



Maitahi Village - FTAA – 2502 – 1009

Request for further information - NCC

Response

Council Response to Minute 5

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Maitahi Village - FTAA – 2502 – 1009 Request for further information NCC Response

Summary of NCC Technical Review of Substantive Application

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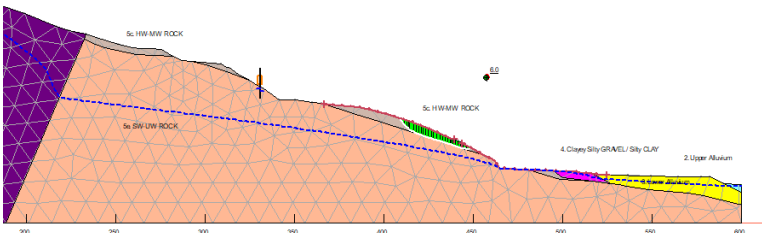
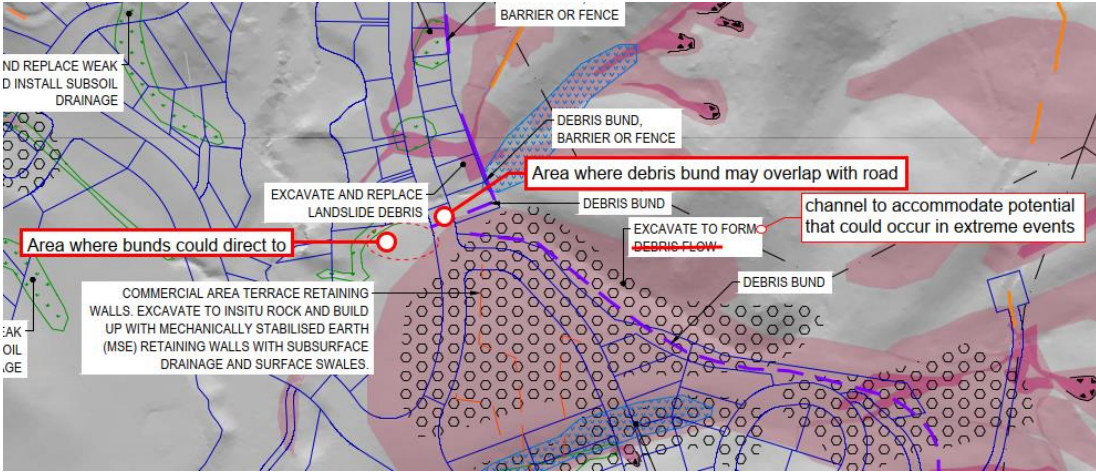
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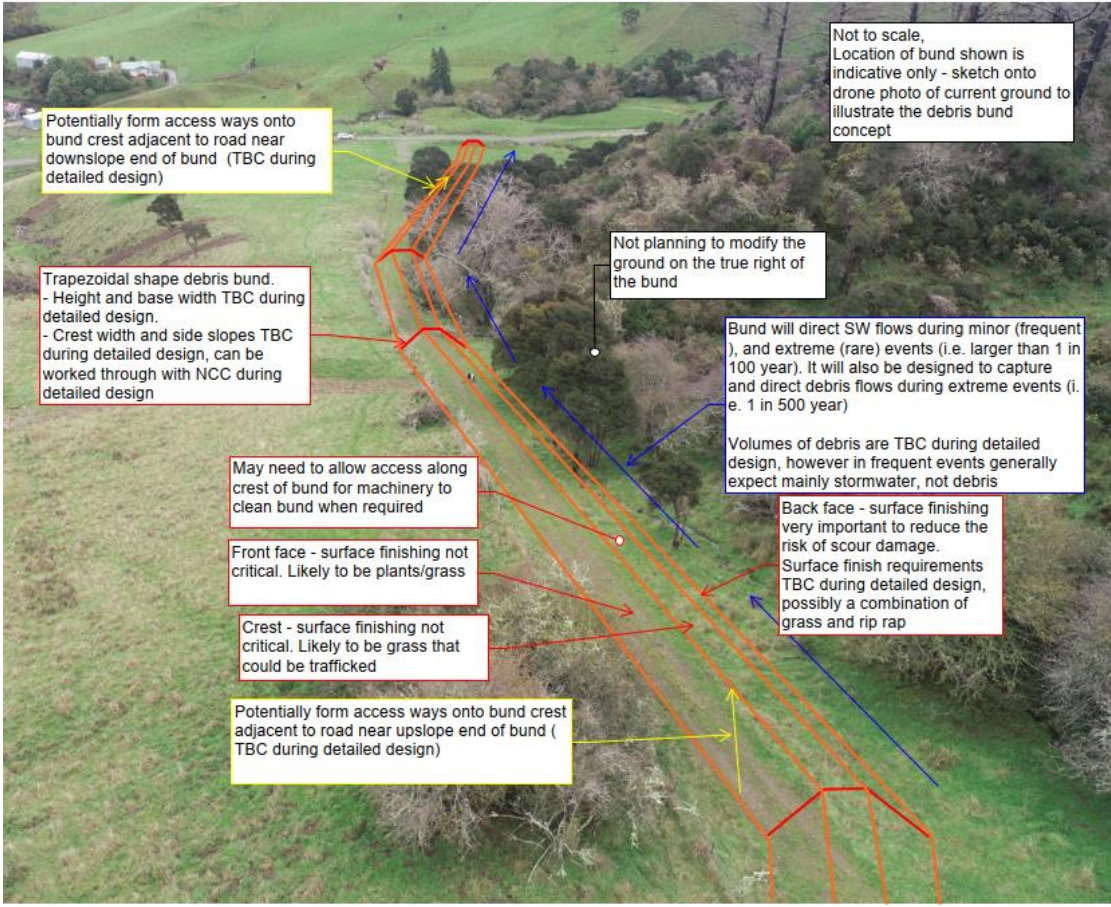
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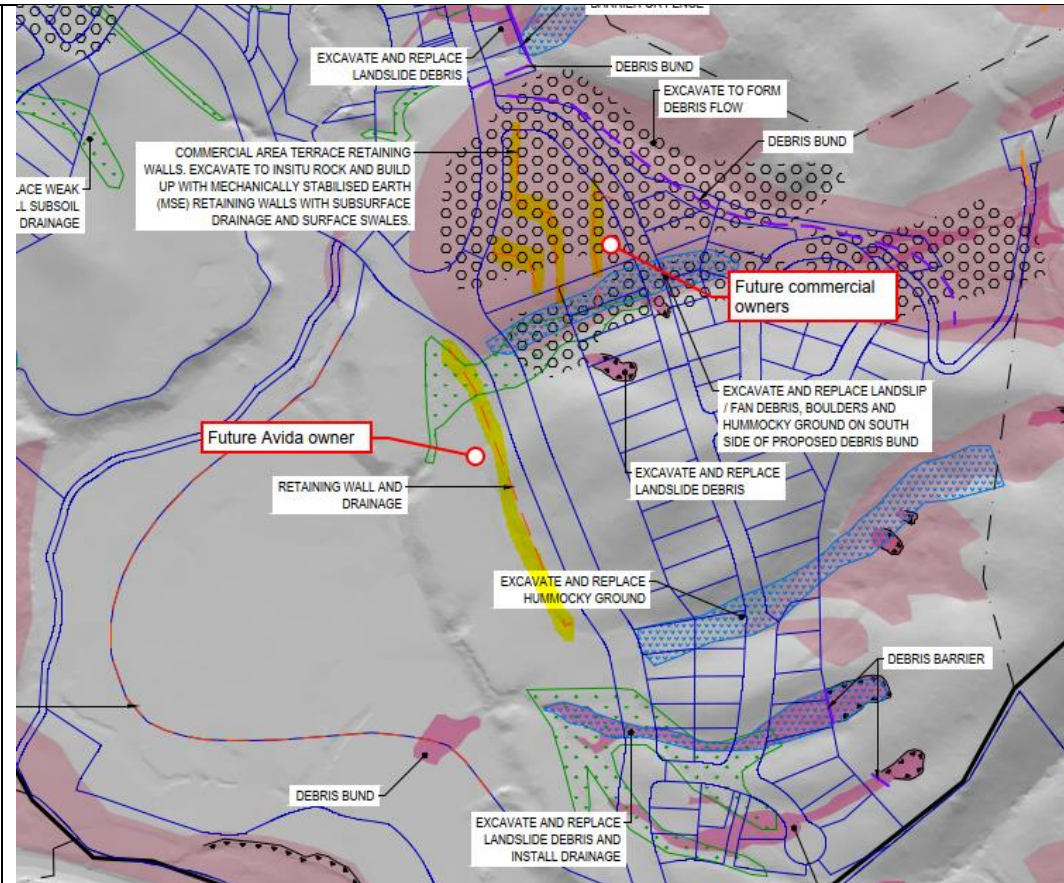
	Clarification sought by Nelson City Council Officers	Response from applicant	Outcome/conditions of consent requested to be imposed
1	Geotechnical summary of questions and responses Council Officers: <ul style="list-style-type: none"> Luke Crichton – Engineering Geologist – Branch Manager Eliot Sinclair Nelson (Contractor) 		
1.1	<u>Slope Stability Modelling</u> <ul style="list-style-type: none"> Has slope stability modelling been undertaken? The feasibility of these structures should be confirmed through appropriate modelling at this stage. 	<p>Slope stability modelling, using industry the standard software package Slope/W, has been carried out on cross sections S1 to S5, and A1 to A7, which are shown in Appendix A of the Geotechnical Assessment Report, to confirm that development is feasible. The models have been updated to account for later changes in the Lot development earthworks and will be used as a basis for detailed design of earthworks. A screenshot from one of our models is shown below:</p> <p>Section A3:</p>  <p>The attached stability modelling summary table describes the issues identified during the modelling and some early identified mitigation options which will need to be developed during detailed design.</p> <p>Where applicable, preferred options that are described in the table are shown on T+T figure 1012937.100-GT-F60, attached.</p>	<p>No further questions – Nelson City Council’s reviewing consultant geotechnical engineer is satisfied and agrees that the report has sufficient information in terms of development feasibility.</p> <p>The technical components can be left to the detailed design phase.</p>
1.2	<u>Instability and Boulder Roll Risk</u> <ul style="list-style-type: none"> Areas of existing instability and boulder roll risk into the site have been identified. While potential mitigation options are suggested, please clarify mitigation options such as, specific locations, design, or how they integrate with proposed roads, reserves, and infrastructure. Ownership and long-term maintenance responsibilities for these measures (public vs private) also require clarification. 	<p>The eastern slope debris bunds/catch fence locations are shown on report Figure 1012937.1000-GT-F60, attached. There is only one area where debris mitigation structures are shown to interface with roads, this area is shown below:</p>  <p>This will be designed as a low point in the road, rather than a bund. In extreme events, debris may travel over the low point and inundate reserve land on the</p>	<p>Nelson City Council Asset Engineers have accepted the location of the proposed bund as well as the proposed location of the bund. It has been determined that conditions of consent need to be flexible enough to ensure the reserve area adjacent to the bund can be enlarged should more area for maintenance access needs to be provided.</p> <p>However, it is deemed that adequate maintenance access is likely to be available given the dimensions and locations provided to date.</p> <p>Nelson City Council’s reviewing consultant Geotech engineer has confirmed that the bund as well as the removal of the boulders will mitigate the risk of boulder roll.</p> <p>Should the application be granted, Council would like to ensure that the final conditions of consent have sufficient flexibility in the reserve dimensions to ensure access is maintained and of a suitable size. Nelson City Council would also like to have input on the surfacing of the bund.</p>

		<p>opposite side of the road. That area could be designed to accommodate and contain debris.</p> <p>Return periods where the road and reserve could be affected have not currently been assessed, however we estimate:</p> <ul style="list-style-type: none"> • Minor events, where there is just stormwater, will be regular. Could be dealt with using a culvert crossing detail • Major events, where there are debris flows or landslide debris from the area above the bund that make it down to the road would less frequent than 1 in 100 years <p>Other debris bunds and fences on the eastern slopes do not conflict with the roading layout. They are generally located at the rear of lots, or on the upslope side of roads, to protect residential and infrastructure developments.</p> <p>Maintenance requirements of debris bunds are limited to keeping the debris impact area, at the rear of the bund, clear of debris and excess vegetation.</p> <p>Maintenance requirements of debris/catch fences include keeping the debris impact area, at the rear of the bund, clear of debris and excess vegetation, and replacing the mesh after approximately 50 years.</p> <p>The observed boulder fields on the western slope are shown on T+T figure 1012937.100-GT-F60 as being removed during development earthworks, so debris bunds or catch fences are not likely to be required on the western slopes.</p> <p>There are a number of aspects that need to be worked through during detailed design.</p> <p>Potential Conditions could be applied to give NCC opportunity to input into and approve some detailed design aspects including:</p> <ul style="list-style-type: none"> - Access to and along bund - Surfacing 	
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1.3	<p><u>Landslip Risk and Section 106 RMA Considerations</u></p> <ul style="list-style-type: none"> ○ The scale of instability and boulder roll hazard appears to need further addressing. ○ Council would typically expect more detailed concept-level mitigation plans to ensure risks under Section 106 of the RMA are appropriately addressed at the subdivision stage. 	<p>Refer to T+T figure 1012937.100-GT-F60, attached, for remedial concepts to be developed during detailed design.</p> <p>We note that S106 1A (a) to (c) only requires assessment, it does not require design work.</p> <p>S106 (2) (a) and (b) allow for conditions to be imposed and limitations on those conditions.</p> <p>We consider that a condition requiring detailed geotechnical design of the remedial works to be suitable to meet the requirements of S106.</p>	Accepted
1.4	<p><u>Groundwater Monitoring – Area 1 (Kākā Lower Reach)</u></p> <ul style="list-style-type: none"> ○ Groundwater monitoring was undertaken only in summer months (January–February 2024), not during wetter periods. ○ Please provide details of additional monitoring undertaken. ○ Further monitoring is recommended, along with a reassessment of the channel design to ensure any post-consent redesign does not result in unintended environmental, stormwater or sediment control effects. 	<p>We now have additional data which we will utilize during detailed design of the proposed channel. Level loggers have been continuously measuring the groundwater level at 2 locations in close proximity to the proposed stream alignment since July 2023. These instruments continue to record data. We are periodically measuring the water levels in the other piezometers. A screenshot of the latest monitoring data is shown below.</p> <p>This have additional data (see screenshot below) shows the groundwater levels at the site have remained relatively consistent over the monitoring period from July 2023 to April 2025. Significant peaks in the groundwater level are shown during and soon after heavy rain falls. We will consider this info in the detailed design.</p>	<p>No further questions – Nelson City Council’s reviewing consultant geotechnical engineer is satisfied and agrees that the report has sufficient information in terms of development feasibility.</p> <p>The technical components can be left to the detailed design phase.</p>

		<p>The new data does not indicate elevated risk to the proposal.</p>	
1.5	<p><u>Groundwater Management – Area 2 (Road 1)</u></p> <ul style="list-style-type: none"> Groundwater is expected at the base of proposed road cuts; drainage measures are suggested. Clarification is needed on: <ul style="list-style-type: none"> Whether these drains are essential for slope stability; Whether they will require ongoing maintenance for functionality; Who will own and maintain these systems (e.g. if the road is to be vested to NCC). Similar clarity is required for any proposed debris bunds and barriers. 	<ul style="list-style-type: none"> <i>Will these drains require maintenance for ongoing functionality</i> We can specify drainage works/devices where possible that are unlikely to require maintenance, such as F2 filled trenches (no pipes). <i>Will the drains be required to control the stability of the cut slope?</i> <p>The majority of the Road 1 cuts are down into rock. Drainage is not likely to control the stability of these cuts.</p> <p>The cut slopes are expected to intercept the natural groundwater table in some locations. Daylighting the groundwater table is likely to result in ongoing surface springs that will be a nuisance to roads and amenities. Therefore, we propose a mix of subsurface and surface (i.e kerbs on the road edge directing water into the SW system) drainage to mitigate this and protect amenity.</p>	<p>No further questions – Nelson City Council’s reviewing consultant geotechnical engineer is satisfied and agrees that the report has sufficient information in terms of development feasibility.</p> <p>The technical components can be left to the detailed design phase.</p> <p>Nelson City Council accepts the maintenance of the drains should they be required to for the functioning of the road reserve.</p>
1.6	<p><u>Retaining Walls</u></p> <ul style="list-style-type: none"> Retaining walls are referenced, but no detail is provided regarding their proposed locations. It should be confirmed that no retaining walls are located within land or roading intended for vesting to Council, as NCC generally does not accept ownership or 	<p>Locations of the proposed retaining walls are shown on Figure 1012937.1000-GT-F60. An extract from that figure, with the retaining walls highlighted, is shown below.</p>	<p>No further questions – Nelson City Council’s reviewing consultant geotechnical engineer and asset engineers are satisfied that the walls will be within private ownership.</p>

maintenance responsibility for walls within road reserves.



The walls are shown in land that will be either commercial land, or land owned by Avida.

2 Earthworks and sediment control summary of questions and responses

Council Officers:

- Corey Parsons – Team Leader Environmental Compliance
- Joanna Wilson – Team Leader Integrated Catchments

2.1 No comments for further information

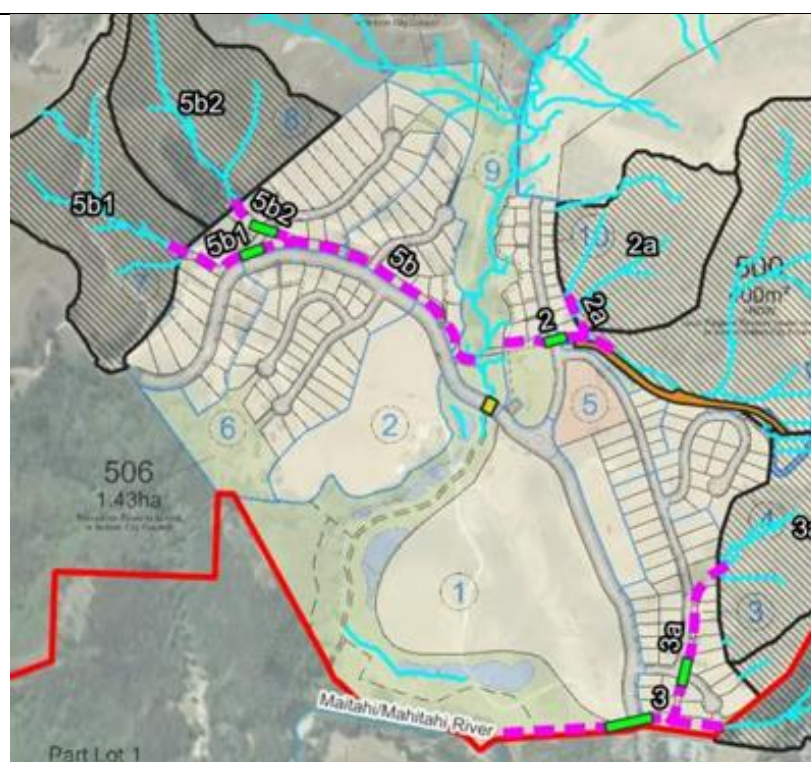
Nelson City Council's Team Leader Environmental Compliance reviewed the application, proposed conditions of consent as well as the Southern Skies Environmental – Erosion and Sediment Control Report – Maitahi Village provided as Appendix 7 of the Substantive application. This review was focused on the suitability and enforceability of the Erosion and Sediment Control Plan to methodologies to mitigate the potential effects from the earthworks.

