

**Kāpiti Coast District Council 23 June 2011:
Submission on MacKays to Peka Peka Expressway**

1. Introduction:

The Kapiti Coast District Council welcomes the opportunity to make a further submission on the Mackays to Peka Peka section of the Wellington RoNS. This submission should be read in conjunction with points made previously in the Council's 2009 and January 2011 submission. The basis for Council's submission continues to the guiding objectives developed with the community in 2010.

The submission focuses on the following:

- Interchanges;
- assessment of impacts on the local road network;
- key sections of the road;
- future road connections;
- stormwater, groundwater and flood management;
- ecosystem impacts;
- CWB access;
- noise and lighting;
- landscaping;
- bridge design;
- air pollution;
- State Highway 1;
- other matters.

2. Interchanges

The design of the four interchanges is of major importance to the District. It is essential that detailed design ensures that active modes are able to move across these interchanges in a way that is sensible and logical in terms of movement, safe and attractive to users. The Council understands that considerable effort has gone into designing these areas in as an attractive way as possible. It believes that the footprint of these areas should be reduced as much as possible, provided that the above conditions can be satisfied.

Poplar Avenue Interchange

As signalled in its previous submission, the Council is generally comfortable with the configuration of this interchange but the following will need to be addressed:

- providing clear documentation and sign-off from the Greater Wellington Regional Council that there is sufficient land for rail station parking at Raumati South. The Council is aware that on-road parking will be possible with the proposed 'design-down' of the old SH1 to a local arterial. However, there needs to be an estimate of likely parking needs (in conjunction with a feeder bus service) when a station is built at some point. Should further off-street parking be needed, then land will need to be set aside for off-road parking and access, given that the Expressway is proposed to be located over top of land set aside for rail parking. This needs to be part of the mitigation of the effects of the Expressway at this point. The Council understands that this is the intention of the current design process but considers that this needs to be clearly documented and signed-off prior to lodgement with the Board of Inquiry.

- ensuring that there is adequate signage further south to ensure that road users have an early warning of the interchange and understand the links through to the Paraparaumu and Waikanae Town Centres on the current SH1. The interchange itself needs to be treated as a ‘Gateway’ statement, with due care taken to protect any remaining trees, including the older exotics where possible. The Council would like exotic trees and planting included at this interchange, to reflect the general character of the area, provided that the links with the escarpment are also acknowledged.
- positioning the roundabouts on or closer to the existing Poplar Avenue alignment;
- ensuring the size of the roundabouts are minimised to reflect the local road status and their semi-rural location;
- better detailing the shared path associated with the expressway, attractive on-road cycle facilities, linkages to local shared paths and pedestrian/cycle crossing arrangements.

Kapiti Road Interchange:

The Council has signalled its clear support for an interchange at Kapiti Road. The major unresolved issue at this time is the question of the impact of the interchange on the local network. There is, however, continuing concern that the work does not adequately address the issue of Expressway effects. At present, the working assumption is that full development of the airport and town centre will only occur at a later unspecified date beyond 2026, that by 2026 the Ihakara Street extension will be provided, that SH1 continues in its current form and capacity to 2026 and that Arawhata is signalized by 2026. It should be noted that the Ihakara Street extension is largely dependent on Airport development and therefore the assumptions are not necessarily clearly linked. The scenario tested to date may or may not prove to be the case and these assumptions should be subject to further sensitivity testing to establish the consequences of variations in circumstances. For interpretation purposes separate consideration also needs to be given to the likelihood of these variations occurring.

The following sensitivity tests (especially with respect to Kapiti Road analysis) are sought as follows:

- with higher airport and town centre development levels (both currently assumed to be approximately one third developed by 2026) to say 50% and 100% of full development potential By 2026;
- with the airport development reduced to the District Plan ‘threshold level’ and therefore without the Ihakara Street extension;
- with the latest envisaged treatment of SH1 included;
- without the signalization of Arawhata Road.

Undertaking all these tests would give more confidence in the interpretation of modeling results and conclusions about their implications.

In general the approach outlined in the consultation for this part of the Expressway is aligned to the thinking expressed in Council’s previous submissions. However, there is a need for further clarity around the overall interaction of the active and vehicle networks and more analysis and examples of visual and noise impacts.

