SECOND GENERATION DISTRICT PLAN

Variation 2 – Additional Housing Capacity

Part 3 – Sites Proposed for Rezoning

Appendix C

Site Assessments

July 2022

APPENDIX C.1 Rezoning Assessment Sheet – Part 155 Scroggs Hill Road (GF01)		
SITE DETAILS		
Change Number	GF01	
Site outline image		
Site Address	Part 155 Scroggs Hill Road	
Full area assessed	As shown in map above	
Site Area	10.3 hectares	
Current zoning	Rural Residential 1	
PROPOSAL DETAILS		
2GP Zone assessed	Large Lot Residential 1	
ASSESSMENT CRITERIA		
Slope	Moderate issues	The site is generally flat or gently sloping, but includes steep gullies
Aspect - Solar access	Good	Variable. Final area considered for rezoning generally slopes gently to the east
Accessibility – Public Transportation	Poor	The nearest bus stop is approximately 1.6km away

Accessibility - Centres	Poor	Mosgiel principal centre is approximately 9,000m away. Brighton neighbourhood centre is approximately 2,000m away.
Accessibility – Schools	Good	Big Rock Primary School is the closest primary and intermediate school to the site at approximately 2.3km away.
Rural character/visual amenity	No issues	The site was assessed by DCC's Landscape Architect (see Appendix 7 of s32 report) for potential large lot scale development. The full site covers a series or broad ridges and gullies northwest of Brighton. In general, the proposed area is hidden from view from many of the more established urban parts of Brighton near the centre of the settlement and the south-eastern facing hillslopes near the coastal edge. Broader views into the site are available from immediate surrounding locations on Scroggs Hill Road, and the hillslopes to the west, east and north. The site has an open character, which means that residential development will change the existing rural / rural residential character. Denser development could appear as a distinct settlement area, surrounded by rural residential land. Siting the development on the lower, less prominent part of the site would lessen this effect. As a result of this assessment only part of the site is proposed to be rezoned. (Updated 2022 comments): The existing assessment for GF01 stands, development should be limited to the GF01 area and capped at Large Lot Residential Density.
Impacts on productive rural land	Moderate issues	The areas assessed is significantly larger than the area ultimately proposed for rezoning. Approximately 25% of the full area, including all the area proposed to be rezoned, is LUC Class 3. This area scored poorly compared to other sites, given the size of the site assessed, the relatively low density of housing considered (large lot residential), and the distance from services (which reduces the economic value attached to housing). However, given the reduced area proposed for zoning, impacts are considered to be moderate, rather than significant.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	The landowner identified areas of vegetation in gullies on the site that would be excluded from development. DCC's biodiversity officer did not identify any areas in the final area proposed to be rezoned (through inspection of aerial photography) that were considered necessary to formally protect.
Natural landscapes and natural coastal character	No issues	

Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	The site is assessed as having a medium level hazard associated with slope instability, particularly on the steeper parts of the site. Geotechnical investigation will be required prior to development.
Potable water supply	Significant issues (manageable)	The site elevation varies from approximately 116m to 6m. The site location is outside the area that is currently serviced by DCC. However, the Brighton Reservoir is within the site location at an elevation of approximately 86m. This is fed by Southern WTP, elevation approximately 114m. The existing infrastructure is adequate to service a portion of the proposed development at lower elevations. The topography of the site suggests that an additional reservoir would be required to service higher elevation areas of the site (to the north of the site) up to an approximate elevation of 84m (therefore the RS220 site but no further). Booster pumps and pressure reducing valves would be required to service any areas at higher elevation than approximately 84m. Dunedin's water supply is fortunate in many areas to not require pumping. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. 3 Waters do not support servicing water supply for development above 84m elevation. It may be possible to consider development up to 84m pending further detailed analysis to investigate the feasibility of the proposed reservoir. Some major upstream network upgrades would be required in the future. At this stage the proposal is not supported from a water supply perspective. Further investigation and assessment is required.
Wastewater supply	Significant issues (manageable)	There is existing infrastructure within Scroggs Hill Road. Small extension required, however many areas of the site are at lower elevation to the adjacent road. For these areas, wastewater pumping may be required. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. While servicing by gravity would be possible for areas of the site with elevation similar to adjacent Scroggs Hill Road, 3 Waters do not support servicing for wastewater for areas of the site that would require pumping. Significant downstream network upgrades would also be required. At this stage the proposal is not supported from a wastewater servicing without an understanding of the balance of gravity and pumped reticulation. Further investigation and assessment is required.

