#### **Change GF02:**

Rezoning from Rural to General Residential 1 – 201, 207 and 211 Gladstone Road South Adding housing capacity in Dunedin (2GP Variation 2)

We, Sonia Lucia Thom and Karl Donald Thom are submitting as a person/s of interest in the proceeding that is greater than the interest that the general public as due to owning a property at 197 Gladstone Road South, East Taieri that is adjacent to and/or overlooking the site requesting a rezoning: Change GF02 - 201, 207 and 211 Gladstone Road South

We are not a trade competitor for the purposes of section 308C or 308CA of the Resources Management Act 1991.

As a person/s of interest we would in the first instance say we are not opposed in its entirety to the rezoning as per Change GF02 but our submission is to identify what we consider to be the real effects the proposed plan will have on the value and ambience of our property and we wish to use our submission to provide additional information that we think should be taken into consideration at this time.

# In order to support the proposed sub divisions we wish to have the following points taken into consideration:

- 1. We would ask that in the event that the proposed sub divisions go ahead, rezoning to R1, that the scope of the proposal be extended to include and cover rezoning properties at 195 and 197 Gladstone Road to ensure the ongoing value of our property that would otherwise be adversely affected due to the detrimental effect of the value to our lifestyle properties by developing a high density urban village in what is currently a quiet rural location if it was not otherwise included in the rezoning of the adjoining property.
- 2. Should this not be an option we would remain opposed to the proposal of redeveloping rural land to R1 high density zoning but would consider advocating for a lesser dense proposal being preferable being either a Large Lot Residential (as is our current zoning 2000 sq metre) or even a Low Density Zoning (750m²).
- 3. Whilst we support the councils need to find appropriate land for resolving the city's housing supply shortage, we would be concerned that best practice be undertaken during the course of the proposed development and that our property value not be detrimentally affected as a result of the said development.
- 4. Of concern is that the left hand corner of 207 Gladstone Road is a wetland area and that a large water area during flooding tracks through this section and 201 and that a stormwater management plan is considered in any development of these lands.

- 5. At present 201 has a grass accessway adjacent to the driveway of 197 and this would be of concern if this became a developed road to access sections at 201. The potential of vehicles to cut across the driveway of 197 would create a potential T-boning hazard. However 207 has a driveway access further down the road, and it would be possible here to not cause any problems with traffic pulling over. It has been suggested that any proposed development and rezoning to create a sub division of 201 and 207 should be done in co-operation with both owners. We would have no problem with access proposed off existing entranceway to 207 but would be opposed to any access of multiple vehicles off 201 entrance way for reasons mentioned above.
- 6. We would want assurance around the number of proposed sections that could be allowed on this site. It has been proposed in Council documents that 36 sections have been designated across the 3 sites, being 201, 207 and 211, and whilst we would be supportive of this in principle, based on this proposed volume of housing, and subject to all other concerns as outlined in this proposal are able to be addressed or concerns allayed. However, in the event that a change to this number of sections/houses is proposed at the time of subdivision then we would not be agreeable to a greater density and we would remain opposed to this development until further consultation and advisement has been undertaken.
- 7. We would seek assurance around the ability to tap into any additional services run off Gladstone Road South in the future and that additional provision and capacity for access to these services is built into this development proposal.
- 8. Our understanding is that houses would need to be raised with high platforms to be free from flooding and the packing up of building bases would have a detrimental effect on the outlook of both current and future properties.
- 9. We are led to believe that there is no height restrictions, so in fact multi story properties could be built and obstruct the views we currently have. We would wish to seek assurances from the developers that only single level houses be built on the site in order to protect current rural outlooks.
- 10. Noise from building work what protections are in place around hours of work for building and site work that protect current residents from being subjected to continuous noise day and night and weekends, for years to come.
- 11. Protection of trees planted on fence line of property at 197 Gladstone Road and Entrance way along with addition of border fence by developer.
- 12. What width would a driveway need to be if it was proposed to be an entranceway off 201 Gladstone Road. Concerns about dangers of adding an additional entry way here for multiple vehicles.
- 13. Fencing along length of 197 and if roading is not sealed at time of development, then driveway would need to be wet down periodically to stop dust spread from large trucks.

