

Submission: Comments on FTA 231

Ōhoka Residential Subdivision Proposal (Carter Group Ltd) - Fast Track Approvals Act 2024

1. Our Details:

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Date:	8 October 2026
We can receive emails and our email address is correct	

Based on this commentary document in response to the Application, our request to the Expert Panel is; **Decline FTA 231 in full**

2. Introduction

We arrived in Ōhoka in June 2018, having purchased the [REDACTED] that sits immediately adjacent to the proposed development, and more importantly, to the proposed business park at the entrance to the development. We moved here because of the rural aspect, noting that the land next door was not zoned or planned for significant housing development, and because we highly valued the small village context and community.

We did not move into the village to be close to supermarkets, shopping, bus routes, or higher volume population. We had always aspired to live in a small, close (not *closed*) community, and Ōhoka, with a population of around 400, fitted the bill. As mentioned in our first submission in July 2023, we currently have views to the west and south of the Southern Alps, which we count as a privilege and real lifestyle benefit. The village is generally very quiet, but being rural, also has a number of heavy transport movements each day. Also, as mentioned in that submission, there is a real sense of community in the village with the collective efforts supporting the development of the domain as a community hub, and the planting of the Ōhoka Bush section, which has attracted and maintains a range of birdlife, herpetofauna and invertebrates and is a real haven of peace.

3. Context

The house we live in was originally the [REDACTED] with the oldest part of the house being the [REDACTED] built in 1865. We have the church committee's notes from that time approving the extension of the church to the east, producing the 1877 church that you can see from the street.

The church was deconsecrated in 1977, having served the community for just over 100 years. In the 1980s and 1990s there were extensions to the building to deliver what you can see today. We have further improved both internal and external environments since our arrival. The property sits within a quintessential village setting, with white picket fence and gardens, and this is mirrored across the road with the Ōhoka Gatehouse museum forming a picturesque point of reference for the village. We have all personally fielded comments from passersby – usually associated with market day in the domain across the road – regarding the setting and uniqueness of the environment.

We think that this aspect has value and is worth maintaining. We note that the signs at either end of Mill Road say, "Welcome to our Historic Village".

They do not say, "Welcome to our satellite town, or dormitory suburb".

Issues NOT Addressed in the Application:

a. DEVELOPMENT LOGISTICS – ground conditions:

We are unable to find any reference in the application to the logistics of developing the land in question when it is absolutely not amenable to heavy machinery for at least six months of every year.

How do we know this?

In mid-2022, during a high wind event, and after heavy rain, an ‘old man pine’ of some size fell from the southern boundary of our property, diagonally onto the neighbouring pasture – exactly where the proposed business park would be placed.

I communicated with our neighbour, the vendor of the land proposed for development, [REDACTED] acknowledging that we had a responsibility to sort the tree and have it removed. That removal would require a substantial piece of equipment (around 20-ton excavator with specialist gear). [REDACTED] advised that this work would need to wait until summer as the ground would not cope with it. The work was successfully completed in mid-January 2022.

This event begs the question as to how the developer will succeed in a planned way with unacknowledged issues related to access, utility and management of large vehicles on land that was once a swamp (the reason for the village was the flax swamp and associated mill).

There is additional, relevant local knowledge over a much longer period of time that speaks to this issue around the ground conditions.

It is clear that with non-consultation the Applicant has effectively disregarded local knowledge that would normally inform the project logistics and engineering risks if the project was to proceed. This blinkered approach demonstrates a sharp focus on the opportunity and not on real-world risks and challenges.

It is, after all, a commercially opportunistic project with no relevance to national benefit and a zero-sum outcome for the regional development picture.

b. PHYSICAL PROPERTY ISSUES arising from the Applicant's proposal

Dwelling context: The whole house is stucco finished, and the older parts of the house (1865 and 1877 structures) do not sit on a ring foundation. Because of this, it is liable to the vagaries of ground shifting, warming and cooling, dry and wet conditions, and of course, flooding. Because of this, the house is at substantial risk of cracking in the walls and changes to floor levels.

While the house no longer has a historic places trust heritage listing, it is nonetheless an historic building as identified in section 3 above.

The house and property is somewhat of an icon in the area due to its age and therefore has value as a social benefit.

We therefore have significant concern about the potential direct impact on the building through the Applicant's potential development activity. We frame this in the context of prior experience where a neighbour with a (albeit new) plastered house next door to a large development in Lincoln, experienced significant damage to walls due to the vibration compacting required to prepare for the housing on what was farmland.

We have reviewed the research in this area.

There is a substantial body of engineering and heritage-conservation research showing that nearby development activities can damage older buildings, particularly where the buildings have:

- Brittle exterior stucco or plaster finishes
- Aged mortar

- Unreinforced masonry elements
- Shallow perimeter foundations or timber piles
- Little structural tying between walls and floors
- Pre-existing cracking or settlement

For historic homes with stucco finishes and no reinforced ring foundation, the evidence suggests they are among the more vulnerable residential building types.

Characteristics such as timber pile, shallow perimeter footings, stucco finishes and lath and plaster internal renderings create a building type that is inherently less tolerant of movement than modern homes. Historic stucco and plaster finishes are brittle materials that can crack when subjected to relatively small settlement or vibration-induced strains. Research on historic buildings highlights the susceptibility of aged stucco and plaster to cracking, delamination, and progressive deterioration under vibration loading.

A Canadian report (<https://www.jsheld.com/insights/articles/the-impact-of-construction-vibration-on-adjacent-structures>) confirms the issue of construction vibration as a key risk factor ; *‘Early phases of construction projects often generate vibrations in the near-surface soils. These construction activities can include the removal of existing bridges, buildings, or hardscape. The activities can also include soil excavation, pile driving, site clearing, truck traffic, or compaction with vibratory equipment’.*

More specifically; *‘Vibrations travel through the ground and are transmitted through the foundation to the walls, floor, and roof. The first signs of vibration-related damage will appear on the interior planes of vertical loadbearing walls, as these walls resist the lateral swaying and movement caused by vibrations. Almost all finish materials are rigid and inflexible in nature; examples include cementitious stucco, interior plaster, interior gypsum wallboard, and wall tiles. Damage to rigid finishes would first appear as cracks at the weakest locations in the wall first, which is generally at the corners of window and door openings’.*

For New Zealand village developments, the most significant risk to historic homes is frequently not direct vibration damage but **ground movement associated with construction activities**, including:

- Bulk earthworks
- Excavation near boundaries
- Groundwater changes
- Stormwater infrastructure installation
- Soil compaction
- Increased loading from fill placement

Clearly, damage mechanisms include:

1. Direct vibration cracking
2. Differential settlement from excavation or dewatering
3. Soil densification caused by compaction
4. Changes to groundwater affecting foundation support

The construction-vibration literature (J Sheld as above), notes that excavation, grading, compaction and foundation works can induce both vibration and ground settlement affecting adjacent structures.

Overall, even minor cracking can result in, loss of original heritage fabric, loss of historic finishes, costly specialist repairs and a reduction in heritage value.

Experts in construction vibration, the NZ Transport Agency’s own commentary demonstrates that construction vibration is not a theoretical risk:

Specific local context:

1. Saturated soils amplify vibration transmission

Liquefiable or water - saturated soils transmit vibratory energy more efficiently than dry soils. A study on vibratory probe compaction in liquefiable soils shows that saturated ground allows vibrations to propagate further and with higher amplitude, increasing the risk of structural damage to nearby buildings. Implication for Ōhoka:

Ōhoka's high water table and peat/silt layers mean vibrations from piling, compaction, or heavy machinery can travel farther and affect nearby historic homes.

2. Water-logged soils lose strength when disturbed

Saturated soils—especially silts, sands, and peat can undergo temporary strength loss when vibrated.

This can cause:

- Foundation settlement
- Loss of bearing capacity
- Lateral ground movement
- Differential settlement between old and new structures

These mechanisms are well-documented in NZ Transport Agency vibration research (above), which notes that construction vibrations can induce ground movement and settlement in vulnerable soils.

