



## Report pursuant to s42A Resource Management Act 1991

<b>In the matter of:</b>	A Notice of Requirement to construct and operate a new intermodal rail and freight hub on land between Palmerston North and Bunnythorpe
<b>And:</b>	A hearing by Palmerston North City Council pursuant to s100A
<b>Requiring Authority:</b>	KiwiRail Holdings Ltd
<b>Hearing date:</b>	Commencing 9 August, 2021

Section 42A technical evidence summary statement for hearing: Council Infrastructure

By: Robert van Bentum

1. I am Acting Chief Engineer at Palmerston North City Council.
2. I prepared evidence on the NoR's impact on Palmerston North City Council's existing and future strategic three waters, roading and walking and cycling networks on behalf of the s 42A reporting team.
3. In this summary I comment on the following:
  - a) Issues in relation to impacts on Council's existing and future strategic roading and three waters networks that remain in contention or have not yet been addressed.
  - b) Updates with respect to Council's planned and committed programme of upgrade work, particularly the strategic roading network.
  - c) The draft conditions, including any differences between the revised conditions proposed by KiwiRail and the s 42A reporting team.
4. There are several matters on which I understand the Commissioners are seeking updates. Some brief commentary is provided on these as follows.
5. Level Crossing Closures of Roberts Line and Clevely Road: Following completion of accident reports for fatal accidents at both level crossings and options assessments of treatments to address safety risks, Council is considering the closure of both level crossings to vehicular traffic and has been in discussion with KiwiRail as landowner. Discussions are currently ongoing with KiwiRail to agree the design of the closures and any roading works required, and the appropriate process to follow.
6. Strategic Roading Network Investment: Council has approved a 10 year plan which includes significant investment commitment in upgrades to give effect to the vision of a Ring Road (PNITI) around Palmerston North. The programmes of work were included in Council's RLTP submission to Waka Kotahi. The submission was subject to review by Waka Kotahi, who have signalled that the Land Transport budget for the next three years is significantly over-subscribed.
7. Council's funding commitment assumes at least 51% Waka Kotahi funding support for all the programmes except those which are growth funded. Waka Kotahi has signalled approval for nearly 85% of the minor safety and road to zero programmes of work, however decisions on the other PNITI programmes of work are still outstanding. If funding support is well below that requested, then a re-

prioritisation by Council of its roading programme will be required. By way of clarification, the following are the key commitments made by Council along with assumptions of Waka Kotahi funding.

**Table – PNCC Long Term Plan Programmes Funding Strategic Rooding**

<b>Programme No / Name</b>	<b>Funding Year</b>	<b>Waka Kotahi Funding %</b>
1472 Business Case Work for Strategic Roads (PNITI) – Operating	LTP 1 - \$240k LTP 2 - \$240k LTP 3 - \$500k	51%
1695 – PNITI Intersection and Bridge Improvements (KB bridge replacement) – Capital New	LTP 1 - \$920k LTP 2 – \$5.26m LTP 3 - \$5.56m LTP 4 - \$8.90m	51%
1932 – Urban Transport Improvements – Enabling PNITI – Business Case - Operating	LTP 1 - \$100k LTP 2 - \$100k LTP 3 - \$210k LTP 4 - \$290k	51%
2013 – PNITI Strategic Transport Corridor Improvements – Capital New	LTP 2 - \$250k LTP 3 - \$5.0m LTP 4 – 10 - \$83.5m	51%
2058 Urban Growth – NEIZ – Transport Richardson's Line Upgrade / Alderson Dr Link / Richardson's – Roberts Intersection	LTP 1 - \$7.65m LTP 3- \$250k LTP 4-5 \$3.5m	0% Growth Funded
2059 – Urban Transport Improvements – Enabling PNITI – Capital New	LTP 1 - \$1.95m LTP 2 - \$100k LTP 3 - \$300k LTP 4 – 10 - \$4.3m	51%
2119 – Road to Zero – Transport Safety Improvements - Capital New	LTP 1 – \$1.17m LTP 2 – \$1.84m LTP 3 - \$2.23m LTP 4 -10 - \$12.6m	51%

8. Other network changes: The Council is still working through the next stage of the Speed Limit Bylaw Review. This may include some speed limit changes to Kairanga Bunnythorpe Road, to reflect current width and condition deficiencies and to reduce intersection safety risks.
9. Upgrade of El Prado Intersection: At this stage there is no specific programme to fund any upgrade of El Prado / Roberts Line intersection. The requirement for any upgrade will be determined by the changes in traffic volumes at the intersection. Council has prioritised reaching agreement with the private landowner of the NEIZ on construction of the Alderson's Drive link from the existing NEIZ zone to Richardson's Line. Funding provision has been made to build the link in the current

financial year. If constructed, this link will provide an alternative route for some of the vehicle movements which would otherwise use the El Prado junction.

