

To: Mat Collins (Flow) Michael Luong (Auckland Council) File: Response to Clause 23(2) RMA 1991 Further Information – Private Plan Change Request by Kiwi Property No. 2 Ltd, Oyster Capital, and Fulton Hogan Land Development Ltd	From: Daryl Hughes, Gabriela Surja Stantec Date: April 28, 2020
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Subject: Response to Clause 23(2) Additional Information Request – Drury Central Private Plan Change Request - Kiwi Property No.2 Ltd, Oyster Capital, and Fulton Hogan Land Development Ltd

This memo documents the response to the transport matters in the Clause 23(2) Additional Information Request – Drury Central Private Plan Change Request by Kiwi Property No.2 Ltd (dated 20 April 2020), Oyster Capital (dated 28 April 2020), and Fulton Hogan Land Development Ltd (dated 28 April 2020).

The following attachment is referred to within this memo:

- **Attachment A:** Forecast PT Person Trips

Original RFI Ref	Request	Response
Kiwi Property, FDHL, Oyster Request 18	Please provide forecast peak hour PT patronage on local bus services (i.e. excluding trips taken solely train services). This information is required so we can assess whether the staged delivery of the local road network will enable the local bus services needed to support the modelling assumptions. We note that without the connectivity of a collector road network, local bus services may not be feasible during intermediate years of buildout. This has been an identified issue with other greenfield developments in Auckland. Should local bus services not be feasible during the early stages of development, we are trying to understand the impact this may have on the private vehicle trip rate. This may ultimately impact on the triggers for proposed mitigation.	Please refer to Attachment A for the forecast PT person trip demand for 2028, 2038, 2048. The forecast demands have been extracted from the MSM, and provided as 2-hour peak demand (consistent with the format of output from the MSM). The PT demands are presented in terms of 'internal person trips' and 'external person trips'. The internal trips include trips within and between Drury East and Drury West, where the external trips include trips undertaken to/from areas external to Drury East and West. Based on the 2013 Census Journey to work for Papakura Central area unit, the bus/rail split for commuters is approximately 29%/71%. This has been used as a reference for estimating the proportion of bus person trips between Drury East/West and the external network. It is noted that future bus services that will provide connectivity to the Drury Central Train Station are currently being investigated as part of the work on this train station. While we cannot share this information at this stage, we understand that the connecting roads and bus services to the train station will be delivered concurrently.
Kiwi Request 29, FHDL/ Oyster Request 24	Table IX.6.3.1 does not match with the vehicle trips in Attachment 3 and Table IX.6.3.2 does not match with the vehicle trips in Attachment 2. Please clarify why.	Table IX.6.3.1 and IX.6.3.2 had not been updated with the latest vehicle trips following the revised modelling in March 2020. The tables will be updated accordingly to match Attachment 2 and 3 of the transport RFI responses.

Modelling Request 5	Attachments 2 and 3 provided by Stantec included Mill Road (Papakura and Southern) to be upgraded by 2025/2026. However, we note that Mill Road does not yet have a designation and the consent is indicated to be lodged in 2021. In the event that the upgrade is delayed, the modelling should take this into account. Please provide the Saturn model and .UFC files so we can assess the sensitivity of the traffic effects to the Mill Road southern section. <i>[Note: Stantec has provided this information]</i>	No further response required from Stantec. The following modelling files have been provided to Flow: • 17/03/2020 Revised SATURN files (.UFM and .UFS) • 09/04/2020 Revised SATURN files (.UFC) • 16/04/2020 Revised SIDRA files (Great South Road / Waihoehoe Road signal).
Modelling Request 18	It is not clear how the land use assumptions have been used to determine peak hour trip generation. The modelling report discusses residential trip rates but does not show how trip volumes are calculated. Information on the calculation of trips from other land use activities seems to be absent. Please provide a tabulated summary of the trips (private vehicle and public transport) associated with all land use activities (dwellings, commercial GFA, retail GFA etc) for each PPC area by modelling year.	The trip demands have been calculated by the MSM based on land use data that is stratified by 64 population, 8 household, and 6 employment classes. As with most top down strategic models this is done at daily trip person demand level by trip purpose, split by mode (car/PT) and then aggregated and factored to peak period vehicle trips. It is not a bottom up approach based on vehicle trip rates per dwelling and/or retail/commercial GFA. As most MSM zones contain employment it is not possible to dis-aggregate the total trips per zone. The reported trips per household are indicative only and do not represent a bottom-up household trip rate, and only approximate a household trip rate when no employment is present in the zone (but still include employment related trips from other zones). The mode split by bus and train could be derived from the PT assignment but we do not have that data readily to hand. Likewise the PPC areas are not modelled individually so it is not possible to report the level of detail requested.
N/A	Can you please advise on progress developing a funding agreement.	Refer to the planning response.

Stantec

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Appendix A - PT Person Trips Forecast

Notes	E	Drury East (MSM Zone 550, 551, 554, 555, 556)
	W	Drury West (Zone 557, 558, 559, 560, 561, 562)
	X	External to Drury East and Drury West
Internal PT person trips (per 2 hours)	Person trips undertaken on public transport either internally within the Drury East or Drury West area, or between Drury East and Drury West area. These trips can be assumed to be predominantly bus trips.	
External PT person trips (per 2 hours)	Person trips undertaken on public transport between Drury East or Drury West and external areas. This exercise considers the trips in peak direction only (i.e. outbound in AM peak, and vice versa). Based on the 2013 Census for Papakura Central, the bus/rail split for commuter is 29%/71%. The proportion of external bus trips for Drury has been estimated accordingly.	

AM 2028 PT Person Trips (2hr)

	E	W	X
E	27	6	1055
W	11	18	862
X	138	94	129748
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			62
Total external person trips in peak direction (E-X and E-W) : 29% of which is assumed as bus trips			556

PM 2028 PT Person Trips (2hr)

	E	W	X
E	21	8	146
W	6	17	137
X	733	636	111917
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			53
Total external person trips in peak direction (X-E and X-W) : 29% of which is assumed as bus trips			397

AM 2038 PT Person Trips (2hr)

	E	W	X
E	163	36	1834
W	109	73	1733
X	459	229	158539
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			380
Total external person trips in peak direction (E-X and E-W) : 29% of which is assumed as bus trips			1034

PM 2038 PT Person Trips (2hr)

	E	W	X
E	152	87	491
W	43	67	346
X	1378	1339	138866
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			349
Total external person trips in peak direction (X-E and X-W) : 29% of which is assumed as bus trips			788

AM 2048 PT Person Trips (2hr)

	E	W	X
E	227	54	2304
W	190	136	2640
X	635	338	200354
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			607
Total external person trips in peak direction (E-X and E-W) : 29% of which is assumed as bus trips			1434

PM 2048 PT Person Trips (2hr)

	E	W	X
E	213	151	666
W	69	123	506
X	1733	2023	175754
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			556
Total external person trips in peak direction (X-E and X-W) : 29% of which is assumed as bus trips			1090