The Team Leader Environmental Compliance requests that conditions ensure that earthworks are carried out in accordance with the supervision requirements set out in the Southern Skies Environmental Report and its appendices

(Appendix A – Chemical Treatment Management Plan, Appendix B – Erosion and Sediment Control Monitoring Plan and Appendix C – Site Specific Erosion and Sediment Control Plans).

			<p>Council requests that any amendments to these reports and appendices be forwarded to the Monitoring Officer for review.</p> <p>Nelson City Council's Team Leader Integrated Catchments in the Science and Environment Department also reviewed the application with a focus on the Erosion and Sediment Control Report and Ecological assessments. This assessment was carried out with the lens of assessing the potential effects of sediment entering the Maitai River during and after the construction phases of the development.</p> <p>Council's Team Leader Integrated Catchments recognises the qualifications, experience and expertise of Southern Skies Environmental and asks that conditions of consent require that the works be carried out in accordance with the Southern Skies Environmental – Erosion and Sediment Control Report and under strict supervision of a suitably qualified and experienced earthworks practitioner.</p> <p>Council's Team Leader Integrated Catchments also requested strict conditions of consent to not allow the Kākā Stream Diversion to occur along the proposed alignment until the HAIL site has been appropriately remediated and certified as such by suitably qualified and experienced land contamination professional.</p> <p>It is understood that the applicant accepts this and volunteers that the remediation of the contaminated site needs to occur as part of the Stage 1 of the development and have also volunteered that they are be certified by a land contamination SQEP as well as a suitably qualified ecologist as being suitably remediated prior to the stream being diverted through.</p> <p>Council requests the opportunity to review final condition set for earthworks and sediment control should the application be approved.</p>
3	Infrastructure Servicing – Stormwater summary of questions and responses <p>Council Officers:</p> <ul style="list-style-type: none"> • Shane Overend – Senior Engineer Land Development • Phil Ruffell – Manager Utilities Activity Management • Toby Kay – Activity Engineer Flood Protection and Coastal Hazards 		
3.1	Council Infrastructure Engineer as well as Council's Activity Engineer Flood Protection and Coastal Hazards recommend that the applicant checks the design surface runoff from the land upslope of the following lots and advises if a surface swale drain is needed to intercept and	There is negligible to no surface runoff from upslope land directed towards lots 100 – 119 (based on 1% AEP rain event in 2130). All surface runoff is directed towards the main overland flow paths 5b1 and 5b2 and an intercept drain at the back of these properties is deemed not required.	This is accepted by Council Officers. Should the application be granted, Council requests that a Condition of consent be placed on the subdivision set to ensure the appropriate design and construction of this device as well as Consent Notice applied to the relevant lots which states:

	<p>control this water to protect the proposed lots/building sites.</p> <p>If any such swales are required, then these should be detailed and shown on the plans. (Note - these swales need to be positioned within the lots being protected and as required by Section 5.5.16.15 of the NTLDM):</p> <ul style="list-style-type: none"> - Lots 100-119 - 163 – 173 	<p>There is some minor surface runoff from upslope land that may cause minor ponding (based on 1% AEP rain event in 2130) along the boundaries of lots 163 – 173. It is recommended to extend channel 2a along the boundary of lots 163 – 173 or create a small diversion bund within the lots. The size of this cut-off drain can be significantly reduced from where channel 2a currently ends. Final dimensions will be confirmed as part of detailed design.</p>
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LEGEND

- PPC28 boundary
- Undeveloped catchments
- Flowpaths
- Culvert
- Open channel
- Debris bund
- Kākā Stream bridge

The applicant's stormwater report, prepared by Tonkin & Taylor (T+T), has been reviewed by Council's Infrastructure Engineer, who has raised a number of queries regarding the design and safety of the proposed open channel systems. These are summarised below.

Three primary open channel systems are proposed across the site, with the following design parameters:

- Open Channels 3 and 3a are designed to convey flows of 0.9–3 m³/s with velocities ranging from 2.5–5 m/s. Culverts proposed are between 825 mm and 1350 mm in diameter.
- Open Channels 2 and 2a are designed for flows of 0.74–4 m³/s, with velocities between 0.7–4.8 m/s, and culverts up to 1600 mm in diameter.
- Open Channels 5b, b1 and b2 are designed for flows of 1–2 m³/s, velocities of 2–3 m/s, and culverts ranging from 750 mm to 1050 mm in diameter.

alternative option. The preferred option will be informed by the blockage assessment as part of detailed design.

Information on channel dimensions, flow velocities and lining is provided in table 5.2. of the Stormwater Assessment Report.

Table 5.2: Channel sizing

Overland Channel name	Gradient	1% AEP flow (m ³ /s)	Peak velocity (m/s)	Dimensions (Bottom width, batter slope)			Lining
				Bottom width (m)	Batter Slope (1 in XX)	Top width (m)	
5b Type 1	10-15%	1.10	1.7	1	4.00	5.8	Grass
5b1 Chute	50-60%	1.10	3.4	TBC during detailed design			Rock
5b Type 2	20-40%	1.10	3.3	1	4.00	5.8	Rock
5b Type 3	7-18%	2.12	1.8	1.5	4.00	7.1	Grass
5b Chute	25-30%	2.12	3.2	TBC during detailed design			Rock
2a Type 1	1-10%	0.74	0.7	2	2.00	4.8	Grass
2 Type 1	2-11%	3.95	1.3	4	4.00	12	Grass
2 Type 2	8-18%	3.95	3.9	2	4.00	8	Rock
2 Chute	25-100%	3.95	4.8	TBC during detailed design			Rock
3a Type 1	1-11%	0.89	0.7	2	4.00	7.6	Grass
3a Type 2	11-22%	0.89	2.5	1	4.00	5.8	Rock
3b Type 1	18%	2.15	3.4	2	4.00	6.8	Rock
3 Type 2	18-25%	3.04	5.1	1	3.00	7.0	Rock
3c Type 2	20%	3.04	5.4	1	3.00	7.0	Rock
3c Type 1	11%	3.04	0.9	4	4.00	8.8	Grass/planted

Davis Ogilvie has attached preliminary cross sections along all roads. The dimensions of the open drains are designed in accordance with the T+T report.

Detailed cross – sections will be prepared at the detailed design stage and will incorporate the T+T rock armor design as required. Forming low points in road crossings at culverts is not practical given steepness of site.

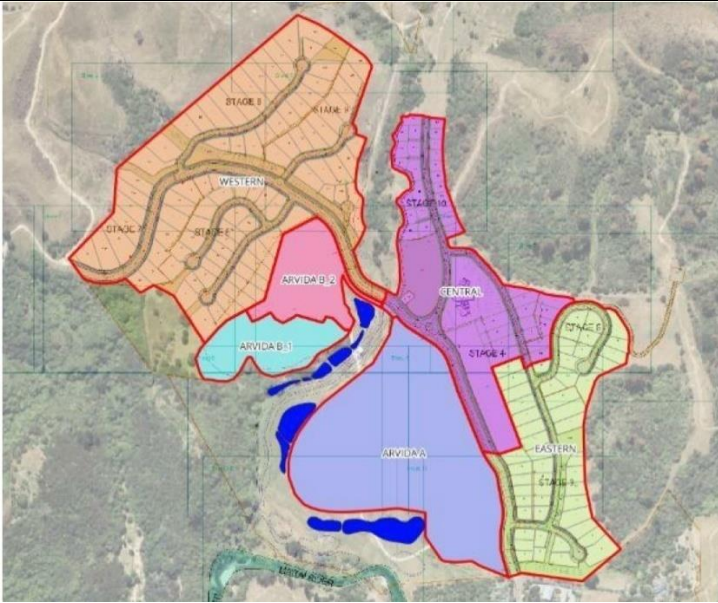
- c) Typical cross and long sections (to scale and fully dimensioned) of proposed vehicle entrances and culverts;
- d) A longitudinal section of the proposed wastewater and stormwater laterals from Road 2 to the eastern lots, demonstrating sufficient cover and grade;
- e) Details of secondary flow capacity and how overland flow will be managed in the event of a culvert blockage, including whether driveways are designed with low points to allow overland flow to re-enter the channel downstream.

It is understood that any changes are unlikely to result in any material re-design of the proposal.

<p>All open channels are designed to convey the 1% AEP event with an additional 0.5 m freeboard.</p> <p>Open Channels 3 and 5 in particular run parallel to proposed roads and are located between the carriageway and adjacent lots. These channels are proposed to pass beneath multiple vehicle entrances. Due to the relatively steep grades and high flow velocities, T+T recommend rock lining using riprap ranging in size from 300 mm to 550 mm to prevent scouring. The recommendation is that rock lining should extend above maximum flow depth, ideally up to the freeboard height, to mitigate both flow-induced scour and hydraulic jump effects.</p> <p>Council's Infrastructure Engineer notes that, given the steep grades, high velocities, and the fully rock-lined nature of these systems, the proposed devices resemble conventional stormwater infrastructure rather than low-impact or "naturalised" systems typically associated with Water Sensitive Design (WSD) approaches. This raises concerns regarding the consistency of the proposal with best practice stormwater management principles, particularly in a residential context.</p> <p>Additional concerns have been raised around public and residential safety due to the fast-flowing water, multiple open-ended culverts, and proximity of these systems to private property and public roadways. The risk profile associated with these devices may be considered inappropriate given their location within a residential environment, and further justification or refinement is sought.</p> <p>In light of the above, Council's Infrastructure Engineer has requested clarification on whether alternative design solutions have been explored that would reduce the potential safety risks identified. In addition, the following further information has been requested to better understand the stormwater proposal and its integration with surrounding infrastructure:</p> <ul style="list-style-type: none"> a) A typical cross section for each open channel, showing channel profile, design flow (including AEP), depth, velocity, freeboard, and setback distances from road edge and property boundaries, along with longitudinal sections; b) The location and depth of proposed underground services shown on the same typical cross sections; c) Typical cross and long sections (to scale and fully dimensioned) of proposed vehicle entrances and culverts; 		
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	<p>d) A longitudinal section of the proposed wastewater and stormwater laterals from Road 2 to the eastern lots, demonstrating sufficient cover and grade;</p> <p>e) Details of secondary flow capacity and how overland flow will be managed in the event of a culvert blockage, including whether driveways are designed with low points to allow overland flow to re-enter the channel downstream.</p> <p>Further clarification on the above matters is required to assess the appropriateness of the proposed stormwater solution and its potential effects on adjoining land, infrastructure, and public safety.</p>																																										
3.3	<p>Further review of the applicant's stormwater report (Tonkin & Taylor) and associated roading plans has identified issues requiring clarification regarding the treatment of secondary flow paths at culvert locations across the site.</p> <p>T+T recommend, as outlined in Table 5.4 of their stormwater report, that all culverts beneath Roads 1, 3, 5, 8, 11, Right of Way 1, and individual lot driveways off Road 2 be designed such that the carriageway or driveway is formed with a low point (or dip) over the culvert. This is to ensure that in the event of a blockage or exceedance of the culvert capacity, water can safely overtop the carriageway and re-enter the downstream section of the open drain without diversion onto adjoining land.</p> <p>However, the submitted roading plans and longitudinal sections for Roads 1, 3, 5, 8, 11, and ROW 1 do not appear to incorporate these low points at culvert locations. Council's Infrastructure Engineer has therefore recommended that the applicant confirm whether these secondary flow paths have been accounted for in the final transport plans. Specifically, the applicant should:</p> <ul style="list-style-type: none">Confirm that the required low points over culverts have been integrated into the road and accessway design;Identify the design flow capacity of these low points (i.e. how much flow is expected to pass over the carriageway in an overtopping scenario);Demonstrate compliance with the requirements of the Nelson Tasman Land Development Manual (NTLDM), which requires that culverts less than 1500 mm in diameter be assessed for the scenario of full blockage;Assess and confirm whether the proposed low points will have any adverse effects on the transport network, such as safety, access, or long-term maintenance.	<p>Forming dips in road formation will likely not be possible for most locations. A low point at the road 2/Road 3 culvert can be formed. It is not practical to form low points at other culvert crossings. Additional T + T modeling has confirmed secondary flow from blocked culverts will stay within the designed secondary flow paths. This will be designed at the detailed design stage.</p> <p>See tables 5.3 and 5.4 from the Stormwater Assessment Report also.</p> <p>Table 5.3: Culvert sizing</p> <table><tr><th>Culvert name</th><th>1% AEP flow (m3/s)</th><th>Catchment (ha)</th><th>Pipe Gradient</th><th>Indicative pipe diameter (mm)</th></tr><tr><td>5b1</td><td>1.10</td><td>57</td><td>12%</td><td>750</td></tr><tr><td>5b2</td><td>1.01</td><td>53</td><td>20%</td><td>750</td></tr><tr><td>5b-1</td><td>2.12</td><td>110</td><td>14%</td><td>1050</td></tr><tr><td>5b-2</td><td>2.12</td><td>110</td><td>5%</td><td>1050</td></tr><tr><td>2</td><td>3.95</td><td>59</td><td>0.3%</td><td>1600</td></tr><tr><td>3a</td><td>0.89</td><td>48</td><td>1%</td><td>825</td></tr><tr><td>3</td><td>3.04</td><td>187</td><td>1%</td><td>1350</td></tr></table>	Culvert name	1% AEP flow (m3/s)	Catchment (ha)	Pipe Gradient	Indicative pipe diameter (mm)	5b1	1.10	57	12%	750	5b2	1.01	53	20%	750	5b-1	2.12	110	14%	1050	5b-2	2.12	110	5%	1050	2	3.95	59	0.3%	1600	3a	0.89	48	1%	825	3	3.04	187	1%	1350	<p>It is accepted that this detail can be provided at the detail design stage and conditions of consent should account for this.</p> <p>The detailed design plans should demonstrate that the dips will not create any transport issues such as vehicle speeds needing to be very low to traverse the dip (requiring warning signs and additional marking) and to demonstrate that the gradient of the road/ROW will not exceed maximum permitted grades to facilitate the formation of the dip.</p> <p>Further detail or conditions of consent should be imposed to confirm that surfacing materials and construction methods proposed for all road, driveway and accessway crossings are capable of withstanding overtopping flows without deterioration or failure.</p>
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	<p>In addition, given that several roads, driveways, and rights-of-way are intended to act as secondary flow paths during high flow or culvert blockage events, these surfaces must be appropriately designed and constructed to withstand the expected scour forces under design storm conditions.</p> <p>Based on the current plans, this has not been demonstrated.</p>	<p>Table 5.4: Culvert blockage assessment</p> <table><tr><th>Culvert name</th><th>Catchment Characteristics (Debris Type, Availability & Transportability)</th><th>Secondary overflow path</th><th>Proposed Debris management and inlet type</th></tr><tr><td>5b1</td><td>Steep rural catchment with pastoral and scrub.</td><td>Flow to overtop road and return to OFP.</td><td>Duplicate intake (standard NTLDM inlet with secondary scruffy dome intake).</td></tr><tr><td>5b2</td><td>Steep rural catchment with pastoral and scrub.</td><td>Flow to overtop road and return to OFP.</td><td>Duplicate intake (standard NTLDM inlet with secondary scruffy dome intake).</td></tr><tr><td>5b-1</td><td>Flow from upstream OFP.</td><td>Flow to overtop road and return to OFP.</td><td>No additional measures required.</td></tr><tr><td>5b-2</td><td>Flow from upstream OFP.</td><td>Flow to overtop road and return to OFP</td><td>No additional measures required.</td></tr><tr><td>2</td><td>Steep upper catchment with known debris flow risk from debris bund.</td><td>Road to be shaped to allow for overtopping flow to pass over and not track down road.</td><td>Consider concrete lined road section. Duplicate intake (standard NTLDM inlet with secondary scruffy dome intake). Pipe to be oversized to ensure no surcharging in the 1% AEP event. Excavator access to intake.</td></tr><tr><td>3a</td><td>Small steep rural catchment</td><td>Road to be shaped to</td><td>Duplicate intake (standard</td></tr></table>	Culvert name	Catchment Characteristics (Debris Type, Availability & Transportability)	Secondary overflow path	Proposed Debris management and inlet type	5b1	Steep rural catchment with pastoral and scrub.	Flow to overtop road and return to OFP.	Duplicate intake (standard NTLDM inlet with secondary scruffy dome intake).	5b2	Steep rural catchment with pastoral and scrub.	Flow to overtop road and return to OFP.	Duplicate intake (standard NTLDM inlet with secondary scruffy dome intake).	5b-1	Flow from upstream OFP.	Flow to overtop road and return to OFP.	No additional measures required.	5b-2	Flow from upstream OFP.	Flow to overtop road and return to OFP	No additional measures required.	2	Steep upper catchment with known debris flow risk from debris bund.	Road to be shaped to allow for overtopping flow to pass over and not track down road.	Consider concrete lined road section. Duplicate intake (standard NTLDM inlet with secondary scruffy dome intake). Pipe to be oversized to ensure no surcharging in the 1% AEP event. Excavator access to intake.	3a	Small steep rural catchment	Road to be shaped to	Duplicate intake (standard	
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3.4	<p>In the T&T report they advise that erosion effects will be managed through a combination of options such as rain tanks on lots with re-use of stormwater.</p> <p>Regarding rainwater tanks and/or infiltration on individual lots, the applicant should provide more information as to when the requirement for these devices will be determined, by whom and how it will be implemented so that it is clear in relation to any condition that may be imposed. Which lots are included in “some lots” in the medium density zone - West and Central sub catchments (found referenced in the Water Sensitive Design Report).</p> <p>In addition, it is noted that these detention tanks could offset part or all of the predicted increase in peak flows (of 200 L/s) arising from the development as shown in Table 6.4 of the Maitahi Village Stormwater Assessment report. The objective should be to ensure that post-development stormwater flows do not exceed pre-development flows, as per NTLDM Table 5-9.</p>	<p>The stormwater management approach assumes raintanks for re-use on all lots within medium density development zones in the Western and Central Catchments. No tanks have been assumed on lots in the Eastern catchments. The following roof areas have been assumed:</p> <table><tr><th>Catchment area</th><th>Roof area to raintanks</th><th>Roof area not to raintanks (high density zone)</th></tr><tr><td>Western</td><td>20,400m2</td><td>7,300m2</td></tr><tr><td>Central</td><td>7,860m2</td><td>4,470m2</td></tr><tr><td>Eastern</td><td>0m2</td><td>~37,187m2</td></tr></table>	Catchment area	Roof area to raintanks	Roof area not to raintanks (high density zone)	Western	20,400m2	7,300m2	Central	7,860m2	4,470m2	Eastern	0m2	~37,187m2	<p>It is accepted that this detail can be provided at the detail design stage and conditions of consent should account for this.</p> <p>Council requests the opportunity to review final condition set</p>																
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		 <p>Further optimisation will be required as part of detailed design which might result in more areas not being viable to have raintanks due to terrain or lot sizes. This will have to be compensated in the wetland and soakage areas. Sizing of tanks, wetlands and soakage areas will be confirmed as part of detailed design.</p> <p><u>Note:</u> It should be noted that the purpose of the on-site retention tanks is not to offset a part or all of the predicted increases in peak flows, as stated in the last paragraph of item 13. The purpose of rain tanks is reduce run-off in small and frequent rainfall events that may cause streambank erosion and other water quality impacts. A planned 25% reduction in mean annual run-off volumes is aimed at mitigating adverse environmental effects. (NTLDM 5.4.11).</p> <p>Even though rain tanks might also contribute to further reductions in runoff during large events, it is conservatively assumed that raintanks are full when assessing pre- and post-development peak flows. The peak flows from large events are managed through reforestation so that post development flows do not exceed pre-development flows.</p>	
3.5	<p>The Table below is taken from the Water Sensitive Design Report. It includes the reuse tanks in the sizing of the wetlands; therefore, it is important to know which lots will require reuse tanks and how/when these will be implemented and this should be addressed in some form such as how many lots this may pertain to, when would these need to be installed (it is noted that the installation of tanks may be easier on some lots rather than others that are perhaps more geotechnically constrained).</p>	<p>Wetland sizing is determined by the contributing impervious areas that require treatment. Further refinement of the wetland areas will be required at detailed design stage once development areas and associated impervious areas are finalised. Sizing of the ephemeral soakage areas is based on infiltrating the first 10mm of rainfall across the impervious catchment, excluding roof areas using rain tanks.</p> <p>This means that the size of the ephemeral soakage areas is dependent on the number of lots or total roof area collecting water for reuse.</p>	<p>It is accepted that this detail can be provided at the detail design stage and conditions of consent should account for this.</p> <p>Council requests the opportunity to review final condition set to ensure the assessments in the report can be captured.</p>

