

Transportation

General

36. Please confirm the lapse date of the existing consented baseline referred to and relied upon within the submitted Broad Integrated Traffic Assessment, and how this is not considered to be fanciful in relation to giving effect to the land use consents prior to the lapse date.

Satisfied.

37. Please provide a clear comparison of the traffic levels provided for by the Operative District Plan Industrial Zone, the consented baseline referred to in point 36 above, and the proposed traffic levels of the Pak'nSave supermarket and fuel facilities.

Satisfied.

38. The modelling provided with the submitted ITA only considers 2021, a Broad Integrated Transport Assessment (ITA) is required to consider a 20-year assessment period, i.e. modelling is required at approximately 2038 (the nearest WRTM model year is 2041). Council understands that there are no future years available in the VISSIM model, but it will be possible for the applicant to test the affected intersections and site accesses with Sidra modelling by applying a percentage increase to passing traffic to allow for growth. Traffic volumes extracted from the WRTM indicate the traffic increases by 10-20%. Please provide modelling and assessment of transport effects that considers a 20-year assessment period. This could be based on sensitivity testing of Sidra modelling at the affected intersections and site accesses.

Satisfied.

Te Rapa Road/ The Base Parade/ Eagle Way intersection

39. Modelling provided for the Te Rapa Road/ The Base Parade/ Eagle Way intersection indicates increased delay and queue lengths of 81m (average) and 308m (maximum) on Te Rapa Road (South). Please provide an assessment of the potential impact on the mid-block left-turn entry to The Base and identify any mitigation necessary to address these effects.

Subject to further input regarding updated VISSIM model.

40. Modelling provided for the Te Rapa Road/ The Base Parade/ Eagle Way intersection indicates increased delay for the left-turns out of The Base Parade. Please provide options to mitigate the increase in delay for the left-turns out of The Base Parade which are not currently addressed by the proposal.

Subject to further input regarding updated VISSIM model.

Karewa Place/ Eagle Way/ Maui Street intersection

41. Future signalisation of the Eagle Way/ Karewa Place / Maui Street intersection may affect timing at Te Rapa Road/The Base Parade/ Eagle Way intersection. Please provide the proposed traffic signal phasing for Karewa Place/ Eagle Way/ Maui St intersection, including how it will be coordinated with the adjacent signalised intersection.

Satisfied.

42. *The 20-year assessment period requested above will have an effect on Karewa Place/ Eagle Way/ Maui Street intersection in terms of signalisation. Council understand that an assessment for Karewa Place/ Eagle Way/ Maui Street intersection will be provided as requested above. Please provide greater clarity around the timing of signalisation of the Kawera Place / Eagle Way / Maui Street intersection.*

Outstanding, demonstration still required that a signalised intersection can be aligned with the proposed application.

43. *Please confirm whether a flush median or solid median will be provided on Eagle Way from the vehicle access for the site towards the Karewa Place/ Eagle Way/ Maui St intersection. Council's preference is for a solid median as it helps control right turns in and out of the Eagle Way access to the site.*

Satisfied.

44. *Additional clarity is required to illustrate the impact of the additional development traffic at the Karewa Place/ Eagle Way/ Maui Street intersection. Please provide additional Sidra modelling and assessment of efficiency effects at the Karewa Place/ Eagle Way/ Maui Street intersection for the following scenarios:*

- *baseline scenario that includes full development of the wider Porters site, i.e. makes no reduction for trips associated with the SHA proposal;*
- *2021 scenario with full development of the wider Porters site plus traffic generated by this proposal; and*
- *20-year future scenario with full development of the wider Porters site plus traffic generated by this proposal.*

Satisfied.

45. *Please provide an independent preliminary design road safety audit for the proposed Eagle Way/ Karewa Place/ Maui Street intersection. The safety audit should focus on:*

- *Interaction of the Couplands Bakery exit both in the priority controlled and signalised options;*
- *The available sight distance for vehicle turning from Eagle Way into Karewa Place; and*
- *The risk of vehicles turning left from Karewa Place into Eagle Way shadowing following vehicles resulting in crashes for vehicles turning right-out of Eagle Way.*

Outstanding. A road safety audit is required to assist in determining any potential effects of the proposal. Similar approach to how Council has responded to other large developments / supermarket proposals.

