BEFORE THE WHANGAREI DISTRICT COUNCIL AND NORTHLAND REGIONAL COUNCIL

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of a resource consent application by Northport Limited under section 88 of the Resource Management 1991 for a port expansion project at Marsden Point
APPLICATION NO.	APP.005055.38.01 LU 2200107

STATEMENT OF EVIDENCE OF NERISSA HARRISON

(TRANSPORTATION)

24 AUGUST 2023

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INTRODUCTION

Qualifications and experience

1. My name is Nerissa Rachael Harrison.

2. I am a Technical Director Transportation Engineer, working for WSP.

3. I have over 17 years of experience undertaking and reviewing transportation assessments, including preparation of traffic evidence for the Environment Court.

4. I hold a Bachelor of Engineering (BE) from the University of Auckland and am a Chartered Professional Engineer (CPEng) with Engineering NZ.

5. I am familiar with the application site and the surrounding locality and have visited the site on 11 August 2023. I have read the relevant parts of the application; submissions; and Section 42A Report. I am the reviewer of the Traffic Impact Assessment (TIA) prepared by Parvez Sheikh that was lodged in support of the Project.

Code of Conduct

6. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note (2014) and I agree to comply with it. In that regard, I confirm that this evidence is written within my expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

7. In my evidence, I:

   (a) Address an overview of my role in the Project;

   (b) Provide an executive summary of my key conclusions;

   (c) Summarise the assessment methodology and key assumptions in the TIA;

   (d) Summarise the operational effects on capacity and safety of the transport network;

   (e) Summarise the construction effects on the transport network;

   (f) Address mitigation measures for traffic effects;

(g) Respond to relevant issues raised in the s42A Report;

(h) Respond to relevant issues raised in submissions; and

(i) Comment on the draft proposed conditions advanced by Northport.

MY ROLE IN THE PROJECT

8. I have been involved in this Project since 2021. I have assessed the transportation effects of the Project and reviewed the TIA. I have also provided input to the draft conditions proposed on behalf of Northport as they relate to traffic/transport matters.

EXECUTIVE SUMMARY

9. The expansion of the port is anticipated within wider transport planning documents and strategies and the Whangarei District Council (WDC) District Plan.

10. I support the conclusions of the TIA. I have assessed intersection sight distances and safety in greater detail than the TIA but have come to the same conclusion as the TIA, which I explain within this evidence.

11. In my opinion, construction traffic effects are no more than minor and can be mitigated through a Construction Traffic Management Plan (CTMP).

12. In my opinion, the operational effects of full Northport expansion are no more than minor and can be appropriately mitigated when the peak hourly intersection volumes[1] are below threshold volumes at three critical intersections:

(a) SH15/One Tree Point Road;

(b) SH15/Marsden Point Road;

(c) SH15/Marsden Bay Drive.

13. I recommend that Northport monitors traffic and undertakes traffic demand management practices as needed to ensure port traffic volumes remain below trigger threshold levels for peak hours (e.g. operating the full 7 days at the port, car share programme or shuttle bus arrangements for staff, and a booking system for container trucks at the port).

[1] The trigger for upgrades to the critical intersections will only be reached when both Northport traffic levels and general traffic growth from surrounding development, combine to cause the critical intersections to exceed threshold volumes.

14. Upgrade of the three critical intersections above is appropriate if Northport is unable to implement other mitigation to keep its vehicle movements less than the trigger threshold volumes. I accept that upgrade of these intersections is the responsibility of Waka Kotahi NZTA and therefore I recommend consultation with that agency in respect of potential future intersection improvements.

15. My conclusion is that the proposed development traffic generation of the port expansion can be supported from a transportation effects perspective.