- 14. Would footpaths and lighting be part of the subdivision and if so what would the effect be around positioning of said lighting on the current property and future developments.
- 15. Flooding and effect of water diversion with regard to our property and assurances from the council in the event this is a problem that this will be rectified as currently there is no water that builds overflows onto our driveway or the main road, as water is contained within 207 at this time. We continue to see ongoing problems at the corner of Riccarton Road and Gladstone Road as more development has happened further up the road, the run off is greater during times of flooding and now pools out onto the main highway at the Riccarton Road, Gladstone Road Corner..
- 16. Will water retention tanks be required within each property considering this is a wet zoned area? How will stormwater be managed?
- 17. Green Space to be provided for within the two subdivisions.
- 18. Location and effects of Street lighting on neighbouring properties.
- 19. Proposed speed limits within the sub division.

#### Concerns: In Relation to the number of Sections Proposed for Sub Division

With the rezoning of R1 from 500m<sup>2</sup> to 400 m<sup>2</sup> there is the capacity to break the land down into even smaller lots. We seek assurance around how the proposed allocation of 36 sections was reached, and is there a proposed formula for working this capacity out? Should this volume of housing change and increase in capacity, we would object to greater intensity without further advice and consultation.



#### **Concerns: Area External to Proposed Sub Division**

- 1. 195 and 197 Gladstone Road are adjacent to and within 50m of the proposed redevelopment and will be directly affected by the proposed changes.
- 2. Open drains at the side of the road, would like to see the current drainage system piped and covered over.
- 3. There is currently no footpaths, bike lanes or OSP. Recommend installation of footpaths and bike lanes, and a decision as to whether there will be on street parking or no parking. Are yellow lines required?
- 4. As per Council's Policy 2.6.2.1 "currently serviced, or likely to be easily serviced, by frequent public transport services". We recommend the inclusion of East Taieri / Riccarton Road into the Mosgiel / Dunedin Bus loop.
- 5. Current condition of road from corner of Riccarton Road along Gladstone Road South in front of proposed subdivision is in poor condition and road surface is lifting off already, and more-so in hot weather. This has had a number of temporary repairs but is still insufficient to support increased heavy truck use that would be required in the event proposed sub division goes ahead, road should be upgraded.
- 6. Concerns regarding speed limit as just past 201 Riccarton Road, the speed limit increases to 100km per hour, making entry into and out of this area a safety issue. Recommend reducing speed limit to 50km past the proposed residential subdivision.

#### **Concerns: Within the Proposed Sub Division**

- 1. Whilst we respect the Council's efforts to increase land opportunities for solving the city's housing crisis and future planning we are also concerned about the retention of the current ambience of the rural area to which we reside in and the bio diversity of the area.
- 2. The proposed sub division seeks to take a rural zoned area and change it to Residential 1 which under new proposed bylaws would allow the land to be chopped down to 400 sq metres. One property at 207 Gladstone Road South, currently allows for one dwelling on a Rural Lot, measuring 1.915 hectares and this is already built. 201 Gladstone Road is also zoned Rural and is an undersized lot and does not as of right allow for a residential dwelling without a sustainable supporting rural activity and we have currently agreed to an application by the owner to support the addition of 1 residential dwelling.
- 3. Properties adjoining 201 and 207 are currently zoned as Large Lot Residential 1 which allows subdivision down to 2000 sqm. There are only 4 sections in this extended lot from Main South Road forward to Gladstone Road South that are currently not able to subdivide less than 2000 sq metres. Many other properties in the block as outlined have already been reduced in size previously.
- 4. Total size of combined sections for 201, 207 & 211 equals 3.1264 ha and could effectively translate to 78 x 400m<sup>2</sup> R1 sections and we therefore seek assurances that the proposed sub division is maxed at 36 sections should this sub division go ahead.

5. When we purchased 197 Gladstone Road South it was a gated property with a very private leg-in section that could not be viewed from the road from any surrounding properties. The value for us in this property was the privacy, tranquillity and the rural outlook.



## Specific Concerns We Would like Address Regarding this Proposed Sub Division

- Currently 195 and 197 Gladstone Road South, remain zoned as Large Lot Residential and must maintain a minimum lot of 2000m<sup>2</sup>. The strip of Road from Main South Road to Gladstone Road South are either Zoned R1 or divided to within an unspecified smaller size.
- 2. We are concerned if the proposed sub division goes ahead, this will devalue the current value of 197 Gladstone Road. If it remains zoned a large lot section surrounded by R1 properties, with no rural outlook, subjected to long standing building noise, loss of rural ambience, increase in traffic and noise due to high density of sub division, then we foresee the value of our property diminishing significantly.