Te Moana Road Interchange

The Council understands that more work is being undertaken on the design of the interchange and that in particular the question of the Waikanae River secondary flow path through to the Waimeha Stream is being fully tested, in conjunction with Greater Wellington Regional Council. It is essential that this work is fully addressed. The Council does not support any river corridor works being undertaken to minimise the need for adjustments to the Expressway design.

The Council does continue to have concerns about the size of the intersection footprint and access for active modes through the intersection at Te Moana Road. This needs to be finally reviewed once the flood and storm water flows analysis is completed. Access into the western and eastern side of the Ngarara Plan Change 81 area also needs to be provided. The link into the western area of the Ngarara North development should be allowed for off or adjacent to the Te Moana Road.

Waikanae On One, a community group of interested residents has raised a number of questions about design solutions between the Waikanae River and Te Moana Road. They seek reassurance about groundwater impacts and river flow paths, all of which are consistent with Council's clearly stated objectives that were set at the outset of this process. Waikanae On One has also proffered their own ideas on design, included an elevated 'bridge' structure instead of earthworks corridor and an alignment further to the west which would give an at-grade route for the Expressway adjacent to the Waimeha Stream. It is understood from GWRC that Waikanae On One has also suggested extensive stopbanks along the River to drive flood waters into a new path on the western side of the dune system that lies to the west of the Expressway route. This suggestion was not included in the presentation Waikanae on One gave to the Council.

The Council makes a clear distinction between the questions raised by Waikanae On One and the particular solutions proffered. The Council has asked that the flooding and storm water issues are reported back to Council when the work is completed. It will await analysis and feedback on the Waikanae On One ideas. The Council seeks any feedback within the parameters set by the Council objectives, which also encompass safety (including CPTED), ecosystem impacts, access, amenity and urban design.

Peka Peka Interchange

The Council supports the design at Peka Peka, including the bridging of the rail line. There are two important reasons for this. First the NZTA made in 2009 that it would only countenance effectively three full interchanges through the District. A bottom-line for the community was that Waikanae and Paraparaumu populations and businesses should have access to a second river crossing. This requires two internal full interchanges, leaving the current options for Peka Peka. Second, a full interchange will have the effect of attracting services and business north. This will lead to pressure for further more urban development around Peka Peka which is inconsistent with the rural lifestyle of this area. The design of this interchange is essential to Council managing urban sprawl into the Peka Peka area, a position which has been consistently submitted on from 2009.

3. Assessment of Impacts on the Local Road Network.

This was raised as a significant issue in the Council's February 2011 submission. It is pleasing to see that there has been refinements carried out which provide for a finer grain in the model. This should go some way to ensuring the traffic effects on the local network can be adequately addressed. The issues in relation to Kapiti Road, the town centre and Ihakara Street were canvassed earlier. These were primarily to do with the selection of scenarios and growth assumptions. The other remaining major issue is the growth assumptions being used in the Waikanae North area.

The key issues are that the scale of residential development in the District Plan is for >1,600 households plus ancillary community / mixed development in the Ngarara Precinct and Zone. For Waikanae North it is approximately 700 households and an unspecified but reasonably substantial amount of commercial development. As far as Council can determine at this stage, the model does not fully allow for the above development, or at least it has been assumed that very little will have occurred by 2026 - zero for Ngarara, and for Waikanae North around 100 households plus a moderate amount of commercial development by 2026. The Council recognises that some localised testing (i.e. not using the main SATURN model) of the impact of 400 households at Ngarara wishing to access a new junction on Te Moana to the west of the expressway has taken place. The analysis does not appear to have looked (in traffic generation terms) at the possibility of using the new junctions being created on Te Moana for the expressway to access the Ngarara development areas.

4. Sectors Commentary

Waikanae North and Ngarara/ Smithfield Roads.

The Council supports the closure of Smithfield Road and the creation of a new access off Ngarara Road which will service Nga Manu and adjacent properties, as well as providing for the link back to SH1. This new road will provide for Nga Manu's preferred access immediately and overtime will tie into the future Waikanae North development areas. The Council understands that Nga Manu have provided a detailed drawing of the preferred access into the area which was developed as part of planning for the Ngarara plan change. While there may be a need to modify the detail of the alignment, this in the Council's view, provides for the most appropriate linkage to properties and through to the east.

