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# Ō2NL June 2017 engagement - summary of key points

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REV. NO.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	REVIEWED BY	APPROVED BY
1	24 Oct 2017	Draft for expert review	J. Wilkins / R. Peterson		Various experts	
2	21 Feb 2018	Final	R. Peterson	S. Allan	S. Allan	P. Peet

# SUMMARY OF KEY POINTS

The following table sets out specific points raised by the community during the community engagement in June 2017.

It also sets out how the project team has taken these points into account during the current phase of investigations. Whilst not always expressly stated in the attached tables, the information will also be used to inform subsequent stages of design including the design of any mitigation that might be needed.

## Table notes

Several aspects of the public feedback that was received relate to multiple areas of technical expertise, some feedback relates to both landscape and ecological considerations. As a consequence the following explanatory notes are provided:

- The 'Landscape and Urban Design Baseline Report' (which the comments refer back to) was prepared in 2011 at the commencement of the Ōtaki to North of Levin RoNS investigations. Its purpose was an overview of the whole area. Further landscape assessment was carried out at a finer scale, and other relevant matters identified, during the subsequent considerations of alternative options. This is contained with a series of subsequent reports. However, the Baseline Report was updated on request in October 2017 to include some additional matters identified during consultation.
- There is a spatial distinction between landscape characteristics that apply to a wider area – and which therefore might influence the choice of option – and localised features which might be avoided by detailed alignment and design of a highway. The latter features are typically listed on the assumption that they will be avoided where possible. Such matters are listed in the 'Landscape and Urban Design Principles'.
- There is overlap between **landscape and ecology** to the extent that natural features such as stands of bush or streams are part of the landscape. Their ecology is relevant to the extent that an appreciation of natural value contributes to an overall landscape appreciation. The specific ecological significance of such features, however, falls under the ecology discipline. Large areas of bush or rivers are taken into account in rating landscape quality and ranking alternative options. Localised features, on the other hand, are more relevant as features to be avoided where possible at detailed option alignment.
- There is also overlap between **landscape and historic heritage**. A landscape's history is relevant to landscape values to the extent that the historical features and history contribute to an overall appreciation of the landscape. For instance early buildings and the family and community histories associated with them contribute to the character of the settled rural landscape. The specific historical significance of such features, on the other hand, falls under the heritage discipline. Large or well-known important historical features or themes are taken into account in rating landscape quality and ranking alternative route options. Localised historical features, on the other hand, are more relevant as features to be avoided where possible at detailed option alignment.
- Similarly, there is overlap between **landscape and Mana Whenua matters**. The cultural histories, associations and features are relevant to landscape values to the extent that they contribute to an overall appreciation of the landscape. For instance, marae and associated kainga and urupa are features. Widely known histories, stories and values can also heighten landscape appreciation. The specific cultural significance of landscapes, on the other hand, falls to Mana Whenua. As above, well-known cultural features or themes are taken into account in rating landscape quality and ranking alternative options. Localised cultural features, on the other hand, are more relevant as features to be avoided where possible at detailed option alignment.

THEME / TOPIC / AREA OF INTEREST		COMMENT PROVIDED BY THE SUBMITTER	COMMENT BY THE PROJECT TEAM
<b>ECOLOGICAL</b>			
1	Waiopēhu Reserve	Situated close to the foothills at the junction of Queen Street East and Gladstone Road. It is a remnant stand of native bush which contains some large rimu trees and many other species of trees, plants and fungi.	<p>Waiopēhu Reserve has been considered in the landscape and ecological assessments. In relation to landscape, the Reserve is noted as a particular feature in the Landscape and Urban Design Baseline Report and was taken into account in rating the existing landscape and ranking alternative options. It is a feature to be avoided.</p> <p>In relation to ecology, the Reserve has been identified as being of National Ecological significance and thus a high priority for avoidance.</p>
2	Puke-tawai hill	This hill is just at the bottom end of Kimberley reserve. When you look in an accurate map you would wonder why this high piece of terrace overlooking the reserve has been included (much of it is grazed by the neighbouring farmer). The reason it was protected is because it is a historic hill. Used for among other purposes, as a lookout to hunt for wild horses. It was named by iwi after the beech trees which grew on it, as local Māori recognized that the beech trees didn't grow anywhere else on the Horowhenua plain, making it special. Some of the beech trees remain today and we are now getting them protected. See "Horowhenua" by Leslie Adkin p319.	<p>Puke-tawai hill is a feature within Kimberley Reserve. This has been considered in both the ecological and landscape assessments.</p> <p>Although Puketawai Hill was not referenced specifically, Kimberley Reserve as a whole was described in the Landscape and Urban Design Baseline Report and was taken into account in rating the existing landscape. From a landscape perspective it is a feature which should be avoided, and has been taken into account in ranking alternative options. A specific reference to Puketawai hill has been added to the updated Baseline Report. More detailed analysis of Kimberley Reserve has been added to the updated Baseline Report, (unit 3i), including its biophysical and aesthetic values, and its recreational use. In the ecological assessment, Kimberley Reserve area has been recognised as being of National Ecological significance.</p>
3	Snails	Endangered native snails in Kimberley Reserve and probably the surrounding areas, so any nearby expressway would require making sure that there were no snail populations in the way.	Land snail populations associated with Kimberley Reserve, and other bush patches where snail populations are known to exist, have been recognised as being of National significance and a high priority for avoidance in the ecological assessment.