10. Upgrade of Richardson / Roberts Line Junction: To inform the preparation of the programmes for the 10 year plan, Council has completed a concept design for a roundabout at the intersection. The design is for a standard roundabout to accommodate heavy vehicle movements. At this stage detailed design is not proposed to occur until 2022-23. If the Notice of Requirement is confirmed, the Council will need to discuss this with KiwiRail.
11. Strategic Transport Link from KiwiRail Hub to Ring Road: There has been discussion around Council's preference for any linkage between the Freight Hub and the wider strategic network. Council has signalled its desire to activate the ring road and particularly Kairanga Bunnythorpe Road as the key corridor for vehicles accessing the NEIZ and the Freight Hub. As described, Council has committed to funding all of the cost to upgrade Richardson's and Setters Line and with Waka Kotahi to fund upgrades of the connection between Richardson's Line and Kairanga Bunnythorpe Road as well as the Robert's Line intersections. KiwiRail's replacement of Railway Road with a new perimeter road on the north-western side of the Freight Hub is supported.
12. Council does not support the use of the northern section of Railway Road to connect to Kairanga Bunnythorpe Road as a permanent connection. Council has signalled its desire to see a new connection from the proposed perimeter road to the Ring Road (Kairanga Bunnythorpe Road) in the vicinity of Te Ngaio Road. This would link with a proposed roundabout at the southern end of proposed bypasses of Bunnythorpe to Feilding and also to Ashhurst. The continued use of Railway Road would continue to affect residents in this area of Bunnythorpe. This speaks to the importance of the Ring Road project and ensuring there is facility within the conditions to ensure that future integration of the strategic roading network can be achieved. I rely on the evidence of Ms Fraser in relation to traffic safety matters in this location.

## Issues

13. I understand there has been some discussion at the hearing about whether there should be appropriate mechanisms in conditions for addressing potential damage to the Council's Road network that will be caused by Freight Hub construction vehicles.

14. First, Council would like there to be a mechanism for determining using modelling the level of any road damage or deterioration and requiring reinstatement and compensation for any road damage or deterioration caused by freight hub construction traffic. I would consider that damage to the road network attributable to KiwiRail construction traffic to be an effect of the NoR on the Council's asset. In those circumstances, requiring this effect to be remedied through conditions on the NoR is the only suitable tool (in the absence of a side agreement with KiwiRail) that I am aware of to ensure that the costs of remedying damage caused is not passed on to the Council and Palmerston North residents.
15. I note that KiwiRail's Construction and Design Report estimates that during construction there will be 145,000 trips over a 2-year period of fully laden 15m<sup>3</sup> truck and trailer units to import fill material. There is no question that these heavy vehicle movements will result in more rapid deterioration and damage to the roads they will be travelling.
16. I agree with the sentiment that the 'tools' used to assess the repair requirements need to be targeted at the effect caused by KiwiRail. I have considered the appropriate mechanisms to address that and suggest that this can be addressed by requiring pre and post construction surveys, with the pre-construction surveys reporting on several matters including the condition of the carriageway, and with independent comparative pavement life-cycle modelling (e.g. DTiMS) for 'with' and 'without' construction traffic scenarios.
17. Post-construction, KiwiRail would then be required to conduct further surveys using the same methods, in the same locations, and for the same extents as carried out pre-construction. On this basis and where necessary, KiwiRail could be required at its expense to engage contractors to carry out rehabilitation works necessary to restore the asset to the condition predicted in the 'without' construction traffic scenario.
18. Finally, there is a level of maintenance that I consider should be required in respect of construction traffic to ensure that surface integrity and waterproofness is maintained. This should be provided for through the construction traffic management plan.
19. In addition, on any roads intended to be used for construction vehicles, specific geometric deficiencies including widening and or pavement upgrades to accommodate construction traffic usage would need to be identified, designed

and completed by KiwiRail to a standard acceptable to Council, prior to works commencing.

20. I would be comfortable for all of the above matters to be addressed by way of a side agreement (project agreement) with KiwiRail, but there is no existing agreement and accordingly, I consider that conditions are appropriate.
21. Safety and efficiency effects – internal level crossings: Council has advanced a concept level roundabout design for the Richardson's and Roberts Line intersection. This is a standard design that allows for heavy vehicle tracking, but is not tailored to KiwiRail's requirements. Council expects the design will need to be amended to address any specific requirements in respect of heavy vehicle stacking or tail-backs due to access or entry restrictions to the freight hub from this intersection.
22. The period of time ahead of the commencement of construction when a CTMP should be provided: It is our view that a reasonable notice period be provided on the basis that Council can manage and mitigate any potential impacts on its own programme of work in the network. As there is a requirement for upgrades to be completed before construction commences, I consider 6 months is appropriate.
23. Water Bore: In my evidence I discuss the Council's plans to upgrade and expand its bore facility on the corner of Roberts Line and Railway Road, on land that it currently owns. This is defined as regionally significant infrastructure under the regional policy statement. I have been progressing discussions with KiwiRail to ensure provision is made for that in a side agreement (the Project Agreement), however this is not yet agreed, despite my hopes that it would be by the time of this hearing. The NoR as proposed will interfere with the Council's planned upgrade of its facilities, and I consider that provision for the upgrade should be preserved. While, again I acknowledge that this is a matter that would be well suited to the project agreement, if it cannot be agreed by the time the designation is finalised the planned upgrade should be preserved by a condition.



Robert van Bentum  
24 September 2021