Key matters of detail that remain to be addressed in this area are:

- ensuring that the local road design protects in-stream habitat and fauna;
- exploring opportunities for walkway and cycling access along the stream edge where possible;
- ensuring that future road connections to the west and east, consistent with the District Plan can be conveniently connected to the new access road;
- making sure the alignment of the Ngarara road over the expressway is consistent, in alignment and safety terms, as it connects back into the existing Ngarara Road.

The Council continues to reinforce that this area is intended for future low-impact urban development. Although progress has been made on the connections, the Council is not convinced that this future development area has been fully provided for in the work to date, particularly the sustainable design philosophy. A central aspect of the philosophy is a high

level of connectivity for all modes. The main connector routes for the area are formally included in the District Plan, from the current State Highway to Ngarara Road and from Ngarara Road through to Paetawa Road. The impact of the Expressway on the road, cycle, walk and bridle path design of the existing precinct plans has not yet been addressed or outlined in detail.

The Council's previous submission made clear there was an expectation that the use of road seal to minimise noise would be used throughout the urban areas. It is not yet clear that this is the case, particularly in the Waikanae North area. This area is intended for future urban development and it is essential that this level of service is designed and costed as part of the project. This may have the benefit of reducing the impact of other works required to reduce noise impacts, with the potential of a better amenity and environmental outcomes.

Lighting in this area needs to be consistent with the low impact urban design standards of limited lighting and carefully managed placement.

Waikanae between Te Moana Road and the River

The Council outlined the importance of this area in our previous submission and acknowledges that it has been a difficult time for many as the final alignment was nominated. The issues in relation to impacts on cultural sites, impacts on adjoining properties and impacts on eco-sites are complex. The Council notes that discussion continues with tāngata whenua: the Council will continue to support the position of tangata whenua but also places considerable emphasis on the development of design and mitigation actions which address the very significant issues which exist in this area. The next phase of design must address these issues in an innovative and creative way.

The matters requiring more coverage include: impacts on overland flow paths, flooding, and specific detail on wetland; stream and springs along with a greater understanding of groundwater impacts. The late change to the western alignment has also highlighted some potential gaps in regard to property access, both temporary and long term and the use of easements to ensure that the integrity of altered overland flow paths are maintained. Cycle, walkway and bridle paths in the area also need to be further assessed- especially in view of the very indirect alignment of the proposed CWB route.

Waikanae River to Mazengarb Road

Council advocated for and supports the retention of Otaihanga Road to a rural standard.

As the current landfill site is proposed to provide for a growing number of recreational activities we wish to ensure that more than adequate provisions are made for non-vehicular trips into and around this area, including linkages to the river and Otaihanga Domain along with the growing residential areas. Council has some reservations in regard to the north-south CWB path being on a right-of-way to the north of Otaihanga road and requests further detail in terms of the possible shared mode status, along with details regarding ongoing maintenance, upgrades and accessibility. We also have some concerns in terms of the overall detail of the east-west CWB navigation and the traversing of Otaihanga Road at key points.

The treatment of the forested area will also need to be addressed along with further information in terms of the impacts on the identified use of the existing wetlands for stormwater management.

The Council seeks a high level of amenity in and around Mazengarb Road as it passes under the Expressway. With the lowering of the road and the imposition of wide expressway bridges this could become a somewhat unpleasant environment. In addition to the significant pedestrian and cycling activities associated with children from the local schools, there is a high number of elderly living in the area. The outcome sought is an environment that allows for a safe and easy mix of these ages and activities, through this confined point. Allowance should be made for wide paths, good lighting, protection from vehicles navigating bends and increased wind, particularly as the opening is exposed to the predominate north/west winds. Treatment of the retaining walls leading up to the bridge also need careful attention to ensure pedestrian comfort is not compromised by steep, high embankments.

Mazengarb Road to Kāpiti Road

The Council appreciates the work being undertaken to understand and allow for active mode movements areas across the length of the project. Council is adamant though that the existing east-west connections in this area be retained. In terms of this section the Council supports two crossing points - one linking the area between Sovereign Way and Palmer Court and the other between Te Roto Drive and either Cypress or Elder Groves. These should be linked into the north/south connection and be of a design quality that ensures safe, pleasant and efficient movements at all times in all directions.

Careful consideration needs to be given to the imposition of continuous noise barriers to the back of the residential areas. Their location in terms of imposing an additional barrier and further isolating households, particularly on the eastern side of the expressway, is a concern. Ensuring also that they do not provide environments for anti-social behaviour is also important. Their careful integration with the cycle and walkways is also essential.