#### Therefore we seek assurance around the following concerns:

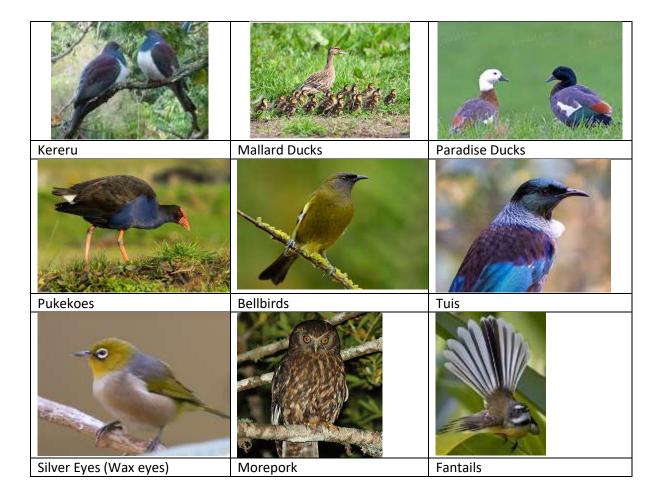
- 1. Propose that prior to any development taking place that Boundary Fencing be installed at the developers expense to respect privacy, noise, dust for current properties at 195 and 197 Gladstone Road South.
- 2. Proposal that all services be extended along the length of the subdivision, i.e. sewerage, waste water, fibre, footpaths, cycle paths, upgrade of roading, coverage of current drainage, OSP, access into and out of subdivision, with by-lanes to prevent T-boning or rear ending as traffic pulls into the subdivision.
- 3. Example: In order to exit 197 Gladstone Road South, we are required to come out of our driveway and edge up the road in order to see both directions. However the other day, a large truck waiting to get into 207 Gladstone Road had parked across our driveway and next door as that is the only part of the road that has a road frontage that has covered ditches. This made exiting ur driveway unsafe. Our recommendation would be for foot paths and cycle lanes to be installed on the opposite side of the roadway closest to the railway tracks as an extension of the foot path down general Gladstone Road.
- 4. Concern around flooding issues within both 201 and 207 especially in the lower right hand corner of 207 Gladstone Road South Road. We would want to see evidence f the proposed Stormwater and Flood Management Plan.
- 5. We have noticed an excess of water pooling now at the corner of Riccarton Road and Gladstone Road, since the addition of new sub divisions off Riccarton Road, during flooding. We would seek assurances around excess water coming off housing and water diversion, that this would not affect our property as a result of any work or changes to water movement that are made.
- 6. Possible Suggestions around water management:
  - Installation of a "Berm" at the edge of 207 boundary to stop any flooding feeding back into 197 driveway. Allows opportunity to be planted with native plants to accommodate the birdlife in the area.
  - Recommendation that perhaps an open culvit with bridge and planting be maintained as like the subdivision off Haggart Alexander Drive (MacAllister Drive).

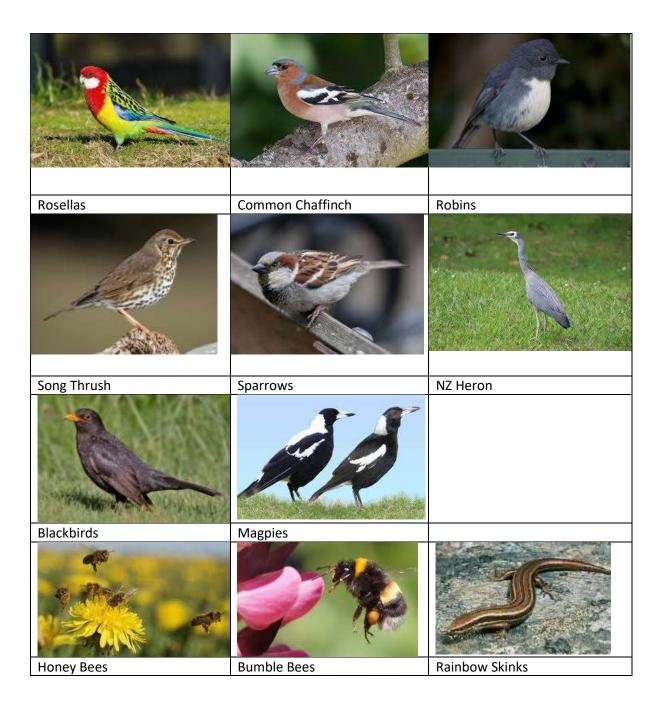
#### Affects on Bio Diversity - Protection of Wildlife