Implication for Ohoka: Historic homes with shallow strip foundations or unreinforced footings are especially vulnerable to settlement when nearby construction disturbs saturated ground.

3. Excavation in water-logged soils increases risk of undermining foundations

In wet ground, excavation causes:

- Slumping of trench walls
- Loss of lateral support to adjacent structures
- Groundwater drawdown, which can trigger settlement in nearby buildings

NZTA's construction vibration guidance emphasises the need for strict control of ground conditions around excavation sites because saturated soils are more prone to movement.

Implication for Ōhoka (our house and others): Any deep excavation (drainage, foundations, pools, utilities) near historic homes can destabilise the surrounding saturated soil, causing cracking or tilting.

4. Historic buildings are more sensitive to vibration in wet ground

Historic masonry buildings have:

- Low tensile strength
- Brittle mortar
- Shallow foundations
- Existing micro-cracks

These vulnerabilities mean they are more likely to suffer wall cracking, chimney movement, and foundation settlement when exposed to vibration in saturated soils. NZTA's noise and vibration guidance confirms that construction vibration can negatively affect nearby communities and structures, requiring careful management.

What this means specifically for Ohoka

Ōhoka's geotechnical profile typically includes:

- High water table
- Peat and soft silt layers
- Poor drainage
- Liquefaction
- Susceptible soils

(as seen in wider Waimakariri District)

These conditions make the area high-risk for vibration-related impacts from construction. Even moderate construction activities—piling, vibratory compaction, heavy truck traffic can cause:

- Cracking in plaster or brick walls
- Movement of old timber piles
- Settlement of strip foundations
- Distortion of floors
- Damage to chimneys or fireplaces

Historic homes in Ohoka (many built on shallow footings) are particularly vulnerable.

Summary: Evidence-based conclusions:

- Water-logged soils transmit vibration more strongly, increasing cracking risk
- Saturated soils lose strength when vibrated, causing settlement and foundation movement
- Excavation in wet ground destabilises adjacent structures, especially older homes
- Historic buildings are more sensitive to vibration, making damage more likely in wet areas like Ohoka
- NZTA research confirms that construction vibration can cause ground movement and structural impacts, requiring strict monitoring

This is clearly a major concern for us, and we would require confirmation of risk mitigation and damage compensation from the Applicant if the development is allowed to proceed.

Provided: Two views of the historic nature of our property:



The outside scene shows the 1865 part of the house on the right (dormer windows), which was the [REDACTED]. The original hand pump well is in the foreground. The other picture shows the inside of the 1877 'upgrade'. We take the view that such buildings, and their community environment, are worth maintenance and protection.

4. Overview: Position taken on the status of EXPERT OPINION VS. LOCAL KNOWLEDGE in this process

The Expert Panel process and other external commentary appears to focus specifically on the utility and apparently unique validity of expert advice as the arbiter of understanding and advice in various areas of contention. We offer an evidence-based opposing response to that position.

Context - Zero Consultation in five years:

This requires some reference to prior processes by this applicant, where their failure to progress on two occasions was at least in part related to the status of their expert advice relative to that of the Waimakariri District Council's.

Interestingly, while the minute references 'Principal issues in contention' and lists the challenges (*our emphasis*) around;

- Contribution to a well-functioning urban environment (*note that the Applicant has specifically failed to demonstrate this on two prior occasions*)
- The extent of the project's national or regional benefits (*neither are apparent, and national benefit would be a be a very long bow to draw*)
- The appropriateness of the supporting information (*for the Expert Panel to decide*)
- Demonstration of essential services (generally infrastructure) – but in this specific context the effects of the project on people in the neighbourhood and, if relevant (*it is*) the wider community, including any social, economic, or cultural effects

The last point is noted here as highly important to the community, not just those immediately adjacent, such as our property.

Further, the Panel Convenor goes on to note, under Engagement (paragraph 14), that the Applicant does not intend to engage with the District Council. Given that there are clear challenges to the Council's various policies and planning documents, after two prior failed attempts, it would be logical to consider collaboration, move to compliance and agreement, or withdrawal of the project from consideration.

But perhaps more directly impactful to us, and we know our neighbours and the wider community, there has been a complete and continuing lack of consultation with the residents of Ōhoka in the last five years of their analysis, planning, documentation development and proposal presentation. We note that the Minute 5 of the Panel Convenor (19 August 2026) specifically refers to the behaviour of non-consultation continuing in this latest application.

In short – experts may understand technical impacts; locals understand real-life consequences.

We consider the Applicant's sample size for local knowledge as n=2.

In planning, urban development, and property development literature there is a substantial body of research arguing that **local knowledge, experiential knowledge, and lived experience provide important evidence that can challenge, complement, or correct expert-driven planning decisions.**

Property development and planning research increasingly recognises lived experience as a legitimate source of evidence. Residents possess experiential knowledge about neighbourhood functioning, amenity values, and place attachment that is often unavailable through conventional expert assessment (Bąkowska-Waldmann, 2023). This reflects a broader shift in planning theory away from purely expert-led decision-making towards collaborative approaches that integrate local knowledge alongside professional expertise (Rantanen & Kahila, 2000; Perić, 2024).

Specifically, we refer the panel to Bąkowska-Waldmann (2023), "Residents' Experiential Knowledge and Its Importance for Decision-Making Processes in Spatial Planning."

The paper argues for a shift away from a purely "expert-oriented decision-making model" toward collaborative planning that incorporates residents' experiential knowledge. Residents possess knowledge about how places function in daily life, including qualities that are difficult for experts to observe or measure.

Relevant to the property development context, the study;

- a) Demonstrates that local residents identify neighbourhood qualities, amenity values, safety issues, social connections and place attachments often invisible to technical consultants, and
- b) Provides empirical evidence that planning decisions are improved when experiential knowledge is considered alongside professional expertise.

Arnstein (1969), argued that meaningful participation requires more than consultation; it requires redistribution of decision-making power, delivering *citizen participation involving genuine influence over decisions* (emphasis ours).

In summary, local residents possess experiential and place-based knowledge developed through years of direct engagement with the landscape and community. This knowledge provides evidence on environmental conditions, cumulative effects, community values, and the lived consequences of development that may not be captured through technical assessments. Planning research recognises that effective decision-making requires consideration of both expert and experiential knowledge, particularly where development proposals may affect the long-term character, functioning, and wellbeing of rural communities.

5. Overall presentation of the application – Considerations for the Expert Panel

The level of documentation, technical analysis and advice provided by the Applicant could lead the Panel to assume that this application is valid, that all elements have been considered and that this 'masterplan' approach is the best outcome for the village, and delivers net regional and national benefit according to the requirements of the Fast Track Approvals Act (2024).

We disagree.

Our comment to the Expert Panel is that this development application via the Fast Track Act, alongside previous failed endeavours by the Applicant has the appearance of completeness, relevance and benefit. However, the application is incomplete in a range of significant areas;

- a) It proposes to develop a large residential and rural-residential site in an area of absent community or District Council support and major infrastructure gaps (confirmed by the District Council)
- b) **It fails to acknowledge that the Waimakariri District Council has made sufficient area and development opportunity available across the district – but not in Ōhoka**
- c) The Applicant has never engaged or consulted with the local community, so assumptions about the wide range of impacts raised in their reports and proposed mitigations are specious at best.
- d) Fundamentally, this is not a project developed out of altruism in the support of housing need where there are no other more realistic options. This is a proposal based purely on commercial opportunism supported by a process that purports to be objective and robust when (to date) it is shown to be far from that.

The following section outlines our opposition component parts of the application, and while we have been advised to not criticise the genesis or delivery of the Act, we retain complete opposition to it being used to support the notion of a residential development of this nature; it being placed in a highly inappropriate area with significant infrastructure gaps while the local District Council has made sufficient planning and access available in other areas.

We would like to take the opportunity in this communication to specifically request that the Expert Panel provide for a hearing.