TRAFFIC IMPACT ASSESSMENT METHODOLOGY AND ASSUMPTIONS

16. The key methodology and assumptions used in the TIA were:

(a) Existing traffic using the road network is based on traffic data from MobileRoad, WDC count data for local roads, Waka Kotahi count data for the state highways, and traffic surveys undertaken in October and December in 2019 (pre-Covid data was used to avoid Covid period traffic data, which is not reflective of normal traffic operation).

(b) The expected trip generation associated with the port development and planned residential development over the 20+ year period was established from anticipated employee and commercial operational forecasts provided by Northport, WDC residential growth forecasts and the Marsden/Ruakākā Structure Plan.

(c) The TIA makes the following assumptions:

i. For intersection modelling analysis, the worst-case scenario is used and the port traffic operation is assumed to occur during the same peak periods as normal traffic.

ii. For intersection modelling analysis, side roads were modelled as single approach lanes, despite some of them having a wide enough approach for two vehicles to queue side by side, except for the Marsden Drive intersection.

iii. The traffic growth rate on Port Marsden Highway (PMH) for the next 15 years is the same as the population growth, 6% per annum by 2033 and thereafter the growth rate would be 3%.

iv. All traffic east of Marsden Bay Drive intersection on PMH is conservatively assumed to be Northport related traffic, despite traffic also being generated by the Channel Infrastructure site near Northport (which has recently changed from a refinery to an import and distribution terminal and therefore, the frequency of truck movements associated with the Channel Infrastructure site is anticipated to be less).

(d) The safety of the local and regional road network was assessed within the TIA using historic crash data from the Waka Kotahi Crash Analysis System (CAS) for 2016-2020 (inclusive), an assessment of projected crash rates using the Waka Kotahi Crash Estimation Compendium (CEC), sight line assessment using Austroads Guide to Road Design Part 4A, and safe and appropriate speed using the Waka Kotahi Speed Management Guide.

(e) I have undertaken an additional safety assessment using more recent CAS data (2017-2022 inclusive), and the entire SH15 corridor from the SH1/SH15 intersection to the Marsden Bay Drive/SH15 intersection (i.e. including midblock crashes.

(f) The capacity and efficiency of the local and regional road network were assessed using Sidra Intersection software V9 and using forecast traffic volumes from the Whangārei Tracks Network Model, which included underlying traffic growth from planned residential development within the Structure Plan.

(g) Compliance of the proposed development with the transport related requirements of the WDC District Plan.

Traffic generation from the Project

17. Northport has confirmed that it currently has 300 staff members (permanent and subcontracted) and expect to increase to 400 staff members at full expansion.

18. 30 cruise ships per annum are expected to dock at this port after full port development. Most passengers disembarking are expected to travel from the port using buses to their destination. The network model has taken these buses into consideration and they equate to 1.33% of heavy vehicles in the network by 2040.

19. At full expansion, the total additional port traffic on PMH is expected to be 806 trips per day, which includes 142 trips per day from the additional 100 staff members.

Rail

20. There is no direct rail link from the port at present, however designations have been obtained by KiwiRail for a spur line from Oakleigh, and land acquisition has started. In June 2021, the Government's New Zealand Upgrade Programme allocated funding to the implementation of the rail link to Northport – the Oakleigh to Marsden Point Rail Link.[2] Once the railway line comes on-line, some freight is expected to move from road to rail, this is assumed to be 8% of freight in the modelling. Freight growth has been fully assessed without rail until year 2028.

21. If the rail link is installed by 2028, some of the truck movements will be replaced by trains. If rail does not come to fruition at the assumed period, the trigger threshold volumes may occur earlier than currently forecast. If rail uptake is greater than the 8% estimated, then the trigger threshold may be reached later than forecast.

Walking and cycling

22. Within the vicinity of Marsden Point and PMH there are no specific cycle facilities on the key roads. Given the rural environment of PMH and the 100km/h speed limit with a high volume of heavy vehicles, it is not expected that the port will generate noticeable volumes of people walking or cycling.

23. There was a serious crash at the Marsden Bay Drive intersection that involved a cyclist. It involved an SUV failing to give way and hitting a cyclist.