Of particular concern we would like to see special consideration given to ensure that Green Space and Waterways are preserved and native plantings included to allow for wildlife to redivert to, with the loss of natural habitat. We would seek reassurance that sufficient Green space be developed to accommodate current wildlife in the area that includes a sample of some 20 species listed below:

- Kereru
- Mallard Ducks
- Paradise Ducks
- Pukekoes
- Bellbirds
- Tuis
- Silver Eyes (Wax eyes)
- Morepork
- Fantails
- Rosellas

- Common Chaffinch
- Robins
- Song Thrush
- Sparrows
- NZ Heron
- Blackbirds
- Magpies
- Honey Bees
- Bumble Bees
- Rainbow Skinks





#### **Bio Diversity**

"A significant effect of changing rural land to a minimum site size to 400m2 across the GR1 and T&S zoned areas, is the likely loss of valuable gardens, mature trees and hedges, and greenery that contribute to the visual character of the residential neighbourhoods and streetscapes, and provide high quality amenity value to residents. As with many types of effects that may be local in extent, but repeated across large areas, the potential cumulative effects of the reduction of residential gardens, trees and greening may result in a more substantial loss of neighbourhood amenity, habitat and character, albeit over a 10 - 20 year period, for example."

This is the advise given by the DCC's own consultants and with this in mind we would request that significant green spaces, and plantings be undertaken by the developers as a specification of any development to support the current rural ambience and Bio Diversity as outlined above.

# Ensuring Council's Own Policy's and Concerns Raised are Taken into Consideration with the Development of this Area as Follows:

#### **CURRENT 3 WATERS ISSUES**

One of the key constraints to providing additional housing capacity through the Second Generation Dunedin City District Plan (2GP) was capacity constraints within the 3 waters (stormwater, wastewater and water supply) infrastructure networks across much of the city. Many of the same constraints continue to present a barrier to urban growth and intensification. Work is progressing to resolve the capacity constraints, with some upgrades already undertaken or programmed. However, the remaining network issues are significant and will require substantial investment and infrastructure works programmes into the long term. Funding is also being sought for additional projects through the DCC's 10 Year Plan 2021- 2031 process to assist in resolving these issues.

New development needs to be carefully managed to ensure that effects on 3 waters networks are acceptable. New approaches are being considered through Variation 2 to ensure that additional housing development can take place while managing 3 waters effects, as outlined below. This is supported by a report entitled 3 Waters Strategic Direction Position Paper (December 2020) by AR & Associates (see Variation 2 supporting documents).

#### 4.1 Wastewater

There are existing wastewater network capacity issues across many parts of the city. These are caused or exacerbated by inflow and infiltration of stormwater and groundwater into the wastewater network during wet weather events. This already results in overflows of untreated wastewater into waterways, streets and private property in some locations. New development has the potential to exacerbate these issues and must be carefully managed. Wastewater catchments that are particularly problematic include the Kaikorai Valley to South Dunedin catchment (limiting further development in Brockville, for example), NorthEast Valley catchment, and Mosgiel catchment.

High level modelling work has been undertaken to assess the extent of upgrades required across the city, based on development currently enabled under the 2GP and the potential increase in development necessary to provide for Dunedin's growth. As a result of this, funding is being sought for upgrades through the 10 Year Plan, and further work is identified in the DCC's infrastructure strategy. In the meantime, the use of communal on-site wastewater detention tanks has been considered through Variation 2 in certain circumstances to enable some urban growth to occur while ensuring there are no additional adverse effects on the wastewater network until constraints can be resolved.