	<p>Table 3: Western sub catchment sizing details</p> <table><tr><td>Total contributing road area</td><td>18,400 m²</td></tr><tr><td>Disconnected roof area (reuse tanks)</td><td>20,400 m²</td></tr><tr><td>Hardstand to wetland (lots with tanks and general)</td><td>14,100 m²</td></tr><tr><td>High density zone (roofs)</td><td>7,300 m²</td></tr><tr><td>Half of Arvida B (roof & driveways)</td><td>10,700 m²</td></tr><tr><td>Total connected impervious catchment</td><td>50,500m²</td></tr><tr><td>Constructed wetland treatment area</td><td>*1,450 m²</td></tr><tr><td>Ephemeral soakage area</td><td>*350 m²</td></tr></table> <p>It is noted that the current wetland design remains slightly undersized for the assumed detailed design and once actual development areas are fully resolved this will be potentially increasing the footprint of the wetland, designing inlet hydraulic to align with Schedule X 6.3 and reducing the overall catchment imperviousness.</p> <p>Final stormwater wetland sizes and construction details are required to be appropriately conditioned with the necessary detail shown at detailed design stage.</p>	Total contributing road area	18,400 m²	Disconnected roof area (reuse tanks)	20,400 m²	Hardstand to wetland (lots with tanks and general)	14,100 m²	High density zone (roofs)	7,300 m²	Half of Arvida B (roof & driveways)	10,700 m²	Total connected impervious catchment	50,500m²	Constructed wetland treatment area	*1,450 m²	Ephemeral soakage area	*350 m²		
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3.6	<p>Further Recommended Stormwater Conditions of Consent by Council Officers</p> <p><u>Performance Bond</u> A performance bond will be required.</p> <p><u>Slope Risk Assessment</u> A slope risk design report shall be provided for all land proposed to vest in Nelson City Council (NCC), including adjacent slopes, demonstrating an acceptable risk to NCC.</p> <p><u>Operation and Maintenance Plan</u> An Operation and Maintenance (O&M) Plan shall be submitted at the detailed construction plan stage for the Kākā Stream treatment ponds and other water sensitive design features. The plan must outline:</p> <ul style="list-style-type: none">○ Inspection and maintenance requirements;○ Frequency of maintenance activities;○ Estimated costs; and○ Responsibilities for any maintenance on Arvida or other private land to be secured through a Consent Notice. <p>(Note: Outfalls on Arvida land must be covered by an easement, with NCC responsible for maintenance.)</p> <p><u>Consent Notice for Private Maintenance</u> A Consent Notice shall be registered on titles requiring ongoing maintenance of storm filter devices and water reuse tanks located on private property.</p>	Accepted	<p>It is accepted that this detail can be provided at the detail design stage and conditions of consent should account for this.</p> <p>Should the application be approved, it has been agreed with Council that these matters can be addressed via conditions of consent. The Applicant and Council Officers are currently working towards addressing this issue in an updated condition set.</p>																

4	Infrastructure Servicing and Flood Protection/Inundation – summary of questions and responses Council Officers: <ul style="list-style-type: none"> Shane Overend – Senior Engineer Land Development Toby Kay – Activity Engineer Flood Protection and Coastal Hazards 		
4.1	<p>The 0.2m³/s increased flow under the T&T scenario 1 is an increase. The cumulative effects of the total increase in flows from individual developments in the Maitai catchment is likely to be not less than minor. For this reason, the approach adopted by the NTLDM is that any development resulting in more than 50m² of additional impervious area, which is discharging to a system that has known capacity constraints, must mitigate the increased flows. On this basis the NCC Infrastructure team suggest that onsite devices should be implemented by the developer to mitigate the increased flows described under scenario 1 of the T&T report.</p> <p>T&T have assessed that under scenario 1 (100% developed site, 0% reforested areas, present day 1%AEP) there will be 0.2m³/s additional flows from their site compared to predevelopment flows. Due to various findings outlined in their report, T&T conclude the following.</p> <p>The proposed stormwater approach has been assessed against the performance outcomes in NTLDM Section 5.1 in Table 6.8. This shows that the proposed stormwater meets or exceeds the NTLDM stormwater performance standards.</p> <p>As the proposed stormwater approach meets the requirements of NTLDM 5.4.13 in the long-term scenarios, and where non-compliant in the short-term scenario, results in no increase in downstream flood effects and meets or exceeds the NTLDM stormwater performance standards, the proposed stormwater approach is considered NTLDM compliant and appropriate for the site.</p> <p>There is a lack of clarity over when the afforestation (~120 ha) of the Kākā Stream catchment will be undertaken to achieve the attenuation represented by scenarios 2 and 3 in Table 6.3 of the Stormwater Assessment report. Further information on the phasing of this afforestation is needed to demonstrate that planting will be undertaken to attenuate the stormwater flows from each stage of the development (part of this planting is also assumed to be a part of the Sch X Canopy cover in the Revegetation Overlay and may form a part of the geotechnical mitigations).</p> <p>Furthermore, there is ambiguity over how much of this forested area will be protected by a QEII covenant, and how much Koata land 'may' be protected by a Ngā Whenua Rāhui kawenata and would this cover the areas of the bunds, overland flow paths or areas needed to access these structures for maintenance. If the forested land is not protected by covenant (or equivalent) what assurances can the applicant provide to ensure that the</p>	<p>The 0.2m³/s is a theoretical worst-case scenario based on the development being 100% complete (i.e. all combined planned impervious surfaces have been implemented), but without any of the planned mitigation measures in place. In this scenario it is assumed that none (0%) of the reforestation areas are established.</p> <p>It is realistic to assume that establishment of the vegetation (canopy cover) will be achieved within the same timeframe (10-12 year) as the maximum development of the area. Even if only 50% of the revegetation has been established by that time, this will still result in a minor reduction in flows.</p> <p>In order to appropriately manage effects from the proposed increase in impervious areas during the different development stages, it is recommended that revegetation of the wider catchment is staged so that the right level of mitigation (planting) is in place for any newly created impervious surfaces for each stage.</p> <p>Further to the above, if a theoretical 0.2m³/s flow increase would occur, the assessment shows that this does not create an effect on the downstream environments (i.e it has been shown that existing flood risks are not increased as a result of the 0.2m³/s flood increase, on this basis NTLDM Table 5-9 states that detention is not required)</p>	<p>It is accepted that this detail can be provided at the detail design stage and conditions of consent should account for this.</p> <p>It is also understood that the assessment was carried out on a "worst case scenario" basis and there is no reliance on the establishment of the vegetation to mitigate the increased run off from the site.</p> <p>Council requests the opportunity to review the final condition set to ensure that the revegetation of the wider catchment is staged so that the right level of mitigation (planting) is in place for any newly created impervious surfaces for each stage. Timings and methodology of plantings should be included in the condition set to address this.</p> <p>Should the application be approved, it has been agreed with Council that these matters can be addressed via conditions of consent. The Applicant and Council Officers are currently working towards addressing this issue in an updated condition set.</p>

	forested land will not developed in future, which would change the assumptions made in the stormwater assessment?		
4.2	<p>Please explain why the increased flow for scenario 1 in Table 6.6 of the T&T is report the same amount for the 1% and 10% events. Does this change any conclusions in the report?</p> <p>In section 6.2.3 of the Stormwater Assessment report, the parameters for the Kākā Stream flood modelling include the use of HIRDS v4 rainfall data and storm profiles. It is also stated that a 6 hour storm event produces the highest peak flows for this catchment. Given the relatively small catchment size, it is considered appropriate to test the stormwater design using a nested storm of at least 6 hours duration.</p> <p>The use of a nested rainfall pattern for small catchments is discussed in section 3.2 of the Inundation Practice Note (2019) and has been adopted for stormwater network modelling in Nelson. It is anticipated that the Kākā valley stormwater network will be incorporated in the wider Central Nelson Stormwater network model and primary / secondary system flows will be assessed and overland flows mapped using a nested storm type for a range of storms up to a 1% AEP (2130) event. Please provide the results of a nested rainfall pattern as per section 3.2 of the Inundation Practice Note (2019) and assess the results.</p> <p>The NTLDM requires a Debris Flow assessment for all of the open drains, as per Section 5.4.4. Please confirm that debris flow has been included in the capacity assessments of all proposed culverts and the bridge and provide this information.</p> <p>In Section 5.2.2, T&T show the following proposed debris bund which will protect a number of lots as well as protecting two roads:</p>	<p>The increases in flows are as follows:</p> <ul style="list-style-type: none"> 1% AEP: 0.18m³/s 10% AEP: 0.15m³/s <p>Both were rounded up in table 6.6. to 0.2m³/s. This does not change the conclusions in the report.</p> <p>After further discussions with NCC, we understand that his concern relates to whether design of stormwater elements within the subdivision (e.g. culverts and secondary flowpaths) has been (or will be) based on the correct/critical storm duration for the specific location, which may not be the same as the critical storm established as resulting in greatest flood extents and flows at the lower end of the PC28 site. This may also have implications for design of building platforms and floor levels.</p> <p>In response to the above T+T:</p> <p>Confirms that the detailed design of stormwater elements and setting of platform/ground levels will be based on specific assessment of the critical duration at each location. i.e. it is not intended to use the existing modelling results as design flows for design of culverts and overland flowpaths, etc.</p> <p>Agrees with NCC that it will be necessary to consider storm durations other than the standard 1hr and 6hr NIWA HIRDS v4 profiles. While nested storms are one approach, they can tend to lead to overly conservative design in lower parts of the catchment. We will consider the relative merits of each approach during detailed design.</p> <p>Confirms that stress-testing of the design will be part of the detailed design approach, e.g. through blockage assessment as per NTLDM.</p> <p>Initial testing with a 6 hour nested storm (1% AEP with climate change) with all culverts blocked shows that flows are contained within roading network and reserves (see figure below).</p> <p>A detailed blockage assessment, part of detailed design, will inform the preferred option for the crossing of road 2 (red circle). Alternative options that we recommend for consideration are a dip in the road or a bridge to ensure that flows continue straight towards Kākā Stream.</p>	<p>Council understands that the applicant is currently working on providing this in detailed design.</p> <p>Council requests to review the detail once it is available and requests the opportunity to review final condition set.</p> <p>Council agrees that the debris bund will be vested.</p>

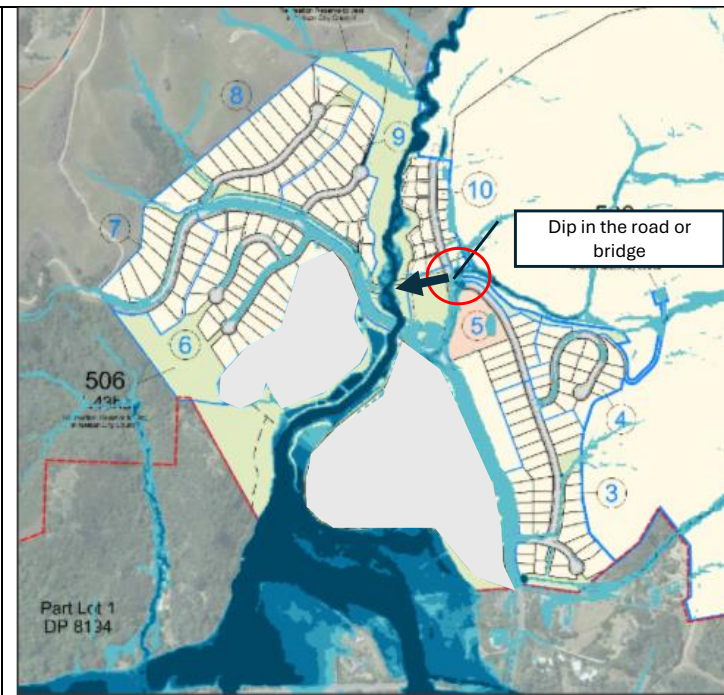


- PPC28 boundary
- Undeveloped catchments
- Flowpaths
- Culvert
- Open channel
- Debris bund
- Kākā Stream bridge

To understand the proposed bund further, it would be key to provide a typical cross section to scale with dimensions of the bund including:

- a. The bund profile
- b. The dimensions from the base of the bund (on both sides) to the proposed reserve/lot boundary.
- c. The profile of the open stream and adjacent slopes
- d. Any specific types of surfacing required, including scour protection.
- e. Show where/how access will be provided for all future ongoing operation and maintenance requirements, including who will be responsible for this maintenance and access for machinery to remove debris following a design event.
- f. What is the volume of debris that is being designed for. Please specify the design event AEP, giving consideration to NTLDM sections 5.4.4 and 5.4.6.

Given the critical nature of this bund the applicant should confirm the basis of design for the channel and bund including risk analysis of breach of the bund and secondary flow paths if the channel is blocked by debris.



Assessment against the 1-in-500-year storm events as per NTLDM Section 5.4.4 will be completed for relevant sections. T+T will undertake this flow modelling and assess effects on culverts and bridges. Findings from the debris flow assessment will be considered and addressed as part of detailed design. This is likely to involve a risk-based approach to manage sediment load and intake resilience. Depending on the outcome of this assessment, this is likely to involve specific design requirements such as: secondary intakes, screening, excavator access to the intake, oversized culverts to ensure no surcharging or concrete lining of road sections that act as overland flowpath.

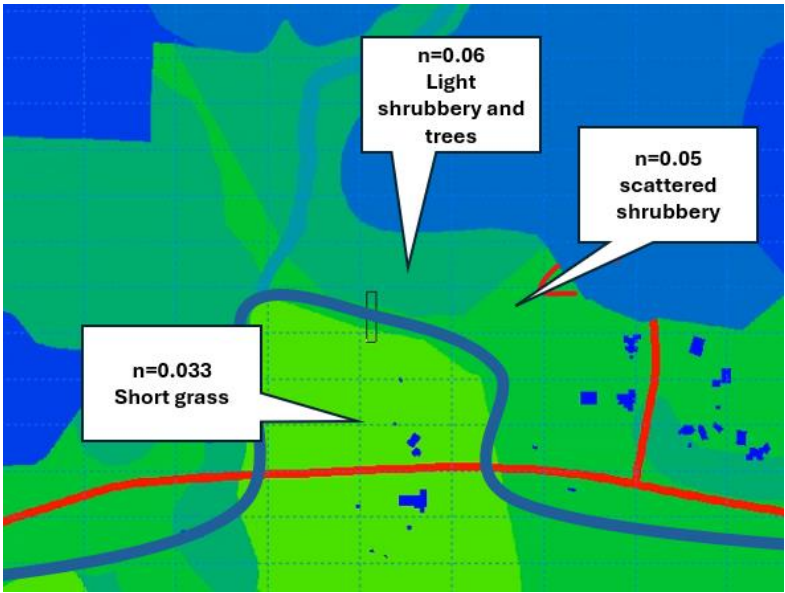
Response is generally covered by T+T Geotech comments. Debris flow and associated design consequences will be confirmed as part of detail design.

The options as to ownership or vesting were openly discussed with NCC and Council has agreed to this being vested.