OPERATIONAL EFFECTS

Capacity of the transport network

24. The supporting road network accessing the port currently operates within its traffic carrying capacity for both intersections and mid-blocks, with intersections performing with good levels of service.

25. PMH is a regional arterial road with one lane each way. The capacity of this road network is between 15,000 to 18,000 vehicles per day.

[2] We understand from KiwiRail that design funding for this project was approved in July 2023.

26. With full port expansion:

(a) PMH has adequate capacity at mid-block sections with PMH volumes forecast to reach 13,666 vehicles per day in 2040;

(b) All intersections will perform well during peak periods at Year 2033[3] albeit with SH15/Rama Road intersection approaching capacity.

27. With full port expansion and residential growth continuing as predicted, by 2040 the following intersections are predicted to be operating with levels of service (LOS) worse than typically acceptable (i.e. worse than LOS D):

(a) SH15/One Tree Point Road Intersection: The One Tree Point approach is expected to operate at LOS F (the worst LOS) during peak hours regardless of the level of Northport traffic growth (i.e. underlying traffic growth causes the approach to reach capacity);

(b) SH15/Marsden Point Road Intersection: The Marsden Point Road approach is expected to operate at LOS F during the AM peak hour (8.00am to 9.00am) with Northport full development traffic. The PM peak hour (4.00pm to 5.00pm) is expected to operate at an acceptable LOS D; and

(c) SH15/Marsden Bay Drive Intersection: The Marsden Bay Drive approach is expected to operate at LOS F during peak hours.

28. The analysis is conservative because it assumes that port traffic will operate at the same time as the normal traffic peaks. A 20% reduction of the conservatively assumed port traffic during both the AM and PM Peaks would ensure that the intersections perform at an acceptable LOS D in 2040 with Northport full development traffic.

29. If the anticipated background residential traffic growth occurs at a slower pace than that assumed in the network model from the WDC forecast, the trigger threshold for Northport is expected to occur later than estimated above.

Safety of the transport network

30. The safety and sightline assessment of the key intersections within the TIA has identified no existing safety issues[4] along PMH and side roads.

[3] Based on forecast traffic volumes from the Whangārei Tracks Network Model.
[4] No issues beyond what would be expected of other similar roads.

31. The existing crash rate at the intersections along PMH is lower than expected injury crash rates for typical rural T and crossroad intersections.[5]

32. The intersections either have turning lanes or have adequate shoulder width to allow through traffic to bypass any turning traffic where no dedicated lane was present on PMH (i.e. as noted for the SH15/Salle Road Intersection).

33. Since the Application was filed, I have undertaken further analysis using more recent CAS data (2017-2022 inclusive) and including midblock crashes along SH15. That data shows:

(a) Most crashes (58%) are midblock crashes;

(b) There is a high proportion of crashes in which loss of control is a contributing factor (55%);

(c) Trucks account for 10.5% of injury crashes, despite making up almost 20% of traffic;

(d) There was one fatal crash over the six-year period, which was a loss of control crash during heavy rain;

(e) There were two serious injury crashes over the six-year period, one was a failure to give-way and the other was a head-on at a bend; and

(f) There were 16 minor injury crashes, which were mostly (75%) midblock crashes, and mostly involved loss of control (56%) or turning/merging (19%).

34. In my opinion, these crash patterns are not unusual for this type of road (i.e. 100km/hr, rural, with no separation of opposing lanes). PMH is not a high-risk road. It has a safety rating[6] of medium collective risk and medium personal risk.