#### 4.2 Water supply

There are also constraints in the water supply network in parts of the city, resulting in low water pressure and insufficient fire flows, particularly in summer. Areas affected include Mosgiel, the Otago Peninsula and northern settlements serviced by the Northern Pipeline (such as Waitati). These issues can be managed to some extent with water restrictions. 18 Funding is being sought through the 10 Year Plan for upgrades to parts of the water network.

#### 4.3 Stormwater

Dunedin's stormwater network is made up of infrastructure such as pipes, culverts and natural open watercourses. This can include drainage channels, kerb and channel, natural features such as streams, green infrastructure such as constructed wetlands, and identified overland flow paths such as roads and parks. Parts of the network are in DCC ownership and parts in private ownership. Stormwater is typically diverted and discharged to whichever downstream stormwater infrastructure is closest to a development. This may be DCC stormwater infrastructure such as kerb and channel, or into a private watercourse. Stormwater may flow through a combination of these private and public networks prior to being discharged to a stream or the coast. Therefore, the performance of both private and public stormwater infrastructure is critical to ensure flooding risk is appropriately managed. In recent years, heavy rain events have exposed vulnerable sections of Dunedin's stormwater infrastructure. Failures have occurred as a result of inappropriate pipe sizing, outdated construction materials and inadequate installation techniques. Private watercourses and infrastructure on private land may no longer have capacity to carry increased flows (which can result from development in the upstream catchment) or may have inadequately designed secondary flow paths. This can increase the risk of adverse effects on public health, property and the environment from flooding. DCC has a responsibility to ensure the potential stormwater effects of development on downstream properties is managed Key areas where there are currently issues managing the volume of stormwater generated are Mosgiel, Outram and South Dunedin. In addition to flooding, there are potential impacts on water quality and erosion of watercourses and downstream properties if stormwater discharges are not adequately managed. S

#### 201, 207 & 211 Gladstone Road South, East Taieri (GF02)

This site is 3ha block of farmland located on the western edge of East Taieri.

See Appendix 6.2 for the site assessment summary.

Benefits This site scored well across several criteria, in particular it is a flat, sunny site, and will allow development of a reasonable number (36) of General Residential 1 Zone sites.

Costs The site is relatively distant from Mosgiel centre and public transport (2km away). There are potentially significant issues in terms of effects on the wider transport network through cumulative development in Mosgiel. These may require intersection upgrades, including to State Highway 1 (SH1) intersections.

There are 3 waters issues that can be managed, through attenuation of stormwater and programmed upgrades.

#### Methods to manage issues

It is proposed to use the following methods to manage identified issues:

Application of a 'new development mapped area' to ensure that subdivision is undertaken in a way that supports best practice urban design outcomes and achieves the strategic objectives of the Plan in an integrated way (refer to Change D for detail of the new development mapped area provisions).

#### Conclusion

While issues were identified in relation to some policy criteria, all these issues are manageable. Development at General Residential 1 Zone density is possible, and this is the preferred zoning. Overall, it is considered that the benefits of rezoning this site outweigh the potential costs. Summary of changes proposed The following amendments to the 2GP maps are proposed in relation to this site: a. Rezoning from Taieri Plain - Rural to General Residential 1. 148 b. Application of a 'new development mapped area'.

#### Objective 2.2.2: Energy resilience

Dunedin reduces its reliance on non-renewable energy sources and is well equipped to manage and adapt to changing or disrupted energy supply by having:

- increased local renewable energy generation;
- b. reduced reliance on private motor cars for transportation;
- c. increased capacity for local food production; and
- d. housing that is energy efficient.

#### Objective 2.2.3: Indigenous biodiversity

Dunedin's significant indigenous biodiversity is protected or enhanced, and restored; and other indigenous biodiversity is maintained or enhanced, and restored; with all indigenous biodiversity having improved connections and improved resilience.

#### Objective 2.2.4: Compact and accessible city

Dunedin stays a compact and accessible city with resilient townships based on sustainably managed urban expansion. Urban expansion only occurs if required and in the most appropriate form and locations.

#### Policy 2.2.4.1

Prioritise the efficient use of existing urban land over urban expansion by:

- a. identifying existing areas of urban land in a range of locations that could be used more efficiently to provide for medium density housing in accordance with Policy 2.6.2.3; and
- b. ensuring that land is used efficiently and zoned at a standard or medium density

(General Residential 1, General Residential 2, Inner City Residential, Low Density, or Township and Settlement), except if: hazards; slope; the need for on-site stormwater storage; the need to protect important biodiversity, water bodies, landscape or natural character values; or other factors make a standard density of residential development inappropriate; in which case, a large lot zoning or a structure plan mapped area should be used as appropriate.