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4	Established stand of native trees	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	The stands of native trees at this location have been noted but are likely to be too small to qualify as significant under the One Plan.
5	Gladstone Reserve		Gladstone Reserve is just outside the study area – upstream on the Ōhau River in the Tararua foothills. It is not affected by the options. The Landscape and Urban Design Baseline Report already identifies connections to the Tararua foothills for recreation – Gladstone Reserve would fall within that matter. A specific reference has been added to the updated Baseline Report.
6	Important native bush	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	The identified area of native bush has been recognised as a constraint in the ecological assessment.
7	Kimberley Reserve	Kimberley reserve area. It is worthy of protection, both of its flora and fauna, but also of its recreational value. Families camp there in the summer, it has very popular swimming holes, a huge field that the public use, a toilet block, changing rooms, BBQ sites and more. Schools use it for field trips, dog walkers and horse riders enjoy its beauty. The organic river festival is held there. The area below Kimberley Reserve floods at times and much of Kimberley reserve floods too.	See comments in relation to Puke-tawai hill.  Kimberley Reserve is noted in the Landscape and Urban Design Baseline Report and was taken into account in evaluating the options. More detailed analysis has been added to the updated Baseline report, (unit 3i), including its biophysical and aesthetic values, and its recreational use.  The Reserve has also been recognised as being of National Ecological significance, and thus a high priority for avoidance, in the ecological assessment.  Hydrology is being considered and this work will be developed in detail during the next phases of investigation.
8	Poroporo Ridge	A continuation of an expressway northward under the Poroporo Ridge would have negative ecological impacts on the Wai-kokopu and Kuku Streams, which are also	The productive working landscape of the plains is described in the Landscape and Urban Design Baseline Report and taken into account in rating the existing

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		<p>rich in native fish biodiversity values.</p> <p>The lands of the Manga-huia and extending north under the Poroporo Ridge are highly fertile and productive, as evidenced by the considerable area of market garden land use. The combination of highly fertile soils and the climatic advantages of the area are very rare and it is in the national interest to preserve it.</p>	<p>landscape and ranking alternative options. The options along the toe of the Poroporo Ridge ranked better relative to those in the middle of the plains partly because they skirt the edge of the productive land.</p> <p>Streams are identified as landscape features and taken into account in ranking options, recognising that a north-south highway must necessarily cross west-flowing streams between Otaki and north of Levin. The streams with recognised significance have also been identified as presenting a specific ecological constraint in the ecological assessment.</p> <p>The potential effects on fertile soils, property (including farms) streams, water courses and ecological values have been taken into consideration during the options assessment stage.</p>
9	Koputaroa tributary stream. restoration of wetland for fish and eels		<p>The number of streams in this area, and the potential effect on them, was taken into account in ranking options from a landscape and ecological perspective. The Koputaroa area has also been recognised as presenting a high level of ecological constraint.</p>
10	Kowhai Park		<p>Kowhai Park is noted as a particular feature in the Landscape and Urban Design Baseline Report. It was taken into account in rating the existing landscape and ranking alternative options. It is a feature to be avoided.</p> <p>Kowhai Park has been recognised as presenting a high level of ecological constraint and a high priority for avoidance.</p>
11	Last stretch of Kuku East Road – there is a native forest and native birds.		<p>This area of native forest has been recognised as an ecological constraint in the ecological assessment of option. A specific reference to this area of bush has been added to the updated Landscape and Urban Design</p>

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		Baseline Report. (See general note above about the role of specific features in landscape assessment).
12 Native birds, White ducks, pukeko, tui, wood pigeon throughout the study area	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	Habitats of significant native birds (threatened species/of conservation concern) have been recognised where applicable as an ecological constraint. While it is agreed that the native birds listed are likely to be present, those species are not of conservation concern and therefore an ecological constraint has not been assigned to this area based on their presence.
13 Native birds and fish	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	Habitats of significant native birds and fish have been recognised as an ecological constraint. This location has been reviewed and it is agreed that native birds and fish are likely to be found in this area. However there is no data available at this stage on which species are present. The ecological risk associated with N5 and N9 in this location could be minimised if avoiding direct effects to the Koputaroa Stream was possible.
14 Natural spring at Twin Peaks Road		A specific reference to the spring and ponds at Twin Peaks Grove has been added to the updated Landscape and Urban Design Baseline Report. At this stage it is considered that the spring and ponds are not affected by any of the alternative options.
15 Ōhau River and river plain needs environmental protection, including stands of totara and other bush east of the railway line and around Kirkcaldie's Bridge		The Landscape and Urban Design Baseline Report identifies the stands of tōtara bush north of the Ōhau River as important landscape features. They were taken into account in rating the existing landscape and ranking alternative options. The areas of native vegetation associated with the Ōhau River have been identified and significant areas have been recognised as an ecological constraint.
16 Ngawakahiamoe (East) Bush. Needs good access and peace		Ngawakahiamoe Bush has been recognised as an ecological constraint and a high priority for avoidance. A