Stormwater management	Some issues (manageable)	The proposed development's stormwater runoff contributes to overland flow path which flows down various valleys and gullies, eventually discharges over McIntosh Rd and finally into the river tributary before heading out to sea. The capacity of the gullies and channels are unknown therefore an attenuation assessment is required for the 100 year storm flows. Due to the large site area, onsite attenuation would be required. The campground downstream has had previous flooding issues. Provided the stormwater management rules in GF01 were applied to the whole proposed structure plan area the site may be considered developable, however 3 Waters have concerns over the affordability of the stormwater infrastructure.
Transport effects (local)	Significant issues (not manageable)	The site accesses Scroggs Hill Road which is a high risk rural road. The speed limit on this road is proposed to be reduced. Improvements will be required to Scroggs Hill Road, which may include increased signage and road markings, and potentially crash barriers, particularly at relevant intersections. (Updated 2022 comments): Rezoning GF01 to a residential zone would necessitate installation of urbanised transport infrastructure along Scroggs Road to link up with existing infrastructure at 50 Scroggs Hill Road. The speed limit on Scroggs Hill Road would need to be reduced. The site is located distant from public transport. Safety improvements may be required in the area. The southern extent of Scroggs Hill Road would require significant and substantial upgrades. The intersection with Brighton Road is also poorly aligned which makes the left turn in and right turn out movements extremely difficult, if not impossible. It is considered that with the additional development traffic that the intersection and hairpin curve would need to be improved. This would require substantial earthworks which have not been investigated at this stage. Further safety improvements need to be investigated on Seaview Road / McIntosh Road at the same time.
Transport effects (wider network)	Some issues (manageable)	(Updated 2022 comments): Safety upgrades and improvements would need to be investigated. Likewise, intersection upgrades would need to be investigated (e.g. Scroggs Hill Road / Brighton Road intersection).
Compact city – proximity to existing residential areas	Significant issues	The site is located approximately 380m from existing residential zoned properties.
Compact city - ability to develop land efficiently	Poor	Estimated feasible capacity of proposed rezoning area is 45 – 55 dwellings under Large Lot Residential 1 zoning
Effects on	No issues	

Manawhenua values		
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	The site is subject to easements for right of way, right to convey telecommunications and computer media and convey electricity and transform electricity. These are not expected to significantly affect development of the site.

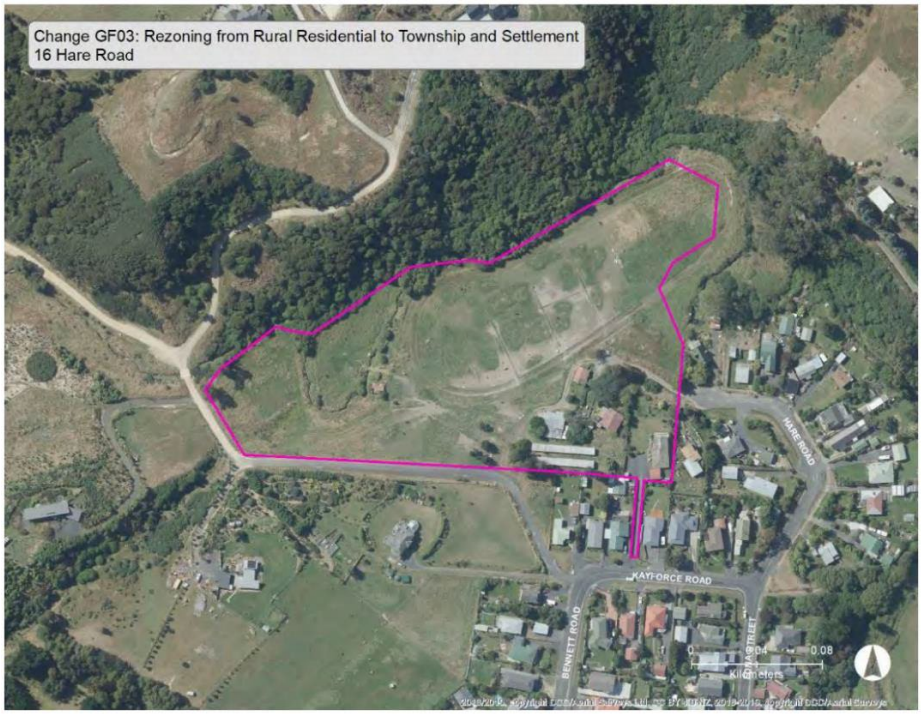
APPENDIX C.2 Rezoning Assessment Sheet – 201, 207, 211 Gladstone Road South (GF02)		
SITE DETAILS		
Change Number	GF02	
Site outline image		
Site Address	201, 207, and 211 Gladstone Road South	
Full area assessed	As shown in map above	
Site Area	3.2 hectares	
Current zoning	Rural Taieri Plain	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	No issues	
Aspect - Solar access	Very good	
Accessibility – Public Transportation	Poor	The nearest bus stop is approximately 2km away
Accessibility - Centres	Poor	Mosgiel principal centre is approximately 2,900m away