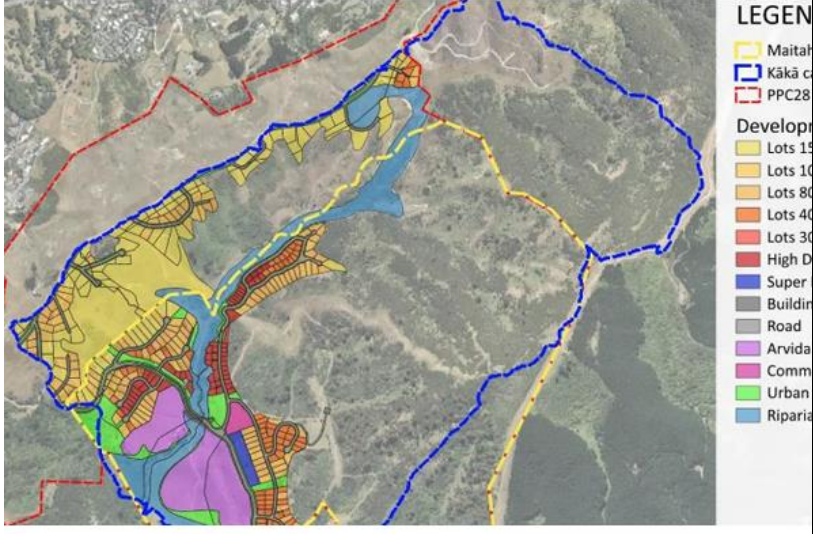
- 4.3 Regarding the Kākā Stream and the proposed water sensitive design features (including the wetland/treatment ponds) Please provide an overall/combined statement from the applicant's relevant design professionals (Stormwater Engineer, Ecologist and Landscape Architect) confirming that:
- a. they have reviewed all the application reports and plans associated with these works.

The applicant's Planner and coordinator of the technical inputs has confirmed that the assessment and design processes have involved a fully integrated approach. This multi-disciplinary and integrated approach was also confirmed in the expert evidence prepared for the Environment Court, with the same experts remaining involved.


Accepted by Council

	Subject to final detailed design plans being developed, they are confident that the layout proposed shown in the application will be sufficient to achieve the intended functions relevant to their field of expertise (either/or Flood capacity and stability, stormwater treatment, ecological, amenity).		
4.4	<p>The proposal will not be adversely affected by low frequency weather events, including flood and drought events. Please advise the design AEP events assessed in this respect including the design AEP for the drought event. <i>(this is needed to establish that the wetland/treatment ponds (following periods of drought) will not degrade to an extent which causes odour issues or high maintenance costs to repair/re-establish.</i></p>	<p>A bypass structure will direct water quality flows (up to ⅓ of the 50% AEP event) through the wetlands for treatment. Larger rainfall events will bypass the constructed wetlands to avoid potential damage to biological processes.</p> <p>Wetlands include a permanent depth of water (on average 350mm with greater depths up to 1200mm) and densely planted with emergent aquatic vegetation i.e. shallow and deep marsh species. An impermeable liner will prevent drawdown between rainfall events and during droughts and will support biological processes.</p> <p>Further wetland design including any maintenance requirements will be provided as part of detailed design</p>	<p>It is accepted that this detail can be provided at the detail design stage and conditions of consent should account for this. Council requests the opportunity to review final condition set to ensure the assessments in the report can be captured.</p>
4.5	<p>The large expansive grassed areas shown on the RMM Landscape Design Report Green Network areas 2 & 3 are not required/desired for the esplanade or stormwater reserves as they require significant maintenance through mowing, weeding and the area may be difficult to access.</p> <p>The Parks Team do not require these areas as recreation reserves or for informal recreation. It is considered that this may be suggested to be grass in relation to the flood potential on the site. It is noted elsewhere that Lot 516 is identified as Local Purpose Reserve and should be Esplanade Reserve given the Maitai River abuts this allotment and requires a 40m esplanade under Schedule X (note this land is zone Open Space and Schedule X does not have any rules relating to subdivision in the Open Space Zone, only Residential thus, OSr.74.must apply and the esplanade of Appendix 6 requiring 20m from the bank of the Maitai (see below planning matters.)</p> <p>Noting that that area directly to the south is slope planting, please provide an assessment on whether these grassed areas could be planted with planting similar to the slope plantings, and if considered to cause a flood issue please justify why the slope planting area to the south does not affect flood levels. A path through the area could still be achieved.</p>	<p>Davis Ogilvie has been tasked with amending scheme plan for Lot 516 to be Esplanade Reserve.</p> <p>The assumed roughness in the flood model allows for more planting than just grassed areas. It varies between 0.05 (scattered shrubbery) and 0.06 (light shrubbery and trees) as per the figure below: (T&T)</p>  <p>T+T have informed RMM that the flood model allows for more planting within these identified grass areas as indicated in the figure below. N = mannings roughness coefficient.</p> <p>T+T have also advised that the area which allows for “scattered shrubbery” shouldn’t be planted too densely, otherwise it could result in a flood effect across the southern site boundary.</p>	<p>It is accepted that this detail can be provided at the detail design stage and conditions of consent should account for this.</p> <p>Council requests the opportunity to review final condition set to ensure the expansive grassed areas will be landscaped and planted with riparian planting.</p> <p>Should the application be approved, it has been agreed with Council that these matters can be addressed via conditions of consent. The Applicant and Council Officers are currently working towards addressing this issue in an updated condition set.</p>

		This response from T+T is positive, because from an ecological and landscape outcome perspective, planting, with native plant species would be more a desirable outcome than grass. The suite of landscape plans have been updated to illustrate this and the density of native planting can be appropriately captured when undertaking the detailed design phase.	
5	Infrastructure Servicing and Wastewater summary of questions and responses Council Officers: <ul style="list-style-type: none"> Mel Large – Wastewater Activity Engineer Phil Ruffell – Manager Utilities Activity Management Shane Overend – Senior Engineer Land Development 		
5.1	In review of the plans, it is noted that the drainage and water lines do not extend into the balance allotment Lot 7000 which needs to have connections to the boundary. The plans should be amended to show this.	Plans will be amended to extend to boundary.	<p>Accepted. Council requests to review this plan once it is available.</p> <p>Installation to be to in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p>
5.2	<p>The applicant's servicing Engineer should provide enough details of the proposed WW pump station to demonstrate that the area shown for the pump station site (243m²) and its shape is sufficient: A general layout should be provided that aligns with NCC standards and requirements. This will include (not necessarily in plan form but consideration):</p> <ol style="list-style-type: none"> Space for a screened overflow chamber with connection to SW system shown. Future space for Council to provide additional treatment in future in response to regulatory changes in which draft regulations are currently being sought on. Suitable odour treatment Manhole space A dedicated-on site generator and any acoustic design required to meet resource consent conditions Additional space for Council to provide further storage in future to improve resilience due to its remote location Vehicle access and off-street parking for maintenance operation <p>Condition - The developer should work with NCC team to ensure electrical and mechanical components are in line with NCC standards and requirements.</p>	Please find attached the preliminary pump station layout which fits in the lot size of approximately 12.7m wide by 19.2m deep (243m ²). Following our discussions we propose increasing the lot size to 23.2 m deep by 17.2m (400m ²) wide to allow for refinements in the layout during detailed design and any area for NCC to respond to any future regulatory changes. The current proposed layout (once worked through under the detailed design process) could be constructed and fenced, with the balance parcel of pumpstation land being landscaped as part of the reserve. This gives the ability for the pump station to be expanded in the future if required.	<p>Accepted. Council requests to see the final conditions of consent and plan for the pump station.</p> <p>Council requests that the applicant engage with Council regarding the final condition wording for site layout, electrical, mechanical and pump details.</p> <p>Installation of the facility should also be in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>Council requests a condition along the lines of:</p> <p><i>The wastewater system and pump station subject to detailed design to the standards of the NTLDM. Lot 3000 shall vest as Utility Reserve, all certifications shall be provided at 224 and the lot shall vest in Stage 1 noting that lateral should extend to the north into Lot 505 (or the balance allotment).</i></p> <p>It is understood that the applicant accepts this.</p> <p>It is acknowledged that odor will be sufficient mitigated by flushing and carbon filtration treatment. It has been assessed that no additional discharge consent to air because of odour is required.</p>
5.3	<p>The final wastewater reporting should specifically confirm that the system is designed to service the Maitahi residential development as well as:</p> <ol style="list-style-type: none"> Bayview development Maximum yield of super lot 1002 	Yes, however the final detailed design wastewater reporting will confirm the system is designed to service the maximum yield for the catchment.	<p>This has been overtaken and covered by the engineering design of the external servicing infrastructure from Nile Street to the site.</p> <p>Detailed engineering approval has already been sought and is currently being processed by Council.</p>

			
5.4	<p>Arvida Wastewater</p> <p>In the servicing report prepared by Davis Ogilvie (DO) and as shown on the Avida plans, advise that Avida will have their own low pressure pumping system (multiple lots served by individual pump chambers and their own odour filters) which discharges to the Maitahi gravity system at the locations shown above.</p> <p>An operational philosophy should be provided to capture how the Avida and Maitahi wastewater pumping station work together to:</p> <ol style="list-style-type: none"> Minimize odour and septicity concerns in the early stages of development Prevent and manage peak wet weather flows during rain events from entering the system. 	<p>DO are working with EcoFlow on the low-pressure sewer design, where septicity and odour issues will be mitigated through design where possible. Clean water irrigation plan will be implemented early in the stages of the development as required. Odour filters are proposed at the outfalls to the wider site's reticulation.</p> <p>The low-pressure sewer reticulation will be sealed. All gravity pipework draining to the pump chambers will be designed to minimise infiltration. During detailed design the infiltration will be appropriately factored into the design to ensure the network can accommodate the expected level of infiltration depending on the extent of the gravity network.</p>	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design report required at detailed design stage. Installation to be to in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>Council also requests a condition along the lines of:</p> <p><i>The Arvida PS will be privately owned and maintained through Consent Notice conditions – operating and maintenance manual provided at detailed design that will be adhered to by the lot owner.</i></p> <p>It is understood that the applicant accepts this.</p>
6	<p>Infrastructure Servicing and Water summary of questions and responses</p> <p>Council Officers:</p> <ul style="list-style-type: none"> Phil Ruffell – Manager Utilities Activity Management Shane Overend – Senior Engineer Land Development 		
6.1	<p>Lot 500 is proposed as the site for a water reservoir. The report does not indicate whether this reservoir is required just for a temporary period or permanent or any reason for its purpose.</p>	<p>The temporary nature of the reservoir(s) is being worked through with NCC as part of the external servicing discussion and will be confirmed in due course. The scheme plan will be updated to remove the lot to vest and replace with an Easement in Gross</p>	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design report required at detailed design stage. Installation to be to in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>Council accepts that this will not be a permanent facility as set out in the application.</p>

7	Transport summary of questions and responses Council Officers: <ul style="list-style-type: none"> James Hills – Senior Transport Planner Rhys Palmer – Transport Engineer – Transport Activity Management (Contractor) 		
7.1	<p>A road safety audit is needed to be carried out at this stage as per NTLDM Table 4.2.</p> <p>Note independence from the project is <u>critical</u>. It has been assessed by Council Officers that, Traffic Concepts is too close to this project to undertake an independent Road Safety Audits associated with the development as per the requirements of the NTLDM.</p>	Agreed. Audits provided.	Accepted
7.2	<p>Trip generation: Page 55 and 56 of the ITA states 110 vehicles in the peak hour from the residential subdivision, 70 trips from Arvida and 15 from Koata House. On page 57 for the intersection at Nile Street Maitai Valley Road however the adopted figure is 70trips per hour in the peak hour. Even taking just the residential component and assuming 80% of trips out in a 110x0.8=88. Please clarify the reasoning behind the adopted figure of 70 trip in the peak hour.</p>	<p>The 70 trips per hour is a typo. The assumed generation of 110 trips was used for the SIDRA analysis.</p> <p>There is a small unrelated error in the table which I will need to fix. Does not change the outcome.</p> <p>The error was with one of the movements in Table 12.</p> <p>Explanation provided to Rhys on 18/5.</p>	Mr. Palmer has reviewed the impact on modelled outputs at the intersection and agrees that it is immaterial.
7.3	<p>Road 3 – 19m legal road reserve required, 14m provided. Acknowledge that this is hillside environment but it has been assessed that back service strip is too narrow to accommodate water metre cover adequately. It has been assessed that a 1.0m minimum required as an absolute minimum.</p> <p><i>Please amend the legal road width to adequately accommodate services.</i></p>	Can address at Detailed Design through providing 750mm either side for service boxes	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design report required at detailed design stage. Installation to be in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>The 750mm berm width is also accepted</p> <p>Council also requests a condition along the lines of:</p> <p><i>The reduction in berm width as proposed by the applicant doesn't preclude locating all necessary services under the footpath and the ability to plant street trees, refer NTLDM table 4-7 note 4.</i></p> <p><i>This could be achieved by a staggered street tree planting plan that provides a localised increase in berm space to enable a specimen tree to grow to full size without effecting services road or neighbours every 60-100m, or alternately smaller trees at 20m spacing.</i></p> <p>It is understood that the applicant accepts this.</p>
7.4	<p>Council's NTLDM requires that Road 3 – 19m legal road reserve required, 14m is shown in the application.</p> <p><i>Please provide expected total number of lots at full development that would use this cul-de-sac as it extends up the Kākā Valley in subsequent stages so this width</i></p>	Agreed	Accepted and Council requests a condition of consent requiring detailed engineering plans and design report required at detailed design stage. Installation to be in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.

	<p>departure can be fully assessed as a footpath on only one side at full development doesn't appear appropriate for the likely number of lots. (snip below showing culdersac in yellow highlight taken from landscape report). An assessment of potential parking demand for the neighbourhood reserve should be provided and how this would be catered for given the under-width road environment. As there is a slight curve in the reserve, yellow lines may need to be installed to maintain forward visibility.</p> <p>An assessment should be made whether any inset parking adjacent the reserve needs to be accommodated for.</p> 		<p>Council also requests a condition along the lines of:</p> <p><i>Before detailed design commences:</i> <i>An assessment of the total number of lots at full development of subsequent stages (not included in this fast-track application) that will use Road 3 and to demonstrate that an under width road reserve arrangement can operate safely, efficiency and house al necessary services, or provide increased road reserve width in line with the NTLDM requirements.</i></p> <p><i>An assessment of potential parking demand for the neighbourhood reserve should be provided and how this would be catered for given the under-width road environment of Road 3. Solutions to be considered shall include inset parking.</i></p> <p>It is understood that the applicant accepts this.</p>
7.5	<p>There is no turning head is shown for Road 1. A temporary turning head will be required.</p> <p><i>Please provide either an amendment to the lot layout to provide a turning head to Road 1 or alternately if the turning head is located on a neighbouring lot please also provide legal agreement that enables this.</i></p>	Accepted	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage. Installation to be to in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>Council also requests a condition along the lines of:</p> <p><i>An amendment to the lot layout shall be provided to include a turning head to Road 1 within the development or a legal agreement that enables the current layout.</i></p> <p>It is understood that the applicant accepts this.</p>

7.6	<p>The turning head to Road 3 is shown over neighbouring lot.</p> <p><i>Please provide either an amendment to the lot layout to provide a turning head to Road 3 wholly within the development or alternately if the turning head is located on a neighbouring lot please also provide legal agreement that enables this.</i></p>	Accepted	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage. Installation to be to in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>Council also requests a condition along the lines of:</p> <p><i>An amendment to the lot layout shall be provided to include a turning head to Road 3 within the development or a legal agreement that enables the current layout.</i></p> <p>It is understood that the applicant accepts this.</p>
7.7	<p>The steep gradient of the shaded path at 1:8 as it climbs to the ridgeline will preclude a number of users as it will be too difficult.</p> <p><i>Please provide full background that shows how the clause in schedule X was developed as the way it is drafted suggests that a route to the ridgeline separate to the Road 1 was envisaged at a flatter gradient. The Expert conferencing dated 4 May 2022 however suggests a path adjacent to Road 1 as per the current</i></p>	On 15/5 DO circulated plan demonstrating why a 1:12 grade is not achievable.	<p>The plan showing the alignment has been provided and it is accepted that the layout shown in this plan is not practical and the alignment shown in the application is preferred.</p> <p>Council request that an assessment of this is also provided at the detailed design stage.</p>
7.8	<p>Visibility to the shared path from the individual properties vehicle crossings and driveways along the length of Road 1 is a safety consideration.</p> <p><i>Please demonstrate how cycle safety in the vicinity of the accessways will be provided. It is suggested that a visibility splay at every access as per NTLDM fig 4.11 is required to be noted on the titles and an increase in the width of the service berm to the NTLDM minimum compliant width of 1.6m is required. Note the ITA highlights compliance for accesses to Figure 4.10 incorrectly when adjacent to a cycle facility. Refer NTLDM 4.10.5.2.</i></p>	Accepted	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage. Installation to be to in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>Council also requests a condition along the lines of:</p> <p><i>Cycle safety along Road 1 in the vicinity of the accessways shall be maintained by providing:</i></p> <ul style="list-style-type: none"> <i>a) A visibility splay at every access as per NTLDM fig 4.11 shall be provided and</i> <i>b) The visibility splay shall be recorded on the title so it is clear to property owners of the requirement and remains in perpetuity.</i> <i>c) An increase in the width of the service berm to the NTLDM minimum compliant width of 1.6m is required.</i> <p>It is understood that the applicant accepts this.</p>
7.9	<p>Please provide concept level structural and geometric details for review of the Road 1 bridge including relevant flooding and freeboard requirements under supplied stormwater and servicing reports.</p>	<p>Bridge concept showing freeboard below:</p> <p>T+T, using DO's design surface and the existing LiDAR surface, based on a target bridge span of 15m have modelled the 1% AEP storm event. The cross-section below shows that the 1% AEP event is mostly contained within the channel, as shown in the diagram below.</p>	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage. Installation to be in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p>

