; rebuttal of Ainsley McLeod at [90] – [93].

(b) the Horizons Regional Pest Management Plan 2017-2037 applies in any event, and provides comfort in respect of possible serious weed infestations; and

(c) it is not clear why the Regional Councils seek that Waka Kotahi be responsible (via conditions) for the permanent management of planted areas, where that has not previously been required (including for Te Ahu a Turanga where the same One Plan policy was in play).

PART F: CONSIDERATION OF ALTERNATIVES AND WHETHER THE DESIGNATION IS REASONABLY NECESSARY FOR ACHIEVING OBJECTIVES

247. Development of the Project has been informed by extensive consideration of alternative sites, routes or methods of undertaking the Project (as required by section 171(1)(b)), which has occurred over a number of years. Waka Kotahi considers the largely positive reaction to the Project in part reflects that robust process and its outcomes.

248. Clause 6 of Schedule 4 of the RMA adds that an AEE must include a description of possible alternative locations or methods for undertaking the activities likely to have a significant adverse effect on the environment.

249. Under section 171(1)(c) the Court is required to have particular regard to "*whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought.*"

Consideration of alternatives

250. This Court helpfully summarised the legal principles applicable to s171(b) as follows:[317]

- *The focus of the exercise is on the process, not the outcome; whether the requiring authority has made sufficient investigations of alternatives proposed, rather than acting arbitrarily, or giving only cursory consideration to alternatives. Adequate consideration does not mean exhaustive or meticulous consideration;*

- *The question is not whether the best route, site or method has been chosen, nor whether there are more appropriate routes, sites or methods;*

- *That there may be routes sites or methods which may be considered by some (including submitters) to be more suitable is irrelevant;*

[317] *Director-General of Conservation v Taranaki Regional Council* [2019] NZEnvC 203 at [96].

- *The Act does not entrust to the decision maker the policy function of deciding the most suitable route; the executive responsibility for selecting the site remains with the requiring authority;*

- *The Act does not entrust to the decision maker the policy function of deciding the most suitable route; the executive responsibility for selecting the site remains with the requiring authority;*

251. The relevant processes are detailed in Part E of the AEE, and more fulsomely in the *Ō2NL summary of consideration of alternatives multi-criteria analysis* reports found on Waka Kotahi's project website.[318] They involved:[319]

    (a) identifying a broad range of alternative route corridors to be assessed, both to the west and to the east of Levin;

    (b) implementing a consistent and replicable Multi-Criteria Analysis (**MCA**) process with inputs from tangata whenua, stakeholders and technical specialists which considered a long list of alternative corridors, then a short list derived from the long list MCA, and a range of sub-options;

    (c) selecting a preferred route corridor and developing a proposed designation within that corridor, involving further analysis using increasingly comprehensive information;

    (d) as part of this systematic consideration, assessing effects on landowners, social and other environmental effects, key RMA considerations and relevant statutory planning instruments, alignment with Project objectives, and strategic considerations such as integration with planned urban landuse.

252. The consideration of alternatives has been robust (and certainly 'adequate'), and the choices made as result of those considerations were reasonable.

253. Ms Anderson supports that conclusion, raising no issues with the process followed by Waka Kotahi.[320]

[318] Technical reports | Waka Kotahi NZ Transport Agency (nzta.govt.nz) .
[319] AEE chapter 72.1, at 371.
[320] Helen Anderson's s198D report at [211]-[221]

Project objectives: section 171(1)(c)

254. Section 171(1)(c) does not require, or allow for, an assessment of whether the selected form of the Project is the 'best' way of achieving the objectives. The High Court has held that:[321]

> *to elevate the threshold test to "best" site would depart from the everyday usage of the phrase "reasonably necessary" and significantly limit the capacity of requiring authorities to achieve the sustainable management purpose.*

255. The proposed works (ie the Project) are reasonably necessary to achieve the Project objectives (which are set out in Part B of these submissions), and to deliver the key benefits outlined above. It would be very difficult to deliver these benefits, as sought through the Project objectives, without the Project.

