

	<p>and unlikely to result in equitable outcomes between beneficiaries (i.e. landowners within the three PPC areas).</p> <p>Please comment on potential risks/challenges associated with monitoring the complex thresholds specified in Tables IX.6.1.1/2 and IX.6.2.1/2, and how these might be addressed.</p>	
T3	<p>Please clarify whether Standard IX.6.1(1) requires the upgrades identified in Tables IX.6.1.1 and IX.6.1.2 when “any” or “all” development thresholds are exceeded. Similarly, clarify this for Standard IX.6.2(1).</p>	<p>Refer to Section 1.8.2 of the Planning Response.</p>
T4	<p>Please clarify why Objective IX.2(2) and Policy IX.3(4) only apply to the management of “significant” transport effects.</p>	<p>Objective IX.2(2) and Policy IX.3(4) have been amended to delete reference to 'significant'.</p>
T5	<p>Please comment on the feasibility of the proposed multiple upgrades to the Waihoehoe Road/Great South Road intersection, compared with implementing one or two upgrades to achieve the same result. Consideration should be given to the disruption to the transport network and provision for all modes of transport.</p>	<p>The 'multiple' upgrades specified in the previous threshold tables (now superseded by the revised tables in Attachment 2 and 3) do not necessarily reflect the intention to carry out the upgrades in piece-meal manner, rather they represent the minimum that is required for each development stage from an operational perspective.</p> <p>In reality, the upgrades are indeed likely to be undertaken in one or two stages to achieve the same long term results, and in a manner which minimises disruption to the transport network.</p> <p>Refer to Attachment 2 and 3 for the revised timeframe for the upgrades to the Great South Road/ Waihoehoe Road roundabout, with and without the direct access (to Drury Interchange). This reflects the upgrade requirement from a capacity perspective. There will be continuous liaison with SGA and Auckland Transport to align the timing and form of this upgrade.</p>
T6	<p>Standard IX.6(2) states that E27.6.1 Trip Generation does not apply to activities in Activity Table IX.4.1, however the Section 32 report does not comment on the rationale for this exemption. It is unclear why this waiver is necessary.</p> <p>Please clarify why an exemption from E27.6.1 Trip Generation is proposed in the Precinct plan.</p>	<p>Within Standard E27.6.1(2), it is stated that Standard E27.6.1 does not apply where:</p> <p><i>“(b) development is being undertaken in accordance a consent or provisions approved on the basis of an Integrated Transport Assessment, where the land use and associated trip generation and transport effects are the same or similar in character, intensity and scale to those identified in the previous assessment;”</i></p> <p>....</p> <p><i>“(d) there are requirements to assess transport, traffic or trip-generation effects for the activity in the applicable zone rules or precinct rules for any controlled or restricted discretionary activity land use.”</i></p> <p>These rules mean that development in the precinct would not need to comply with the trip generation rule anyway given that an ITA has been prepared to inform the plan change and the specific</p>

		transport provisions that it includes. The intent of the proposed exclusion is to make this clear. In our view, this is a clarification rather than a substantive issue for the Plan Change.
T7	<p>Matters of Discretion IX.8.1(2)(a) is missing from the Precinct provisions. We assume this should be (a) Effects on the transport network consistent with the trips generated by development specified in Table IX.6.2.1 or Table IX.6.2.2;</p> <p>Please confirm whether the absence of Matters of Discretion IX.8.1(2)(a) is intentional.</p>	This is an error. The Plan Change has been updated to include IX.8.1(2)(a).
T8	Please confirm which properties within the PPC are not owned by FHDL. Preferably this information should be presented as a map.	Please refer to Section 2 of the Planning response.
T9	<p>Precinct Tables IX.6.1.1 and IX.6.1.2 require multiple upgrades to the Waihoehoe Road/Great South Road intersection. By 2048 Waihoehoe Road is proposed to be 6 lanes wide, and Norrie Road is proposed to be 5 lanes wide. The SGA ITA identifies these roads as key public transport corridors, where bus priority measures (such as bus lanes) are likely. The form of this intersection proposed by the Precinct may not be compatible with provision for frequent bus services.</p> <p>Please confirm whether the proposed form of the Waihoehoe Road/Great South Road intersection is consistent with the design proposed by the SGA, particularly regarding bus priority, noting that the SGA may be lodging a notice of requirement for this intersection.</p>	<p>It is our understanding that the SGA is targeting NoR lodgement for the intersection of Great South Road / Waihoehoe Road in late 2020. While the exact SGA design is unknown at this stage, we acknowledge the potential for bus priority lanes along the approach corridors and at the intersection itself, and a narrower footprint overall.</p> <p>The results from the latest SATURN modelling confirm that widening (4-laning) of Great South Road and Waihoehoe Road is not required from a capacity perspective. Furthermore, the intersection modelling has confirmed that the revised form of the GSR / Waihoehoe Road intersection can accommodate full pedestrian crossings on all arms within a tightened footprint in the short - medium term, as traffic demand can be accommodated on short lanes at the approaches (instead of requiring full widening of the corridor). Shorter lane lengths have been tested to maximise the opportunity to narrow the footprint, without severely impairing the level of services for all road users. Given the modelling results and the information available at this stage, we anticipate that at its full form, there will need to be 3 - 4 approach lanes on the Great South Road and Waihoehoe Road. It is noted that there is flexibility in the future to adapt this initial concept design to any change in traffic flows and patterns.</p> <p>There will be continuous liaison with SGA and Auckland Transport so that a mutually agreed concept design of the intersection can be achieved.</p>