		Bridges are a permitted activity so can be set aside until detailed design.	
7.10	<p>The strip of accesses for Arvida properties onto Road 1 is not desirable. It creates 24 additional conflict points involving reverse manoeuvres onto Road 1 that can easily be avoided by gaining access from the internal road network. Reconfiguring these Arvida accesses to the internal network could allow the shared path to switch sides earlier and avoid crossing Road 5 and the accesses to lots 1-3, 20-24, 174 and 1002.</p> <p><i>Please reconsider the direct access proposed for the Arvida properties onto Road 1 in light of the significant safety deficiency identified between the shared path and accesses. Please provide any amended plans and diagrams showing this.</i></p>	<p>The applicant has discussed this with Council's Transport Engineers and it is agreed that the shared pathway will be moved to the Arvida side.</p> <p>The applicant has clarified that the Arvida Units fronting Road 1 are standalone units that are on the second level accessing the street.</p> <p>There ground floor units facing west are proposed to have internal access.</p>	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage. Installation to be in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p> <p>The applicant has agreed to move the path to the western side of the road along Road 1.</p>
7.11	<p>The change to Clousten Terrace from a give way controlled tee junction to more of an private access as indicated by the concept plan is unlikely to be workable for larger vehicles turning left out. Clousten Terrace provides access to 7 residential lots, and a sewer pump station. The pump station requires hiab style trucks at regular intervals to service the pump station and the residential lots will have refuse / recycling trucks multiple times a week. The left turn manoeuvre for these vehicles needs to be provided.</p> <p><i>Please demonstrate how larger vehicles could access Clousten Terrace to service the existing pump station and undertake refuse and recycling collection.</i></p> <p><i>It is recommended that as a condition of consent the detailed design phase include a signal peer review separate to the road safety audit as traffic signal design is a specialist activity.</i></p>	<p>To provide Rhys (NCC) with Audit Reports and doing some refinements to preliminary design based on safety audit comments.</p> <p>Gary provided amended tracking plan for Clousten Terrace on 18/5.</p>	<p>Mr. Palmer has reviewed the road safety audit provided and agrees that the road safety audit finding in relation to the signalised intersection is able to be accommodated within the next stage of preliminary design.</p> <p>It is understood that the applicant accepts a condition along the lines of:</p> <p><i>It is recommended that as a condition of consent the detailed design phase include a signal peer review separate to the road safety audit as traffic signal design is a specialist activity.</i></p>
8	Parks and Facilities summary of questions and responses		
	Council Officers: <ul style="list-style-type: none"> Joel MacMillan – Reserves and Facilities Planner 		
8.1	<p><u>Wastewater Pump Station:</u></p> <ul style="list-style-type: none"> Council sought clarification in relation to the pump station's location to the neighbourhood park and 	<p>From a landscape perspective, communication with Council to date has indicated that the landscape design approach to screen, soften and visually integrate the pump station into the location has been supported. Detailed design has not been undertaken yet. However, it is important to highlight that there is enough space /</p>	<p>Accepted and Council requests to review the final condition set as well as the plans.</p>

	<p>playground and the management of potential odour.</p> <ul style="list-style-type: none"> An assessment is requested on whether alternative locations were considered, with reasoning provided, and how adverse effects will be mitigated if the proposed location remains. 	<p>depth around the pump station to plant multiple layers of native vegetation to achieve this screening / softening of built form from the neighbourhood park and playground.</p> <p>A toilet block has been included in the design to provide the level of service required for future users of this neighbourhood park and playground area and within the Maitahi development.</p>	<p>Council also requests conditions that the final detailed landscape plans are reviewed by Council prior to the landscaping being implemented on site.</p> <p>Odour issues will be addressed in the detail design of the pump station as above.</p>
8.2	<p><u>Toilet Block – Alignment with Levels of Service:</u></p> <ul style="list-style-type: none"> The proposed toilet block in the neighbourhood park does not align with Council's current service levels, which provide such facilities only at designated larger parks (e.g., Sunday Hole, Black Hole, Branford Park). 	<p>It is important to highlight that the above-mentioned toilets are more than 800m away from the playground, across Maitahi Valley Road. Therefore, these other toilet blocks will not appropriately service adults and children using this neighbourhood park and playground area. (RMM)</p>	
8.3	<p><u>Lot 517 – Reserve Classification and Compensation:</u></p> <ul style="list-style-type: none"> Council notes Lot 517 is not required to meet neighbourhood park service levels and questions its proposed classification as a Recreation Reserve eligible for compensation. It may be more appropriate to vest this lot as a Local Purpose Reserve (Amenity) at no cost to Council. 	<p>RMM and the Applicant are happy to work with Council, in particular the Parks Team to design and construct these two playgrounds so the desired outcomes of both the Applicant and Council are achieved. I agree with Council that "flexibility be provided in any condition to have the playground construction subject to detailed design and approval".</p> <p>The updated suite of plans will illustrate where maintenance access is located for the proposed reserves. No public reserve car parks have been included, rather only on-street parking is provided.</p>	
8.4	<p><u>Lots 521 & 522 – Classification and Purpose:</u></p> <ul style="list-style-type: none"> These lots are viewed as utility-oriented (e.g., stormwater) rather than neighbourhood parks and are not eligible for compensation. They should vest as Local Purpose Reserve (likely Access), not Recreation Reserve, especially as walkways extend over private land and do not meet reserve design criteria. 		
8.5	<p><u>Lot 509 – Reserve Suitability:</u></p> <ul style="list-style-type: none"> Council considers Lot 509 unsuitable as a compensated Neighbourhood Park and recommends it be vested as a Local Purpose Reserve (Amenity). 		
8.6	<p><u>Playground Construction and Responsibility:</u></p> <ul style="list-style-type: none"> Clarification is needed on the proposed playground construction prior to vesting. Council notes that playground design and equipment selection are typically their responsibility. It is unclear if the applicant intends to fund the playgrounds fully and how ongoing maintenance 		

8.7	<ul style="list-style-type: none"> would be managed. Flexibility in conditions is sought to ensure detailed design and approval processes are followed. <p><u>Access and Parking:</u></p> <ul style="list-style-type: none"> From a planning perspective, Council requests more detail on how maintenance access and parking will be provided for the proposed reserves. 		
9	<p>Environment and Ecology summary of questions and responses</p> <p>Terrestrial and freshwater ecology</p> <p>Council Officers:</p> <ul style="list-style-type: none"> Dr. Paul Fisher – Senior Freshwater Scientist Scott Butcher – Environmental Programmes Advisor 		
9.1	<p><u>Significant Natural Areas (SNAs) – Predation and Disturbance Risk:</u></p> <ul style="list-style-type: none"> The proposal is adjacent to SNAs 166, 79 and 78, which support sensitive native species such as New Zealand Robin. The Ecological Impact Assessment does not address how increased human disturbance or cat (stray, feral, or companion) predation will be avoided, remedied, or mitigated. 	<p><u>Predation and Disturbance Risk (SNAs):</u></p> <ul style="list-style-type: none"> The applicant proposes to address these concerns through a volunteered Ecological Management Plan (EMP), to be secured via consent conditions. <p><u>Open Grassland and Ecosystem Restoration:</u></p> <ul style="list-style-type: none"> The landscape plans have been updated to better reflect native regeneration and planting, recognising that native ecosystems would deliver more ecological value than maintained grassland. 	<p>Accepted and Council requests to review the final condition set as well as the amended EMP.</p> <p>The fire risk matters were canvassed and addressed in the Plan Change 28 process. No further work needs to be done on this.</p> <p>Council also requests conditions that the final detailed landscape plans are reviewed by Council prior to the landscaping being implemented on site.</p> <p>Council also requests that conditions of consent require a suitably qualified ecologist to supervise and certify the Kākā Stream alignment works.</p> <p>Council requests that the changes to the EMP be carried over to conditions of consent and that all ecological restoration work be carried out in accordance with the updated EMP.</p> <p>Council also requests that a suitably qualified ecologist as well as a suitably qualified and experienced land contamination professional also certifies that the land has been appropriately mitigated in line with the performance standards detailed in the reports prior to the stream diversion being finalized and water is diverted down the new channel.</p>
9.2	<p><u>Landscape Masterplan – Open Grassland and Ecosystem Restoration:</u></p> <ul style="list-style-type: none"> A large area beside the Maitai River (Area 10) is shown as open grassland. Council notes this could be a missed opportunity to restore valuable and underrepresented alluvial/valley floor ecosystems. Suggestion is made to regenerate or plant this area in appropriate native vegetation rather than maintaining it as open grassland. 	<p><u>Urban/Natural Interface – Weed and Fire Risk:</u></p> <ul style="list-style-type: none"> The EMP will include management measures to address weed spread and fire risk along ecological boundaries, and reverse sensitivity effects from rural activities. Planting and design responses will align with Fire and Emergency New Zealand (FENZ) guidelines and be developed during the detailed design phase. 	
9.3	<p><u>Urban/Natural Interface – Weed Invasion and Fire Risk:</u></p> <ul style="list-style-type: none"> Further information is sought on how interface areas between residential development and SNAs/regenerating vegetation will be managed, particularly with regard to: <ul style="list-style-type: none"> Weed incursion risks from residential gardens 	<p><u>Bird Survey Methodology:</u></p> <ul style="list-style-type: none"> A “roaming bird survey” was used as a preliminary method to scope habitat use. The applicant acknowledges it is not a standard method and advises that structured survey methods (e.g. 5-minute counts) will be included in the EMP to support mitigation planning. <p><u>Timing of Works – Nesting Birds and Other Terrestrial Species:</u></p>	

<p>9.4</p> <p>9.5</p> <p>9.6</p>	<ul style="list-style-type: none"> ○ Fire hazard, which may threaten both homes and adjacent ecological values • Council requests a clear strategy for fire risk mitigation and management of reverse sensitivity issues (e.g., fire risk or forestry activity impacts from adjacent rural land). <p><u>Bird Survey Methodology – Limitations of Assessment:</u></p> <ul style="list-style-type: none"> • The bird survey in the Ecological Impact Assessment used an unconventional “roaming survey” method. • Council questions this choice and suggests more standard methods (e.g., 5-minute bird count or slow-walk transect) would better assess species presence and abundance. <p><u>Timing of Works – Impacts on Terrestrial Fauna:</u></p> <ul style="list-style-type: none"> • While the report considers waterway/fish habitat impacts, Council requests an assessment of impacts on terrestrial species, particularly nesting birds (July–February), including those that nest in open or treed habitats. <p><u>Species List – Accuracy and Omissions:</u></p> <ul style="list-style-type: none"> • The list of at-risk/threatened bird species needs refinement: <ul style="list-style-type: none"> ○ Wrybill is unlikely to occur due to habitat preferences. ○ South Island and Variable oystercatchers are more likely to be present than suggested. ○ New Zealand Falcon presence is underestimated. ○ Spotless Crake, although less common, may also be present. • Additional common native forest birds likely to be present (e.g. Silvereye, Bellbird, Tui, Kererū, Brown creeper, New Zealand Robin, Tomtit) have not been included but should be 	<ul style="list-style-type: none"> • Seasonal impacts on terrestrial species will also be addressed through the EMP, including nesting bird considerations. <p><u>Species List – Accuracy and Omissions:</u></p> <ul style="list-style-type: none"> • Addressed as per response to the survey methodology: further detail and refinement, including species presence and risk assessments, will be incorporated in the EMP. 	
10	<p>Urban Design and Heritage summary of questions and responses</p> <p>Council Officers:</p> <ul style="list-style-type: none"> • Chelsea Scanes – City Centre Development Programme Lead • Mithran Gopinath – Senior Planning Advisor 		

10.1	No matters raised that aren't already addressed in the application.		The urban design matters and heritage matters were assessed to be consistent with the requirements of Plan Change 28 as well as the Structure Plan in Schedule X of the NRMP.
11	Planning s9 and 11 – Land Use and Subdivision Consents summary of questions and responses Council Officers: <ul style="list-style-type: none"> Vince Matschke – Principal Development Advisor 		
11.1	<p>The subdivision and Schedule X rely on an external consent for part of the upgrade enabling works that will provide the required infrastructure to the development. These consents are: RM245337 - RM245340.</p> <p>In order to ensure that Stage 1 has sufficient infrastructure, a condition precedent must be imposed requiring the works authorised under those consents to have been completed and provided to the boundary of the site and certified and signed off by Council's Infrastructure Group Manager.</p>	The applicant requires a water connection in order to start the construction activity. This is addressed directly in the application. It goes without saying that the EW cannot commence until the reticulated water supply is available. That could be imposed as a consent condition.	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage.</p> <p>The final design and installation are requested to be in accordance with the NTLDM and to the approval of the Group Manager Infrastructure.</p>
11.2	The applications seeks a staged subdivision in which it proceeds in order from Stage 0 to 2 but then desires flexibility to staging. Stage 1 includes the vesting of the numerous reserves and wetland/detention areas – so this area must be fully completed, planted and signed off. Once it is a reserve owned by Council future construction of outfalls etc become trickier especially for Arvida if outfalls are not constructed ahead of time as easements are then required over the Reserves and are subject to the Reserves Act. It is best all outfalls within Stage 1 are established even those for Stage 2	<p>This makes sense as the Kākā Stream reserve and stormwater management areas are to be vested in Stage 1. It would be better to complete all infrastructure before the reserve area is planted and completed for 224c.</p> <p>This would also save rework reserve of an existing reserve which may require further consents. Could include this requirement as a condition of consent associated with Stage 1</p>	Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.
11.3	<p>Flexible staging really dependant on the water supply and the need for the water reservoir. If development proceeds to the north, stages 6 or 9, or if Stage 5 came after 2, then the reservoir must be in? a suitable right of way over balance land, easements to convey water, telecommunications etc and lines must be put in to cater for this.</p> <p>It makes sense that Stage 5 may wish to come before 3 & 4 to allow the Park and Koata Building to be constructed so the legal arrangements for this need to be considered and conditioned as well as outlining timing and responsibility of deconstruction and costs associated with this.</p>	This will be clarified as a part of also addressing other items as a part of updating the consent conditions, as well as updating the application with reference to the temporary water reservoir.	<p>Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.</p> <p>Should the application be approved, it has been agreed with Council that these matters can be addressed via conditions of consent. The Applicant and Council Officers are currently working towards addressing this issue in an updated condition set.</p>
11.4	<p>In respect to the potentially temporary water reservoir, if it is indeed temporary, consideration should be made as to whether the creation and vesting of a Utility allotment is ideal for the long-term purposes of the land.</p> <p>A temporary solution may be not the creation of an allotment but rather easements in gross, access and legal agreements so that the land can be easily returned back to a natural state or for any other uses rather than dealing with the Reserves Act.</p>	Davis Ogilvie will amend the scheme plan to remove the lot and have the necessary easements in Gross.	Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.

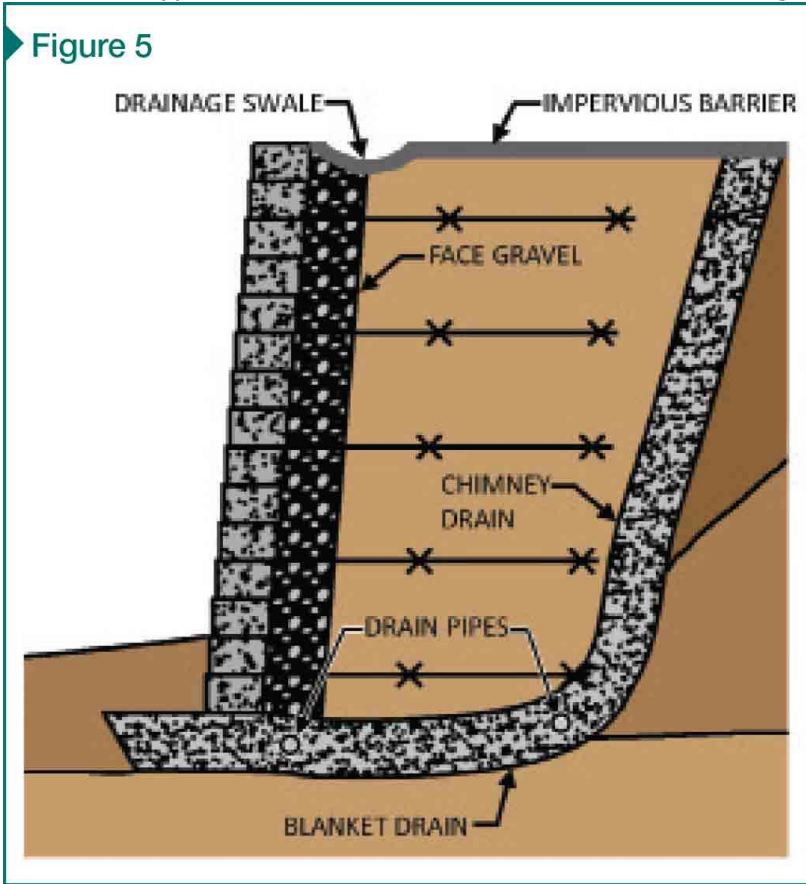
11.5	<p>Lapse date – The subdivision seeks 10 years in which to give effect to the consent. This seems reasonable but given the purpose of the FT bill and that the CHD is reliant on these, the lapse dates for Stages 0-2 should be earlier and more specific to provide assurance that the development will proceed.</p> <p>The timeline provided with application shows completion of civil construction and earthworks by Q1 2028.</p> <p>Given the approval of a Survey Plan could be done at this time with 3 more years to deposit plan, Consideration of a shorter lapse period for these stages should be applied and also aligns with the lapse dates for the water reservoir and pump station.</p> <p>All other remaining stages must be given effect to by the balance period after this date (ie 3 years for stages 0-2, 7 years after for everything else).</p>	<p>This will be clarified as a part of also addressing items 71, 74, 75, 88 and 102 as a part of updating the consent conditions.</p> <p>The purpose of the Act will also be addressed in the legal submissions that has been requested</p>	<p>Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.</p>
11.6	<p>In respect to lapse dates set in the Substantive application – It is not clear why the NESCS consent requires a 10-year lapse date and should be in line with the Arvida development and earthworks remediation.</p> <p>It is also unclear why 10 years is applied to the Dam and divert, discharge, reclamation are set at 10 years when the majority of this works must be complete or have been given effect to much sooner than this.</p>	<p>Yes you are correct that the NES-CS consent will involve the completion of works in the first stage of the earthworks development.</p> <p>Note: This has no relevance to the CHD development being undertaken by Arvida. This will be clarified as part of also addressing items 71, 73, 75, 88 and 102.</p> <p>Note: Section 4.1 of the AEE and Volunteered Consent Conditions 'M' refer to 2 years not 10 years.</p>	<p>Accepted and Council requests to review the final condition set as well as the amended EMP.</p> <p>Council also requests conditions that the final detailed landscape plans are reviewed by Council prior to the landscaping being implemented on site.</p> <p>Council also requests that conditions of consent require a suitably qualified ecologist to supervise and certify the Kākā Stream alignment works.</p> <p>Council requests that the changes to the EMP be carried over to conditions of consent and that all ecological restoration work be carried out in accordance with the updated EMP.</p> <p>Council also requests that a suitably qualified ecologist as well as a suitably qualified and experienced land contamination professional also certifies that the land has been appropriately mitigated in line with the performance standards detailed in the reports prior to the stream diversion being finalized and water is diverted down the new channel.</p>
11.7	<p>Durations - The application does not seek durations for some regional matters which should have them such as the outfalls and discharges. Note discharge of stormwater before vesting to Council should have a duration up to the time the infrastructure vests.</p> <p>This will avoid the need to transfer and permit will now fall under Council global consent and responsibility.</p>	<p>This will be clarified as a part of also addressing items 71, 73, 74, 88 and 102 as a part of updating the consent conditions.</p>	<p>Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.</p>
11.8	<p>The boundaries in Stage 0 along the stream appear complex and potentially difficult to determine in the future.</p> <p>This should be rationalised for clarity of owner responsibility in the future and reference to the stream is not static.</p>	<p>The boundaries separate the two landholdings in a logical way. The proposed boundary being centerline of the Kākā Stream is appropriate as it provides both CCKV and Bayview access to the Kākā stream network to the Maitahi valley.</p> <p>The southern portion of the Bayview/CCKV boundary follows the best development of the residential zoning providing both parties the ability to develop residential section on both sides of the link road.</p>	<p>Accepted</p>