This request is made as the Applicant has failed to communicate directly, consult or otherwise engage with the Ōhoka community in any way since the beginning of their original proposal development for RCP31 in May 2021 to the current day.

6. Specific comments to Applicant Documentation

Document and subject	Our comments				
Appendix 2 Economic Assessment	BENEFIT vs. DETRIMENT - Overview The Applicant's documentation rightly refers to the requirements in the Act for there to be regional or national net benefit to justify approval of the proposal. This report targets key criteria including: • Increasing housing supply and addressing housing needs • Contributing to a well-functioning urban environment • Driving regional economic growth • Creating employment opportunities • Supporting Canterbury's broader development objectives Other commentators will deliver specific expert response to this report but fundamentally, considering the quality of the Waimakariri District Plan and its allocation of more than sufficient access to development space for rational population growth for the targeted reach of the plan, the key elements raised by the Applicant are at high risk of delivering a zero-sum game. The development would not take place in a vacuum. Rather, there is not an endless supply of construction capacity in Canterbury and North Canterbury, so in terms of what possible benefit the development might deliver during construction, that capacity will not be available to building projects and developments within the District Plan – hence no net benefit. This status applies directly to the Applicant's assumptions around: • Housing supply and addressing housing needs • Creating employment opportunities • Supporting Canterbury's broader development objectives The Applicant defines the project as a 'master-planned expansion of the existing Ōhoka settlement' (note – does not use the word village). Response to specific stated 'benefits': <table> <tr> <th>Applicant's claim</th><th>Response</th></tr> <tr> <td>A substantial increase in housing supply and housing choice in the Waimakariri District including retirement living</td><td>Incorrect. This is well accounted for in the District Plan. The approach can be taken to total population growth and housing stock. Given that the District Plan covers the future requirements, there is no need for the additional 875-odd dwellings and associated infrastructure, business parks (or polo field) in the region.</td></tr> </table>	Applicant's claim	Response	A substantial increase in housing supply and housing choice in the Waimakariri District including retirement living	Incorrect. This is well accounted for in the District Plan. The approach can be taken to total population growth and housing stock. Given that the District Plan covers the future requirements, there is no need for the additional 875-odd dwellings and associated infrastructure, business parks (or polo field) in the region.
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Document and subject	Our comments	
		Merely adding volume to housing stock is insufficient benefit to the region and has no impact at national level. In short: Pouring more water into an already full bucket does not represent a net benefit.
	A response to demonstrated, location-specific demand for residential living at Ōhoka that is not readily met in the main urban centres of the district	Incorrect. This claim references a real estate company's comment in a prior application that people like the look of the area and enquire about properties here. This is not unusual behaviour, and does not require a commercially opportunistic response. The desire to live in the district is BECAUSE of its rural nature and village context. The Applicant themselves considers this an urban environment and in so doing ensures that this supposed benefit can be disregarded. The proposed development will clearly destroy the rationale espoused here. Therefore, this cannot be considered a benefit.
	Approximately \$400 million in regional economic value during construction phase, with sustained construction employment and ongoing local jobs	Incorrect. This is clearly a zero-sum situation as stated earlier. The development has limited businesses involved and nothing that would not naturally take place within developments already catered for in the District Plan. This extends as mentioned above to the construction sector and business opportunities for local builders and all supporting services.
	Establishment of a local centre contributing \$24 million in regional value added and supporting employment, as well as improving self-sufficiency and reducing vehicle travel for local convenience goods and services	Incorrect. The Applicant suggests that one benefit will be the reduction in vehicle travel for local convenience goods and services – We did not relocate to the village to be close to a supermarket or shopping mall. We did not expect those facilities to follow us here. This is the inherent nature of a village in a rural setting. In this instance, convenience is not benefit.
	Efficient use of existing and planned infrastructure, with developer-funded upgrades where required	Incorrect. The Applicant has predicated the whole proposal as an expansion of the village, has referenced the historic, aesthetic, architectural and social aspects and now says that this is not good enough and we are here to help.

Document and subject	Our comments	
		No-one has asked for upgrades in the Village, hence we call this an arrogant approach. It cannot be considered a benefit other than for the developer and the vendor of the land. Note also that (as stated later in these comments), the Applicant purports to use the Ōhoka village name as the baseline for their commercial development. This is unacceptable.
	Transition from intensive agriculture to urban use, resulting in reduced nutrient and E. coli discharges to freshwater	Incorrect. This supposed benefit belies the earlier element of location-specific demand – and it confirms the commentary in that area – that the development of an urban environment will not provide a beneficial outcome to that ‘demand’. Further, the nutrient and E.coli discharges will, according to the Applicant’s documentation, be taken over by heavy metal discharge during construction, and storm and groundwater discharge literally muddying the waters. Note our commentary on the Applicant’s Appendix 19b Report below.
	Long-term enhancement of waterway corridors, open space, and recreational access	Incorrect. As above. However, there is already sufficient walkway and waterway corridors in the village that caters to the current population. The supposed benefit claimed is in response to the Applicant’s own plans and is a benefit of their own making to offset detriments associated with urban placement in this village setting.
	Development of recreational facilities, including walkways/cycleways and a polo complex.	Incorrect. The village does not require additional recreational facilities. The benefit ascribed here is also in response to the urban challenge delivered by the project. And no-one in the village has asked for a polo field. This plan boggles the mind.
	Key point: No-one has asked for this expansion other than the applicant, and by extension the vendor of the land. Our further response in this area relates to the absence of commentary about net detrimental effect.	

Document and subject	Our comments
	Ōhoka is a village with an immediate population of around 400. The proposed development will deliver 875 dwellings and around 2,300 to 2,600 residents – <u>an increase of 700% on the current population.</u> What value is placed on social environment disruption? Specific impacts here include loss of social capital, reduced sense of place, weakened community cohesion, stress on infrastructure, changes in identity, and impacts on wellbeing. Research consistently shows that large-scale residential development can affect social wellbeing by weakening existing social networks, reducing community cohesion, altering local identity and creating challenges in integrating new residents. Studies emphasise that the social impacts are particularly significant where population growth is rapid relative to the size of the existing settlement and where investment in social infrastructure and community-building measures lags behind residential expansion. Pomeroy (2022) argues that rural communities contain rich social structures and knowledge networks that are frequently overlooked in development decision-making, despite their importance for social wellbeing and sustainable futures Social Impact Assessment via the NZ Association for Impact Assessment: The Guidance for Assessing and Managing the Social Impacts of Projects published by the International Association for Impact Assessment (IAIA) is considered the leading international good-practice framework for assessing social effects of development proposals. It explicitly states that impact assessment should address social, cultural, health, community and wellbeing effects, not merely physical or economic impacts (Vanclay, et al. 2015). According to IAIA, development projects can affect: • People's way of life and daily routines • Community cohesion and stability • Local character and identity • Participation in decision-making • Health and wellbeing • People's fears, aspirations and perceptions about the future of their community. These categories align closely with concerns commonly raised over the last five years by Ōhoka residents: • Loss of village identity. • Transformation from a rural village to a suburban settlement. • Increased population turnover. • Weakened community cohesion. • Pressure on local social infrastructure. • Changes to lifestyle and rural amenity