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	and quiet for people to enjoy.		specific reference has been added to the updated Landscape and Urban Design Baseline Report. However this bush area is not affected by the options.
17	Ngā Whenua Rahui bush. Covenant area.		Generally, legally protected areas have been recognised as ecological constraints and high priority for avoidance. Reference to this bush area has been added to the Landscape and Urban Design Baseline Report. However, this area is on the fringe of the study area and is not affected by any of the options.
18	Podocarp bush	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	The podocarp bush has been recognised as ecologically valuable and a high priority for avoidance.
19	Rata tree growing on side of road	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	Although this rata tree would not qualify as being significant at regional or national levels, its presence is now noted. If an option in this vicinity is preferred, efforts would be made to avoid it if possible.
20	Remnant forest reserve. Streams etc. important for native fish and bird life	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	Native forest reserves have been recognised as being of ecological importance and a high priority for avoidance.
21	The Hanawera Ridge	<p>The catchment for a large number of tributaries that feed into the Manga-huia and Waiute (known as Manakau) Streams. The Manga-huia Stream feeds directly into the Waiute Stream. Please refer to the native fish spotlighting report which outlines the high native fish biodiversity values of the Manga-huia Stream.</p> <p>Furthermore the survival of this native fish habitat in the Manga-huia Stream is reliant upon flows from the historic Waikawa Water Race, (engineered in the 1890's) during the dry summer and autumn months.</p>	Manakau Stream has been recognised as a specific ecological constraint.



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	<p>The water race diverts water from the Waikawa River near North Manakau Road and passes in behind the Pikiwahine Knob to the north, and then south underneath North Manakau Road and adjacent to the Hanawera Ridge, until reaching the Manga-huia Stream.</p>	
<p>22 The rare carnivorous native snail – Powelliphanta traversi florida – is only found on the Horowhenua Plains – 2 locations are known.</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>Sites known to contain native land snails have been recognised as being of national significance and a high priority for avoidance.</p> <p>The Landscape and Urban Design Baseline Report also notes the significance of the area for Powelliphanta.</p>
<p>23 There are a lot of native trees in this area</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>Native treeland and forest patches have been identified and recommended for avoidance.</p>
<p>24 There is a small lake here that has a QE2 Covenant on it– the surrounding swamp is also a habitat for native paraphanta snails. The lake is also a breeding area for Dabchicks, an endangered species.</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>QEII protected sites and known wetlands have been identified and considered during the options assessment phase. The approach is to seek to avoid such sites when considering options, and when designing a detailed alignment.</p>
<p>25 This hill has a significant stand of old native bush with totara, rata, black beech. Powliphanta (native snails) have also been found in this area.</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>Native forest reserves have been recognised as being of ecological importance and a high priority for avoidance. The approach is to seek to avoid such sites when considering options, and when designing a detailed alignment. At this stage no options would affect this hill.</p>
<p>26 Foothills</p>	<p>Close to foothills the rainfall is much higher. We get periods of very intense rain.</p>	<p>Rainfall conditions will be taken into account as part of the design process, in particular in relation to pavement and drainage design.</p>



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27	Waima - native tree arboretum	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	The project team has noted this feature. It is well clear of all proposed alignments so is not expected to be directly impacted.
28	Waiopehu Bush Reserve		Waiopehu Reserve is recognised as being of National Significance and a high priority for avoidance. It is also noted as a particular feature in the Landscape and Urban Design Baseline Report and was taken into account in rating the existing landscape and assessing the options.
29	Wairere Stream		Waiwiri Stream (?) is the outfall stream from Lake Papaitonga. This stream is referenced in the Landscape and Urban Design Baseline Report, and was taken into account in rating landscape value and assessing the options.
30	Waitarere Beach		Waitarere Beach is on the coast just outside the study area. A specific reference has been added in unit 1a to the updated Baseline Report. It would not be directly affected by any of the options.
31	Wehipeihana Bush		<p>This is stand of bush west of NIMT Railway north of Whakahoro Road.</p> <p>Wehipeihana Bush has been recognised in the ecological constraints exercise, being classified as an area of forest of regional ecological significance and a high priority for avoidance.</p> <p>A reference to it has been added to updated Landscape and Urban Design Baseline Report. This is also of significance to iwi.</p>
32	This property has historic gardens with bush, native trees original rata and English oaks	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-</a>	This is the area surrounding the Prouse homestead. The area was visited by the Project's ecology expert in October 2017 to verify (based on existing data) the level of