#### Objective 2.4.1: Form and structure of the environment

The elements of the environment that contribute to residents' and visitors' aesthetic appreciation for and enjoyment of the city are protected and enhanced. These include:

- a. important green and other open spaces, including green breaks between coastal settlements;
- b. trees that make a significant contribution to the visual landscape and history of neighbourhoods;

C. built heritage, including nationally recognised built heritage;

- d. important visual landscapes and vistas;
- e. the amenity and aesthetic coherence of different environments; and
- f. the compact and accessible form of Dunedin.

#### Objective 2.4.6: Character of rural environment

The character and visual amenity of Dunedin's rural environment is maintained or enhanced.

#### Policy 2.6.2.1

Identify areas for new residential zoning based on the following criteria:

- a. rezoning is necessary to meet a shortage of residential capacity (including capacity available through releasing a Residential Transition overlay zone), either:
- i. in the short term (up to 5 years); or
- ii. in the medium term (up to 10 years), in which case a Residential Transition overlay zone is applied to the rezoned area; and
- b. rezoning is unlikely to lead to pressure for unfunded public infrastructure upgrades, unless either an agreement between the infrastructure provider and the developer on the method, timing, and funding of any necessary public infrastructure provision is in place, or a Residential Transition overlay zone is applied and a future agreement is considered feasible; and
- c. the area is suitable for residential development by having all or a majority of the following characteristics:
- i. a topography that is not too steep;
- ii. being close to the main urban area or townships that have a shortage of capacity;
- iii. currently serviced, or likely to be easily serviced, by frequent public transport services;
- iv. close to centres; and

- v. close to other existing community facilities such as schools, public green space and recreational facilities, health services, and libraries or other community centres;
- d. considering the zoning, rules, and potential level of development provided for, the zoning is the most appropriate in terms of the objectives of the Plan, in particular:
- i. the character and visual amenity of Dunedin's rural environment is maintained or enhanced (Objective 2.4.6);
- ii. land, facilities and infrastructure that are important for economic productivity and social well-being, which include industrial

areas, major facilities, key transportation routes, network

utilities and productive rural land:

1. are protected from less productive competing uses or incompatible uses, including activities that may give rise

to reverse sensitivity; and

- 2. in the case of facilities and infrastructure, are able to be operated, maintained, upgraded and, where appropriate, developed efficiently and effectively (Objective 2.3.1).
- iii. Achieving this includes generally avoiding areas that are highly productive land or may create conflict with rural water resource requirements;
- iv. Dunedin's significant indigenous biodiversity is protected or enhanced, and restored; and other indigenous biodiversity is maintained or enhanced, and restored; with all

indigenous biodiversity having improved connections and improved

#### Section 11 (Natural Hazards) Objective

#### Objective 11.2.1

Land use and development is located and designed in a way that ensures that the risk from natural hazards, and from the potential effects of climate change on natural hazards, is no more than low, in the short to long term.

# Addressing Assessment Criteria as documented in Appendix 6.2 Rezoning Assessment Sheet – 201, 207, and 211 Gladstone Road South (GD02)

Accessibility – Public Transportation	Poor	The nearest bus stop is
Proposal:	approximately 2km away.  Council needs to add in a Riccarton Road loop for bus access to Mosgiel and Dunedin to cater for the increase in population in this neighbourhood. To meet its own Policy requirements for Objective 2.2.2: Energy resilience.	
Rural character / visual amenity	Some issues	Rural amenity and character values are low, consisting of grazed paddocks and adjoining residential development. Rezoning will result in a loss of rural outlook for neighbouring properties but will have minimal effects on a broader scale.
Objection:	The observation that the loss of rural outlook for neighbouring properties will have minimal effects has obviously been assessed by someone who does not have a million dollar plus investment in the adjacent property.	
Significant indigenous bio diversity	No issues	
Objection:	We have identified a substantial effect on the wildlife native to the habitat in the area and what we know to affect the bio diversity of the area that has not been taken into consideration for this proposal.	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Objection:	The affected neighbouring properties would disagree that there are important vistas and viewshafts, and important green and open spaces that are going to be destroyed or inhibited with the resulting sub division. One vista in particular is the rural outlook to the Maungatuas and consider this to be a major issue.	
Natural Hazards	No hazards	
Objection:	A very real natural hazard is the sections of 201 and 207 and this consideration in any proposed do no adverse affect to neighbouring	levelopment to ensure there is