Document and subject	Our comments
	These concerns are not to be dismissed by over-simplification and minimisation of issues and effects as presented by the Applicant. Given the importance of these effects, the continually stated absence of any engagement or consultation with the community by the Applicant is nothing short of unacceptable. How do we come to this view? Applicant's comments – Section 85(3) Conclusion (clauses 14 – 16) Here the Applicant states categorically that the proposal meets the statutory test for approval under that Act. They acknowledge some residual adverse impacts but suggest that these will be mitigated or at worst not meet the threshold of being out of proportion as suggested by the Act. They go on to say that the conclusion is informed by comprehensive expert analysis. We refer (once again) to our earlier comments and evidence regarding the value of local knowledge (achieved through engagement and consultation with local people), in planning, decision making, and understanding real-world contexts. The Panel is therefore asked to note that all of the Applicant's evidence, analysis and proposal development is merely informed by modelling. We believe that this is insufficient for the Applicant to make a blanket statement about potential adverse effects and therefore how the requirements of the Act are satisfied. They are clearly not.
Appendices 17a – 17c Groundwater and water supply	We wish to note as an immediately adjacent property, we are reliant on a septic tank, with most grey water being distributed underground (vendor's comment). This is unlikely to be a unique situation across the village.
Appendix 19&19bb Aquatic Ecology Assessment - Instream	Dr Marlene Leggett (Ecologist) comments: How this assessment treats the Aotearoa New Zealand endemic longfin eel (<i>Anguilla dieffenbachia</i>) The report recognises the endemic longfin eel 'At Risk–Declining' present and uses that to elevate the ecological value of some waterways (e.g. Ōhoka Stream Tributary is rated "high"). However, its impact assessment and mitigation framework are largely generic and do not grapple with the specific life-history vulnerabilities of longfin eel—especially long-distance migration, longevity, and cumulative habitat loss. We believe there are net detrimental effects on longfin eel, associated with the following key pressure points. 1. Habitat loss, realignment and wetland removal Key concern: permanent loss and simplification of eel habitat. • Stream length and wetland loss: The report acknowledges "loss of stream length and wetland extent" from realignments and removals but treats this

Document and subject	Our comments
	as offsettable via enhancement elsewhere. For longfin eel, which use a wide range of habitats over decades, permanent loss of any spring-fed and wetland habitat is non-trivial and adds to a national pattern of habitat reduction (Jellyman, 2007; McDowall, 2010). • Channelisation and straightening: Several waterways are already highly modified drains; further realignment risks increasing uniform depth, low hydraulic heterogeneity, and reduced refuge habitat. Longfin eel rely on complex structure (undercut banks, woody debris, macrophytes) for cover and feeding; simplification reduces carrying capacity and resilience (Jellyman, 2007; McDowall, 2010). • Wetland degradation and removal: Longfin eel use wetlands and backwaters as feeding and refuge habitat. The report frames wetlands as “degraded” and focuses on offsetting rather than avoiding further loss. That underplays their functional value for eel, especially juveniles and sub-adults (McDowall, 2010; Richardson & Taylor, 2002). Point summary: The mitigation hierarchy is described, but “avoid” is weakly applied—there is no clear demonstration that eel habitat loss has been minimised to the greatest practicable extent, only that some enhancement is proposed elsewhere. 2. Instream works, culverts and fish passage Key concern: barriers and disturbance to a catadromous migrant. • Culverts and structures: The report notes culvert installations/removals and instream works but treats them mainly as construction-phase issues (timing, isolation, fish salvage). For longfin eel, culverts and associated hydraulic conditions are a major long-term pressure, delaying or blocking both upstream elvers and downstream silver eels (Mitchell, 1995; Jellyman & Harding, 2012). • Fish passage design: There is no detailed discussion of passage standards (e.g. slope, outlet drop, internal roughness, low-flow depth) tailored to eel climbing/swimming abilities. Without explicit design criteria and monitoring, there is a real risk that new structures will incrementally reduce connectivity between spring-fed headwaters, Ōhoka Stream, Kaiapoi River and ultimately the Waimakariri (NIWA, 2018; Stevenson & Baker, 2021). • Downstream migration: The report does not address how lighting, flow manipulation, or hydraulic conditions at culverts and stormwater outlets might affect downstream migrating silver eels, which are particularly vulnerable to barriers and mortality (Jellyman & Harding, 2012; Jellyman, 2007). Point Summary: Treating instream works as short-term, salvage-managed events ignores the long-term barrier effects of new infrastructure on a species whose conservation status is already compromised. 3. Water quality, stormwater and cumulative effects Key concern: chronic degradation of water quality in already stressed lowland systems. • Existing poor baseline: The report’s own data show elevated nitrate, DIN, phosphorus and E. coli, with macroinvertebrate indices (MCI, QMCI) mostly

Document and subject	Our comments
	below national bottom lines—indicating already degraded ecological condition. Longfin eel can tolerate moderate pollution but depend on healthy food webs; further nutrient and contaminant loading erodes prey abundance and overall ecosystem function (Williams & Death, 2018; McDowall, 2010). • Stormwater metals and “temporary” exceedances: The assessment accepts that zinc and copper from some devices will exceed receiving standards for several hours, but concludes adverse effects are unlikely after mixing. For long-lived species like longfin eel, repeated short-term pulses over decades <u>constitute chronic exposure</u>, especially in headwater reaches with limited dilution (Gadd, 2016; Leduc & Kelly, 2019; O'Brien & Williams, 2020). • Cumulative effects: The report briefly acknowledges cumulative effects to downgradient waterways but does not integrate eel population-level consequences (e.g. reduced growth, increased disease, lower fecundity) into its significance assessment (McDowall, 2010; Jellyman, 2007). Point Summary: The framing of stormwater effects as “temporary” and acceptable after mixing is optimistic for a species exposed over many years in small, spring-fed channels with limited assimilative capacity. 4. Flow alteration, dewatering and hydrology Key concern: changes to spring and seep hydrology that affect eel habitat permanence and quality. • Dewatering and groundwater interception: The report notes dewatering and engineering measures to “reduce the risk of re-directing groundwater flow paths” but does not quantify how much baseflow reduction would be ecologically significant for eel. Small changes in spring discharge can convert perennial habitat to intermittent or reduce depth and refuge availability (Gray et al., 2011). • Realignment of gaining reaches: Some channels are described as gaining flow downstream; realignment and drainage works may alter these patterns, potentially reducing cool, stable spring inputs that are valuable for eel (Jellyman, 2007). • No explicit eel-focused flow thresholds: There is no discussion of minimum depth, velocity, or refuge requirements for different eel size classes, nor any commitment to maintain these through design and consent conditions. Point Summary: Hydrological changes are treated generically; the specific dependence of longfin eel on stable, connected freshwater habitats over long timeframes is not explicitly built into the flow impact assessment. 5. Impact significance and “sufficiently significant adverse impact” Key concern: underestimation of risk given species status and landscape context. • At Risk–Declining status: Longfin eel are already in decline nationally, with concerns about reduced elver recruitment and scarcity of large adults (Allibone et al., 2010; Jellyman, 2007). In such a context, additional local

Document and subject	Our comments
	habitat loss, barriers, and water quality degradation should be weighted more heavily in significance assessments. • Site as part of a migratory corridor: The Ōhoka–Kaiapoi–Waimakariri system is mapped as having high ecological value (Land of National Significance, inanga spawning, braided river bird habitat). The report acknowledges this but does not fully explore how incremental degradation at the headwaters contributes to system-wide decline in migratory fish, including longfin eel (McDowall, 2010; Richardson & Taylor, 2002). • Reliance on mitigation/offset success: The conclusion that effects do not reach a “sufficiently significant adverse impact” threshold rests on assumed success of restoration, offsetting and management plans. For longfin eel, whose response to habitat enhancement can be slow and whose migration is easily disrupted, this is a relatively high-risk assumption (Jellyman & Harding, 2012; Jellyman, 2007). Point Summary: Given the species’ threat status and the already degraded baseline, a more precautionary stance would treat additional habitat loss and connectivity risks as potentially significant, rather than confidently below threshold. 6. RECOMMENDATIONS: Gaps and improvements needed for eel-sensitive management Given the above analysis and issues identification, we believe that there are a range of MINIMUM strategies needed to strengthen protection for longfin eel, including: • Stronger avoidance of habitat loss: ○ Avoid: retain all perennial spring-fed reaches and wetlands used or likely to be used by eel; only realign truly low-value drains. ○ Minimise: where realignment is unavoidable, design channels with high structural complexity (meanders, variable depth, cover (McDowall, 2010; Jellyman, 2007). • Explicit fish passage standards and monitoring: ○ Require culvert and structure designs that meet best-practice eel passage criteria, with independent review ○ Include post-construction fish passage monitoring (e.g. elver and adult movement surveys) and adaptive management triggers (Beentjes & Jellyman, 2003) • Eel-focused hydrology and water quality limits: ○ Set minimum flow and depth thresholds in key reaches, tied to consent conditions ○ Tighten stormwater quality requirements in headwaters (especially metals), recognising longfin eel’s long exposure period (Leduc & Kelly, 2019; Gadd, 2016) • Population-level perspective: ○ Incorporate longfin eel population metrics (size structure, CPUE, presence of large adults, elver recruitment) (Jellyman, 2007), into baseline and ongoing monitoring.