Accessibility – Schools	Very good	East Taieri School is the closest primary school, located 1.4km away
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. (Updated 2022 comments): These three sites are located adjacent to Large Lot and General Residential 1 development in East Taieri. To the west there is a broad expanse of rural pastoral land, zoned Rural Taieri plain. The large lot properties are framed by well-established boundary and amenity planting and/or typical rural fencing. Dwellings are predominantly single story. It is considered that General Residential development within GF02 and GF02a could integrate relatively well in this location without notable adverse effects on existing rural character values. The sites are relatively small and are adjacent to residential parts of East Taieri. There are existing clusters of buildings on these properties, both numerous farm sheds and dwellings, which will mean that the transition from rural to residential land-use would be less pronounced that if the sites had a more open, pastoral character. It is acknowledged, however, that for immediately adjoining residents, rezoning will result in the loss of a rural outlook and its replacement with a more enclosed, residential one. This will result in localized adverse visual amenity effects for some of these neighbouring residents. Controls to limit dwellings to single story may help to address the concerns of submitters that development within this area would block views to the Maungatua Range.
Impacts on productive rural land	Some issues	The entire site is Land Use Capability Class 3, which is defined as good land with moderate limitations to arable use. The area consists of three small sites unlikely to be materially productive in primary output.
Reverse sensitivity	Some issues (manageable)	The site adjoins a rail corridor. 2GP performance standards require acoustic insulation within 70m of a rail line.
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or	No issues	

viewshafts, important green or open spaces		
Natural Hazards	No issues	The site has a Hazard 3 (alluvial fan) overlay. Existing 2GP rules impose additional restrictions / consent requirements in relation to earthworks. The site was assessed as having a low hazard level associated with seismic instability and flood hazard. (Updated 2022 comments): Stantec have reviewed the original assessment, and have recommended no change from the original hazard assessment level. Stantec have advised the flood-related comments can be added in to the original assessment - the site lies within a flood area where hazards are typically mitigated through specific design as part of the subdivision.
Potable water supply	Some issues (manageable)	Minor network extension and some upstream network upgrades required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed. Mosgiel water supply is currently strained during dry hot summer periods and this would be exacerbated by further development. Projects to address these issues are in DCC's 10 year plan and the issues are expected to be resolved in 3-5 years. Due to the timeframe of the plan change process and then additional time to construct new homes, the potential short-term effects on water supply constraints are considered acceptable.
Wastewater supply	Some issues (manageable)	A minor network extension 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 next couple of years. Some further minor downstream upgrades would be required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Significant issues (manageable)	There is no DCC stormwater network in this area. Overland flowpaths 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.
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. (Updated 2022 comments): Urbanised transportation infrastructure will need to be provided on Gladstone Road South (replacement of existing swale drainage with footpath, kerb, and channel, widening and sealing of existing footpath, cycle infrastructure, review of street lighting). An Integrated Transport Assessment would be needed at the time of subdivision and would need to assess the Riccarton Road East / Gladstone Road South intersection. The new intersection into the development would be expected to comply with the Code of Subdivision and Austroads Guide to Road Design Part 4A Unsignalised and Signalised Intersections. The internal subdivision roading would need to be constructed in accordance with the standards contained within the Code of Subdivision and/or NZS4404:2010 – Land Development and Subdivision Infrastructure. A walking/cycle connection to Riccarton Road East should be considered. Similarly, consideration should be given to the potential for future westward urban expansion when designing the subdivision.
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.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	Estimated feasible capacity is 36 - 42 dwellings under General Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education	No issues	

• FENZ		
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues	The site is subject to easements for 3 waters 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.

APPENDIX C.3 Rezoning Assessment Sheet – 16 Hare Road and 7 Kayforce Road (GF03)		
SITE DETAILS		
Change Number	GF03	
Site outline image		
Site Address	16 Hare Road and 7 Kayforce Road	
Full area assessed	As shown in map above	
Site Area	3.54 hectares	
Current zoning	Rural Residential 1	
PROPOSAL DETAILS		
2GP Zone assessed	Township and Settlement	
ASSESSMENT CRITERIA		
Slope	No issues	
Aspect - Solar access	Good	The site is flat, but part may be shaded by the steep slope to the north in winter.
Accessibility – Public	Ok	The nearest bus stop is approximately 540m away.

Transportation		
Accessibility - Centres	Poor	Brighton neighbourhood centre is approximately 1,900m away
Accessibility – Schools	Very good	Big Rock Primary School is the closest primary and intermediate school, at approximately 2km away
Rural character/visual amenity	Some issues	The current character of the site is pastoral with forestry/scrub on an elevated slope adjoining the site. There is a small water course running through the site. The proposed rezoning will result in a loss of rural outlook for neighbouring properties but will have minor effects on the rural character and visual amenity at a broader scale. (Updated 2022 comments): The existing assessment for GF03 is largely accurate. There will be some localized adverse effects on existing views from some neighbouring properties. In terms of broader landscape character effects, it is considered that additional residential development on this small parcel of land, in a relatively unobtrusive location, adjacent to existing Town and Settlement development will have low effects on the character of the wider surrounding area
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues (manageable)	There is a small watercourse on the site. Access can be considered during any subdivision application.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	The site has a low hazard level associated with slope instability. (Updated 2022 comments): Stantec have reviewed the original assessment, and have recommended that the assessment be increased from a low level hazards to a medium level hazards site.