35. PMH has a posted speed limit of 100km/h for all sections west of the Marsden Bay Drive intersection and 70km/hr to the east starting approximately 200m west of Mair Road. The TIA assessed the Approach Sight Distance (ASD) of the intersections along PMH. I have undertaken an assessment of ASD, Safe Intersection Sight Distance (SISD), and Minimum Gap Sight Distance (MGSD). In my opinion, the existing sight distances at

[5] Based on analysis using the Waka Kotahi Crash Estimation Compendium for High-Speed (Rural) Priority and T-Junctions (Section 6.3).
[6] An assessment of the road safety of the state highway network according to KiwiRAP. KiwiRAP is a partnership between Waka Kotahi, Ministry of Transport, NZ automobile association, ACC, and NZ police.

intersections along PMH meet SISD requirements of at least 250m for a 100km/hr road.[7] However, at the SH15/McCathie Rd intersection, traffic looking northeast from McCathie Road needs to look across a paddock to achieve the 250m sight line. If restricting visibility to within the road reserve (i.e. if sight lines across paddocks are excluded), the desirable SISD is not met. This means that if the use of the adjacent properties change from a rural paddock to another use there is a risk of SISD being reduced to less than desirable distances. However, the MGSD is met within the road reserve, meaning vehicles approaching from McCathie Road can safely find a gap to enter or exit PMH.

36. The TIA notes the SH15 / Marsden Point Road intersection does not have 250m sight distance within the road reserve; however, in my opinion a 250m sight line is met within the road reserve with the shoulder and berm included.

37. East of the Marsden Bay Drive intersection, PMH has a posted speed limit of 70km/hr. In my opinion, the existing intersection sight distances meet SISD requirements of at least 150m for a 70km/hr road.[8] The TIA notes the SH15 / Mair Road, has a sight distance of 80m and 100m looking each way from Mair Road for vehicles turning right[9] when measured along the road reserve, however this is the ASD[10] not the SISD.

38. The TIA crash risk assessment has shown that port expansion induced traffic will increase the total injury crash rate for the PMH intersections by 0.01 reported injury crashes per year. This increase is less than one additional injury crash over the next 20 years on PMH. This increase is very minor.

CONSTRUCTION EFFECTS

39. The construction of Northport's proposed expansion is expected to be carried out predominantly using water-based methods. There will be some temporary traffic impacts associated with land-based works, which will include minor increases in heavy commercial vehicle (HCV) volumes carting construction supplies to and from the site.

40. Overall, traffic effects are considered to be no more than minor. Any traffic effects arising during the construction period can be suitably mitigated through the development of a suitable Construction Traffic Management Plan (CTMP). The matters that should be included in the CTMP are summarised in the TIA.[11]

[7] Based on Austroad Guide to Road Design Par 4A.
[8] Based on Austroad Guide to Road Design Par 4A.
[9] Vehicles turning left out of Mair Road have use of a slip lane which affords greater visibility.
[10] Approach sight distance (ASD), which measures from 0m above road, rather than vehicle height.
[11] At 10.1.

MITIGATION MEASURES

41. The TIA identifies trigger levels of Northport traffic at which the three key intersections will no longer achieve an acceptable level of service. These trigger levels have been amended in the conditions proposed by Northport[12] to include a trigger for all traffic rather than just Northport traffic for easier monitoring, as follows:

    (a) If total traffic volume determined in any traffic monitoring report exceeds 1,215 vehicles per hour (being 90% of the nominal capacity of 1,350 vehicles per hour) at any of the critical intersections, the consent holder must engage a suitably qualified and experienced person to conduct a survey of port traffic contributions to the total traffic volumes at the relevant intersection and more detailed analysis of the level of service (LOS) at the relevant intersection.

    (b) There are then secondary trigger levels based on Northport traffic only, shown in the table below, which trigger the need for mitigation.

Critical intersection	Northport Inbound AM Peak Hour Trigger Volumes	Northport Outbound AM Peak Hour Trigger Volumes
SH15/Marsden Bay Drive	700	200
SH15/Marsden Point Road	700	200
SH15/One Tree Point Road	300	200

42. The necessity of mitigation measures is dependent on how close to threshold trigger levels the key intersections get. Therefore, I recommend traffic volumes accessing the port are monitored to determine whether they are approaching trigger levels identified. This will likely need to occur regularly (e.g. annually) or proactively by forecasting traffic volumes as the port expands over time.