Potable Water Supply  Concerns:	Some issues (manageable)  We would raise concerns around	
	addressed the water supply constraints within 3.5 years (as we are realistic about timeframes for achieving expected outcomes) and would recommend that these issues be resolved prior to the issuing of building consents so as not to put further constraints on current residential water supply.	
Wastewater supply	Some issues (manageable)	A minor network extension
wastewater supply	Joine issues (manageable)	would be required. Due to the
		flat grade, a pump station may
		be required. Flows from the
		site eventually reach the Burns Street wastewater pump
		station which is planned to be
		upgraded in the next couple of
		years. Some further minor
		downstream upgrades would
		be required and are budgeted
Concorne	Wo would overses as assets	in draft 10 year plan.
Concerns:	We would express concern over the need to install a further wastewater pump station and if this is a factor in how the sub division progresses and the proposed location of said wastewater pump station in relation to the area. If this is a make or break to ensure that the Wastewater supply works effectively then this needs to be in place as part and parcel of the	
	subdivision rather than a wait a	nd see approach.

Stormwater Management	Significant Issues	There is no DCC stormwater
	(manageable)	network in this area. Overland
		flow paths discharge to
		roadside table drains and
		flows then enter two 300mm
		diameter culverts before
		entering farmland and
		eventually reaching the
		Owhiro stream, which has
		known flooding issues. The
		capacity of the table drain and
		culvert is unknown and
		attenuation is therefore
		required.
Concerns:	There are definite flooding issue	es across both 201 and 207
	during periods of extensive rainfall and this should require further investigation and monitoring prior to the issue of consents and location of proposed building sites, along with an extensive plan to mitigate flooding onto neighbouring sites and the main highway and roadside culverts. There are current issues at the Riccarton Road/Gladstone Road junction that are yet to be addressed as a result of development further up	
	Riccarton Road.	

Transport effects (local)	Some issues (manageable)	An additional footpath
Transport effects (local)	Some issues (manageable)	An additional footpath
		connection along Riccarton
		Road East may be required. A
		footpath on the southern side
		of Gladstone Road South may
		also be required to link the
		development site with existing
		pedestrian infrastructure on
		Riccarton Road East.
		Provision for appropriate
		connections to future
		residential development
		should be considered at
		subdivision stage.
		Improvements may be
		required to the Gladstone
		Road South / Riccarton Road
		East intersection, noting the
		presence of the level crossing
		on Riccarton Road West. A
		Level Crossing Safety Impact
		Assessment (LCSIA) may be
		required.
Proposal:	We strongly recommend the dev	velopment of Footpaths/Bike
	Lanes along the length of the pro	oposed sub development.
	Possibly on the same side as the	railway line to connect with the
	existing Gladstone Road link on t	the other side of Riccarton Road.
	Since the Covid lockdown we have noticed an increase in Dog	
	Walkers, School Children and Cyclists frequenting the Southern	
	end of Gladstone Road and are subjected to the dangers of	
	walking on a narrow / non existent road verge in a 100km hour	
	roading zone.	

Transport effects (wider network)	Significant issues (manageable)	Infrastructure upgrades may be required at the Riccarton Road / SH1 intersection. Cumulative development in Mosgiel is likely to put extra pressure on the state highway network, in particular the Gordon Road / SH1 intersection, which has existing efficiency issues. Upgrade of this and other intersections may be required.
Concerns:	At certain times of the morning and evening, traffic is backed up down the main street of Mosgiel, past the Countdown to the traffic lights, and at the other end of the day, traffic backs up to the top of saddle hill to the roundabout and lights at Gladstone Road / Gordon Road Junction.  This has also been occurring on the Riccarton Road, Gladstone Road Intersection with increased traffic frequenting this road and making it more difficult to merge from Gladstone Road onto Riccarton Road and making it unsafe for children, walkers and bikers to cross.  The Riccarton Road Railway Crossing / Gladstone Road Intersection also has a high accident ratio where turning cars are smashed into by cars travelling too fast along Riccarton road. Traffic Management needs to be considered here. Possible addition of traffic lights with increase of families into the neighbourhood.	
Compact city – proximity to existing residential areas	No Issue	
Observation:	There are no amenities close to the proposed development with the nearest supermarket being approximately 4 km away.	
Compact City – ability to develop land efficiently	Good	The site has approximate feasible capacity of 36 dwellings under General Residential 1 zoning.
Concerns:	Whilst we would support the development of a maximum of 36 sections providing greenspace and plantings, and 3 water issues are addressed, we would not support a more intensive development with additional sections.	