256. Furthermore, the use of designations is reasonably necessary to achieve the Applicants' objectives. Designations are a well-accepted method of securing land use authorisations for state highway projects, generally preferable to land use resource consents, because they:[322]

(a) are more appropriate for large infrastructure projects that extend across a long, narrow area;

(b) provides certainty that the Ō2NL Project can be maintained and operated efficiently in the future;

(c) provides certainty to the community in relation to the nature of the work and the location of the Ō2NL Project; and

(d) prevent others from doing anything in relation to land subject to the designation that would prevent or hinder the Project. [323]

257. Ms Anderson raises no issues in terms of section 171(c), and specifically confirms she considers the use of designations is reasonably necessary.[324]

PART G: PROPOSED CONDITIONS

258. Sections 108 and 198E(6)(b) of the RMA provide that the Court may impose conditions on the resource consents and designations. These will be an

[321] *Queenstown Airport Corp Ltd v Queenstown Lakes District Council* [2013] NZHC 2347 (***Queenstown Airport***), above n 283, at [96].
[322] AEE Chapter 72.2, at 371 - 372.
[323] RMA, s 176(1)(b).
[324] Helen Anderson's s198D report at [222]-[225]

important means for ensuring that effects are managed appropriately through the construction and operational phases of the Project.

259. The latest version of conditions proposed to attach to the resource consents and the designations are explained in, and appended to, the rebuttal evidence of Ms McLeod. The conditions respond to issues raised during consultation, in submissions, further information responses, the Councils' 87F / 198D reports, mediation, the evidence of other parties, and expert conferencing. They have been drafted based on Ms McLeod's experience and input from other experts (reflecting their advice on best-practice avoidance, minimisation and mitigation measures).

260. The conditions provide a robust set of controls to ensure that the adverse effects of the Project on the environment will be avoided, or where avoidance is not possible, minimised or mitigated to acceptable levels.

PART H: APPLICATION OF PART 2 OF THE RMA

261. The High Court in *New Zealand Transport Agency v Architectural Centre Inc*[325] (***Basin Bridge***) considered the implications of *King Salmon* in the context of an NoR. The High Court distinguished *King Salmon* on the basis that section 171 of the RMA requires a different approach to that taken in a plan change context. The High Court cited with approval the following passage from the Board of Inquiry's findings:[326]

> *Further and perhaps more importantly, as we have already noted, Section 171(1) and the considerations it prescribes are expressed as being subject to Part 2. We accordingly have a specific statutory direction to appropriately consider and apply that part of the Act in making our determination.*

262. In the context of resource consents, the findings in *King Salmon* were considered by the Court of Appeal in *RJ Davidson Family Trust v Marlborough District Council* (***Davidson***).[327] The Court of Appeal in *Davidson* determined that:

    (a) The position of the words 'subject to Part 2' near the outset and preceding the list of matters to which a consent authority must have

[325] *New Zealand Transport Agency v Architectural Centre Inc* [2015] NZHC 1991 (***Basin Bridge***)
[326] *Basin Bridge*, at [118] citing [183] of the Board of Inquiry's decision.
[327] *RJ Davidson Family Trust v Marlborough District Council* [2018] NZCA 316, [2018] 3 NZLR 283 (***Davidson***)

regard in s 104, clearly show that it is necessary to have regard to Part 2, when it is appropriate to do so.[328]

(b) If it is clear that a plan has been prepared having regard to Part 2, and with a coherent set of policies designed to achieve clear environmental outcomes, reference to Part 2 is unlikely to add anything.[329]

(c) If a plan has been competently prepared under the RMA, in many cases a consent authority will feel assured in taking the view that there is no need to refer to Part 2 because it will not add anything to the evaluative exercise. Absent such assurance, or if in doubt, it will be appropriate and necessary to do so.[330]

263. Mr Eccles concluded that in undertaking his analysis of the Project against the objectives and policies of the relevant plans he had *"not found the provisions of those plans to be equivocal. Nor have I found that there are any omissions or gaps in the plans in terms of Part 2 matters that would lead me to believe that they have not been completely prepared*."[331]

264. The Court must be "*assured*" that reference to Part 2 would not add value.[332] *"Assured"* is a high test and the Project 'rates' highly in achieving and delivering on the matters in Part 2. In particular, in relation to section 5 the Project unequivocally promotes the sustainable use, development and protection of natural and physical resources, noting its myriad positive effects (addressed above).

[328] *Davidson* at [47].
[329] *Davidson* at [74].
[330] *Davidson* at [75].
[331] Evidence in chief of Grant Eccles (04.07.2023) at [380].
[332] See Chapter 74 of the AEE, beginning at 379 for fuller discussion of the RMA Part 2 assessment as regards the Project.

PART I: EVIDENCE TO BE PRESENTED

265. Counsel will update the Court on the witnesses who will be presenting evidence at the start of the hearing.

DATED at Wellington this 17th day of October 2023.

D G Allen / T H Ryan / E L Bennett

Counsel for the Applicant