43. If vehicle movements to and from the port can be maintained below the trigger threshold volumes identified, then in my opinion no further mitigation is required because the transport network can operate within acceptable levels of service.[13]

[12] Attached to the evidence of Mr Hood.
[13] Based on forecasted traffic volumes from the Whangārei Tracks Network Model.

44. However, the transport network would still benefit from measures to spread the port traffic demands and Northport should implement some or all of the mitigation measures set out in the TIA to maintain its operational traffic on PMH to below the threshold trigger volumes at critical intersections. The mitigation measures focus on avoiding the port traffic peak coinciding with the network AM and PM peaks, and reducing traffic volumes to and from the port. Examples of measures to reduce traffic during peak hours that I recommend Northport consider are:

(a) Encourage freight companies operate seven days a week at the port, if possible within port operations, thereby minimising port traffic operating during road peak times and the effect it has on other traffic;

(b) Managing cruise ship arrivals so that passengers disembark during off-peak periods;

(c) Implement a car share programme or shuttle bus arrangements for their staff to travel to and from work;

(d) Providing bus transport for cruise ship passengers; and

(e) Implement a booking system for container trucks at the port, shifting the time of truck movements to off-peak and improving transfer times for trucks.

45. If monitoring or operational planning by Northport indicates that trigger levels are expected to be exceeded, then I recommend a traffic assessment is carried out to determine the form of upgrades necessary to achieve an acceptable intersection LOS of “D” or less. The type of upgrades required may include new line marking and signage to provide more space and formalise turning movements. Alternatively, more substantial upgrades may be appropriate such as road widening, or a change in intersection form (e.g. roundabout). Waka Kotahi as the road controlling authority has the authority over the intersections including decision making about the form of any potential upgrade, therefore, the expectation is that, while it may be appropriate for Northport to make some contribution to the upgrades as a user of the roads, it is not appropriate that it be fully responsible for any upgrades (including because there are numerous other road users). Upgrade of the intersections would only be necessary if Northport is unable to implement other mitigations to keep its vehicle movements below the threshold volumes.

46. In my opinion, if the mitigation measures identified above are implemented, no transportation-related effects or other matters preclude the grant of consent for the full Northport expansion.

RESPONSE TO THE SECTION 42A REPORT

47. I have read the Section 42A Report prepared by WDC's and Northland Regional Council's consultant planners (S42A Report). I have also read Appendix C11 Technical Memo - Transport to the S42A Report prepared by Mr Robert Inman from Beca (Transport Memo).

48. The Transport Memo generally agrees with the TIA. In particular, Mr Inman agrees with the methodology and approach used in the TIA. Mr Inman also agrees that the potential adverse traffic effects can be appropriately mitigated to acceptable levels, however, the Transport Memo makes a number of recommendations. The S42A Report, relying on the Transport Memo, concludes that, subject to recommended conditions, adverse transport effects will be no more than minor, and suitably mitigated. The Transport Memo makes a series of recommendations; however, these are not all entirely clear, nor does Mr Inman propose condition wording. Further, it is not clear from the S42A Report, whether all of these recommendations are accepted and recommended to be included in the conditions.

49. I respond to each of the recommendations set out at section 8.2 of the Transport Memo below, including by indicating those areas in which some clarification is required:

(a) **The CTMP is to include any restrictions on construction traffic routes:** I agree with the proposed consent condition recommendations within the s42A report, which provide additional clarity on the CTMP content. The proposed conditions require the preparation of a CTMP and set out the range of matters which must be included. For example, these matters include the estimated numbers, frequencies, routes and timing of construction traffic movements; and the identification of detour routes and other methods for the safe management and maintenance of traffic flows on existing roads.