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	○ Use these data to assess whether the development contributes to local decline, not just site-scale habitat change • Precautionary significance assessment: ○ Re-evaluate the “not sufficiently significant” conclusion with explicit reference to longfin eel’s threat status, national pressures, and the cumulative effects of barriers and habitat loss (Allibone et al., 2010; McDowall, 2010; Jellyman & Harding, 2012)
Appendix 20 Hydrology Assessment	We have had no enquiries from the Applicant as to the hydrological nature of our property. We have one well serviced by an electric pump and there is an historical hand pump well on the property that provided water for the church, Sunday School (a 90-year-old local recalls this task) and other very early events. These are highly relevant features in the broad hydrological context for the area – such springs and wells are not unusual as we are sure will be raised by our neighbours. Notably, in the eight years we have been here, our lawn has been both very wet and soft (deep footprints and lawnmower tracks) around the calendar, and on occasions quite dry and hard. This clearly speaks to the changes in groundwater level, and we use the ponds at the southern end of Whites Road (Tram Road corner) as the general measure for what is happening in local groundwater levels – there does seem to be a strong correlation there.
Appendix 22 Updated Flood Effects Report	Little seems to have changed here since the earlier, failed proposals. At the time of the 2023 submissions, the Applicant’s expert reported that they considered an additional 10-20mm flood risk to be minimal or low risk. Our evidence showed that just three weeks earlier, we had endured a flood inundation of our property that followed high groundwater, heavy rain and poor drainage of surrounding culverts and conduits. That event saw the floor of the 1865 part of our house completely replaced by insurance, and the garage walls needing to be replaced up to 300mm above floor height. The informative flood pictures from that event are in Appendix 1. Referring back to the Applicant’s expert immediately post this event (and it was reported that they had visited the area later that flood day to look at the effects), we believe that the statement that an “additional 10-20mm of water would be minimal or low impact” is patently incorrect, and an assumption made without any reference to the property owner (us). They had an opportunity to ask us for our opinion that day and clearly chose not to engage. An appreciative inquiry methodology by the Applicant would have been a minimum level of engagement in our view.
Flood Effects Report (9 September 2026)	
Executive Summary	In the Executive Summary to this report, the Applicant states; <i>‘Overall, the modelling indicates that the proposed development can be progressed without</i>

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	<i>causing significant adverse flood effects, provided the development remains generally consistent with the landform, drainage and stormwater management assumptions assessed in this report subject to detailed design refinements. Further detailed design will be required to refine local drainage, road levels, stormwater management areas, culvert arrangements and any isolated medium-risk road areas’.</i> This effectively states that the modelling should be OK, but more work might need to be done. The overall direction of this report speaks to potential and real flood risks on the site, with little or no commentary about the potential adjacent (our house) or other downstream effects. The flood dynamics experienced by the local population have not been addressed and there has been (we repeat) zero engagement with the local community at individual or collective level which would provide this level of detail and enhance confidence in the flood risk assessment. I refer again to the referencing provided earlier in this document about the value of local knowledge.
Page 11 – Soil types:	The graphic and table supplied does not provide a sufficiently detailed view of the soil types identified. The picture and colour modelling extends significantly west from the site with the site itself a very small subset. According to the colour coding it would appear that the site is largely class 1 (very poorly drained) or class 2 (poorly drained). Again, the Applicant effectively states that their review suggests it would be ‘OK’, but if not, there might need to be additional work done. Context note: The Waimakariri District Plan has been developed over years with <u>significant</u> technical review and local knowledge, and as such will deliver more than sufficient capacity for housing growth in the district acknowledging soil type challenges and with appropriate access to infrastructure.
Page 17 – 5.2 Catchment calibration:	This section of the report bears review as it refers to three relatively recent flooding events (2014, 2022, 2023). We have direct experience of the latter two events, with at least one further (2020 I believe) delivering significant but not risky water ingress to the front of our property. We note that the Applicant has chosen to review the catchment calibration via the Cust Main Drain and the Threlkelds Road gauges. These gauges are peripheral to the development site by some distance, and while they deliver an objective view of the rainfall record, do not represent actual impact at or around the site. We note also that the Applicant has chosen the 2022 event as the ‘main’ event for the benefit of their position, i.e.; - <i>It is a single hyetograph-peak flood event, which aligns with the chosen design rainfall approach</i>

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	- <i>There was a much closer match with recorded rainfall across all five gauges, which meant that a relatively uniform rainfall profile was applied across the whole catchment.</i> - <i>It is the closest event to when the underlying LiDAR was flown (also in 2022).</i> The 2022 event is clearly NOT indicative of the worst recent case which was the 2023 event. The approach taken has the effect of minimising the risk profile unreasonably, especially given that real world (not model) outcomes are highly impactful to adjacent properties. It is interesting to note in the report that June 2022 was the wettest month on record (Page A-3), but the actual greatest flood impact was the July 2023 event. It is therefore not surprising that the Applicant has chosen the June 2022 event as the key indicator – when in reality the wettest month <u>does not necessarily deliver the worst outcomes.</u> Total rainfall does not appear to be the issue. Volume and time delivered are potentially more key relative to the experience of flood issues in the village.
Page 20 – 6.0 Post Development Flood Model	The graphic on this page is very telling. It clearly indicates the proposed ground levels post development, with a line of ‘fall’ from the southwest to the northeast of the development – all into the corner of the development bordering our property. This is possibly the basis of the Applicant’s expert stating that an additional 10-20mm would be tolerable. We fundamentally disagree and do not see any specific mitigation of this risk in the documentation.
Page 24 – Discussion (pre-development and post-development modelling).	This discussion is important. The Applicant states in the proposed development note (p25) that <i>‘the proposed site layout has been designed as to preserve the natural flow direction across the site and thus is intended to be hydraulically neutral’ (i.e. no changes in peak flood level to the surrounding area).</i> The Applicant’s own graphics demonstrate clear negative effects to the northeast corner of the development – showing increase water / flood depth at our boundary (401 Whites Road), and therefore on our property, as well as having apparently zero benefit for the domain: Pre-development graphic (Applicant’s documentation) – our annotations:

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	Post-development graphic: (next page) Further, the note at 8.2.1 references Minimum Floor Levels Within Site. This is all very well in managing the risk of flooding (a baseline floor level in the develop of half a metre), to the Applicant's clients / purchasers of housing, but has no use to our situation where we have a 161-year-old building that is not on a ring foundation and which cannot be raised to accommodate the Applicant's comfort with their modelling. In short, the development is proposed to be built on higher ground than our floor level. The last time we checked, water tended to flow down with the effect of gravity. This document note and the graphics shown on the page prior combine to deliver real concern that there is little importance given to the safety of those on the border and downstream of the development. Note also the relevance of this discussion to the points raised about development impact in Section 4b.
	Pages 26 and 27: Flood Risk (categorisation): This section deals with allocation of levels of flood risk according to a matrix approach.