Kāpiti Road to Raumati Road

The Council would like to see more detail in regard to access along and across the Expressway for active modes, outside the formal road crossings including Ihakara Street. The Wharemauku Stream route and the quality of the bridge crossing is a significant concern, for both access and stream values. Good quality access through the Expressway needs to be maximised, particularly in these town centre areas.

Extensive areas are planned for dedication to the management and treatment of stormwater and overland flow paths. Given their location adjacent to the future development areas of the town centre, careful consideration needs to be agreed as to their visual and other impacts. High amenity values are sought in order that these areas integrate as quality locations and draw cards to the town centre, rather than places to be avoided.

Raumati Road to Poplar Avenue

Council strongly advocates for the inland CWB 'off-road' route connecting Paekakariki and Raumati, rather than a route adjacent to the Expressway, with the junction with Poplar Avenue somewhere in the vicinity of Matai Road. This should not in any way preclude cycling on the Expressway along the straight, nor the provision of shared path facilities from the Poplar/Matai junction linking Leinster Avenue to the former state highway.

5. Future Road Linkages

There are three areas significantly affected by severance as a result of the proposed Expressway, where local connections (walking/ cycling and/or vehicle access) are potentially needed across the Expressway but will not necessarily need to be constructed until after the completion of the Expressway. These are:

- Leinster Avenue/ Raumati South area;
- between Te Moana Road and Ngarara Road where it passes under the Expressway;
- the paper road extension of Ngarara Road outside the Waikanae Urban Edge.

Council will continue to seek a Memorandum of Agreement with the NZTA as to the inclusion of these potential projects as part of the overall project but with an agreement to fully fund at a later date. The Council wishes this agreement to be in place prior to lodgement with the Board of Inquiry. The process of assessing what is finally needed and the trigger for this design process would also be included.

The assessment of need must canvass the full range of matters generally covered off in the multi-criteria analysis used to date and not be simply confined to traffic generation.

6. Stormwater and Flood Management

Specific issues relating to Te Moana Road were covered earlier. Stormwater and flood management effects and impacts are a major issue and the general issues are canvassed below. The Council seeks a specific report back on these issues and how they are being handled along the corridor. An important theme is having a clear plan and agreement in place to monitor long-term effects and deal with any unanticipated issues that may arise. This includes ensuring that there is provision in place to deal with climate change effects. A second important issue is ensuring that there is a maintenance and operational plan in place for all stormwater systems which is not simply focused on maintaining Expressway function. The plan and agreement must also ensure that the overall system is operated and maintained to avoid impacts on adjacent areas over time. The Council will not accept any costs arising inadequately designed or maintained systems.

Ponding:

There are existing flooded areas which when filled will displace floodwaters elsewhere. It is important to accommodate this volume of water without raising the flood level in adjacent properties. The results of the modelling that has recently started need to confirm that the effects of any construction in the ponding areas are no more than minor

Increased stormwater runoff:

As a result of constructing large impermeable areas there will be an increase in the amount of runoff with the greatest difference between before and after on sand dunes, the peak flow of which will need to be attenuated before entering the receiving environment. The Council is still awaiting the results of modelling this mitigation proposal.

Obstruction of overland flow paths:

At this stage it would appear that the culverts and structures for water crossings are adequately sized but sensitivity analysis needs to be done for an “over design” event. The expressway should not block the residual flow path of the Waikanae River to Waimeha stream, controlled by GWRC.

Stormwater Contamination:

It is Council’s view that the treatment of runoff as currently proposed for the project is to industry “best practice” standards

Excavation of Peat:

Council expects to see a plan to mitigate for potential changes the removal of peat will bring and long term monitoring of adjacent areas of interest to ensure that these effects are clearly understood and dealt with on a long term basis

Compaction of Dune Sand:

Similar to peat removal, the compaction of dune sand will reduce the number of voids which will reduce ground water flow through the ground, potentially causing upstream effects. The Council expects to see a plan to mitigate for potential changes and the long term monitoring of adjacent areas of interest to ensure that these effects are dealt with on a long term basis

Post Construction Settlement:

Where there are existing structures located near to excavations the effects of removal of the adjacent soil or altering the soil characteristics may not be apparent for some time. Council believes that should issues such as this occur there must be a mechanism in place to deal with them on a long term basis

Management of Sediment control during construction:

During the construction period there is the potential for erosion of sediments when the ground has no vegetation. Council expects that industry “best practice” methods are employed to avoid any damage to the downstream environment from sediment contamination

Disposal of water from dewatering operations:

The excavation of peat and construction of structures may require temporary dewatering. The disposal of this water will require careful management to avoid damage to surrounding properties. Council would like to see approved methodologies that deal with effects of these flows.