(b) **Preparation of a baseline traffic monitoring report of the four key SH15 intersections not less than 18 months after the commencement of the land use consents, with regular monitoring reports thereafter:** The proposed conditions include a requirement to prepare a traffic monitoring report to monitor crash trends and determine total traffic volume from all sources at the three critical

intersections and also at the intersection of SH1 and SH15. The Transport Memo recommends that a fourth "key SH15" be included as part of monitoring, however, it is not clear which additional intersection is recommended be included (i.e. whether this is the SH1/SH15 intersection, or some other intersection with SH15).

(c) **Trigger-based upgrade contributions (volume and LOS), generally as per that proposed by the Applicant:** I agree that level of service can be informative. However, the intent behind the requirement to monitor volumes was to provide a trigger volume at which time an assessment of the level of service (and other operational assessments) of the intersection(s) would be required. This ensures that monitoring requirements for Northport are appropriate, while still incorporating level of service assessments as required. I recognise that level of service has been used in Rule MCP-REQ3 for the Marsden City Precinct as part of the WDC Operative District Plan (in part). However, requiring level of service to be monitored would require a traffic assessment (i.e. traffic modelling) to be conducted regularly, which may not be useful if volumes do not change significantly year on year. I support the current wording of the conditions proposed by Northport that pertain to traffic volumes as a trigger level.

(d) **Retention of public access from Ralph Trimmer Drive:** Access to Ralph Trimmer Drive is not referenced in the S42A Report or the Transport Memo (except that it forms one of the recommendations in section 8.2 of the Transport Memo). Therefore, it is not clear to me what the basis for this recommendation is, and what exactly is being sought.

(e) **Not later than 12 months following commencement of the land use consents, undertaken a Crash Monitoring Report for the key SH intersections to determine a trend in accidents and to identify any safety concerns as a result of Port Activities. Repeat annually for three years thereafter:** I agree there should be condition(s) for monitoring crashes at SH15 and at key intersections and monitoring speeds along SH15 given the high-speed nature of the highway and given that speed was a contributing factor for almost half of the analysed crashes. I recommend the Waka Kotahi telemetry data is used to monitor speed and the Crash Analysis System (CAS) is used to monitor crashes. I support the conditions proposed by Northport which require monitoring speeds and crashes along SH15.

(f) **Preparation of an Operational Site Travel Management Plan, the objectives of which shall include how traffic volumes to and from the port are to be**

reduced and how port traffic peaks will avoid coinciding with network peaks. The OSTMP shall include cruise ship operations: I agree an Operational Port Site Management Travel Plan, which also includes Cruise Ship Operations, will be beneficial to improving management of traffic accessing the port. However, Northport do not control how port customers (including freight and cruise passengers) arrive and depart the port, which is the responsibility of third parties. Therefore, Northport is not able to enforce matters contained in a travel plan that are the responsibility of third parties. Northport regularly coordinates with third parties, including in relation to traffic/transport matters and will continue to do so to manage port arrivals and departures. This includes regular meetings with Waka Kotahi, which currently occur monthly. With regards to the comments in the Transport Memo regarding the assessment of cruise ship operational effects within the site and on external transport networks,[14] the TIA sets out that cruise ship passengers are expected to travel from the Port using buses. It is expected that these bus trips will generally occur outside of peak hours. The modelling in the TIA takes account of these bus trips.

(g) **Investigation and implementation of safe cycle connections to promote sustainable travel modes and to provide more choice in how people travel to work:** I acknowledge the importance in providing more travel choice for people travelling to Northport for work, given that the surrounding area may see an increase in population. I believe providing alternative travel choice will also help with ensuring traffic trigger volumes are not reached. However, the usefulness of an active modes (walking and cycling) connection is dependent on what it links to. Without it linking to residential zones within a walkable or cyclable catchment it is unlikely to be successful in supporting travel choice for Northport. I agree with including a condition to investigate and implement an active modes connection from Mair Road to Northport (600m), only if the Waipu to Marsden Cove Cycle Trail is implemented in the future. This is because Northport should only be providing an active modes connection if there is certainty there is a wider cycling network to connect to.