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	They note: <i>We have used the risk matrix to develop a combined risk map as shown in Figure 21 below. The map shows that;</i> - <i>Across the vast majority of the site, the risk is either 'low' or 'negligible'.</i> - <i>Most roads are shown as 'low' risk, with some isolated portions of 'medium' risk.</i> - <i>A small portion of the polo field is shown to be 'medium' risk.</i> - <i>The locations of high or very high risk are contained within the existing and proposed waterways.</i> All language in the assessment of risk is aimed at minimising the impact of the development. The bulleted list above makes no mention of dwellings affected but it is easy to see that there is an assumption of medium risk to our property (one of the highest of the whole proposal).
	Validation Photo 1: Flood event July 2023 looking towards our property at [REDACTED]  It is interesting to see the use of this photo, taken at 11:24AM on July 23, 2023. The expert attendee clearly did not consider there to be any value in dropping in on the homeowner (us) to ask about the effects and impacts (and if we were OK). There is a spectacular disinterest in the real world, local knowledge implications of the proposal.  This caption to this photo in the document states that this was the critical validation location for the model. Notably, it shows our vehicles parked across the road because the garage floor was inundated. These are the real-world effects, not just the example to validate a flooding model.

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	The caption to this photo includes that the ponding depth in the photo may be masked by the height of the grass. Bear in mind that this is the area where the Applicant proposes to create a 'grass square'. We refer to our comment under Indicative Commercial Hub Concept Plan A (page 28) below. We would suggest renaming that space a 'mud-bath'. Leaning once again on local knowledge, we can report that the level of groundwater on this paddock is very similar after normal rain events and stays in place for days after. This confirms the poor or very poor drainage rating of the soil.
Appendix 23b: Ōhoka Residential Development - Urban Design and Landscape Masterplan	
Section B2 – Existing Character Photos	This page includes representation of current character of the environment that the development would subsume. A – the Gatekeepers Lodge is a community initiative, and the caption identifies this as having significant aesthetic, architectural, historical and social value within the region. This is because the local population is a village community with shared sentiments, value of the village as a social construct and work together to enhance it. The development proposes to override this social context by increasing the population seven-fold, thereby effectively destroying the nature of the environment that it purports to enhance. C – the Ōhoka Bush is equally a community initiative with the same underlying ethos and collaboration – a working bee meets monthly to maintain it. This is a <u>village community</u> at work. D – Typical residential frontage – this is represented as 'the majority of dwellings are rural in nature'. This is patently incorrect. The village is within a rural context but has a small number of contiguous street frontages, with the obvious, small number of more rurally located residences on the periphery. Through statements such as these, the applicant is looking to minimise the nature of the village, the community and its social value – it is endeavouring to depict the village as ripe for development and somehow lacking without it. This is far from reality and once again demonstrates the Applicant's distance from the community to be affected, and complete lack of consultation or engagement.
Section B3 – Viewpoints Pages 14 – 20	The Applicant's documentation goes to great lengths to depict the environment as ripe for development with pictures taken on a sunny day, with no images showing proximity to current dwellings or village elements. It is as if the development was a stand-alone green space with no implications for the social environment. Equally the pictures only show a sunny, cloudless day and do not show the level of groundwater apparent following normal rain events.

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Indicative Commercial Hub Concept Plan A (page 28)	The 'grassed square' shown on the plan immediately adjacent to our property would be entirely unusable for much of the year – and if it was to be used during winter, would require continuous remedial work. Masterplan graphics depicting beautiful environments on sunny days are one thing, reality is another. A reminder: this area was once a swamp. If the Applicant had bothered to ask locals about the nature of that specific piece of land, it is highly likely that the plan would be designed differently. See additional notes under 'Items NOT Addressed in the Application' section.
Illustrative view into commercial hub from Whites Road Page 36	The Applicant has provided their vision for the entrance to the development at the position of the proposed business hub: (next page)  Note the naming on the wall of the entrance way (both sides). This, along with the whole application being named the Ōhoka Village Master Plan, represents effective theft of the name of the historic village by a commercial entity. With zero consultation or engagement with the community over five years of processes, the Carter Group has the hubris to name their development 'Ōhoka' in the face of wide and strident opposition from the community that is being replaced by this development.
Appendix 23b – UPDATED Landscape Visual Assessment DCM	
Receiving Environment 3.1 Landscape Description and Characterisation	This section contains the notable quote: <i>'Ōhoka is a small rural settlement with a historic mill-settlement character, including heritage buildings, community facilities and the Domain. Mature vegetation, informal road edges and varied lot sizes contribute to the rural village character, while larger rural-lifestyle properties beyond the core are generally screened by boundary planting'.</i> The proposed development would completely subsume the village nature of the settlement. The values attached to the settlement by the Applicant would no longer exist once the development was underway.

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	This has the effect of destroying the thing that the Applicant states they value.
3.3 Landscape values	Under the heading 'Perceptual', the Applicant states: <i>'The site's perceptual values are principally associated with its rural openness, the visual simplicity of its pastoral land cover and intermittent views towards the Southern Alps. Open paddocks provide a sense of spaciousness, while shelterbelts and mature trees interrupt longer views and create localised enclosure. This combination of open pasture and linear vegetation is characteristic of the site and the wider Lower Plains landscape.'</i> This is correct, and the development would, again, completely change this aspect of the nature of the environment. There is inherent value in the current village and rural setting that would be destroyed by the development. The area would be replaced by streets, lighting, around 875 dwellings with all of their attachments, vehicle and people movements that do not currently exist. In our view, this objectively delivers a net detrimental effect to the baseline 'perception' of the area.
4. Recommendations 4.1 Mitigation measures	Specific comments: MM1: Development Pattern and Lot Distribution. It is notable in this section and from the graphic presentation of the plans, that the higher density housing will be based in the northern section of the development, adjacent to the current village. It is further noted on page 20 of this appendix: <i>the proposal concentrates development around the existing Ōhoka settlement, with the smaller lots and commercial area closer to the centre of Ōhoka.</i> We fail to understand how higher density development closer to the village will function in any way as a mitigation. In our previous submission to the Applicant's RCP31 (declined) process, we pointed out that true mitigation in this particular area would include a well-constructed green belt between the village and the development. It appears that this has never been considered, and the Applicant retains an extraordinary position that higher density is somehow better than lower density when it comes to visual impact. We note also that in prior applications, the Applicant considered specific mitigation of visual impact for our property to include this notion that the higher density housing would prove beneficial (or at least less bad, which does not equal better). We also note that this is no longer a feature of their consideration for our property, BUT the plan remains the same. MM4: Access from Whites Road and Bradleys Road The Applicant notes: <i>'Individual vehicle access to residential properties shall not be provided directly from either Whites Road or Bradleys Road. All residential lots</i>

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	<i>adjoining these roads should obtain vehicle access from the internal street network’.</i> Of course, this means that while there might be a mitigation of VISUAL impact on these roads by not having driveways linking to them, all vehicle movements will be funnelled into two ‘entrances’ to the development. While this is a physical impact there is no doubt in our view that a stream of traffic at those bottlenecks will anything other than a serious visual impact overall. MM9: Landscape Treatment C: Northern Boundary Interfaces: A proposed landscape strip with 4m x 2m planting at 1.5m intervals effectively creates a complete block of any views to the south and southwest that we currently enjoy. One whole side of our property will become a wall of green much more than it currently is. The plantings will also do little to mitigate noise and activity interruptions from the proposed business park, cafes, and the village green.
5. Assessment of Effects	The Applicant reviews the statutory provisions in this section with the framework for assessing potential effects on landscape values. LIGHT: The Applicant at least acknowledges the potential risk to amenity values in terms of viewability of the night sky. I use a telescope for amateur astrophotography and have real concern about the bleed of light but have little confidence in the Applicant’s understanding of the actual potential effect on the local Bortle dark-sky value which is a key amenity for the hobby. There is no discussion of this technical aspect and apparently no analysis of the potential changes. EFFECTS ON LANDSCAPE CHARACTER AND VALUES: The Applicant states that there will be approximately 856 residential lots as part of the development. In other documents this number is at least 875. There is no internal consistency in the applicant’s documentation in this area. The Applicant states (bottom of page 20): <i>‘The effects have been assessed against the existing environment with consideration of the anticipated development pattern anticipated under the current RLZ zoning discussed above. A rural-lifestyle outcome of approximately 4ha allotments would introduce dwellings, accessory buildings, driveways, fencing, shelterbelts and domestic planting across the site, progressively dividing the existing paddocks and reducing continuity of open pastoral views. The comparison does not remove the effects of the proposal but assists in understanding the retention of the site as uninterrupted pasture is not the anticipated foreseeable future landscape condition’.</i> This can be reasonably interpreted as: “we have permission to create a 4ha lifestyle block development that would interrupt the visual amenity, so you may as well just let us do this more intense development”.