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	120 years linking to early history of Levin. A haven for birds and forming natural bush corridor from the mountains to the Lake.	<a href="#">that-are-important-to-you</a>	constraint posed by this area.
RECREATIONAL / AMENITY / LANDSCAPE			
33	Walkway	The recreational walkway which was constructed along Queen Street East a few years ago is very popular. As well as local users, a considerable number of people from the town want to access the countryside and use it for walking and cycling; many people connect with the steep trig walk just along Denton Road. There is a continuous stream of people on the walkway every day from early morning to evening.	A specific reference to the recent Queen Street Walkway has been added to the updated Baseline Report. The Baseline Report notes the connections between Levin and the Tararua foothills.
34	Puke-tawai hill	The river terrace around Puke-tawai is high and unstable and as seen on your map it runs around in a curve towards the drive into Kimberley Reserve. This river terrace acts like an amphitheatre and for the people below, or for the houses near the edge it amplifies all noise.	Depending on the preferred option, this is an aspect that would be further investigated at the time that the detailed alignment is being determined and a range of possible mitigations considered.
35	280 Kimberley Road	Heritage Trees-Pohutakwa (a Street icon) given its magnificent size and age (hundreds of years) and totara and rimu.	This is a localised feature which will be taken into account in the detailed alignment stage if potentially affected by the preferred option.
36	Appropriate rest areas	Throughout the corridor.	This is a matter of key consideration for the project and will be considered in more detail once a preferred option has been chosen.
37	Camping area and place to start walks in the Tararua forest park		A specific reference to the Waikawa Stream picnic area and camping site has been added to the updated Landscape and Urban Design Baseline Report.  Would also apply to Kimberley Reserve which is referenced

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		in the noted in the Baseline Report and was taken into account in rating the existing landscape and ranking alternative options.
38	Connection to the hills	The Landscape and Urban Design Baseline Report identifies connections to the Tararua foothills as a landscape characteristic that is taken into account in rating the existing landscape and ranking alternative options. Detailed highway design should, as far as possible, also take such matters into account – for instance by maintaining physical and visual connections such as along the Queen Street Walkway.
39	Peaceful rural valley behind Manakau village – between them and the Tararua Foothills.	It is acknowledged that an option between Manakau and the foothills would impact on this area and also Manakau Heights.
40	Horse riding in this area	Ensuring continued facilities and connectivity for all modes of transport, including horse riding, is important Exactly how this will be provided will be considered in more detail once an option has been chosen.
41	<p>Manakau Village character</p> <p>In recent years described by Boffa Miskell, a leading New Zealand environmental planning and design consultancy, as a village having ‘unique character’ and a leading example of its type in New Zealand. They referred to the tree lined single lane streets, and the idyllic and peaceful setting. This report was commissioned by the Horowhenua District Council to determine future town planning objectives.</p> <p>As the village is on an elevated site, any expressway immediately to its east would negatively impact on all the properties through noise and also visualness. It would be unreasonable for residents to be surrounded by two national highways and the railway, and their lifestyles and property values would decline.</p>	<p>The Landscape and Urban Design Baseline Report identifies the particular history and character of Manakau, which is taken into account in rating the existing landscape and in ranking alternative options. The Baseline Report acknowledges that there would be significant visual amenity effects within the valley (and potentially, large earthworks).</p> <p>However, factors taken into account with an option to the east of Manakau are that it would be in a valley lower than and ‘behind’ the township. Manakau is on a terrace that slopes subtly to the north-west. These factors would reduce potential visual effects compared, for instance, to an option immediately to the west.</p>

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42	Playing fields and dog park that are at the western end of Queen Street.		Specific references to Donnelly Park playing fields have been added to the updated Landscape and Urban Design Baseline Report.
43	Poroutawhao School, community hall, and rifle range		The Landscape and Urban Design Baseline Report identifies Poroutawhao School and Community Hall.. A specific reference to the rifle range has also been added to the updated Baseline Report.
44	Ōhau School		The Landscape and Urban Design Baseline Report describes Ōhau township as a whole. Specific reference to Ōhau School has been added to the updated Baseline Report. The school forms a particular enclave between SH1 and the NIMT Railway along with Ōhau Domain and St John the Baptist Church. The options avoid Ōhau.
45	Koputaroa School and Koputaroa Hall		The Landscape and Urban Design Baseline Report identifies Koputaroa Settlement (marae, urupa, school).
46	Kuku Catholic Church		Reference to Kuku Catholic Church (also known as St Stephen's) is already included in the Landscape and Urban Baseline Report.
47	Kimberley Road	A really special road, with its wide verges and really scenic outlook. Its gets quite busy on sunny afternoons in summer as people travel to the reserve to swim, and it also has a lot of rural traffic and stock movements. People come from the surrounding area to horse ride down the road, or to jog or walk.	Any option east of Levin would necessarily cross Kimberley Road at some point . Maintaining good connectivity to Kimberley Reserve will be a consideration (design principle) for the highway design.
48	Swimming hole	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	This feature is unlikely to be directly impacted by any of the options. However effects on this feature will be considered, if relevant, in future design phases.
49	Trig hill	[and walk] is an amazing asset to Levin. People walk, run and cycle up it all the time.	A specific reference to Trig Hill (Kohitere Track) has been added to the updated Baseline Report (acknowledging the