T10	<p>Please confirm what consideration has been given to Auckland Transport standards and guidelines when developing the road cross sections in IX.11 Drury Centre: Appendix 1, and explain how the Precinct will provide flexibility in design to ensure future roads are contextual to surrounding land uses and consistent with potential changes in Auckland Transport standards and guidelines.</p>	<p>The road cross sections have been developed based on the criteria listed in the SGA ITA for Drury area, with consideration and reference to the AT Roads and Street Framework (RASf) and Transport Design Manual (TDM), which at the time of the cross section development (2019) had only been issued as a 'soft launch'.</p> <p>The cross sections, together with the strategic placement and layout of the development, ensure that sufficient width will be available to enable a good level of walking and cycling facilities and movements appropriate for the intended development.</p>
T11	<p>Please confirm which transport infrastructure projects referenced in the ITA are funded within the RLTP/NLTP ("Funded"), unfunded with the RLTP /NLTP ("Committed") or not in the RLTP /NLTP ("Uncommitted"). Please confirm that the ITA includes all infrastructure assumed in the various modelling scenarios included in the Drury East Modelling Report.</p>	<p>The ITA has considered all infrastructure assumed in the various modelling scenarios. Refer to Attachment 4 for breakdown key infrastructure upgrades considered in the revised modelling, and their funding status.</p>
T12	<p>Please confirm whether the recommended transport improvements can be achieved within the existing legal road, or by vesting private property owned by Kiwi Property, FHLD, or Oyster. If there is no mechanism to deliver infrastructure that requires third party land, third party agreement or third-party funding, then the reasonableness of including the upgrade should be discussed within the report.</p>	<p>The upgrades to Waihoehoe Road will be provided for through the NoR process led by AT / SGA, and that any third party land required will be acquired as part of that process. However, we note that the revised modelling illustrates that only safety upgrades will be required in the short term that will not require any land take. This will enable some development to proceed without the need for land take. The final upgrade to Waihoehoe Road / GSR intersection is likely to require third party land on the western side of GSR but this will not be required for some time. Again, it is anticipated that this will be addressed through the NoR process. We will continue to liaise with SGA and Auckland Transport to achieve alignment with the roading design.</p>
T13	<p>Please confirm the "what", "how", "when" and "by whom" for the funding and delivery of all transport infrastructure and transport services required to support the PPC? This should include discussion about the staging, fit for purpose rail station facilitates, connections to the rail station for all modes, required bus services (including private services), and walking and cycling connections between each PPC area as development progresses. If there is no mechanism to deliver infrastructure that requires third party land, third party agreement or third-party funding, then the reasonableness of including the upgrade within the Precinct provisions should be discussed.</p>	<p>Since lodgement of the Plan Change request the Government has confirmed the funding and bringing forward the delivery of many key transport infrastructure projects within the wider Drury – Opaheke area. Further traffic modelling has now been undertaken to take into account these timeframes. Discussions on the scope, funding, and timeframe of all transport infrastructure considered in the transport modelling assessment have been included in Attachment 4 (Revised Modelling) as well as the revised threshold tables for clarity (Attachment 2 and 3).</p> <p>The updated modelling now shows that there are only a limited number of local roading upgrades to enable certain development capacities:</p> <ul style="list-style-type: none"> • Interim safety upgrade to the Waihoehoe / Great South Road intersection to provide safe crossing facilities for pedestrians and cyclists on all approaches.