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	PERCEPTUAL: The Applicant states (page 22): <i>Overall, taking account of the scale of the development, the reduction in rural openness, the existing areas of visual enclosure and the proposed landscape treatments, adverse effects on perceptual landscape values are assessed as moderate. Positive perceptual values are also anticipated with further associations built around recreation networks, naturalised waterways and amenities.</i> It will be of no surprise to the Panel that we disagree with the assessment of Moderate adverse effects. ASSOCIATIVE: The Applicant assesses the loss of the working rural association as low-moderate, suggesting that the development will deliver offsetting benefits. This is a very long bow to draw and rests on the Applicant's baseline assumption of overall benefit to everyone involved or associated alongside this application. Not all development is beneficial. EFFECTS ON LANDSCAPE CHARACTER AND VALUES (from page 23) The Applicant's assessment of an overall moderate adverse effect is based on the permanence of the changes while accounting for the site's settlement-edge location amongst other things. Temporary effects are assessed as low-moderate Cumulative effects are assessed as moderate Noting that the definition of moderate impact in this development context includes effective mitigation strategies, we find it difficult to agree with the assessment as we do not see that the mitigation strategies are; a) Relevant to real world situations as there has (again) been zero engagement or consultation with the individually affected property owners or the community b) Able to achieve what the Applicant suggests. AFFECTS ON VISUAL AMENITY (from page 24): The introduction identifies viewpoints from specific and adjacent properties including ours [REDACTED] The commentary includes: <i>These viewpoints do not represent every location from which the proposal may be visible. However, they provide a representative sample of the viewing conditions experienced by nearby residents and road users. Where a viewpoint is used to represent views from a private property, the photograph has been taken from the nearest practicable public location. The precise view from a dwelling may differ because of its orientation, setback, elevation and intervening vegetation.</i>

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	Again, the Applicant would have more real-world data to work from if they had engaged with us directly. They are making visual impact assessments based on non-real-world viewpoints when it comes to lifestyle. We do not live on the roadside where the viewpoint picture was taken, so that cannot represent the true level of visual impact. COMMENTARY ON TABLE 1: ASSESSMENT OF EFFECTS ON VISUALLY SENSITIVE RECEPTORS We acknowledge that there needs to be technical jargon involved in such documentation but ‘visually sensitive receptors’ is an appalling technical misrepresentation of the real-world. The terminology dehumanises the experience and the impact. We comment specifically related to the assessment of impact on our property at [REDACTED] The Applicant has decided that, with ‘moderate-high effects before mitigation, mitigations MM5 and MM9 will reduce that to moderate (i.e. not much). Let’s look at these two measures: MM5: Provide a coordinated network of green links, reserves, stormwater management areas and waterway corridors throughout the development (etc.). We completely fail to understand how internal development design will provide <u>any</u> mitigation of our visual impact, especially considering that the other mitigation is a solid hedge MM9: dense planting 1.5m apart of 4m x 2m plants (trees), which would, as stated previously, completely block our views to the south and southwest anyway. Our position: The applicant has not taken any care in their consideration of visual (or other) impacts on people directly affected by their development. If there was any intent to mitigate the effects of their commercial development on our chosen lifestyle, they would have engaged at some point to check in and fully consider what could be done. They have not. Again – they have completely failed to engage or consult. Local knowledge sample size: n=2. Their assumptions around both impact and mitigation are well short of being a quality assessment or set of options. Importantly – as a point of reference: In the RCP31 commission hearing in 2023, the Commissioner asked me, at the end of our submission, whether the Applicant or any of their agents had consulted, visited or engaged with us in any way. I answered that they had not.

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	Nothing has changed, except their assessment of visual impact. At least this time they have not included that the high-density housing would be beneficial, or that a solid fence on the boundary would be beneficial, or that we would still be able to see the tops of the trees on the Ōhoka South Stream (all elements of mitigation of visual impact in their original proposal).
Appendix 24 Lizard Management	Notes from Dr. Marlene Leggett Urban Development and Native Lizards in Ōhoka Urban development poses a significant potential threat to endemic New Zealand lizard populations in Ōhoka by altering grassland and pastoral habitats, fragmenting remnant habitat patches, and increasing exposure to introduced mammalian predators (Department of Conservation [DOC], 2024; Environmental Protection Authority [EPA], 2026). Native species, particularly the Canterbury grass skink (<i>Oligosoma aff. polychroma</i> "Clarence"), (At Risk – Declining https://www.doc.govt.nz/globalassets/documents/science-and-technical/nztcs50.pdf) may be vulnerable to localized displacement, habitat fragmentation, and mortality associated with earthworks and vegetation clearance undertaken during residential subdivision and infrastructure projects (DOC, 2026; EPA, 2026). Specific Impacts of Development in Ōhoka Habitat Loss and Earthworks The proposed Ōhoka Residential Subdivision promoted by Carter Group Limited directly interfaces with areas that have been identified through ecological assessment as containing potential lizard habitat (EPA, 2026). The project includes extensive earthworks, vegetation removal, and urban development across approximately 154 hectares adjoining the existing Ōhoka settlement (EPA, 2026). Ground-dwelling skinks are particularly vulnerable during construction because vegetation clearance, soil disturbance, and machinery operation can destroy shelter sites and cause direct mortality where lizards are present (DOC, 2026; EPA, 2026). Increased Predation Risk Associated with Urbanisation New Zealand's lizard fauna evolved in the absence of terrestrial mammalian predators and is highly susceptible to predation by introduced species (DOC, 2024). Urban expansion can increase the abundance and proximity of domestic cats, rats, mice, hedgehogs, stoats and other mammalian predators that are recognised threats to native lizard populations (DOC, 2024; DOC, 2024a). Increased predator pressure is therefore a significant ecological risk associated with residential development adjacent to occupied or potential lizard habitat (DOC, 2024). Mitigation Requirements and "Think Like a Skink" Approaches All native New Zealand lizards are protected under the Wildlife Act 1953, and activities involving capture, relocation, disturbance or destruction of habitat occupied by protected species generally require approval from the Department of

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	Conservation (Wildlife Act 1953; DOC, 2024). Consequently, developments affecting lizard habitat commonly require a Lizard Management Plan or similar mitigation framework before construction begins (DOC, 2026; EPA, 2026). In response to development pressures within Waimakariri District, a "Think Like a Skink" approach has been adopted in several infrastructure projects involving Canterbury grass skinks. This framework emphasises ecological surveys, habitat enhancement, salvage, relocation, predator control, and long-term monitoring (Waimakariri District Council, 2025). Recent relocation projects associated with the Woodend Bypass have involved the transfer of Canterbury grass skinks to specially prepared habitat at Kaiapoi Lakes Reserve, including predator management, habitat augmentation and ongoing monitoring (Waimakariri District Council, 2025; RNZ, 2026). Translocation of Lizards in Ōhoka, Canterbury: While translocation may be required as a mitigation measure under the Wildlife Act 1953, documentation prepared for the Ōhoka Residential Subdivision emphasises the need for species management and mitigation measures but does not provide evidence of completed long-term success monitoring within Ōhoka itself (DOC, 2026; EPA, 2026). National research provides important context for interpreting likely outcomes. Reviews of New Zealand lizard translocations have shown that many mitigation-driven translocations are poorly monitored, and that evidence of long-term population establishment is often lacking (Romijn & Hartley, 2016). Romijn and Hartley (2016) found that mitigation translocations frequently occur in mainland environments where introduced predators remain present, and that <u>relatively few projects have documented sustained population growth</u>. Similarly, DOC's best-practice guidelines emphasise that successful translocations require careful site selection, suitable habitat, predator management, and long-term monitoring (DOC, 2018). <u>DOC guidance further notes that lizard translocations are not inherently successful</u> and that post-release monitoring is essential for determining whether populations become self-sustaining (DOC, 2018). Many historical translocations have lacked sufficient monitoring to verify long-term outcomes (Romijn & Hartley, 2016). Ōhoka's landscape is characterised by pastoral land use, lifestyle blocks, fragmented vegetation and the presence of introduced mammalian predators. Such conditions are generally less favourable for lizard persistence than secure predator-controlled habitats and may reduce the likelihood of successful establishment following translocation unless substantial management interventions are implemented (DOC, 2018; DOC, 2024). Accordingly, the likely success of any lizard translocation undertaken as mitigation for development in Ōhoka should be regarded as uncertain unless supported by intensive predator control, habitat enhancement, appropriately designed release methods, and long-term monitoring consistent with DOC best-practice guidance (DOC, 2018; Romijn & Hartley, 2016).