		There are medium level hazards associated with stormwater and flooding from Taylor Creek are present. Flood hazard assessments are required to identify suitability (or not) of the site for higher density development. It is likely that hazard mitigation will require extensive earthworks to develop the lower lying land within this site.
Potable water supply	Some issues (manageable)	No network extension required. Some major upstream network upgrades may be required in the future, but are not anticipated within the next 10 years. Future upgrades are proposed to be included in the Council's Infrastructure Strategy.
Wastewater supply	Significant issues (manageable)	A minor network extension would be required. The local wastewater infrastructure is relatively flat in places and so capacity issues for additional flow exist in part of the network. Significant downstream upgrades required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Some issues (manageable)	The site catchment discharges via various overland flow paths to Taylors Creek. There is not enough information available to conduct a capacity assessment of the creek, however there does not appear to be any concerns for flooding in the area. Attenuation would be required to mitigate erosion risks.
Transport effects (local)	Some issues (manageable)	No upgrades are required to the Hare Road access point. The footpaths on Hare Road would need to be built/upgraded to link the site to Edna Road. Localised intersection improvements may be required at the Kayforce Road/Hare Road intersection due to increased traffic generated by the development. The DCC Code of Subdivision limits the number of sites that can be accessed from a cul-de-sac. A second access point to the site will be required to avoid a restriction on yield. A direct pedestrian link to Kayforce Road would also be desirable. (Updated 2022 comments): The existing assessment generally stands. Overall, it is recommended that the developer be required to undertake an integrated transport assessment at the time of subdivision to ensure that the traffic and transport effects are adequately considered based on a final design of the development. This would need to include an analysis of the Kayforce Road/Hare Road/Edna Street intersection from a safety perspective and make recommendations for improvements. Similarly, the sharp bend adjacent to 1 Edna Street would need to be reviewed to ensure that the current alignment is sufficient to accommodate the increased traffic volumes. It is considered appropriate that the developer undertake any upgrades to external transport/roading infrastructure. The extent of these upgrades should be confirmed following a detailed transport assessment at the time of subdivision. Based on the size of the subdivision, it is recommended that consideration be

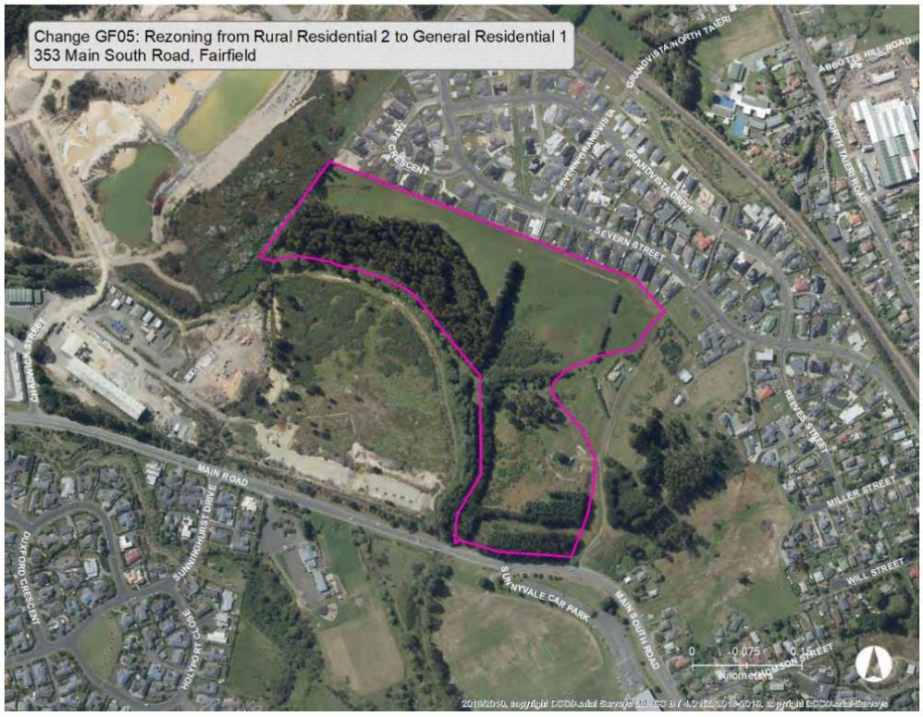
		given to future transportation linkages and potential connectivity.
Transport effects (wider network)	Significant issues (manageable)	Cumulative development in the Brighton / Waldronville area may result in the need for upgrades of: Brighton Road / Blackhead Road intersection and Brighton Road / Jeffcoates intersection, for safety and efficiency reasons; Uncontrolled intersections along Brighton Road, and isolated improvements to some existing controlled intersections; Brighton Road in discrete sections, i.e. crossing points, to mitigate safety and speed issues arising from increased traffic (noting a speed limit reduction for Brighton road is planned).
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	Estimated feasible capacity is 38 - 48 dwellings under Township and Settlement zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	No issues	