Construction nuisance:

Given the nature of peat and sand there will be issues with dust, noise and vibration associated with the construction activities of the expressway. Provisions that deal with these effects must be established before any physical work commences and used to satisfactorily deal with the unwanted nuisances.

7. Ecosystem Impacts

The Council reiterates its position on avoiding ecological impacts, as set out in its Objectives for the project.

The key issues that have arisen concern the project's potential for having significant adverse effects on wetlands, waterways, ecological sites and native vegetation along and adjacent to the proposed alignment. The initial threats are from the effects of construction, which will include destruction of wetlands at Raumati, Otaihanga (Council and private land) and Waikanae (El Rancho and Iwi land). There have been some general discussions about mitigation where destruction cannot be avoided. Though the intention to mitigate is clear, the Council will continue to seek reassurance in the further design stage that mitigation goes beyond the merely adequate and achieves best practice. This is particularly the case at the significant El Rancho/Takamore Trust site (Ecological Site K170).

In addition to outright destruction, the Expressway project has the potential to alter the hydrology of a series of wetlands along the route, including the regionally significant Te Harakeke wetland complex (Ecological Site KO66), and to adversely effect the values of these wetlands through sediment and contaminant laden run-off. The Council underlines its requirements for hydrological neutrality, for careful assessments of adverse hydrological effects prior to construction, and for long-term monitoring of hydrological and other environmental effects on wetlands, with adequate provisions for remediation and mitigation of adverse effects. As with stormwater impacts generally, the Council expects to have an agreement in place prior to the Board of Inquiry process which links long-term monitoring systems to a clear process (and associated resourcing) for rectifying problems should they arise.

The construction and presence of the expressway are bound to have some effects on hydrology throughout the proposed route. Pre-loading of peat land will 'squeeze' water out and alter permeability, and excavating peat and replacing it with compacted fill could have severe effects on the hydrology of large surrounding areas. Wetlands can suffer irrevocable damage through small changes in water levels. Protection of remaining wetlands is a national conservation priority, therefore the Council advocates strongly for their protection. The Council also needs continued assurance that the potential effects are well understood before construction starts, and that planning to avoid, remedy or mitigate adverse effects is adequate. Avoiding adverse hydrological effects on wetlands and waterways should be a priority when considering which construction techniques to use in sensitive areas. The Council is aware that avoidance will be technically challenging and probably expensive and will continue to be involved in reviewing these matters.

Waterways from Raumati to Peka Peka are similarly vulnerable to sedimentation and contamination during the construction phase as many bridges and culverts requiring extensive earthworks are proposed. Waterways ranging from the Waikanae River to minor stream tributaries will remain vulnerable to the effects of contaminated stormwater discharge after the project's completion. Ecological assessments of the current state of affected waterways have been conducted. The Council considers the results of these assessments should be used as a reference baseline for monitoring of adverse effects during the construction phase and long-term, with standards set to protect ecological health. Maintaining fish passage or improving it where the opportunity arises is also a baseline requirement.

Effective attenuation and treatment of contaminated stormwater run-off is vital to safeguard the ecological health of wetlands and waterways. The Alliance consultants propose an extensive system of swales and wetlands to attenuate and treat stormwater. The approach is sound but needs to be supported by adequate establishment and maintenance regimes. The consultants propose to keep treatment wetlands separated from any wetlands restored as mitigation for adverse environmental effects, and this is strongly supported by the Council.

Significant destruction of native vegetation will occur mainly in wetlands in Raumati South along with mature kanuka on Council land at Otaihanga. Regenerating dry duneland vegetation will be destroyed in the area covered by Plan Change 80. The Council submits that the destruction of areas of naturally occurring native vegetation outside ecological sites should be mitigated based on mutual agreement on what is significant.