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	FTAA memoranda for the Ōhoka Residential Subdivision emphasise that mitigation-driven translocations do not guarantee survival, and outcomes remain uncertain without long-term monitoring. National research on New Zealand lizard translocations provides context for interpreting likely outcomes in Ōhoka. Studies evaluating mitigation translocations across Aotearoa New Zealand consistently show low or unknown success rates, primarily due to inadequate post-release monitoring, dispersal away from release sites, and mismatches between source and receptor habitats. For example, Knox (2014) and Hitchmough et al. (2020) highlight that many mitigation translocations lack evidence of population establishment and that survival is often unverified. Recent work on arboreal geckos demonstrates that hard-release methods result in high dispersal and low site fidelity, with long-term establishment variable or poor (Romijn et al., 2024). Conclusion: Based on current evidence, the expected success of lizard translocation in Ōhoka should be considered uncertain and likely low unless supported by comprehensive habitat preparation, ongoing predator management, and long-term monitoring consistent with DOC best-practice guidelines.
Appendix 31 Updated Stormwater Management Report	2.1 Overview of the site (page 2): In this section, the Applicant identifies that ‘impervious’ areas in the current site are limited to unsealed roads (no area % provided) and buildings and sealed areas (<1% in area). Notably, the table of proposed land-use types and areas on Page 7 (Table 1), shows that total impervious area (referring to residential, rural-residential, retirement village and business/commercial areas +/- roading), equates to 125 ha of the 154ha site, or 80.8% of the total area. Given the level of stormwater run-off and associated ACTUAL flooding impact related to a stated current impervious area of <1%, the Applicant’s assumptions, technically supported or not, are problematic. There is a world of difference between <1% and 80.8%. A quick quantitative review of the table demonstrates that the reduction becomes progressively smaller as storm duration increases from 1 hour to 24 hours. This pattern is typical of a system that includes detention and storage, because storage is most effective at reducing short, intense runoff peaks. This therefore provides a concern unaddressed by the Applicant’s report, where longer duration weather effects have little or no improvement in outcome, potentially the opposite. The Applicant does not appear to acknowledge this risk as the whole table is formatted to show wide benefit (green font formatting) and bold for greatest benefit. There is no identification of remaining or greatest risk.

Document and subject	Our comments
	This whole report is clearly technical, with the usual barriers to understanding from a lay-person's point of view. However, the conclusion is telling (page 36). The Applicant suggests that the post-development run off will not exceed pre-development levels even with climate change considerations – along Whites Road. We are not confident in this assumption given our comments above. In noting the stormwater quality requirements, the Applicant at least acknowledges that the discharge quality is not expected to meet the “in-stream” 95% species protection limits for total zinc or copper but refers to any effects as less than minor. This begs the question as to why else would there be a measure of 95% species protection in place. It seems that the Applicant is familiar with breaching regulations if the effects are deemed less than minor – their own subjective measure.

Comment Appendix 1: Flood Event July 2023 – Pictures at [REDACTED]

Note again that this event did not occur during the wettest month of July on record that the Applicant has specified as their measure and baseline for flooding and stormwater analysis. That event was in 2022. So, it is demonstrable in the real world that total monthly rainfall is not necessarily the culprit when it comes to inundation events. The following photos and commentary show the reality and effects of flooding in July 2023. This event required replacement of the floor and some joists and piles in the oldest part of the house (1865) and wall repair up to 300mm above floor level in the garage. Total insurance cost for that claim was in the region of \$30,000.

Patio Area after three hours of Swannanoa volunteer brigade pumping. The aforementioned old hand pump well can be seen in the background. Sandbags in place to reduce ingress of water from the lawn to the patio area.

Note the level of pooling on the lawn even **after two hours of pumping**. This is indicative of the way the water behaves on our property AND in the paddock next door (i.e. the 'grass square' of the plan).

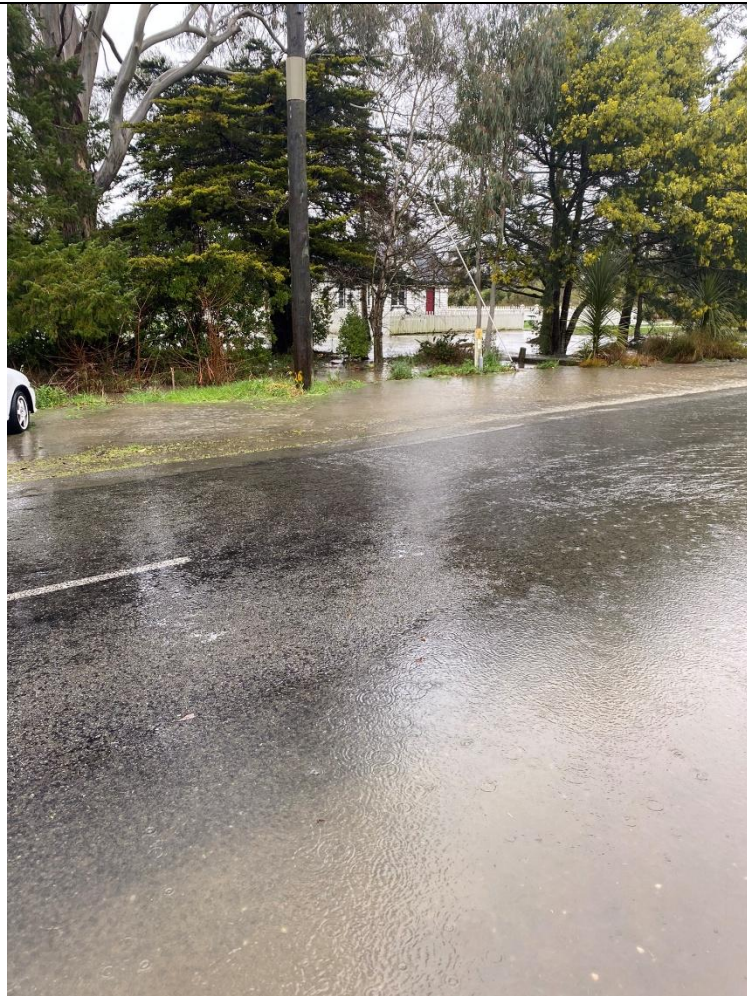


View from neighbour's house showing front of property, ingress into the garage. significant water in paddock next door (where the business park would be). This is at the end of the brigade's involvement. At their advice, we purchased some submersible pumps to complete the job. Note that the water flow is from the paddock and culvert mid right of picture to the boundary corner bottom left (and from there across the road. This is not standing



water; it was flowing freely.

This picture shows the flooding completely across the road, with inundation of the culvert leading to a virtual lake around the Ōhoka Gatehouse immediately adjacent. At this point, the domain itself was fully flooded. Note that this is past the high water point that day.



The following is a panorama stitched together from a video of the event later in the day, July 2023, notably AFTER the Swannanoa Fire Service had pumped out our patio and the water level in the house and garage had receded.

In the video, the water is flowing across the front of our property (L-R) and across the road into what became a temporary lake in the Domain. This can be seen in the front of one of our vehicles parked (theoretically) out of harm's way. It is not static flooding.



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