APPENDIX C.4 Rezoning Assessment Sheet – Part 127A Main Road, Fairfield (GF04)		
SITE DETAILS		
Change Number	GF04	
Site outline image		
Site Address	Part 127A Main Road Fairfield	
Full area assessed	As shown in map above	
Site Area	1.3 hectares	
Current zoning	Rural (hill slopes)	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Significant issues	The site is generally steeply sloping.
Aspect - Solar access	Poor	Steep slope generally facing south
Accessibility – Public Transportation	Very good	The nearest high frequency bus stop is approximately 150m away

Accessibility - Centres	Poor	Green Island principal centre is approximately 3,100m away
Accessibility – Schools	Very good	The site adjoins Fairfield School.
Rural character/visual amenity	No issues	The rural amenity and character values in this location are low, being grazed farmland, adjoined by residential development and the southern motorway. Rezoning would have no more than minor effect on rural character.
Impacts on productive rural land	Some issues	This site has LUC Class 3 soils. Given its small size and location between existing residential housing and the southern motorway, it is unlikely to be materially productive in terms of primary output.
Reverse sensitivity	Some issues	The site adjoins SH1. 2GP performance standards require acoustic insulation within 40m of a state highway.
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	The site assessment has indicated a low-to-medium hazard level. There are low level hazards associated with slope instability across most of the site, and medium level hazards associated with slope instability in the steeper parts of the site. Geotechnical investigation will be required prior to development.
Potable water supply	Some issues (manageable)	A minor network extension is required. Minor local and wider network upgrades are required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Wastewater supply	Significant issues (manageable)	The site is located at a lower elevation than the surrounding wastewater infrastructure and so a pumping station would be required from the lowest extent of the site to the identified connection point. Significant downstream upgrades may also be

		required on the wider network. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Some issues (manageable)	The site discharges via overland flow to the south-east along the northern boundary of the Dunedin Southern Motorway. Analysis of street view photography indicates that there is functioning piped stormwater infrastructure (an NZTA asset) but the capacity of this is unknown. Without further information, attenuation is assumed to be required.
Transport effects (local)	Some issues (manageable)	Consideration of connectivity will be required at subdivision stage. (Updated 2022 comments): DCC has recently approved a subdivision of the residential portion of the site. Access will be from a private access extending from Main Road, as existing easements were considered prohibitive in terms of creating a legal road. The site is relatively constrained in respect of access, which will likely limit the development yield of the site. This will need to be assessed at the time of subdivision, and the result may be a limit on the overall number of residential sites.
Transport effects (wider network)	No issues	
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	Estimated feasible capacity is 15 - 36 dwellings under General Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	

Other constraints on development (encumbrances, owner aspirations, appeals)	No issues	

APPENDIX C.5 Rezoning Assessment Sheet – Part 353 Main South Road, Fairfield (GF05)		
SITE DETAILS		
Change Number	GF05	
Site outline image		
Site Address	Part 353 Main South Road, Fairfield	
Full area assessed	As shown in map above	
Site Area	11.0 hectares	
Current zoning	Rural Residential 2	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	Parts of the site are steep and will be challenging to develop; other parts are relatively flat.
Aspect - Solar access	Ok to poor	The site ranges from gently to steeply sloping, in a south or south-west direction.

Accessibility – Public Transportation	Very good	The nearest high frequency bus stop is approximately 400m away
Accessibility - Centres	Ok	Green Island principal centre is approximately 900m away.
Accessibility – Schools	Very good	Abbotsford School (primary and intermediate) is approximately 480m away, accessed by foot through the Grandvista subdivision. Te Kura Kaupapa School is 150m from the southern part of the site. St Peter Chanel School and Green Island School (primary and intermediate) are within 1.5km.
Rural character/visual amenity	Some issues	The rural character in this location consists of grazed farmland, trees and scrub. Residential development will result in loss of some of this green area but will have a minor impact on rural character and visual amenity on a wider scale. (Updated 2022 comments): The existing assessment for GF05 is largely accurate. While the existing landcover is rural in character, the surrounding industrial and residential land-uses and the adjacent quarry to the northwest diminish a wider sense of ruralness. As such, effects on wider surrounding landscape character are considered to be relatively low in this surrounding context. Potential options to mitigate adverse visual amenity effects on these neighbouring residents should be investigated - this could include linkage of the existing playground on Severn St or limiting dwelling heights. A suitably planted buffer zone with adjacent industrial land should be considered.
Impacts on productive rural land	Some issues	The majority of the site is mapped as having LUC Class 3 soils. A small area of the site contains high class soils mapped area. Overall, this site is assessed as having relatively low productive value.
Reverse sensitivity	Some issues (manageable)	The site adjoins a scheduled mining activity to the west.
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important	No issues	