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			track is on private land). The Landscape and Urban Design Baseline Report notes the recreational and visual connections between Levin and the Tararua foothills, which was taken into account in rating the existing landscape and ranking the options. Maintaining good connectivity between Levin and the foothills, and to Kimberley Reserve should be a design principle for any future highway in this area.
50	Cycling	Many people mentioned the need to provide for cyclists.	Ensuring continued facilities and connectivity for all modes of transport, including cycling, is important. Exactly how cycling facilities will be provided will be considered in more detail once an option has been chosen.
51	Having uninterrupted views of rural land and the Tararua ranges		Any of the options for an expressway must necessarily affect views of rural land from some locations in proximity. However the Tararua Ranges are not likely to be affected as the dominant visual backdrop to the plains and Levin.
HISTORIC			
52	Wool-shed on the corner of Arapaepae and Waihou Roads is believed to have been used by the world-class shearer Godfrey Bowen. Bowen, the subject of a TV documentary made in 1971, was known for training sheep to perform on stage at Expo 70.		This association is unlikely to result in any requirement for protection of the woolshed. There are other sheds in the vicinity (e.g. at Opiki – a listed building) which also have associations with this important shearer. It is useful to have this documentation, which would be recorded as part of the assessment of effects if the woolshed is on the final alignment of the expressway. If the building predates 1900, it would be an archaeological site and archaeological authority would be needed to modify or remove it.
53	15 Wakefield Road, Levin – just off Queen Street East	This house, with a piece of timber dated 1918, was initially built for Leslie Adkin’s sister Margaret, who married George Broomfield. Leslie Adkin lived at Cheslyn	The project team has done preliminary investigations of the Adkin family’s associations with this general area and is generally aware of them. This house post-dates 1900

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	<p>Rise on Queen Street East. Many of his diaries, letters, notebooks, and papers on Geology, Archaeology, Natural History, Māori history and artefacts, his photographs, cameras and photographic plates, hand-drawn maps and his sketches are held at Te Papa Museum and at the Alexander Turnbull Library. He and his father William Adkin were important figures in the early development of the area.</p>	<p>so it is not an archaeological site with automatic protection under the Heritage NZ Act. The house has never been identified for or sought to be listed in the district plan or with Heritage NZ as far as we are aware.</p> <p>The impacts of options on houses (and property) have been considered during the options assessment process from a landscape point of view, from amenity and community point of view and in respect of property effects.</p> <p>If the eventual alignment was to come close to this building, a detailed analysis of its merits may be undertaken.</p>	
54	89 Arapaepae Road, Levin	<p>House designed by architect Rossano Fan – also a well-known artist. He arrived in Levin after migrating to New Zealand from Hong Kong in 1963. In a 2011 a documentary film on Rossano Fan was produced by Richard Riddiford and shown on TV1.</p>	<p>If the eventual alignment was to come close to this building, a detailed analysis of its merits may be undertaken. The house has never been identified for or sought to be listed in the district plan or with Heritage NZ as far as we are aware. As the building post-dates 1900, it does not have automatic protection under the Heritage NZ Act.</p> <p>The impacts of options on houses (and property) have been considered during the options assessment process from a landscape point of view, from amenity and community point of view and in respect of effects on dwellings.</p>
55	9 heritage fruit tree orchards planted by generations of family members. These are not replaceable and fit within the context of a heritage historic homestead and owned by the same family for 125 years.	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>This feature is part of the Prouse homestead which is included in the heritage data set analysed for this project. The special values associated with this property are given consideration in the option assessment and previous reports. Reference to the homestead and curtilage has also been added to the updated Landscape and Urban Design Baseline Assessment.</p>