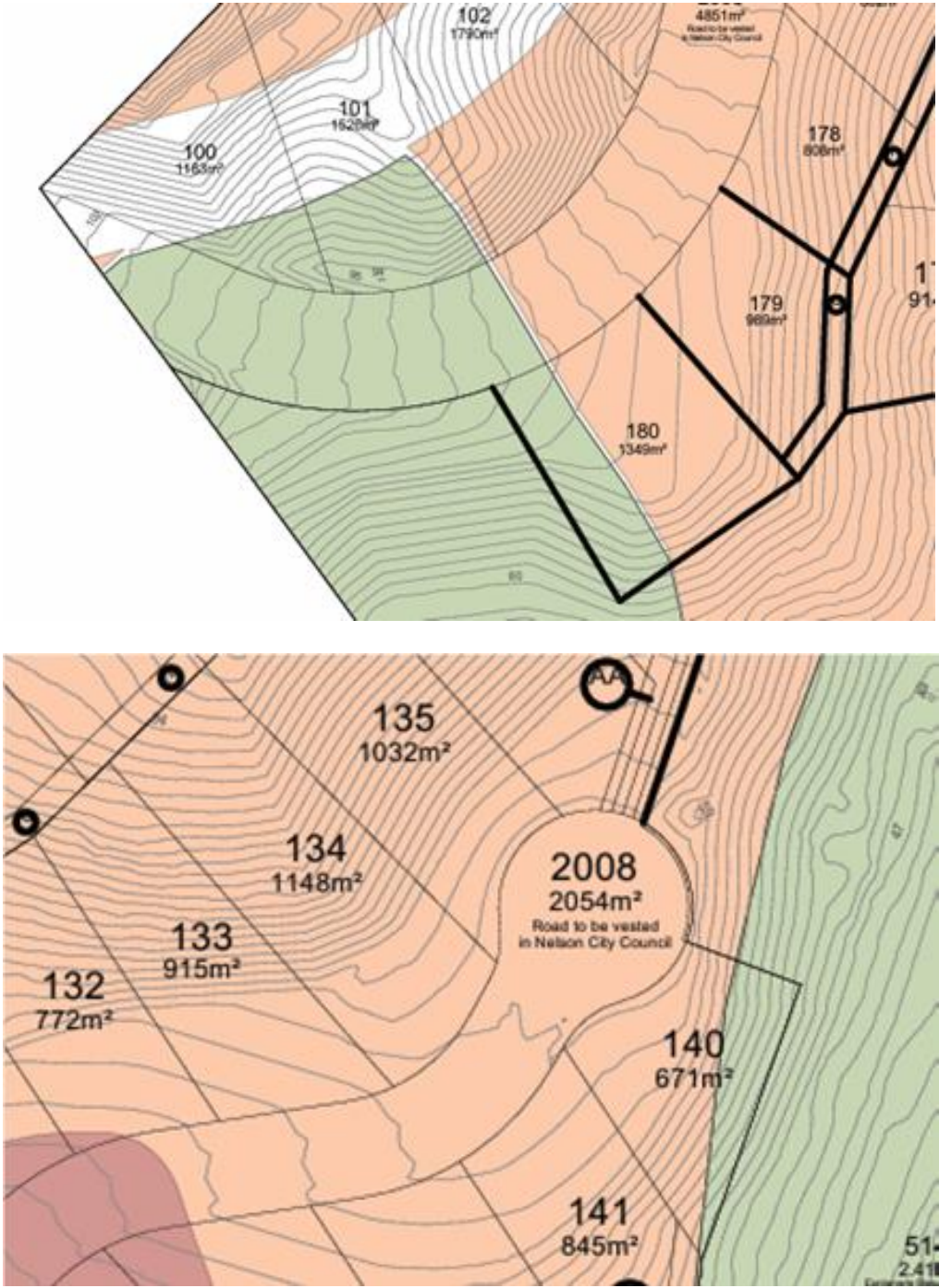
11.9	The application assessed geotechnical hazards and flood hazards but does not address the potential fire risk hazard. It is noted that this may have been addressed in the recent plan change but for completeness and the further planting near allotments this should be addressed again in respect to Section 106.	The issue and management of fire risks have been addressed in item 65 of the response from Robertson Environmental and RMM.	Accepted – Acknowledged that fire risk hazards were canvassed and addressed through PC28. The application and scheme plan are in line with the structure plan of Schedule X and conditions of consent can be applied to ensure low flammable species of trees are planted.
11.10	Activity status indicates that all lots can meet the controlled standard of REr.107 Subdivision containing an 18m x 15m development rectangle. Lot 147 should be checked on this and consideration of a quite a constrained area for building. Being served at the end of a right of way will require onsite manoeuvring which will take up a portion of usable space and push building back to constrained area. Constraints are green corridor boundary shape and easement. Lot 86 also may not meet size requirements and should be assessed as to development potential and issues related to the constraints.	The Subdivision Plan will updated to ensure all allotments comply.	Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.
11.11	Section 3.4.3 Hydraulic conductivity of the T&T report highlights that there are some zones of silty material within the lower Kākā Valley floor that could impede soakage locations and depths. Site specific permeability testing needs to confirm hydraulic conductivity for the specific soakage locations in particular in the southern soakage area where there are currently no test results. Please have the Geo-professional comment on whether this testing is necessary to determine the feasibility of the stormwater treatment areas and their size or performance and what effects may occur from reduced hydraulic conductivity and whether during periods of lower rainfall would Kākā Stream be affected.	Some site specific hydraulic testing has been carried out at limited locations, refer to Appendix F of the Geotechnical Assessment report Once the layout of the soakage pits has been developed, if they are not in close proximity to the testing that has been carried out to date, we recommend that supplementary testing is carried out as part of the detailed design to confirm the feasibility and inform detailed design. Within the natural soils there is likely to be some variability in hydraulic properties that may require some alterations to the dimensions of soakage pits. Additionally, if soakage pits are proposed within the proposed fill material, specific testing on the placed fill hydraulic properties will be required, and/or specific types of fill may be required.	Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage.
11.12	The Davis Ogilvie servicing report Section 4.0 refers to details on the Potable Water refers to the design of the reservoir and watermain is documented within the T&T report included as a part of this application. I have not been able to locate this report which I am sure outlines more information and this is referenced in the 'Water' section as well.	The external servicing is being completed outside the subdivision consent application and is ongoing with NCC. The DO servicing report was not updated prior to lodgment to reflect this.	Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.
11.13	The planting of the Revegetation Overlay is a requirement of Schedule X but seems to also be a stormwater matter relating to reduced runoff as well? The landscape planting plans are unclear whether this will be planted and to what extent or does the plan indicate existing regenerative bush? It would be assumed that planting of this area on the rural land on the balance allotment in the Rural Zone should commence after Stage 2 and the substantial completion of the earthworks and creation of overland flow path. The application indicates this may be protected by covenant but also contains infrastructure such as the	As set out by T&T in the Stormwater Assessment Report and in their response to items above, the revegetation is not required to mitigate stormwater flows. It is however accepted that the revegetation component of this proposal needs to be clearly set out in the consent conditions, including for long term maintenance and protection.	Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage.

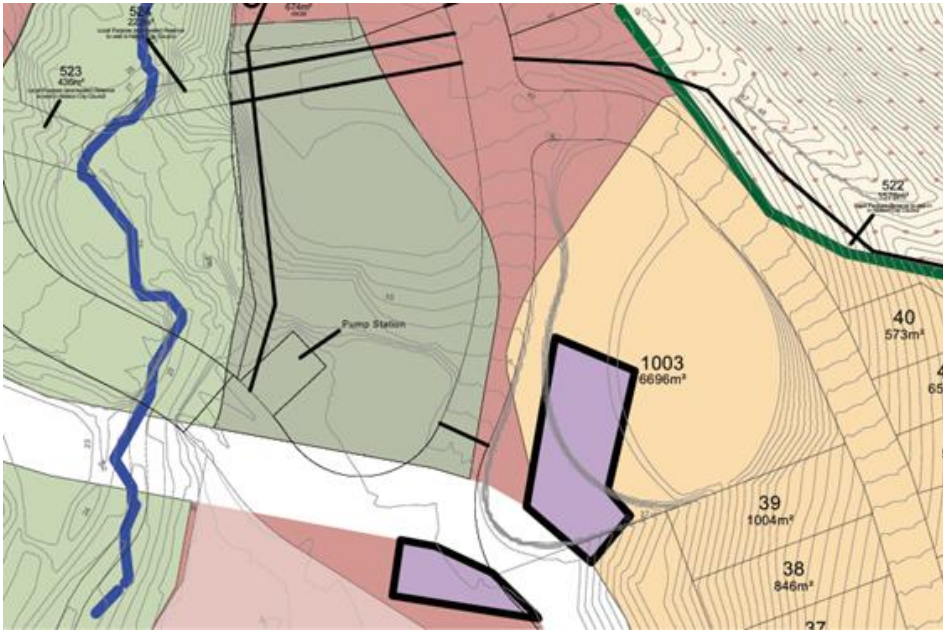
	<p>flowpath and bund that should not be restricted from access and maintenance to clear debris or vegetation if needed or access to the area and clearing vegetation to get there.</p> <p>Whether this control is the best mechanism needs to be discussed. Any instruments placed on the balance allotment early will need to be considered upon later stages ie Consent Notices imposed on balance land of future stages that are not relevant to that stage should be able to remove redundant or irrelevant Consent Notices through any decision issued rather than dealing with Section 221 and Sections 88 to 121 of the Act</p>		
11.14	<p>The AEE and scheme plans are silent on any amalgamations, but it is assumed Lots 1000 & 1001 will be held together? Amalgamation conditions need to be consulted with Land Information New Zealand prior to issuing an RMA decision.</p>	<p>They are intended to be separate lots as they are in different stages. Yes, they will be on the same ownership, so could be amalgamated.</p> <p>Davis Ogilvie will amend the Scheme Plan to reflect and provide amalgamation condition wording.</p>	<p>Accepted. It is understood that the applicant is currently amending the scheme plan and application documents to address this.</p>
11.15	<p>The landscape plans show a walking footpath on the balance land intended for Lot 522 and outside the proposed reserve area.</p> <p>This should be rectified so that any paths proposed to vest to Council occur on land to be vested to Council or the path needs to be amended so that it remains in the reserve land.</p>	<p>Davis Ogilvie to amend boundaries to ensure path is with the local purpose reserve.</p> <p>The footpath has been designed to follow the top of the rock protection bund. Therefore, the boundary line between Lot 522 and the balance land has been updated to be located on the northern side of the footpath.</p> <p>DO to capture this change. (RMM)</p>	<p>Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.</p>
11.16	<p>The T&T report indicate that the swales will need to be rock armoured up to the design flood level.</p> <p>The Landscape Assessment indicates that these swales form a part of the green network designed to integrate ecological restoration and enhancement with recreational benefits. Further information was suggested to be provided on the nature of the swales and extent of rock armouring.</p> <p>It will be important to understand how much space is left over for the green network of these overland flow paths to actually have green in them and whether plantings will actually succeed in these locations.</p> <p>After the swale plans are provided the Landscape Architect should confirm whether planting and the green network is achievable as first assessed.</p>	<p>Upon completing this response of the draft feedback to the planning matters I noted that item 84 had not been addressed. The following response has been provided by Paul Smith from RMM:</p> <p><i>The edge treatment of the swales differ along there alignment, refer to the Cross Sections on the Design Document - Part2 – Pages 34 and 35. The different edge treatments have been informed by T&T storm water management modelling, focused on ensuring that a specific velocity of water is achieved during flood events. i.e. native vegetation can slow the velocity of water which can result in flooding upstream, so rock armour is preferred in certain areas.</i></p> <p><i>The detail design has not be undertaken, however, based on modelling and concept design work to date, the rock armour is relatively small in scale, as shown on the cross sections. Based on our experience working within Nelson and its wider area, and our conversations with the project ecologist, we are confident that the plant species chosen will thrive in this environment.</i></p> <p>T&T has also added that:</p> <p><i>The main reason for the rock armour is to avoid scouring of the open channels where flow velocities are too high. Table 5.2 from the stormwater assessment report indicates the sections of swale that require rock vs the sections that can be grassed or planted.</i></p>	<p>Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage.</p> <p>Should the application be approved, it has been agreed with Council that these matters can be addressed via conditions of consent. The Applicant and Council Officers are currently working towards addressing this issue in an updated condition set.</p>
11.17	<p>The location of the contaminated encapsulated cell is at a scale that makes it hard to discern whether it will be</p>	<p>Davis Ogilvie will clarify the position of the cell and provide updated plans.</p>	<p>Accepted and Council requests to review this plan. At this stage it is understood that the cell will remain in private land ownership.</p>

	<p>located in the future high density land or near or within the future esplanade reserve.</p> <p>Remediation report states not planned for future development so it is unclear where this is.</p> <p>Council may not desire this cell in the future and a potential effect would be impact on Council and the taking of future esplanade.</p>	<p>The cell is expected to be small however some flexibility needs to be added as the actual volume is yet to be determined.</p>	
11.18	<p>The AEE and Landscape Assessment all state that the esplanades of Schedule X have been provided but this is not actually the case.</p> <p>A 40m vegetative corridor is provided but this is not Esplanade Reserve.</p>	<p>The Council is correct that the corridor does not achieve a minimum width of 20m wide either side of the Kākā Stream. Rather, the Kākā Stream corridor achieves a 40m+ vegetative corridor along its entire length. For reference, this calculation includes the storm water treatment wetlands.</p> <p>This relates directly to the requirement for integrated management and Water Sensitive Design (WSD).</p> <p>This design response has focused on enabling the corridor to respond to the varied site topography and land cover rather than taking a blanket measure.</p> <p>DO will amend Lot 516 to Esplanade Reserve.</p> <p>DO will amend lot 506 to 20m wide from the Maitahi River bank, and identify the current river bank position.</p>	<p>Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.</p> <p>It is understood that the status of the reserves will be all changed to being esplanade reserves.</p>
11.19	<p>It is noted that there will be a debris bund and potential debris barriers installed. It is identified that the bund will be located on reserve to vest to Council but also above private lots on the balance allotment.</p> <p>Relying on third party mitigation for future potential adverse effects on lot owners may result in future issues. I.e the private lot owners will rely on the owners of the balance allotment to maintain and clear debris away from the bund to protect their property.</p> <p>The boundaries of allotments should be amended to allow the bund and any other mitigation protecting that respective lot to be within their control or assess the potential adverse effects related to this third party issue.</p>	<p>Addressed above. DO to clarify the base of the bund position in the scheme plan</p>	<p>Accepted. Council requests to see the plans of the final bund location when they become available.</p>
11.20	<p>Earthworks and Land Development - The AEE indicates that earthworks will be undertaken in conjunction with Stages 1 & 2 but the timing Timeline indicates it will likely occur up to Stage 7?</p> <p>Will later stages in the earthworks cause issues with other stages residential development. Also, Earthworks in the Landscape Assessment estimates the duration of earthworks will take 18 months yet timeline estimates this to be 49 months. What is the most accurate anticipated time to have the earthworks completed by.</p>	<p>This will be clarified as a part of also addressing items 71, 73, 74, 75 and 102 as a part of updating the consent conditions, and construction timetable if necessary. As a heads up, the applicant proposes to undertake the bulk earthworks over the first three summer seasons. See Southernskies report 7 (Table 3, page 16).</p> <p>The timetable (document #23) shows 49 months which you have identified.</p> <p>This will be clarified alongside the AEE, however the applicants needs to protect itself against delays caused by seasonal weather constraints. Some extra time will provide for that possibility. Beyond the bulk earthworks, physical works will be the construction of the subdivision (i.e. services and roading).</p>	<p>Accepted – Need to ensure final staging conditions reflect this</p>
11.21	<p>The Landscape Assessment identifies and assesses the effects of development in the toe of the Residential Green Overlay but the Schedule requires the Ecological Management Plan to address this and it is not addressed</p>	<p>The Residential Green Overlay Area within this first stage of the Maitahi Bayview development forms a small part of the wider Residential Green Overlay Area on Malvern Hill's eastern facing slopes, refer to the RMM LDD, Part 1, Sheet 24.</p>	<p>Accepted – Council requests to review this final consent notice wording to ensure these matters are captured.</p>

	<p>in the Ecological Impact Assessment. There is no description of the nature of this overlay and whether planting is required other than it should result in a Canopy cover of 80% in Schedule X. The application is silent on what will occur with this land other than earthworks to form the pads. Further assessment and clarity as to whether it is to be kept clear or planted for biodiversity purposes in which Consent Notices may be required.</p> <p>The Landscape Assessment indicates that the dwellings and residential activities be located alongside road to allow the upper slopes will remain free of development and accommodate future native vegetation. It seems that a Consent Notice is required given the Schedule does not have rules against structures in this area, just indigenous vegetation clearance and earthworks. Note, a Consent Notice should be placed after earthworks are complete noting values in this overlay may be removed from buildings on piles. Also, the area seems to be largely grassed areas in which the indigenous vegetation removal rule may not protect this area from being cleared given the earthworks rule allows up to 1.2m as a permitted activity and grass is not indigenous vegetation.</p> <p>The Geotechnical Assessment report indicates as a part of their recommendations to utilise the designated planting areas for improving the stability of the land. Policy RE3.9 states that the Residential Green Overlay is established with appropriate planting and protected at the time of subdivision and development.</p> <p>Landscape Design plans do not show any planting of this area of which I consider should be shown and described when it will be planted, by who and how.</p>	<p>An Ecological Management Plan needs to be prepared for this entire area, not just the part within this first stage of development. Therefore, I consider it appropriate that a consent notice is included at this stage as to ensure that native vegetation achieves an 80% canopy cover within the Residential Green Overlay is planted by the developer at the time of subdivision and development, prior to titles being issued.</p>	
11.22	<p>The AEE and proposed conditions highlight that the Project Ecologist will have the ability to sign off on the morphology and stabilisation of the new stream and stream banks – the may be outside of the scope of their expertise and may be more suitable for geo-professional for stabilisation and an River engineer to sign off on stream design and morphology features and the Ecologist to assist in this sign off.</p>	<p>This matter will be addressed in the updated consent conditions.</p>	<p>Accepted – Council requests that the appropriate experts certify the appropriate matters and that this is reflected in the final condition set.</p> <p>Should the application be approved, it has been agreed with Council that these matters can be addressed via conditions of consent. The Applicant and Council Officers are currently working towards addressing this issue in an updated condition set.</p>
11.23	<p>The AEE and technical reports highlight that works will need to occur within land owned by NCC to tie diversion into Dennes Hole- The Overall Earthworks plans do not show the extent of these cross boundary works only an outline of the area is shown as stream restoration and enhancement works. A description of these works and how they tie into the consent would be useful for a greater understanding of the stream re-alignment.</p>	<p>This overlaps with the planning response as it is a permitted activity. To be shown at detailed design stage.</p>	<p>Accepted</p>
11.24	<p>The Geotechnical Assessment Report (GAR) indicates the presence of rocks in the Eastern Fan that may need mechanical break up or the use of blasting.</p>	<p>This is described with the consideration of reducing the risk of large boulders rolling down the slope during adverse events. During construction this will require liaising with the Contractor to develop a methodology for either removing the existing large boulders or breaking them up into sizes that can be managed by the</p>	<p>Accepted – It is understood that sheet blasting will not be utilized on the site. Conditions of consent need to specify the methodology and techniques used for boulder popping or fracturing.</p>