green or open spaces		
Natural Hazards	Significant issues (not manageable)	This site assessment has indicated a high level hazard associated with slope instability. An area on the eastern part of the site is subject to landslide hazard. Extensive geotechnical assessment is required in relation to any earthworks or development. The western part of the site has been identified as being of lower risk with potentially developable sites. As a result, the eastern part of part is not proposed to be rezoned. Part of the remaining area will be subject to a structure plan requiring geotechnical investigation prior to any development. (Updated 2022 comments): Stantec have reviewed the original assessment, and have recommended no change from the original hazard assessment level. GF05a is also assessed as having a high hazards level. It is recommended that specific geotechnical advice is sought before any zone changes in this area. From the desktop assessment, the site appears to be unsuitable for any subdivision or reduction in lot sizes where there are massive landslips present. Detailed site investigations would need to be undertaken to support any development proposals in this area.
Potable water supply	Some issues (manageable)	Some network upgrades required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Wastewater supply	Significant issues (manageable)	Significant infrastructure is required to connect site to the network. Some downstream wider network upgrades may be required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Some issues (manageable)	Stormwater from the sub-catchment travels via overland flow to Abbotts Creek before flowing to the coastal marine area. Attenuation is required to mitigate erosion of the natural flow channels downstream of the site which may be caused by the development.
Transport effects (local)	Some issues (manageable)	Consideration of connectivity will be required at subdivision stage. (Updated 2022 comments): It is not considered that there are any significant road safety deficiencies on this section of Main South Road, however ice may be a factor and any new road would need to be designed with this in mind. It will be important that the new intersection is located so that it complies with Austroads Guide to Road Design Part 4A Unsignalised and Signalised Intersections. This

		will need to be assessed and confirmed by the applicant's traffic engineer at the time of subdivision. Given the size of the subdivision, it is recommended that it would be prudent for road access to be provided through the development site, linking Severn Street with Main South Road. This would appear possible based on the land ownership status of 46 and 48 Severn Street, but discussion with the administering department (Parks and Recreation) would be required to confirm this. It is considered that a link road would provide a positive outcome for the transport network by providing a second point of access for the Grandvista Estate, as well as this development. The design of the new road will need to be determined following an integrated transport assessment which can be prepared by the developer at the time of subdivision.
Transport effects (wider network)	Significant issues (manageable)	There are existing safety issues at the North Taieri Road / Severn Street intersection (railway bridge) where current visibility is limited. No improvements are currently planned/funded. (Updated 2022 comments): In terms of the impacts of the rezoning on the wider transport network, assuming a feasible development potential of 49 dwellings, it is likely that a development of this size would generate in the order of 44 vehicle movements during the network peak hours. Given the already high number of vehicle movements on the surrounding roading network, it is unlikely that this level of traffic would have any significant impact on levels of service of nearby intersections.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	Estimated feasible capacity is 49 - 70 dwellings under General Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development	No issues	The site is subject to a 2GP appeal by The Coalition Preservation Trust to rezone the land from Rural Residential to Rural.

(encumbrances, owner aspirations, appeals)		

APPENDIX C.6 Rezoning Assessment Sheet – 27 Weir Street and Part 1 Allen Road, Green Island (GF06)		
SITE DETAILS		
Change Number	GF06	
Site outline image		
Site Address	27 Weir Street and Part 1 Allen Road, Green Island	
Full area assessed	As shown in map above	
Site Area	5.8 hectares	
Current zoning	Rural (coastal)	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	The site is mostly gently sloping with some areas of moderate slope towards Allen Road South.
Aspect - Solar access	Very good	The site is northwest facing
Accessibility – Public	Good	The nearest bus stop is approximately 300m away

Transportation		
Accessibility - Centres	Good	Green Island principal centre is approximately 800m away.
Accessibility – Schools	Very good	Green Island School is the closest primary and intermediate school to the site, at approximately 1.7km away.
Rural character/visual amenity	Some issues	The site is currently grazed farmland and has moderate rural character and amenity values. Residential development will result in loss of some of rural views from the adjoining residential area and Brighton Road, but will have a minor impact on rural character and visual amenity more broadly.
Impacts on productive rural land	Some issues	A relatively small portion of the site (17%) is mapped as having high class soils. The site does not contain any LUC class 1-3 land. Loss of the productive potential on this small area of land is likely to be outweighed by the benefits of providing additional housing close to Green Island principal centre.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	This site is assessed as having a medium level hazard, associated with flooding within the flood hazard area (resulting from overland flow from adjacent properties), slope instability and potentially liquefiable soil. Geotechnical assessment will be required prior to development.
Potable water supply	Some issues (manageable)	A very minor network extension is required to reach the existing network. Some upstream network upgrades are required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.