The construction and presence of the expressway is likely to affect the movement of native fauna across the landscape. Construction will create disturbance, and the scale and orientation of the expressway will be a physical barrier to east/west movement, particularly of birds moving between bisected areas of habitat such as wetlands, and through developing habitat corridors linking the Tararua Range foothills with Kāpiti Island (Waikanae River, Pharazyn Reserve-Te Harakeke-Nga Manu-Hemi Matenga). Traffic poses a significant risk to native fauna and one of the objectives of Expressway design should be to minimise that risk.

Thus far the process followed to inform planning that avoids, remedies, or mitigates adverse effects on ecology has been sound. The Council is confident that the ecological consultants have to date provided to date the right quality/ level of information.

8. Cycleways, Walkways and Bridle Paths (CWB)

The Council supports all efforts by the Greater Wellington Regional Council to provide a quality activity mode path through the Queen Elizabeth Park. The Council also supports ensuring quality links, particularly to residential areas and key services in Paekakariki and Raumati South.

The Council reinforces the community's aspiration to have a well connected active mode pathway from Paekakariki to Otaki. The work completed to date certainly has started well and the Council looks forward to work on developing the detail further.

It is desirable that the shared CWB facility is located predominantly on the western side of the Expressway. North of Kapiti Road that desire could be relaxed provided that directness and continuity is maintained. However, it is critical that the shared path is located on the western side of the expressway at the Peka Peka interchange to connect with the Peka Peka to Otaki (PP20) projects shared path.

The Council wishes to make the following more detailed comments:

- As noted earlier CWB links between Leinster Avenue and Matai Road need to be provided for in the future.
- The Council required that except on rural bridges, all local roads, either under or over the Expressway, have paths on both sides. At this stage only the Ngarara

(paper road) Road Bridge would fall into the rural category, as all the other bridges are within urban or future urban zones.

- A proposed matrix showing the bridge hierarchies and associated CWB facilities is awaited in order that Council can clearly address the question of the adequacy of facilities on all bridges and/or the associated underpasses.
- Further work is required on the Wharemauku Stream CWB, in particular the future alignment and susceptibility to flooding.
- At Otaihanga Road the Expressway over option requires a CWB clip-on or similar structure as termination of the shared path on an acute bend on Otaihanga Road is unacceptable. The Council has recently invested in a shared path on the north side of Otaihanga Road to avoid this CWB route crossing the district's busiest rural road. It is also essential that there is a connection from the Expressway CWB to the local Otaihanga walkway/ cycleway, given the Council's strategic intentions for recreation in this area.
- At the Kapiti Road expressway overbridge the Council wishes to maintain high utility cycle lanes and shared paths. Whether the Expressway goes over or under, at this point, a central bridge support structure would best fit the Council's plan to reconstruct Kapiti Road as a boulevard.
- Arawhata Road needs to be signalised, particularly, if there are no opportunities to achieve CW access between Te Roto Drive/ Sheffield Street and Makarini Street during the construction period.
- Options for solar powered low level night lighting of the shared path needs to be considered, unless this amenity will be specifically provided on the Expressway during non-daylight hours. Overhead high powered lighting is generally the least preferred option due to issues with light spill, fauna disturbance and intrusion of unnecessary structures into the landscape.
- The shared path beside the Poplar Avenue expressway off-ramp has an excessive divergence for cyclists and needs to be relocated further eastwards towards the roundabout. Poplar Avenue will need to be upgraded by providing an off-road shared path on the north side. Connections between Leinster Avenue and Matai Road, Fincham Ave and local schools are key to good outcomes.
- A review of the Otaihanga Road Bridle path is needed. Generally good design of all bridle paths connections at bridges or underpasses is required. The Kāpiti Coast District is possibly unusual in its emphasis on bridleways and it is important that this area is not overlooked simply because of a lack of familiarity.

Overall the Council is encouraged by the work that has gone into the development of a CWB route alongside the Expressway in addition to continuing the provisions for on-Expressway cycling.

9. Lighting and Noise

To date there is limited information in the material about lighting of either the Expressway or the CWB network. As a baseline the Council would anticipate the use of environmentally sustainable, low energy illumination.. The number and location of light stands is highly important to the Council as it seeks to minimise unnecessary; clutter, light spill, particularly out and upwards. In rural, low-impact and eco-hub areas we want adequate levels of lighting for safety consistent with density and character, but see the point of departure being our ‘low-impact’ vision that uses the latest methods to minimise light spill and promote ‘dark skies.’