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<p>56 Cheslyn Rise – 1127 Queen Street</p>	<p>Cheslyn Rise, 1127 Queen Street East, Levin is of historical significance to the Horowhenua region. The house was built by WD Adkin in 1899. The Adkins were among some of the original pioneering families to settle in the Horowhenua. Te Takare holds many photos, documentation of the early history of the site.</p> <p>The original property was approximately 350 acres and considered to be the most valuable farmland in the district when balloted in 1889. Conditions applied in 1982 when we purchased the property in that land/properties could not be subdivided along Queen Street East and Denton Road to less than 10 acres.</p> <p>The property has the original house on it, although the second storey was relocated to Laws Hill in the mid 1950's, the woolshed, sheep-yards and pot dip and an out building built in the early 1900's are still on site. There is a stand of native and exotic bush, approximately 2 acres, with totaras, rimu, a large Norfolk pine and monkey puzzle planted around 1900-1906.</p>	<p>This property has been identified and briefly discussed in previous reports, but was not part of the site data set used for the analysis prior to options evaluation. The house has never been identified for, or sought to be listed in the district plan or with Heritage NZ, as far as we are aware. However, we are aware of it and recognise the importance of (George) Leslie Adkins in recording Horowhenua history, natural history and geography, and the Adkins information has provided context to the cultural, archaeological and heritage evaluations undertaken to date.</p> <p>The impacts of options on houses (and property) have been considered during the options assessment process from a landscape point of view, from amenity and community point of view and in respect of property effects. If the eventual alignment was to come close to this building, a detailed analysis of its merits may be undertaken.</p> <p>As a pre-1900 dwelling, the site has a level of protection as an archaeological site under the Heritage NZ Act and an archaeological authority would be required to disturb the area or remove the house.</p>
<p>57 Denaby at 105 Denton Road</p>	<p>Denaby has been the home of the Denton family since 1901. This house dates from 1901 and was built by Mr Douglas.</p>	<p>The impacts of options on houses (and property) have been considered during the options assessment process, from a landscape point of view from amenity and community point of view and in respect of effects on dwellings.</p> <p>The Denton family has a long and well-documented association with Levin. If the eventual alignment was to come close to this building, a detailed analysis of its merits may be undertaken. The house has never been identified for or sought to be listed in the district plan or with Heritage NZ as far as we are aware. As the building</p>



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		<p>post-dates 1900, it does not have automatic protection under the Heritage NZ Act.</p>
<p>58 Early Levin homestead – Ashleigh</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>Part of the Prouse homestead which is included in the data set analysed for the options assessment. The special values associated with this property are given consideration in this and previous reports. Reference has also been added to updated Landscape and Urban Design Baseline Report.</p>
<p>59 Bishops Vineyard with Historic Values</p>		<p>The impacts of options on houses (and property) have been considered during the options assessment process from a landscape point of view, from amenity and community point of view and in respect of property effects.</p> <p>The subdivision at Ōhau is referenced in the Landscape and Urban Design Baseline Report and was taken into account in rating the existing landscape value and ranking alternative options.</p> <p>It is also located within an archaeological risk area which was part of the project data set used for the assessment of options.</p>
<p>60 Original historic pioneer homestead built 1891 with historic outbuildings, trees, gardens. Second oldest house in Levin. Occupied by the same family for the past 126 years since the establishment of the town. Strongly connected to Levin's early history.</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>This is the Prouse family homestead ('Ashleigh').</p> <p>The special values associated with the homestead have been recognised and given consideration in the option assessment.</p>
<p>61 Property at 76 North Manakau Road</p>	<p>The house was built in 1880 and a room in the house was made available by the farmer (who employed a</p>	<p>The impacts of options on houses (and property) have been considered during the options assessment process</p>

THEME / TOPIC / AREA OF INTEREST	COMMENT PROVIDED BY THE SUBMITTER	COMMENT BY THE PROJECT TEAM
	<p>teacher) for use as a classroom prior to Manakau School being built. Current school has records and photos of this.</p>	<p>from a landscape point of view, from amenity and community point of view and in respect of property effects.</p> <p>This information is currently not part of data set used in the options assessment. The house is within the bounds of option S6. As it was built before before 1900 it has an automatic level of protection as an archaeological site under the Heritage NZ Act, and an archaeological authority would be needed if it was to be disturbed or removed. This property will need further investigation during detailed design if this option is taken further.</p>
62	<p>Prouse homestead</p>	<p>This is the Prouse family homestead ('Ashleigh').</p> <p>The special values associated with the homestead have been given consideration in the option assessment.</p>
63	<p>The homestead on this property built in 1891 connects to the early history of Levin and forms part of the cultural and historic heritage of early Levin. It has been occupied by 5 generations of the family who are strong advocates for its preservation.</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p> <p>This site was not included in project site data set for the assessment of options. The site values will need further investigation, if impacted by options taken forward to future project stages.</p>
64	<p>Site of first school in Muhunoa District</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p> <p>This property was included in the site data set used for the heritage assessment of the options.</p>
65	<p>Historic church</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p> <p>This is the Prouse family homestead ('Ashleigh'). The special values associated with the homestead have been given consideration in the option assessment.</p>