46. *Please provide further assessment around the potential conflict between vehicles queuing to turn right into Eagle Way approaching from Maui Street, vehicles turning right into the Maui Street access and vehicles turning right out of the Maui Street access and identify options to mitigate any effects.*

Outstanding. The response does not provide an assessment of crash risk / conflict assessment and this is required.

Wairere Drive/ Pukete Road intersection

47. Please provide modelling and assessment of effects for the Wairere Drive/ Pukete Road intersection, including discussion of queue lengths and potential impacts on the proposed signalised intersection at Karewa Place / Wairere Drive.

Satisfied.

Te Rapa Road/ Avalon Drive/ Wairere Drive intersection

48. While the overall performance of the Te Rapa Road/ Avalon Drive/ Wairere Drive intersection improves, the level of service appears to deteriorate on the Te Rapa Road (north) and Avalon Drive approaches. Please provide further assessment of these effects and identify options to mitigate these effects.

Subject to further input regarding updated VISSIM model.

Karewa Place/ Wairere Drive intersection

49. Please provide examples of other similarly spaced signalised intersections on high speed major arterials and provide a summary of their crash history for comparison against the predicted crash rate for the proposed new Karewa Place/ Wairere Drive intersection.

Satisfied.

50. Please confirm the proposed form of control on the left-turn slip lanes at the Karewa Place/ Wairere Drive intersection (currently a mixture of zebra crossing bars with a Give Way triangle is shown). It should be noted that Council does not support zebra crossings on left-turn lanes due to pedestrian safety concerns.

Satisfied.

51. The queuing space is shown as 118m, but the VISSIM modelling shows a maximum queue length of 215m and an average queue length of 24m and 90m using Sidra. This leads to a significant risk of queues extending beyond the right-turn bay, and potentially resulting in high speed rear-end crashes. Please provide an assessment of the suitability of the queuing space proposed.

Subject to further input regarding updated VISSIM model.

52. Closely spaced signalised intersections can result in drivers "looking through" one set of signals to the next and miss-interpret the intersection. Please provide an assessment for Karewa Place/ Wairere Drive intersection visibility and compliance with road signals for east bound traffic along Wairere Drive.

Outstanding, expected to be covered off as part of further information request point 57.

53. *Please provide an assessment of the predicted death, serious injury and injury crash rate for the proposed new Karewa Place/ Wairere Drive intersection.*

Satisfied.

54. *On-road cycle lanes are provided on Wairere Drive but no cycle turning facilities are indicated on the proposed Karewa Place/ Wairere Drive intersection layout. Please confirm how cyclists wishing to turn-right into Karewa Place will be provided for.*

Satisfied.

55. *Please provide a plan showing the proposed directional signage to be provided in advance of the Karewa Place/ Wairere Drive intersection. The signage plan should identify any new signs, the location of existing signs and identify what changes will be required to the existing signs (location and/or messaging).*

Outstanding, expected to be covered off as part of further information request point 57.

56. *Please provide the proposed traffic signal phasing for Karewa Place/ Wairere Drive intersection, including how it will be coordinated with the adjacent signalised intersections.*

Outstanding. The current response does not provide the detail to assess potential effects from the signalised intersection and any phasing. Council has concerns that given the separation between the three intersections coordination may be difficult to achieve. Please demonstrate how the proposed signal phasing can be safely achieved given the separation between the three intersections.

57. *Please provide an independent preliminary design road safety audit for the proposed Karewa Place/ Wairere Drive intersection. The safety audit should focus on:*

- *Location of, and messages provided on the advance directional signage;*
- *Risk of high-speed rear end crashes; and*
- *Potential confusion resulting from closely spaced traffic signals in a high-speed environment.*

Outstanding. A road safety audit is required to assist in determining any potential effects of the proposal. Similar approach to how Council has responded to other large developments / supermarket proposals.