Other constraints on	Some issues (manageable)	The site is subject to
development (encumbrances,		easements for 3 waters
owner aspirations, appeals)		infrastructure from a
		neighbouring property,
		however this appears unlikely
		to significantly affect
		development on the site. The
		site is also subject to a building
		line restriction, but this falls
		within the road boundary
		setback and should not affect
		development potential.
Further Information	We would respectfully request f	urther information on this issue.
Requested		

#### **Green Space Example in Mosgiel Sub Division**



#### **Current Culvets Opposite 207 Gladstone Road South**







Recommend covering over existing culvets and making bigger to accommodate excess stormwater.

As can be seen from the photographs culvets are not maintained and as a result flooding is prone to happening in the course of extensive rainfall.

**Example of Flood Management in Development off Haggett Alexander Drive** 

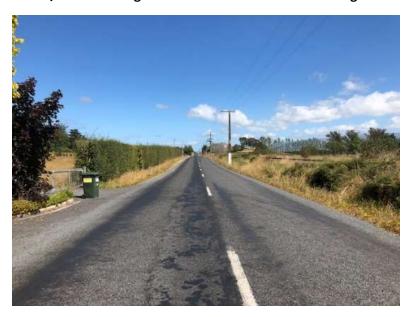


#### **Example of Built up Sections for Housing Platforms in New Cemetery Road Sub Division**



This is an example of a built up section in a previous flood prone sections off Cemetery Road, East Taieri. Our concern would be that when property's are raised above ground level, the water that would flow off that section would back fill into 197 Gladstone Road. For this reason we would recommend a natural drainage system for flooding and storm water excesses. We would also recommend a Berm to prevent waterflow back through to the section and that can be planted out in native plants to house the local habitat as itemised above.

#### 100km/hour Road Sign Location - Recommend Reducing to 50 km/hr



# **Examples of Footpaths and Dressed Roads with OSP**



Footpaths & cycle lanes added into new sub division of Cemetary Road.



OSP and footpaths along new sub division in Wingatui Road .

## Recommend Addition of Footpaths and Cycle Lane on Railway Track Side of Road





Example of No OSP and Narrow Road Verge Outside 195 & 207 Gladstone Road South



## Possible T-Bone Situation when exiting 197 Gladstone Road South







If the entrance to 201 Gladstone Raod is to be used to enter the proposed sub division then the car shown approaching would naturally begin to pull over onto the side of the road from the road cones and create a possible T-Bone situation for vehicles exiting 197 Gladstone Road .

#### **Example of Current Condition of Road**



Road on Gladstone Road South would need to be repaired and upgraded to support increase in heavy devlopment traffic. Currently the seal on this road lifts in the heat and peels off ascan be seen in the tracking shown in the photograph..

#### **Example of a High Density Sub Division.**







With small R1 size sections, where hourses fill the entire seciton, there is no opportunity to plant habitat suitable for birds and wildlife so this needs to be accounted for the in the overall subdivsion plan to prevent the creation of ugly urban jungles and protect the ambience of the location.

#### **Current Rural Outlook**



#### Wet Area shown as Green area





Wet Area showing where the grass is Green.



The gap in the hedge shows where the wet area exits the section.



During times of flooding or extensive rain water tracks through from 201 to 207 creating a ponding area in the natural waterway shown in adjacent photos.

#### Example of Berm to Prevent Flood fallback and Plant with Natives to protect birdlife





# Trees at entrance to driveway 197 Gladstone Road South that we would like to protect



Current farm fenceline that we would request be replaced with a Residential Privacy Fence prior to development starting.