Wastewater supply	Some issues (manageable)	The wastewater infrastructure in the area is significantly restricted for self cleansing due to low gradients and a pumped rising main would be required. Modelling of the flows by the developer at the time of subdivision would be required to ensure feasibility of the proposal. A moderate network extension would be required to reach the existing network and minimal network upgrades would be required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Some issues (manageable)	The natural stormwater discharge from the site follows the contours across Brighton Road (via a 300mm culvert) to a DCC-owned stormwater pond immediately to the north-west. It is assumed that the pond was not designed anticipating development at this location and therefore attenuation is required.
Transport effects (local)	Significant issues (manageable)	Access to the site will need to be off Weir Street and Allen Road South, not Brighton Road. Allen Road South will need to be sealed and Weir Street may need to be upgraded to current engineering standards. An upgrade may be required to Weir Street /Brighton Road intersection. Consideration is required at subdivision stage in terms of connectivity. Speed reductions are proposed on Allen Road as part of a package of speed reductions within the overall area. This work is anticipated to take place this financial year. (Updated 2022 comments): While it is considered likely that transportation issues can be managed, it would be prudent to ensure that an ITA is undertaken at the subdivision stage to ensure that all potential transportation issues are evaluated in detail. This should be included as a subdivision requirement / performance standard. Access to Brighton Road will need to be managed and possibly restricted, given it is a Strategic Road in the Council's transportation network. Access should typically be from Local Roads as that is their primary function. At a minimum, Weir Street will need to be widened and footpath, kerb and channel will need to be constructed along the development site frontage. The intersection of Weir Street and Brighton Road will need to be assessed in the context of additional development traffic. It is likely that the intersection would need to be improved and the speed limit on Brighton Road adjusted. Operating speeds on this section of Brighton Road are likely to be high since land either side is largely undeveloped. There appears to be a boundary issue on this corner which should be resolved at the time of subdivision Allen Road South is unsealed and is unsuitable to service a residential

		development of this size. It would need to be upgraded and it is possible that this would require land acquisition to enable road widening. Allen Road South's intersection with Brighton Road is unlikely to be adequate to facilitate any significant increases in turning movements that might arise from this development. This will need to be assessed in an ITA as part of a subdivision application and improvements proposed and undertaken at the developer's expense if deemed necessary.
Transport effects (wider network)	Some issues (manageable)	(Updated 2022 comments): Development will necessitate upgrades to the existing transport network. The extent of these upgrades will need to be confirmed pending the results of the ITA. The upgrades will need to be undertaken by the developer(s) as part of a subdivision proposal
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	Estimated feasible capacity is 32 - 72 dwellings under General Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	Some issues (manageable)	The Ministry of Education raised concerns in relation to growth in the Green Island school catchment, based on significantly greater estimated growth than currently proposed. The relatively modest increase in capacity proposed is not anticipated to cause significant issues.
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	The site is subject to easement for right of way from a neighbouring property; however, this appears unlikely to significantly affect development on the site. 27 Weir Road is subject to Section 8 Mining Act 1971 and subject to Section 5 Coal Mines Act 1979. This is only an issue if there is a discovery of a significant mineral deposit.

APPENDIX C.7 Rezoning Assessment Sheet – 33 Emerson Street, Concord (GF07)		
SITE DETAILS		
Change Number	GF07	
Site outline image		
Site Address	33 Emerson Street, Concord	
Full area assessed	As shown in map above	
Site Area	3.4 hectares	
Current zoning	Rural (coastal)	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	The site generally slopes gently with some areas of moderate to steep slopes.
Aspect - Solar access	Very good	The site is north facing
Accessibility – Public	Good	The nearest high frequency bus stop is approximately 700m away

Transportation		
Accessibility - Centres	Poor	Corstorphine neighbourhood centre is approximately 1,700m away. Although not identified in the 2GP as a centre, there is also a small collection of services (hairdresser, takeaways and pub) in Concord, approximately 450m away.
Accessibility – Schools	Very good	Concord School is the closest primary school at approximately 600 metres from the site.
Rural character/visual amenity	Some issues	The site is part of a rural area, predominantly grazed farmland, above the existing developed area of Concord. Rural amenity values are low to moderate. The site is visible in long views from the southern motorway. Further development is likely to appear as a natural extension of the existing developed area, with overall minor effects on rural character and amenity.
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	This site is assessed as having a medium level hazard associated with slope instability. Geotechnical investigations will be required prior to development.
Potable water supply	Some issues (manageable)	A minor network extension is required. Moderate upstream network upgrades are required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.