		<ul style="list-style-type: none"> • Upgrade and signalisation to the Great South Road/Waihoehoe Road intersection to signals. • Capacity upgrade of the Waihoehoe / Great South Road intersection. <p>In addition, the Plan Change has also been amended to require the early delivery of cycle and pedestrian connections to the Drury Central train Station. These upgrades will be required prior to, or concurrently with the development.</p> <p>The funding and delivery of these required local upgrades will be addressed through a Developer Funding Agreement. It is expected that this will be finalised prior to a hearing on the Plan Change.</p> <p>It is expected that bus services in areas outside the walking catchment of the Drury Central train station will be provided by AT as demand arises consistent with their Auckland-wide policy for the provision of public transport services.</p>
T14	<p>Please explain how the staged delivery of train and bus infrastructure and services, and walking and cycling infrastructure, aligns with the public transport mode share assumptions made in the Drury East Modelling Report. Please clearly identify any third-party funding for infrastructure or services needed to support these assumptions.</p>	<p>The Government has now confirmed the funding of the Drury Central train station and electrification of the Papakura to Pukekohe line with delivery prior to 2026. This provides certainty that Drury East will be able to access a high quality public transport facility and services much earlier than previously anticipated.</p> <p>The Plan Change has also been amended to require the early delivery of cycle and pedestrian connections to the Drury Central train Station. The funding and delivery strategy for these upgrades will be addressed in the developers' agreement that is intended to be formed this year.</p> <p>It is generally accepted that AT will provide services where demand/growth is identified and will improve or provide services and infrastructure as needed. Therefore, as development occurs this will drive demand for the supporting bus network.</p> <p>It is also noted that there are various active modes and PT-related upgrades (i.e. bus prioritisation and cycle lanes) being earmarked for Waihoehoe Road, SH22, Bremner and Norrie Road that will further support reduction in car trips and enable a mode shift improvement.</p>
T15	<p>The ITA identifies the need to upgrade Waihoehoe Road and its intersection with Great South Road. This may require the upgrade of the Waihoehoe Road bridge over the rail line, which may need to be lifted in the process to meet Kiwi Rail vertical clearance requirements and require third party land on the western side.</p>	<p>The SGA consultation plan for the corridor future upgrades includes the corridor urbanisation and widening to provide for a four-lane east-west connection between the Drury Centre and the proposed Opaheke north-south connection, to provide better public transport, walking and cycling facilities. This upgrade is supported as it will improve travel for all modes of traffic. Should this upgrade go ahead, this will require an upgrade to the rail</p>

	<p>Please confirm whether the Waihoehoe rail overbridge will require replacement/upgrade to implement the transport infrastructure recommend in the ITA. If replacement/upgrade is required, please comment on whether potential alterations to the vertical alignment of the carriageway would affect safety outcomes (i.e. safe stopping distances for drivers) and how the upgrade of the bridge impacts on the level of development allowed for prior to its upgrade.</p>	<p>overbridge which will be designed to ensure satisfactory vertical clearances and sightlines.</p>
T16	<p>Please confirm whether the urbanisation of existing roads within and immediately surrounding the PPC will be undertaken by FHLD, or whether this is assumed to be undertaken by the landowner along each site frontage?</p>	<p>Waihoehoe Road is identified as a future arterial and is part of the DTIP programme. On this basis, it is expected that this project will be delivered by Auckland Transport, with input from the developers as required.</p> <p>The upgrade of existing Collector Roads will be progressively implemented as development occurs and will be subject to the development agreement referred to above.</p>
T17	<p>Where connections to the south are proposed, further information is sought on what upgrades may be required to the southern network over and above those needed to support the Drury South development.</p>	<p>It is anticipated that the Drury South development will upgrade Quarry Road to form the 'Spine Road' for Drury South. This will include the upgraded intersection of Quarry Rd / Great South Road. Should the southern connection be provided, no further upgrades are anticipated at this stage other than the intersection with Quarry Road / Spine Road. The upgrade of existing roads that connect with Drury South will be progressively upgraded over time as development occurs, unless delivered earlier with Auckland Transport.</p>
T18	<p>Please show the proposed staging for land use and how the proposed transport network, including walking and cycling infrastructure and streets suitable for buses, will be delivered in stages in an integrated way.</p>	<p>Refer to Section 1.3 of the Planning Response.</p>
T19	<p>Please provide further information on transport mitigation measures and appropriate thresholds for infrastructure improvements based on outcomes relevant to safety, public transport, and active modes. This should draw on the findings of the modelling report, but importantly consider the upgrades and improvements needed to achieve safety outcomes, and active mode and public transport uptake.</p>	<p>Refer to Attachments 2 and 3 for the revised thresholds including explanation on how safety and active modes have been considered, and Attachment 4 for the results of the revised modelling with a discussion on how PT and active modes provisions have been incorporated. Refer to the revised precinct provision which now require pedestrian and cycle connections to the Drury Central train station to be staged with development.</p> <p>An interim upgrade to the roundabout to improve safety for all users is now required prior to any development despite the revised modelling identifying that a capacity upgrade is not required until at least 2033 (without direct access) and 2038 (with direct access).</p> <p>Considering that Waihoehoe and Norrie Rd widening (4-laning) may consist of one bus lane and</p>