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<p>66 Historic homestead and property located at 1024 Queen Street East, Levin.</p>	<p>It is an original pioneer homestead built in 1891 and has been occupied by one family for 126 years since the establishment of the town. It is the second oldest house in Levin. The house and family have strong connections to early Levin history and this is well documented in historic publications on the making of the town.</p>	<p>This is the Prouse family homestead ('Ashleigh').</p> <p>The special values associated with the homestead have been given consideration in the option assessment.</p>
<p>67 Historic House Annandale at 108 Arapaepae Road, Levin</p>	<p>Designed by architect Frederick de Jersey Clere built in 1917. Currently operating a Bed and Breakfast establishment and feijoa orchard.</p>	<p>The impacts of options on houses (and property) have been considered during the options assessment process from a landscape point of view, from amenity and community point of view and in respect of effects on dwellings and property.</p> <p>Fredrick de Jersey Clere is an important NZ architect having designed over 100 churches and, for example, most of the remaining Wellington waterfront heritage buildings. If the eventual alignment was to come close to this building, a detailed analysis of its merits may be undertaken (for example looking at the extent of modifications as well as other similar examples of the building). The house has never been identified for or sought to be listed in the district plan or with Heritage NZ as far as we are aware. As the building post-dates 1900, it does not have automatic protection under the Heritage NZ Act.</p>
<p>68 House originally built 1918 for Margaret, sister of Leslie Adkin – (Adkin family of Cheslyn Rise, Queen St East). Leslie's collections, valuable to Māori, geological &amp; natural history, held at Te Papa &amp; Alexandra Turnbull Library. He &amp; father were important figures in the early development of the area.</p>	<p>For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a></p>	<p>The impacts of options on houses (and property) have been considered during the options assessment process from a landscape point of view, from amenity and community point of view and in respect of effects on dwellings and property.</p> <p>The project team has done preliminary investigations of the Adkin family's associations with this general area and is generally aware of them. This house post-dates 1900 so not an archaeological site. The house has never been identified for or sought to be listed in the district plan or</p>

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			with Heritage NZ as far as we are aware.
69	Horowhenua public cemetery		Reference added to updated Landscape and Urban Design Baseline Report.
70	Koputaroa Cemetery		The Landscape and Urban Design Baseline Report identifies Koputaroa settlement including the cemetery and urupa. None of the options considered will impact on this area.
71	Manakau Cemetery		The Landscape and Urban Design Baseline report identifies the Manakau Cemetery (on South Manakau Road). None of the options considered will directly impact on the cemetery. Some options pass nearby, but the cemetery lies between SH1 and the railway line.
ECONOMIC			
72	Alliance Levin	Meatworks. 300 workers. 3000 sheep per day. 250 beef per day. 50 trucks a day.	<p>The Alliance Meatworks were considered as part of the multiple criteria in the option assessment process. If an option impacting on the works proceeds, further consideration will be given.</p> <p>The Landscape and Urban Design Baseline Report identifies the meatworks (or abattoir). Reference to as 'Alliance' meatworks has been added to the updated Report. It is a major industrial and employment feature that would be considered as part of detailed alignment and design of a highway.</p>
73	Garden of York Farm Shop at 73 Arapaepae Road, Levin		<p>This farm shop is located on the east side of Arapaepae Rd north of Queen St East. It is not directly affected by any option under consideration.</p> <p>The impacts of options on property and business have been considered during the options assessment process from a property perspective.</p>

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74	Coral Tree Orchard	Producers of organic cider vinegar. Unique eco house on site.	Some of the orchard may be affected by N5 and N9. Business specific avoidance and impacts will be considered once a preferred option is chosen.
75	Shirley's Yummy Strawberries at 85 McLeavey Road		No options are in this area.
76	Quarter Acre Bistro Cafe		No options are in this area.
77	The Black Shed shop		No options are in this area.
78	Country life camellias		No options are in this area.
79	Yorkvale Cattle Stud		Some of the stud may be affected by S6. Business specific avoidance and impacts will be considered once a preferred option is chosen. The impacts of options on property and business have been considered during the options assessment process from a property perspective.
80	Racehorse breeding and training establishment.  (Could not be located on the map)	This business has been going in the area of Manakau and Levin in excess of 72 years. This property was chosen for the highly productive soils to breed, raise and train thoroughbred racehorses to the highest level of competition, here in New Zealand and overseas.	Business specific avoidance and impacts will be considered once a preferred option is chosen, if this activity is directly affected.  The impacts of options on property and business have been considered during the options assessment process from a property perspective.
<b>CULTURAL</b>			
81	Tikorangi waahi tapu		The Tikorangi cultivation and clearing is included in archaeological site data set used for the option assessment process.
82	This is a small area of Māori land that is left to the hapu of Ngāti Tukorehe in Ōhau, lower north island – New Zealand. On	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	This site is mapped adjacent to Kuku Beach Road just west of the NIMT Railway crossing. There are several other references to the stands of bush in the vicinity. Reference has been added to updated Landscape and Urban Design