58. *As per NZTA's Economic Evaluation Manual, please provide an estimate of the number of accidents that could be expected by an intersection of this nature and traffic volumes. An estimate should be validated by assessing the crash history at other existing signalised intersections in New Zealand of this nature and in this speed environment. Please quantify the expected crashes and the social cost as a result of the proposed Karewa Place / Wairere Drive intersection.*

Satisfied.

Church Road / Maui Street intersection

59. *Currently this intersection is not set up in terms of phasing for additional traffic from southern approach on Maui Street. Please provide an efficiency and safety effects assessment for the current suboptimal phasing setup and identify any mitigation necessary to address these effects.*

Outstanding. Please provide an update on the traffic flow information referred to in the response.

Site layout and access

60. *Please confirm the number of exit lanes at the Maui Street vehicle crossing and whether this is accurately reflected in the Sidra modelling (ITA, Table 14 which separately reports the left and right movements).*

Satisfied.

61. *Please provide further information on the proposed form of the vehicle crossings and how a continuous footpath will be provided. Council's preference is for pedestrian priority to be retained.*

Outstanding. Updated plan required.

62. *The ITA identifies that Sidra modelling of the Te Rapa Road access is unable to show the interaction of the nearby signalised intersection. Please provide further analysis and assessment of the potential effects, for example through use of linked intersection in Sidra or further analysis of the VISSM outputs.*

Satisfied.

63. *Please provide further assessment of the safety and efficiency effects of 271 vehicles / hour turning left into Pak'nSave from the high volume, high speed southbound through lane on Te Rapa Road.*

Satisfied.

64. *Please provide further assessment of the safety and efficiency effects of 277 vehicles / hour turning left out of Pak'nSave onto the high volume, high speed southbound through lane on Te Rapa Road.*

Satisfied.

65. *Please provide a more detailed assessment of the queuing space required by Rule 25.14.4.2n). Assuming 100 spaces per access, the District Plan requires 18m be provided and only 5-10m is provided to the nearest car park or internal intersection. Council has concern about the potential for offsite effects as vehicles entering the site are delayed by those manoeuvring at car parks or internal intersections. The existing layout of the parking and internal movements of the Pak N Save car park has the potential to generate offsite effects that need to be appropriately mitigated.*

Outstanding. Updated plan required.

66. Please confirm how the Eagle Way access and adjacent internal intersection will be designed and managed to avoid delays for entering vehicles that result in off-site effects.

Outstanding. Updated plan required.

67. The vehicle tracking for the fuel delivery vehicle occupies the full width of the vehicle crossing and aisle when entering from Eagle Way and departing to the Maui Street extension and requires the vehicle to track across both southbound lanes. This appears likely to result in offsite effects including queues as a result of blocked vehicle crossings and delays as the fuel delivery vehicles wait for sufficient gaps in the aisle and vehicle crossings. Please provide vehicle tracking for the fuel delivery vehicle that demonstrates how this potential effect will be addressed and how any offsite effects are mitigated.

Outstanding. Updated plan required.

68. Please provide vehicle tracking for the fuel delivery vehicle turning left-out of the site to the proposed Maui Street extension. This should demonstrate how the vehicle can depart the site without tracking into the southbound lane.

Outstanding. Updated plan required.

69. Please confirm the number and location of cycle parking spaces onsite. Any proposed shortfall of cycle parking will require additional rationale to justify this outcome within the context of the Plan. Given the size of the proposed supermarket and the wider connectivity to large residential areas, appropriate provision shall be made to assist in sustainable transportation modes of both staff and customers.

Outstanding. Updated plan required.

70. Please confirm the number and location of motorcycle parking spaces.

Outstanding. Updated plan required.

71. Please confirm whether the pedestrian connection from Maui Street is raised from the level of the car park.

Satisfied.