(h) **Utilisation of the Marsden Point Rail Link if/when it is operational to transfer freight from the road to the rail:** While I do not consider that such a condition is necessary to address traffic effects in relation to this Proposal. In my opinion, these effects are adequately addressed by the various mitigation measures proposed by

[14] At pg 6-7.

Northport as part of the Proposal. Furthermore, Northport do not control the mode choice for their freight customers. Northport regularly meet with third parties such as Waka Kotahi to manage access to the port and will continue to do so including advocating for use of rail.

(i) **Continuation of regular formalised liaisons with Waka Kotahi to discuss forecast cargo and traffic peaks:** Northport is continuing to liaise with Waka Kotahi regarding the Proposal. They currently meet monthly. The conditions proposed by Northport include a requirement for Northport to provide its traffic monitoring reports to Waka Kotahi.

(j) **Speed monitoring of SH15:** Refer to my comments above at (e).

RESPONSE TO SUBMISSIONS RAISED

Submission of Whangarei District Council Parks and Recreation[15]

50. I have read the Whangarei District Council Parks and Recreation ("Infrastructure Group") submission, and my responses are below.

51. The Infrastructure Group has raised the following:

(a) Limited information is provided on how different transport networks (coastal shipping, ferry, road, state highway, and rail) will connect with each other at various points. An understanding of the alignments relative to each other is required, to ensure the impacts of proposals on the transport networks are thoroughly understood. The submission made specific mention of the rail network.

(b) Provision of pedestrian and cyclist connections with the wider Ruakaka/ Marsden area.

The alignment of different transport networks

52. Information about existing transport networks is provided in the Traffic Impact Assessment and in my opinion is adequate to assess the transport effects of the Northport expansion. The design of any future networks (e.g. potential upgrade of rail) is not available and is not part of the existing environment. The connection of future transport networks will be the responsibility of any designation or consent requirements for that future transport project.

[15] Submission number 176.

Provision of pedestrian and cycling connections

53. I acknowledge that the WDC Walking and Cycling Strategy has identified a future walkway/ cycleway connecting Waipu and the Ruakaka area. This route could connect to nearby locations i.e. beaches, Marsden Cove. As discussed in paragraph 48 I agree with including a condition to include an active modes connection from Mair Road to Northport as this will connect to the future cycling route between Waipu and Marsden Cove. Waka Kotahi have stated in their submission that it is not expected that Northport provide a walking and cycling connection for the entire length of SH15 to which I agree with.

Submission of Mr Buhr[16]

54. I have read the submission of Michael Buhr and note their concern regarding a lack of adequate committed roading and/or rail infrastructure upgrades in support of the development.

55. I do not consider this to be an issue because:

(a) The conditions proposed by Northport include a trigger threshold against which the critical intersections will be reviewed. As the future road network reaches near capacity, mitigation measures will be implemented to keep the vehicle movements below the threshold volumes. If the interventions do not regulate the vehicle volumes to an acceptable level, then Northport is committed to contributing to the funding of intersection upgrades.

(b) Freight growth has been fully assessed without rail until 2028 and traffic modelling results show that all intersections operate without issues in 2033. If the proposed Oakleigh to Marsden Point Rail Link does not proceed/come to fruition within the assumed period, then the trigger threshold will likely occur earlier than the forecasted year, 2035, and appropriate measures will be taken as stated above.

(c) Highly conservative traffic volumes have been used in the analysis. The sensitivity analysis shows that the intersections are expected to operate at an acceptable level if the predicted volumes in 2040 are reduced by 20%. A range of factors will contribute to the future traffic volume in the area, hence there is no certainty of when the traffic network will reach capacity.

[16] Submission number 104.