		<p>one general lane each way (mentioned as a potential SGA design in the RFI), the modelling has shown that Great South Rd, Waihoehoe Road and Norrie Road can operate as a single lane corridors for general traffic. When extra turning lanes are needed, these are provided as short lanes with minimum lengths.</p>
T20	<p>Please confirm whether local road upgrades include provision for public transport and active modes infrastructure, and if so, explain how staged development within the three PPC areas will be interconnected to achieve the mode share assumptions used in the Drury East Modelling Report.</p>	<p>The proposed staging of access provisions between the train station and plan change areas is included within the revised precinct provisions refer to Section 1.3 of the Planning response. Some PT and active modes upgrades to local roads within the plan change (Great South Road, Waihoehoe Road, Norrie Road) are already earmarked by SGA and any upgrade proposed by the Plan Change will not preclude these outcomes.</p> <p>The Plan Change requires the design of roads within the Plan Change area to be designed in accordance with the road cross sections. Local roads are required to provide pedestrian paths. Local Roads – Park Edge are also required to provide cycle paths.</p>
T21	<p>The PPC area is adjacent to the Drury South Industrial Precinct. This Precinct includes requirements for improvements to the transport network surrounding the PPC area. The Precinct Plan includes the provision of walking and cycling facilitates, which may enable a connection between the Drury South Industrial Precinct and the PPC. Please comment on how the transport improvements to support the Drury South Industrial Precinct may interact with the improvements needed to support the PPC.</p>	<p>The following transport improvements have been specified in the Drury South Industrial Precinct Plan (I410), that are relevant to the Plan Change.</p> <ul style="list-style-type: none"> • The realignment of existing Quarry Rd onto the alignment of the Spine Road • The upgrading of existing Quarry Road/Great South Road intersection • The provision of traffic signals or alternative upgrade to the Great South Road / SH22 • The upgrading of the right turn bay on Waihoehoe Road at the Waihoehoe Road / Fitzgerald Road intersection, under the scenario where development of the Precinct proceeds in advance of the Mill Road Corridor Project. • a new dedicated pedestrian path and cycleway has been constructed between the existing Drury township and the Drury South Industrial Precinct (I410.10.2 Drury South Industrial: Precinct Plan 2 identifies this connection to be via Waihoehoe Road and Fitzgerald Road) <p>All of the above measures appear compatible with the upgrades identified in the Plan Change.</p> <p>The provision of new walking and cycling facilities included in the Plan Change (as shown in the Plan Change ITA Section 8.4) is compatible with the walking and cycling connection shown on the Precinct Plan 2 of I410.10.2 Drury South Industrial.</p>

T22	<p>Please comment on how the ITA responds to the recommended "next steps" identified in Table 8-1 of the SGA ITA. The report should consider the following topics</p> <ul style="list-style-type: none"> o Land-use changes o Further consideration of local employment to manage travel demand o Future Plan Change guidance o Collection road funding and implementation risks o Further assessment and design development of network "hot spots" o Integration with operative Precincts o Further development of staging strategies o General design detail o Further development of the secondary active mode network and greenways o Further development of rail station access and park and ride strategy. 	<p>Refer to Attachment 5 - Fulton Hogan RFI T22 Response.</p>								
T23	<p>Please update the ITA to include information on the assumed staging and indicative development years.</p>	<p>We understand that Fulton Hogan Land Development intend to develop their Plan Change area to accommodate approximately 2,200 – 2,500 houses over time. It is estimated that by 2028, up to 1,000 houses could be provided within the Plan Change area.</p> <p>For the purposes of the transport modelling assessment several assumptions were required to be made in terms of the development staging per decade . Although the staging and timeframes above are indicative only at this stage, these were used to inform the assumptions for the transport modelling. The following table outlines the residential development staging assumed for each decade of the development in the Drury East development area. Note the Drury East development area covers the Macro Strategic Model (MSM) Zone 554 and 555, within which Kiwi Property, Fulton Hogan, and Oyster Capital properties are contained.</p> <table border="1" data-bbox="820 1518 1347 1870"> <thead> <tr> <th></th> <th>Residential (dwellings) within Drury East development area</th> </tr> </thead> <tbody> <tr> <td>2028</td> <td>2,172 units</td> </tr> <tr> <td>2038</td> <td>4,640 units</td> </tr> <tr> <td>2048+</td> <td>6,428 units</td> </tr> </tbody> </table>		Residential (dwellings) within Drury East development area	2028	2,172 units	2038	4,640 units	2048+	6,428 units
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T24	<p>Please provide a consolidated table showing development thresholds for infrastructure upgrades, which includes vehicle trip generation and assumed number of public transport trips.</p>	<p>Noted. Refer to Attachment 2 and 3 for the revised and consolidated threshold tables.</p>								

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