	I do not believe blasting has been considered in the Activity Status document on whether it is permitted and what the effects of this may be.	debris bund. 'Blasting' is not likely to be required, and other techniques are preferred, such as boulder 'popping' or fracturing with a swelling agent.	
11.25	<p>The GAR highlights that Area 6 Gully 6 has flowing water from a spring immediately upslope of the track. A small dam has been constructed to capture this water.</p> <p>Please explain this statement on whether the damming and take of this water is permitted in the Maitai catchment and what actions are being undertaken if it is not.</p>	<p>This item notes the spring and existing small dam upslope of the site. This arises from the description of Area 6 (p22) of the Geotechnical Assessment Report. This existing dam structure serves to collect water for stock. Given the change in land use arising from this proposed subdivision and development, that structure will be removed.</p>	<p>Accepted – A condition of consent should be applied requiring the removal and decommissioning of this dam.</p> <p>It is understood the applicant accepts this.</p>
11.26	Section 6.2.3 of the GAR highlights the needs for a Mechanically Stabilised Earth (MSE) retaining wall. No details have been provided on the extent of this structure, and whether it can be contained within the boundaries of the site.	<p>The MSE walls will need to be designed by a Chartered Professional Engineer experienced in the design of geotechnical structures as part of the detailed design process. We have not provided typical details at the feasibility stage. This MSE walls will be arranged so that they are contained within the commercial property.</p> <p>Below is a typical schematic of an MSE wall. Various facing options are available.</p> <p>Figure 5</p> 	Accepted and Council requests a condition of consent requiring detailed engineering plans and design required at detailed design stage.
11.27	Wastewater - The AEE indicates that the discharge of sewage from the pumpstation after it has vested to Council will be covered by Council's global discharge consent RM105388V1 & RM105388A1. There has been no assessment made in relation to the conditions of those consents and whether the pump station can fall under this consent.	<p>As referenced in this draft feedback, the relevant consents include RM105388V1 and RM105388AV1. These consents are also addressed in Attachment #24 (see page 29).</p> <p>For clarification, RM105388A is not relevant as that is the associated Coastal Permit.</p> <p>RM105388V1 is a Discharge Permit "To discharge untreated wastewater to land and freshwater as a result of overflows from the Nelson City Council's wastewater reticulation system". This consent expires on 1 April 2032.</p>	Accepted – It is acknowledged the applicant is aware of their obligations to comply with these conditions of consent.

		Aside from ensuring the PS has at least 4 hours of storage (condition 3) I don't see why the consent holder cannot comply with those conditions.	
11.28	<p>It is noted that there are zone issues with the development and planned areas for development.</p> <p>4 residential properties contain the Open Space zoning and will result in future landowners being restricted to what they can do with their land given the rules applied to this zone. This must be resolved with a land use consent and appropriate conditions relating to the residential use of the properties.</p>	<p>Yes it is correct that the proposed subdivision and development does not exactly match the zone boundaries / Structure Plan in Schedule X.</p> <p>This has been caused by the more detailed design of Road 1 to achieve the compliant grade of 1 in x. This has resulted in the road not exactly following the 'indicative road' alignment on the Structure Plan / planning maps. This impacts the underlying zoning of proposed lots 100, 101 and 180 within 7 and within proposed lot 140 in stage 9. See screen shots below.</p> <p>This shows that part of these 4 residential lots are zoning Open Space & Recreation.</p> 	Accepted

		It is through the conditions and consent notices that these zoning anomalies will be managed for future owners and for the consent authority.	
11.29	<p>Similarly, Koata House is not located on the commercially zoned land but more on the Residential zoning.</p> <p>The rules in the Activity Statuses' document do not reflect this situation or cover these breaches as well as the Non-residential activities in the Arvida village.</p>	<p>Following on item 96 above, the zoning of proposed Lot 1003 does not match the Structure Plan / zoning map. This issue has been caused by the detailed earthworks design following the approval of Plan Change 28.</p>  <p>Aside from Lot 1003 and the four lots addressed in item 96 above, the proposed subdivision is very much consistent with the Structure Plan. As noted above, this issue is only caused by the generic nature of structure planning in advance of detailed design.</p>	Accepted
11.30	<p>Related to the above, The Landscape Assessment notes that Arvida Village is within the High Density Area and is anticipates this type of development.</p> <p>This is not consistent with the Pavilion, Clubhouse, Care Centre etc of the development which are Non-residential activities. Note these have not been covered in the Activity Statuses document as rule breaches. The effects of these also has not been addressed.</p> <p>Will the Pavilion/clubroom run events? What are the hours of these Non-residential activities? Are they sufficient in traffic, parking guests, noise etc if used for external purposes?</p>	<p>This point suggests that the proposed Pavillion, Clubhouse, Care Centre etc within the village are not consistent with the High Density Residential zoning as they are not anticipated. This is not accepted for the reasons explained below. Comprehensive Housing Development (CHD) are specifically provided for in the Higher Density Area in Schedule X. Refer to Rule X.2.</p> <p>The same Higher Density Zoning within the Wood (Nelson City) specifically provides for CHD, which is why this zoning was also used in Schedule X.</p> <p>For the retirement village villages established in The Wood, each contain community / common buildings, and care facilities, as a part of their villages, none of which have obtained separate resource consents as non-residential activities. These activities are considered to be integral parts of retirement village living catering for a range of needs. The definition of residential activity is also helpful as it provides for homes where residential are subject to care.</p> <p>The proposed café within the village would be only non-residential activity proposed. This is also considered to be a technicality as cafes are common within residential retirement villages.</p> <p>I will therefore update the Assessment of Activity Status (Attachment #24), the AEE and address this in Volunteered Consent Conditions ('A') to ensure there are some appropriate operational parameters.</p>	Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.

11.31	There are some minor inconsistencies in the scheme plans such as Lot 2005 to be vested as Recreation Reserve when it is Road or in the memorandum of easements for Stage 1 relating to an easement in gross in favour of private lots. These plans need to be reviewed and amended accordingly.	DO to review and amend along with other reserve descriptions	Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.
11.32	It is noted that the Economic Impact Assessment assesses the economic injection to the region over 7 years but it is clear that the development will result in construction over at least the next 9 by the timeline provided in the application. Is there a reason why the report only forecasts for 7 years.	<p>Tim Heath from Property Economics has responded that:</p> <p><i>The staging timeframe we were provided with went from 2026-2032 (7 development years).</i></p> <p><i>If the timeframe is longer, then the EIA should be over the longer timeframe which will reduce the economic impact (via applying NPV discounts) (22/4)</i></p> <p>We therefore agree that this should be clarified formally within an update (if necessary) to the economic assessment.</p>	Accepted – Council considers it sensible to update the assessment to reflect this.
12	Planning s13 to 15 – Regional Consents summary of questions and responses Council Officers: <ul style="list-style-type: none"> Pete Keyanonda – Principal Planner 		
12.1	<p>The establishment of vegetation and canopy cover is a key stormwater mitigation feature.</p> <p>The vegetated areas are sought to be protected by a QEII Covenant. Council staff have not had any experience with these covenants and were hoping your project team who have had experience with these could provide details in on how these covenants operate in practice. Is it a guarantee that if the covenant is applied for it will be accepted?</p> <p>Can conditions be applied to the covenant to ensure weeds are managed and any dying plants in the establishment phase can be replaced? What would occur if a storm event damages the trees in the covenanted area?</p> <p>Stormwater mitigation would be compromised until trees re-establish. How would stormwater mitigation for the wider site be affected if they trees are damaged in a storm event or do not establish in the anticipated timeframes?</p>	<p>This matter also overlaps with the stormwater answers above.</p> <p>The use of covenants to protect the revegetated land was raised in the section 4.1 of the Stormwater Assessment Report (#5.1). While this also refers to the blue-green corridor, the Kākā Stream corridor is to be vested as reserve and so covenants will not be required.</p> <p>The Residential Green Overlay will be managed and protected through consent notices (applying to proposed Lots 108-118). For Kākā Hill, a Consent Notice rather than covenant is considered to be the most appropriate mechanism given the future ownership and stewardship by Ngāti Koata. This will however also be clarified in the updated consent conditions.</p>	<p>Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.</p> <p>Should the application be approved, it has been agreed with Council that these matters can be addressed via conditions of consent. The Applicant and Council Officers are currently working towards addressing this issue in an updated condition set.</p>
12.2	<p>As noted above it is acknowledged that the conditions of consent supplied with the substantive application contain potential expiry dates. Many of the regional condition sets state that there is no expiry.</p> <p>If no expiry is specified then the consents will expire with the standard 5 year duration. Could you please review these expiry dates and confirm the duration for each of the regional consents. These durations will need to be long enough to account for the stages of the development.</p>	This will be clarified as a part of also addressing the above and 88 as a part of updating the consent conditions.	Accepted. It is understood that the applicant is currently amending the plans and application documents to address this.
13	Planning - Technical Rule Breaches for the applicant to address Council Officers:		

	<ul style="list-style-type: none"> Chinley Bernardo – Graduate Planner Melissa Warmenhoven – Graduate Planner 		
12.1	<p>While it is acknowledged that some of the rule breaches below are technical in nature and resolved as part of the wider substantive application bundle. It is still considered necessary for the applicant to address these rule breaches and list them within the NRMP rule assessment provided as part of the application.</p> <p>The following additional NRMP rule breaches have been identified:</p> <p><u>Residential Zone</u></p> <p>Schedule X (X7) Esplanade Reserve Standards</p> <p>Assessment of activity status: (40m required no indication of where it is measured from. No activity status will be treated as discretionary,)</p> <p>Reason: 40m Corridor stated but makes up other types of reserves not esplanade. Lot 516 adjoins the Maitai River but it appears the Schedule does not cover subdivision in the Open Space Zone just Residential. As such the 20m applies along that boundary. Otherwise, Lot 518 takes up most of the esplanade width from Lot 519. Lot 514 generally makes up width.</p> <p><u>Rural Zone</u></p> <ul style="list-style-type: none"> <i>RUr.28(c & d) Buildings (Boundary setback & size and location)</i> <p>Assessment of activity status: Discretionary</p> <p>Reason: Water reservoir on Lot 500 suggested to be 300m² – no specific details available, building unlikely to meet setback requirements.</p> <ul style="list-style-type: none"> <i>RUr.49A Services Overlay – Building</i> <p>Assessment of activity status: Discretionary</p> <p>Reason: Water reservoir– no specific details available on the structure/method of storage. Services are not existing on site.</p> <ul style="list-style-type: none"> <i>RUr.77C Maitahi/Mahitahi Bayview - Structure Plan – Schedule X</i> <p>Assessment of activity status: (No activity status, Plan is required as part of subdivision application or earthworks proposal RUr.78 must deal with Rural subdivision)</p>	<p>The applicant's Planner is currently updating Attachment #24 and the AEE to take account of these identified potential NRMP rule breaches.</p> <p>While the applicant's Planner does not agree with all of the feedback, he agrees some of the identified rules need to be addressed for completeness.</p> <p>With regard to X.7, I agree this not strictly comply as this requires a 40m esplanade reserve to meet the RDA status.</p> <p>However, as assessment in Attachment #24, there are a number of other rules that do not comply and so elevate the activity status to non-complying. The width of the esplanade reserve has however also been addressed in response to other items in the draft feedback.</p> <p>The riparian corridor exceeds 40m along its length, however the requirement to integrate low impact stormwater management (WSD) within the 'blue-green corridor', combined with the requirement for those functions to be vested separately, causes the esplanade reserve to be less than 40m in places.</p> <p>RMM - Residential Zone - The width of the Kākā Stream corridor is the area of land between the private properties that flank its eastern and western sides. This corridor, at a minimum, is 42.5m wide, with its pinch point being located between Lots 16/158 to the east and Lot 140 to the west.</p> <p>From a landscape perspective, the 40m wide Kākā Stream corridor will appear as a single entity, providing the same level of amenity and biodiversity outcomes that has always been intended, no matter what the corridor is defined as, being reserve or esplanade.</p>	<p>Accepted. It is understood that the applicant is currently amending application documents to address this.</p> <p>It is acknowledged that the applicant does not agree with all of the rule breaches identified in this section. However, for emphasis, the rule breaches identified are technical in nature.</p>

<p>Reason: X.15 requires EMP for any subdivision + earthworks X.16 requires SCP The EIA/EMP provided by applicant does not include lot 5000 in the project area/area of investigation but it forms a part of the Revegetation Overlay.</p> <ul style="list-style-type: none"> • <i>RUr.78 Subdivision - General</i> <p>Assessment of activity status: Non-complying</p> <p>Reason: Schedule X addresses subdivision in general residential zone. The regular rural rule table applies for the proposed subdivision (With additional requirements. X.15 requires EMP for any subdivision + earthworks (Rural site is excluded from RMP)</p> <ul style="list-style-type: none"> • <i>RUr.80 Subdivision within the Landscape Overlay</i> <p>Assessment of activity status: Non-complying</p> <p>Reason: Landscape assessment does not encapsulate rural lot and NTLD standards not met as rural lot is not included in servicing plans</p> <ul style="list-style-type: none"> • <i>RUr.85 Subdivision within the Landscape Overlay</i> <p>Assessment of activity status: Discretionary</p> <p>Reason: Rural lot is not included in servicing plans, therefore will not meet criteria in RUr.78.2</p> <p><u>Suburban Commercial Zone</u></p> <ul style="list-style-type: none"> • <i>SCr.71 Subdivision</i> <p>Assessment of activity status: Discretionary</p> <p>Reason: Schedule X addresses subdivision in the residential zone. The regular suburban commercial zone rule table applies for the proposed subdivision (With additional requirements).</p> <p>Proposed subdivision does not strictly accord with the structure plan in Sch.X (Figure 1)</p> <p><u>Open Space and Rec Zone</u></p> <ul style="list-style-type: none"> • <i>In OSr.74 Subdivision</i> <p>Assessment of activity status: Discretionary</p>		
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	<p>Reason: Schedule X addresses subdivision in the residential zone. The regular Open space and rec rule table applies for the proposed subdivision (With additional requirements).</p> <p><u>Freshwater Rules</u></p> <ul style="list-style-type: none"> <i>FWr.21 Discharge from the public sewerage to freshwater bodies</i> <p>Assessment of activity status: Consented</p> <p>Reason: RM105388V1 and RM105388AV1 has condition 3: Any new pump station constructed as a part of the Nelson City Council reticulation system shall have a minimum of four hours storage, based on the average dry weather flow of wastewater that enters it from the catchment it serves. Application does not provide details of new pump.</p> <p>Applicant assessment: Consent granted and applicant has provided details they can comply with the conditions of these consents</p> <p><u>Nelson Air Quality Plan</u></p> <ul style="list-style-type: none"> <i>AQr.22a Offensive or objectionable odour</i> <p>Assessment of activity status: Permitted</p> <p>Reason: For the potential odour from the wastewater pump station</p> <p>Applicant will address in detailed design with carbon filters and flishing.</p> <ul style="list-style-type: none"> <i>AQr.39 Dust from surfaces (AQr.22 General Conditions All discharges)</i> <p>The discharge must not result in dispersal or deposition of particles, including smoke particles or dust, to the extent that it causes an offensive or objectionable effect beyond the boundary of the site of the discharge</p> <p>Reason: Earthworks is ongoing during the certification of stages 1-5. Potential dispersal onto other "sites" may occur.</p>		
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Reports Not Reviewed by Nelson City Council (NCC) Technical Staff

The following reports submitted with the substantive application were not subject to technical review by NCC staff:

- Fast Track Economic Impact Assessment (Attachment 1.0)
- Cultural Impact Assessment – Ngāti Koata (Attachment 2.1)
- Te Tauihu Engagement & Consultation Summary – PPC28 & Maitahi Village (Attachment 2.2)
- Statement of Cultural Values – Maitahi – Ngāti Tama (Attachment 2.3)
- Remediation Action Plan – EnviroLink Ltd (Attachment 8.1)
- Site Contamination Specialist Review of Remedial Action Plan – HAIL Environmental (Attachment 8.2)
- Response to Review of RAP – EnviroLink Ltd (Attachment 8.3)
- Landscape Context and Site Analysis – Rough and Milne Mitchell (RMM) (Attachment 16.1)
- Landscape Design Reports (A)–(C) (Attachment 16.2)

Rationale for Not Seeking Review:

Economic Impact Assessment

Council does not maintain in-house economic expertise capable of reviewing economic assessments of this scale. Additionally, the application has been accepted for consideration under the Fast Track Approvals Act 2024, which in itself recognises the proposal's potential economic benefit. On this basis, and due to the legislative pathway already accepting the premise of economic contribution, Council determined that further technical review was not necessary.

Cultural Reports and Iwi Engagement Material

The reports were prepared by iwi authorities with statutory interests in the Maitahi Statutory Acknowledgement Area, and Council accepts that these documents reflect the cultural voice of the appropriate parties. No further technical review was sought in recognition of iwi autonomy and the weight that must be given to their own expressions of cultural values.

Site Contamination and Remediation Reports

NCC does not have internal contaminated land specialists. The Remediation Action Plan (RAP) was prepared by EnviroLink Ltd, and the RAP was independently peer reviewed by HAIL Environmental Ltd.