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	it is native bush which has been flourishing with the help of kaitiaki.		Baseline Report.
83	Pukeatua, rakau rangiatea	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	This site was included in the archaeological site data set, but there may be specific cultural values that are not covered under archaeological criteria.
84	Ngāti wehewehe Marae		The marae and associated kainga is already referenced in the Landscape and Urban Design Baseline Report. It was taken into account in rating the existing landscape qualities and ranking alternative options. This site was also included in the archaeological site data set.
85	Waahi tapu	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	There are several sites of significance in the general vicinity of Kuku Beach Road (the location indicated in this piece of feedback). These sites include the Papawhanake clearing, Wehepeihana’s homestead and remnants of a small settlement on the western edge of the clearing. The project team has a quantity of information on the sensitivity of this area and this information has been taken into account in the assessment of options.
86	Cultural sensitivities near Kuku	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	The Landscape and Urban Design Baseline Report identifies the Ngāti Tukorehe Marae and associated settlement at Kuku, and features such as the bush and waahi tapu near Kuku Beach Road.  A number of archaeological sites were included in the data set in this general area.
87	Whare Rongopai	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	There are no options being considered in this area.  The updated Landscape and Urban Design Baseline Report identifies the Whare Rongopai (Brethren Church) at Hinaupio. Specific provision was made for this building

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88	Lake Horowhenua	Māori land and sacred sites that exist around the lake.
<p>in the approved Waitarere Curves Project design.</p> <p>Lake Horowhenua has been recognised of high value in the ecological assessment, landscape assessment, social assessment and assessment of Māori Cultural values completed for the project.</p> <p>In the ecological assessment, Lake Horowhenua has been recognised as being of National Ecological significance and a high priority for avoidance.</p> <p>Lake Horowhenua is also noted as a particular feature in the Landscape and Urban Design Baseline Report. This specifically includes its value to tangata whenua, which was taken into account in assigning it a high landscape rating. The Lake is a feature to be avoided, and is taken into account in evaluating options.</p>		
89	Lake Papaitonga	Māori land and sacred sites that exist around the lake.
<p>Lake Papaitonga has been recognised of high value in the ecological assessment, landscape assessment and assessment of Māori Cultural values completed for the project.</p> <p>In the ecological assessment, Lake Papaitonga has been recognised as being of National Ecological significance and a high priority for avoidance.</p> <p>Lake Papaitonga is noted as a particular feature in the Landscape and Visual Baseline Assessment, including its value to tangata whenua, which was taken into account in assigning it a high rating. The Baseline report identifies it as an outstanding natural feature (ONF). It is a feature to be avoided, and is taken into account in evaluating options.</p>		
90	Campsite	Maunu-wahine is a campsite where Muaupoko hid from Te Rauparaha as it was close to a stream and in a natural
<p>The project team is aware of the general location of the site. Further investigation work may be undertaken</p>		



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		clearing	depending on which option is advanced.
<b>DESIGN</b>			
91	Earthquake, High rainfall, Mist, Slips. This area sits above a fault line. Significant slips and land movement occurred during the Kaikoura quake. An earthquake with a closer centre could cause extensive damage. Rain/Mist clings to the hills and valleys in here.	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	The geotechnical considerations have been taken into consideration during the desktop engineering assessment and the fault line issue is known. The rain and mist issues identified are useful additions to the available information on climate and weather in the area.
92	Flood prone bridge due to Waikawa River		The project team is aware of this flood prone bridge on the current SH1 and the washout that occurred here recently.
93	Flooding (and fog) north of Levin	For more information, please refer to the online map: <a href="http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you">http://o2nl.nzta.govt.nz/taki-to-north-levin-mapping-your-view/maps/tell-us-the-areas-along-the-corridor-that-are-important-to-you</a>	The project team is aware of the flooding issues through Regional Council. The information on fog is a useful addition to the available information on climate and weather in the area.
94	Springs and water drainage issues	North of Queen St East and East of Arapaepae there is a large amount of springs that come up from the hills to the east and a large amount of surface flooding and water runoff. This will make managing drainage of the bypass difficult and also create new areas of water pooling adjacent to the bypass if it was in this area.	While no groundwater investigations have been undertaken, the design team is aware of this issue and it has been noted in the Preliminary Geotechnical Appraisal. If options in this area are advanced further, this issue will be taken into account during future design stages.
95	517 Arapaepae Road South	The distance from our home to the Ōhau river bank is 268 meters which is across a designated Flood Zone as shown on a LIM report from HDC for our property. Properties in this area have been flooded before.	All river channels will be modelled to better determine flooding extents. The project will ensure no worsening of flood issues.