Submission of BJ Thorne and AA Davies[17]

56. I have read BJ Thorne and AA Davies and note their concern regarding the lack of roading infrastructure. I refer to my comments above at 55.

Submission of Waka Kotahi[18]

57. I have read the submission from Waka Kotahi, and also met with Waka Kotahi to discuss their concerns in more detail on Thursday 10 August 2023. My responses are below.

58. Waka Kotahi raised the following:

(a) Inclusion of SH15/SH1 intersection as part of the critical intersections identified for the project.

(b) Amendment of the triggers that require investigations to be undertaken when Northport traffic reaches a threshold rather than when overall volumes at the intersections reach a critical level. This involves continuous monitoring of the traffic volumes at Northport, using telemetry traffic data collected by Waka Kotahi (at Site Red: 15A00006), and assessment of the crash data along SH15. An annual report is to be provided.

(c) Provision of cycling facilities between Northport and Mair Road, to connect to the future cycle routes being considered between Waipu and Marsden Cover, by the Whangarei District Council.

SH15/SH1 Intersection

59. I agree that the SH15/SH1 intersection is a key intersection for access to Northport and will be affected by any expansion of Northport. As explained in the TIA, with the full port expansion, the roundabout intersection in 2040 is expected to function better compared to if there is no port expansion based on forecast changes to surrounding land use and therefore traffic distribution on the road network. This means that the port expansion is expected to have minor impacts on the SH15/SH1 roundabout.

60. I agree that the SH1/15 intersection should be included as part of monitoring of key intersections. Following the meeting with Waka Kotahi on 10 August, the proposed conditions were updated to include monitoring of the SH1/15 intersection.

[17] Submission number 40.
[18] Submission number 170.

Triggers for determining when intersections need to be upgraded

61. I agree that Northport should make use of the telemetry data collected continuously on SH15 by Waka Kotahi to determine when the triggers are reached.

62. I also agree that Northport should provide an annual monitoring report to Waka Kotahi which provides an update on if and when traffic volumes will reach the agreed triggers, and provide an assessment on the needed intersection improvements, if triggers or safety concerns are reached.

63. I am satisfied that the proposed conditions, which have been updated following discussion with Waka Kotahi, adequately reflect the use of telemetry data and require a monitoring report to be provided to Waka Kotahi.

Provision of cycling facilities

64. I agree that is important to encourage more travel choice to Northport given the anticipated growth and travel demand in the area. As outlined in 9(g), the provision of an active mode connection from Mair Road to Northpoint should be investigated and implemented only when the Waipu to Marsden Cove Cycle Trail is implemented. This is because there is no benefit in delivering a small section of an active modes path if there is no wider active modes network to connect to. The proposed conditions were updated following discussions with Waka Kotahi to require Northport to investigate and implement a walking and cycling connection between Mair Road and the Port when the future cycling route between Waipu and Marsden Cove is implemented.

COMMENT ON DRAFT PROPOSED CONDITIONS ADVANCED BY NORTHPORT

65. I have read the proposed consent conditions that are attached to the evidence of Mr Hood insofar as they relate to traffic/transportation and am satisfied they appropriately mitigate the construction and operational transport effects. The following inclusions were made to the proposed conditions to address items raised by Waka Kotahi and the S42A Report recommendations:

(a) A condition has been included to investigate and implement an active modes connection of 600m from Mair Road to Northport when the future cycling route between Waipu and Marsden Cove is implemented.

(b) Monitoring of the SH15/SH1 intersection as part of the critical intersections is now included in the proposed conditions.

(c) Requirement to undertake a Monitoring Report for the key SH intersections to determine trends in accidents, traffic volumes, and speeds has been included in the proposed conditions. This is to be undertaken using the Waka Kotahi telemetry data and Crash Analysis System (CAS). Monitoring of traffic volume trigger levels will be a critical component of this monitoring report.

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Nerissa Harrison
WSP

24 August 2023