Council verified that HAIL Environmental met the relevant criteria for a Suitably Qualified and Experienced Practitioner (SQEP) under the NES-CS. As a result, and given the presence of both a primary and independent technical review, Council was satisfied that the RAP would be sufficiently robust and that any outstanding matters could be appropriately addressed through consent conditions.


Council also considers the proposed staging and sequencing of the development will help address potential contamination effects I.e. the remediation of the HAIL-identified site is required to occur in the initial stages of the development to enable the stream realignment to occur. Should the site not be remediated to a satisfactory standard in accordance with the requirements of a Suitably Qualified and Experienced Practitioner (SQEP) and consent conditions, the subsequent stages of the development—particularly those involving the diversion of Kākā Stream into this area—will not be able to proceed until the issue is appropriately resolved.


Landscape Analysis and Design Reports

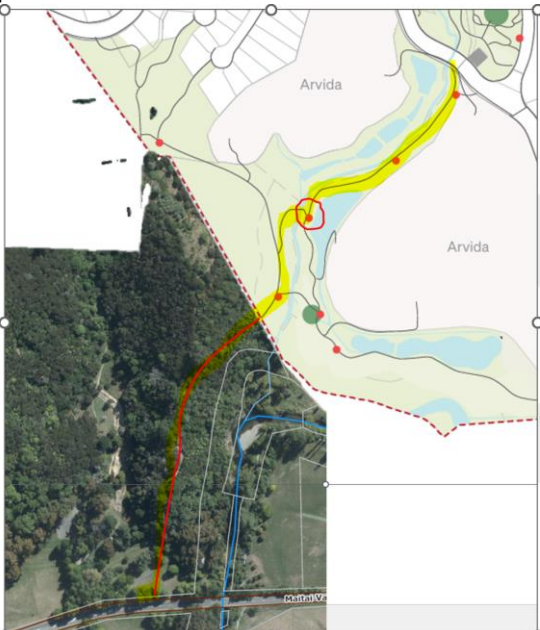
Council does not have in-house landscape architecture or landscape assessment expertise. However, the submitted landscape material was reviewed against the design outcomes established in Plan Change 28, specifically those within Schedule X of the Nelson Resource Management Plan (NRMP).


Council officers considered the reports to be generally consistent with the landscape expectations set through PC28, which has already been subject to independent expert review during its development. Accordingly, it was concluded that no further technical landscape review was required and that detailed matters could be addressed via consent conditions.

15 Additional Information and Feedback from Council for matters to be included within the Detailed Design Plan phase of the proposal and Conditions of Consent		
Geotechnical		Applicant/NCC Staff Comment
1	<p>Detailed Geotech design elements are anticipated once the further information requests for the geotechnical requirements have been assessed and provided. It is likely that as conditions of consent, detailed investigations into the ground will need to be undertaken to inform the earthworks and stream diversion works and this will need to be review by Council prior to works commencing.</p> <p>Detailed geotechnical plans relating to earthworks and the location of mitigation structures, flow paths etc will likely need to be reviewed by Council.</p>	
Transport		
2	<p>The Tonkin & Taylor stormwater report requires secondary flow across the roads in proximity to the open channels. This doesn't appear to be reflected in the long sections provided.</p> <p><i>It is recommended that as a condition of consent that during detailed design the road design and SW is coordinated and the dip in the road does not compromise intersection visibility.</i></p>	Accepted
3	<p>The bund that protects Lots 40, 41 and 59 and portions of Road 2 and 4 should have a different ultimate ownership arrangement from that shown to ensure those that benefit from it contribute to its maintenance. The maintenance responsibilities need to be made clear to the relevant future owners and this should be required by conditions of consent/consent notices.</p> <p><i>It is recommended that as a condition of consent that during detailed design the area behind Lots 40, 41 and 59 currently shown as reserve and that contains an earth bund to protect those properties from an over slip occurring above should be wholly amalgamated into those lots. The area of bund adjacent to Road 2 and 4 should become road reserve.</i></p>	Accepted
4	<p>Road 3 / Road 1 Roundabout currently shows inadequate deflection for through vehicles.</p> <p><i>It is recommended that as a condition of consent that during detailed design ensure deflection is introduced for northbound vehicles to manage approach speeds/safety performance. Also refer to bus section below re need for the roundabout to accommodate bus U-turns at this location.</i></p>	Accepted
5	<p>Road 5 / Road 2 appears to favour minor flow with priority.</p> <p><i>It is recommended that as a condition of consent that during detailed design rearrange intersection and the boundaries to Lot 25 so that Road 5 curves at 40m minimum radius into Road 2 & the remaining Road 5 tees off.</i></p>	Accepted
6	<p>The SISD departure at Road 11 needs review alongside the broken back curve issue that is also identified below.</p> <p><i>It is recommended that as a condition of consent that a review of this visibility deficiency is made as it appears only a minor realign of the boundaries to lots 97 and 98 would enable SISD to be provided. Alongside this review during detailed design consider the location of no stopping lines to balance managing speed, forward visibility and achieving a continuous curve (not broken back) in the moving lanes.</i></p>	Accepted
7	<p>Road 1 has a broken back curve in vicinity of Lots 97 & 90.</p> <p><i>It is recommended that as a condition of consent that a minor realign and modification to the property boundaries as necessary during detailed design with one smooth radius to prevent head on crashes/increased driver task. Consider at</i></p>	Accepted

	<i>the same time how on street parking will be used and if any restrictions will be required as that will influence the lane geometry.</i>	
7	<p>Road 4 has a several different radius curves in vicinity of lots 48-52.</p> <p><i>It is recommended that as a condition of consent that a realignment and modification to the property boundaries is made as necessary during detailed design with one smooth radius to prevent head on crashes/increased driver task. Consider at the same time how on street parking will be used and if any restrictions will be required as that will influence the lane geometry.</i></p>	Accepted
8	<p>Road 9 & 10 - Connect to improve resilience – 5m height change.</p> <p><i>It is recommended that as a condition of consent that during detailed design consider if vehicle connection can be made between Road 9 and 10 and if not possible the minimum requirement is a direct road to road walkway connection as per NTLDM 4.4.4.8. The walkways shown in the landscape plan sets are not direct enough as highlighted in yellow below.</i></p> 	<p>Accepted</p> <p>NCC Comment - Conditions of consent to cover design options for walkway linkages it is suggested that the connecting paths should be designed to be as direct as practical between the cul-der-sacs at a grade that does not require the use of steps.</p>
9	<p>Lack of direct connection between Road 11 and Road 8.</p> <p><i>It is recommended that as a condition of consent that in lieu of connection of the Road 11 & Road 8 due to the significant height change a more direct walkway link than currently shown via the Recreation Reserve land should be provided. This link will need to be shown on detail design plans as per NTLDM 4.4.4.8.</i></p>	<p>NCC Comment - The connecting paths should be designed to be as direct as practical between the cul-der-sacs at a grade that does not require users to go down a flight of steps then back up again to connect. The landscape design plans currently shows this as highlighted below. Suggest as a condition of consent a change in alignment of the pathway to be higher up nearer the ROW to lots 136 to 139 than currently shown.</p>

		<p>most of the es will be o and within ude ramps and</p> <p>per hillsides, ing walking tural markers arks.</p> 
10	<p>The target operating speed of 40km/h needs to be achieved on Road 1 especially in the steeper 1:8 section</p> <p><i>It is recommended that as a condition of consent that speed management devices and treatment are considered during detailed design to achieve target operating speed of 40km/h.</i></p>	Accepted
11	<p>ROW 1 and Lots 11-16 will require a culvert or similar to bridge the open channel. Any culvert/bridge and associated revetment will form part of the access and thus be the responsibility of the property owner to maintain. An advice note attached to the title will be required to highlight this to prospective purchasers.</p> <p><i>It is recommended that as a condition of consent that an advice note attached to the titles of lots that have a crossing to an open channel to make the maintenance obligation of the associated culvert/bridge/revetment clear.</i></p>	Accepted
12	<p>The Shared path crossing at Road 9 should give cyclists priority as it is the higher order transport corridor.</p> <p><i>It is recommended that as a condition of consent that during detailed design the cycle crossing at Road 9 has the appropriate arrangement including signs lines to give the cycleway priority.</i></p>	Accepted

13	<p>The reserve walkway between Arvida near the roundabout to the existing gravel path above Dennes Hole will be an important transport connection as it is shorter and more direct than the proposed shared path. The applicant should consider aligning path so the link through to Maitai Valley Road to ensure it is as direct as possible (remove kink at red circle below) and ensure the vegetation selection allow sufficient shy space and excellent visibility between users to avoid conflict between cyclists and pedestrians.</p> 	<p>The applicant agrees with the importance of this connection. This comment from Council will be kept on file so the identified shorter pathway, that is likely to be a primary cycle / walking connection to town is more aligned and vegetation remains clear of the pathway itself.</p>
15	<p>It is recommended that as a condition of consent the detailed design drawings/report demonstrate:</p> <ul style="list-style-type: none"> • Evidence that complaint drive gradients can be provided without retaining on the legal road reserve. • Evidence that complaint drive gradients can be provided from the building platform to the road on the hillside lots that are lower than the road. Especially lots 26-39, 103 -106 and 126-129 and 178 (note the crossing for Lot 129 appears directed at boundary and constrained for an internal driveway). 	Accepted
16	<p>It is recommended that the detailed design drawings show:</p> <ul style="list-style-type: none"> • Access to Lot 24 and Lot 1 off lower order road, Road 5. • Access to Lot 64 off lower order Road 4. • Access to Lot 33 shifted away from intersection and footpath crossing • Lot 182 - Access off lower order road 9 which will also mitigate the intersection spacing departure. <p>Lot 83 – moved to avoid clashing with adjacent intersection.</p>	Accepted
17	<p>It is recommended that as a condition of consent the detailed design drawings provide tracking curves for anticipated bus and loading manoeuvres at Koata House and visibility splays in accordance with NTLDM Fig 4.11 due to the volumes expected with the 180 seat event space.</p>	Accepted
18	<p>No public transport infrastructure is currently shown on the concept plans.</p> <p><i>It is recommended that as a condition of consent the detailed design phase provide a Bus Stop location on Road 1. Additional widening may be necessary. Bus stops should be 15m long and 2.5m wide. Suggest a bus stop both sides of Road 1 just south of the roundabout (CH 360) would provide a convenient location for the Arvida</i></p>	<p>Accepted, however we will need a decision from Council to where they want the bus stop.</p> <p>As close as possible to the roundabout. In Stage 1. One on either side.</p> <p>To be determined at detailed design</p>

	lifestyle village, Koata House and the additional properties on Road 3 as it is extended up Kākā Valley over time.	
19	<p>As already mentioned the radius of the roundabout at the intersection of Road 1 and Road 3 needs to accommodate public transport doing a 270 degree turn as the terminus of the route until such time as Road 1 connects through to Bayview Road.</p> <p>Bus tracking details below.</p> <div> <p>Overall values of Foton EV - Right Turning Circle Measurements</p> <p>Length: 12.00 m Steering angle: 37.27 °</p> <p>Max width: 2.80 m Turn radius (curb to curb): 10.77 m</p> <p>Lock to lock: 6 s Turn radius (wall to wall): 12.5 m</p> </div> <div> <p>Dimensions</p> <p>Front: 2.77 m Width: 2.8 m</p> <p>Wheel base: 5.9 m</p> <p>Rear: 3.33 m</p> </div> <p><i>It is recommended that as a condition of consent the detailed design phase provide sufficient space for a bus to undertake a 270 degree turn at the Road 1 Road 3 roundabout. This space should be shown on the relevant detail design plans.</i></p>	<p>The applicant notes that this was not addressed by Gary Clark (responses on 13 May).</p> <p>The applicant can however confirm this is accepted that it can provide for the turning of a 12m bus on the roundabout (until such time as Road 1 connects through Bayview Road or Walters Bluff).</p>
20	<p>The acute angled intersection at the junction of Road 1 and Road 2 will result in drivers needing to look through their blind spot at vehicles that are approaching at a height of 3m less (possibly hidden depending on vegetation chosen). Given aged population and lack of neck flexibility in this cohort this intersection form is likely to perform poorly from a safety perspective.</p>  <p><i>It is recommended that as a condition of consent the detailed design phase reconsider this form of the intersection of Road 1 and Road 2 within the Arvida development.</i></p>	Accepted
21	<p>The southern most access from Arvida appears to join at a slight acute angle. The grade at this access is also steeply up that may make intervisibility between users on the footpath and drivers challenging. Given the scale of the development should this be a teed up intersection form rather than access?</p> <p><i>It is recommended that as a condition of consent the detailed design phase reconsider the most appropriate form of the Arvida Road 1 southern access as the combination of the slight acute angle, grade steeply raising up may make it perform poorly from a safety perspective.</i></p>	<p>Accepted</p> <p>NCC is satisfied with Arvida access being an intersection to account for possible future use by residents via a licence plate reader</p>

Parks and Facilities		
22	The Parks and Facilities Team have feedback around the choice of plant species and this can be provided or discussed at detailed design.	Accepted
Environment and Ecology		
23	Plan change 28 provides a palette of native plant species to be used throughout the development. The species list excludes several species that would be appropriate and should be included in any restoration/planting across the site to establish authentic and appropriate vegetation communities. Nelson City Councils Living Heritage guide is a good place to start and Ecological Restoration Plans that have been developed for adjacent sites also provide a range of species recommendations (kind of like the above).	The applicant will review and revise the landscape plans to ensure they appropriately incorporate plant species listed in Nelson City Council's Living Heritage guide.
24	<p>The Landscape Masterplan Part 3: Stormwater treatment wetlands are identified as a chain of connected wetlands. However, the plan does not provide detail as to how these will perform or function and it may possible that their ecological value will be limited, particularly if the design is not guided by the project ecologist. Wetlands that have a steep and narrow riparian edge profile, provide limited riparian foraging habitat for Marsh crake, White-faced heron, Pied stilt and other waterfowl such as Scaup, Grey teal and Australasian shoveller.</p> <p>The detailed design of the wetlands shall show that the wetlands that are of an adequate size for wetland bird species. The sizing and dimensions of the wetlands shall be determined by the project ecologist.</p>	<p>Upon completing this response of the draft feedback to the planning matters I noted that item 126 had not been addressed. The following response has been provided by Ben Robertson:</p> <p><i>The proposed wetlands are primarily designed for stormwater treatment and are not intended as ecological offset or compensation areas. However, input from the project ecologist will inform aspects of the design—such as side slopes and planting—to help maximise incidental ecological value where practicable.</i></p> <p>The primary function of the wetlands is for stormwater treatment, being a low impact water sensitive design approach. As noted above, the project ecologist will continue to have input as a part of multi-disciplinary approach to incorporate incidental ecological benefits where practicable.</p> <p>The final design of this will be carried out by suitably qualified stormwater engineers and suitably qualified ecologists</p>
25	<p>The applicant has identified permanent and intermittent flowing reaches of KHT1, KHT2, KHT3 and KHT4 meet the NPSFM definition of a river (using the Auckland Council guidelines) and identified that the potential impacts on the streams are inconsistent with the NPS-FM/NES and NRMP (no loss of open river channel).</p> <p>Working with the proposed scheme plan for development, the Ecologist has estimated that the adverse residual effects that cannot be Avoided or Minimised associated for the proposed stream realignment and loss equate to 1,110 m of riparian and in-stream habitat along the Lower Kākā Hill Tributary (KHT1) and intermittent reaches associated with KHT3 and KHT4. The Unnamed Tributary on Eastern Hillslope (KHT2) reach will also be reclaimed for stormwater management, leading to the complete loss of 300 m of riparian and in-stream stream habitat.</p> <p>A preliminary assessment has been provided, which identifies potential areas for offsetting and a net gain in river habitat (linear km and m²), including the realigned channel.</p> <p>The evaluation of the biodiversity offsetting, including calculating a more detailed Environmental Compensation Ratio (ECR) has been identified by the Ecologist as a requirement during the final design phase.</p> <p>A more stringent quantitative evaluation recommendation that it is completed by a SQEP with experience offsetting biodiversity, following best practice e.g. https://www.doc.govt.nz/about-us/our-policies-and-plans/guidance-on-biodiversity-offsetting/ the DOC biodiversity will be provided at the final design stage.</p>	The updated EMP will address stream offsetting requirements to ensure a No Net Loss outcome for freshwater ecology. Any offsetting will follow best practice and align with the EIANZ Ecological Impact Assessment Guidelines for New Zealand (2nd Edition) and the Department of Conservation's Guidance on Biodiversity Offsetting (2014).
Urban Design		
26	The final design and placement of the Ruru Units should be redesigned to locate their driveway entrances to the interior Arvida road and main shared path to run along east of the buildings and west of the main vehicle access. Northern solar access should be prioritised to main living areas with direct outdoor access.	Applicant's architect and landscape architect to address during detailed design of the buildings. Consent notices could be imposed to reinforce these requirements.

	<p>Suggested revision of cul-de-sac design (see transport section) and direct walking/cycling connections between road loops/cul-de-sacs.</p> <p>A pedestrian/cycle access priority should be adopted in in all detailed designs. The detailed design should seek to reduce vehicle crossovers of pedestrian and cycling pathways and banking crossovers together where crossovers are required. Where roads and shared paths or key path connections cross provide pedestrian and cycle priority with zebra crossings where applicable. Ensure pedestrian front entries are visible from carriageways and prominent in the detailed roading and shared pathway design.</p> <p>The detailed landscape design should show a palette and percentages of colours in facades and roofs to increase the diversity of the offering, individuality and reduce the heat island effect of the dark finishes.</p> <p>Detailed design of sustainable features included in the proposal and bike storage facilities should be provided as part of the detailed landscape and reserve design.</p> <p>Fencing of perimeter should be transparent and resistant to cat access to the wider area. Allow for body corporate maintained edge verge/at perimeter/consent notices to reduce Council maintenance of pest weeds and maintain a firebreak.</p> <p>Provide clear distinction of items completed per each stage, path network, shared pathways, planting, reuse of heritage items, playground installation, infrastructure installation. The completion timeframe should be set prior to the occupancy of related services/users on the site. This completion timeframe for each stage and the appropriate infrastructure that corresponds with that stage can be provided at detailed design stage.</p> <p>The applicant should create rest points along walking pathways. As we are initially catering to the retirement village, this is a critical part for the pathways to be functional. Multiple locations which are lit with a flat area and seat to pause at should be factored into the detailed landscape design and their final locations advised by a suitably qualified landscape architect or urban design professional.</p>	
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