Others standards would include: low level lighting where possible; warning and amenity lights on CWB where necessary; avoid flashing lights, matching lights and stands to their location; use of circuit controllers, incorporation of lights into structures.

Light-spill from vehicles on the Expressway itself needs to be addressed and carefully managed.

In all areas except those north of the Waikanae North urban edge the use of urban-level noise mitigations include: quiet road surfaces; earth bunds and walls only as a last resorts due to their visual and accessibility impacts and give consideration to location in context of local area requirements, amenity and identity.

Noise is a major issue for the community. The Council understands that analysis is still underway and that a range of design scenarios are being/ or will be tested along the route. The Council has a particular interest in ensuring the following is addressed:

- impacts on immediately adjacent property owners are fully mitigated to best practice residual noise standards, with current noise levels taken as the clear benchmark to address mitigation and not an assumption of an ‘optimal’ achievable noise level associated with an Expressway;
- noise impacts on the surrounding character of an area is a factor in noise mitigation designs;
- noise impacts on areas which are valued as particular quiet spaces along the route are tested and addressed. For example, the river corridor, key adjacent parks and the rural areas are relevant;
- the low impact but residential nature of Waikanae North is fully provided for with the use of non-chip seal. Council will seek a formal undertaking from the Board of Inquiry that this level of service will be maintained in perpetuity and that future reseals do not revert to chip seal type solutions;
- Design solutions use ‘natural’ landforms and planting wherever possible, rather than hard surfaces such as noise walls. Where the latter are used they must be designed and placed in a way that is consistent with CPTED principles, with particular regard for walking and cycling routes and use. An innovative approach is needed for the design and amenity of any noise walls on bridge structures, from the point of view of the surrounding community.

Council does not support a standard approach to lighting at any point along the Expressway. The desired approach is to follow best practice of sustainable, low impact and energy efficient lighting solutions. The Council awaits further detail in order to respond comprehensively on this matter.

10. Landscaping

The Council is pleased that to date the level of funding commitment to landscaping has been maintained. It will continue to look to a high quality of planting consistent with surrounding character and habitat considerations.

Council will continue to input into developing the planting regimes proposed along the length of the Expressway. As is currently the situation on the former state highway, there are various combinations of formal and informal plantings along its length in addition to open grazed areas. It is this variety of urban, peri-urban and rural outlooks and experiences that Council would like to see continued through the length of the Expressway.

11. Bridge Design

The Council welcomes the appointment of an architect to develop a consistent design of the many bridges through the area. While it still has an interest in seeing key bridges at the Wharemauku Stream and the Waikanae River make a strong statement, it does agree that an approach which lifts all bridges above basic engineering solutions is desirable. It also appreciates the work that has been undertaken to review design in terms of the experience of people moving under the bridges. The capacity to split the north/ south bridges and to allow light to spill below is appreciated.

The surrounding areas should also be designed and planted (where that is possible) to enhance the overall effect. Access points including CWB bridges, must be thoughtfully and clearly resolved within the overall bridge design framework. Particular attention needs also to be paid to linking logically with local recreation areas and roads. CPTED principles should infuse the design with flair and integrate with the natural environment. Areas in and around the walkways below the bridge should be maximised to provide safe and inspiring environments, not simply functional ones. In addition to maximising the experience for the current users, similar mitigation should also be provided in areas which may become activated or isolated as a result of works.

12. State Highway 1

The Council looks forward to the further development of the design and rehabilitation of SH1 so that it is fit for purpose as a local arterial. It appreciates that the Alliance and NZTA have agreed to bring work forward on this matter and that more detailed community consultation will occur in August. The Council welcomes the commitment to bring forward this work in the programme so matters are appropriately addressed in a timely manner. The Council looks forward to having a clear agreement in place around funding prior to the Board of Inquiry process.

13. Other Matters

The Council understands both the construction and final designations boundaries are still subject to some degree of variability. It looks forward to continued input on this.

The Council continues to have very high expectations in terms of the design, quality and boldness of major structures and components proposed within the corridor and its surrounds.

The Council welcomes moves to bring forward and shorten the construction programme but this should not be at the expense of the comprehensive sustainable design outcomes.

The issue of noise, vibration and dust impacts of sheet or construction piling also needs to be addressed.

The matters raised in earlier submission, in regard to pressing forward with property purchase with willing sellers, are being actively pursued by NZTA. The Council will continue to maintain a watching brief in this area.