Wastewater supply	Some issues (manageable)	Minor network extension required. Moderate downstream network upgrades required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Some issues (manageable)	The site currently discharges via an overland flow, through a 225mm pipeline along Emerson Street, and then to an open watercourse. The pipe is under capacity for the expected 10 year annual recurrence interval (ARI) and the capacity of the open watercourse is unknown. Therefore attenuation is required.
Transport effects (local)	Significant issues (not manageable)	Given the relatively low expected level of yield, no particular concerns exist in respect of this site. The site slopes up from Emerson Street so access construction may be difficult. Emerson Road curves where it adjoins the boundary of the site and the point of access needs to be carefully considered in order to maximise visibility for vehicles exiting the site. (Updated 2022 comments): The standard of Emerson Street itself is of significant concern when considering the prospect of reasonably dense residential development as proposed. As it passes the development site, Emerson Street typically comprises a 5.5m wide sealed carriageway with a dashed centre line and painted edge-lines. There is no kerb and channel, nor are there footpaths. The road is adjoined by a steep bank on the development side and slopes down into private property on the other side. There is also no street lighting. The road has a legal width of about 25m, though much of the land within the corridor is very steep and would likely require substantial earthworks and potentially retaining walls in order to make use of the land for roading purposes, such as footpaths and kerbs. Overall, it is considered that in the absence of any detailed information, DCC Transport does have some reservations around the feasibility of developing this property whilst at the same time ensuring the new residents are provided with appropriate levels of service from roading / transportation infrastructure perspective.
Transport effects (wider network)	Some issues (manageable)	A roundabout is planned at the Emerson / Blackhead Road intersection as part of currently programmed and funded works. There are a number of existing issues with the Kaikorai Valley 'on and off' ramps from the SH1 southern motorway. This intersection is currently being assessed with a view to installing roundabouts to improve SH1 access and egress arrangements. (Updated 2022 comments): It is considered unlikely that the vehicle traffic generated by an additional 28 dwellings would have any significant effects on the capacity of the wider roading network.

Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	Estimated feasible capacity is 23 - 28 dwellings under General Residential 1 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	No issues	

APPENDIX C.8 Rezoning Assessment Sheet – 19 Main South Road, Concord (GF08)		
SITE DETAILS		
Change Number	GF08	
Site outline image		
Site Address	19 Main South Road, Concord	
Full area assessed	As shown in map above	
Site Area	7.4 hectares	
Current zoning	Rural (hill slopes)	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1 / General Residential 2	
ASSESSMENT CRITERIA		
Slope	Some issues	The site generally slopes gently with some areas of moderate slope
Aspect - Solar access	Ok to poor	Generally southwest facing, and moderately sloping
Accessibility – Public Transportation	Very good	The site is within 100 metres from a high frequency bus route.

Accessibility - Centres	Poor	Corstorphine neighbourhood centre is approximately 1,900m away. Although not identified in the 2GP as a centre, there is also a small collection of services (hairdresser, takeaways and pub) in Concord, approximately 160m away.
Accessibility – Schools	Very good	Concord School (primary) is approximately 750 metres from the site.
Rural character/visual amenity	No issues	The site is located in a small area of rural land surrounded by residentially zoned land, adjacent to the southern motorway. It has a large church building and car park within the site. Rural amenity and character values are low. (Updated 2022 comments): The existing assessment for GF08 is largely accurate, residential rezoning will have relatively low effects on existing landscape character values. It is noted, however, that the northern part of the site appears less suitable for residential development that the lower slopes, due to steep topography and the narrow form of this area between Main South Road and SH1. Protection of the area of native planting along the creek should be maintained. A buffer strip adjacent to SH1 should be created to maintain amenity.
Impacts on productive rural land	No issues	
Reverse sensitivity	Some issues (manageable)	The site adjoining the Southern motorway (SH1). 2GP performance standards require acoustic insulation within 40m of a state highway.
Significant indigenous biodiversity	Some issues (manageable)	Native riparian revegetation plantings along the creek (a tributary of Kaikorai Stream) have been partially funded by DCC Biodiversity Fund grant. These are proposed to be protected through a structure plan rule.
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues (manageable)	There is a small watercourse on the site. Access can be considered during any subdivision application.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	No issues	The site is assessed as having a low hazard level associated with slope instability.

Potable water supply	Some issues (manageable)	Minimal network extension required. Some downstream network upgrades required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Wastewater supply	Some issues (manageable)	Minimal network extension would be required. There is a 375mm trunk main adjacent to the site but DCC is unable to determine the capacity of the network due to a lack of information. There are also several rising mains discharging into the trunk main immediately downstream from the site. The discharge from these rising mains is not known, however if they are flowing at full capacity the trunk main capacity may not be adequate. Some downstream network upgrades would be required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Some issues (manageable)	Stormwater from the site (and further upstream) flows through a culvert to the west of the property. The capacity of this culvert is not known but based on a high level assessment and contours, the culvert appears to have adequate capacity to accommodate development within the proposed site. Discharge is to the Kaikorai Stream and attenuation of flows on the site is likely to be required.
Transport effects (local)	Some issues (manageable)	There may be a requirement for traffic calming in the form of speed humps / raised tables along this section of Main South Road. The access will need to be carefully considered at the time of subdivision. (Updated 2022 comments): Any new roading and intersections would be expected to comply with the Dunedin Code of Subdivision, Austroads Guide to Road Design Part 4A – Unsignalised and Signalised Intersections, and NZS 4404:2010 – Land Development and Subdivision Infrastructure. It is considered that such matters can be addressed at the time of subdivision
Transport effects (wider network)	Some issues (manageable)	There are a number of existing issues with the Kaikorai Valley 'on and off' ramps from the SH1 southern motorway. This intersection is currently being assessed with a view to installing roundabouts to improve SH1 access and egress arrangements. (Updated 2022 comments): It is considered that the transport infrastructure in the vicinity of the site is generally sufficient to support a development of this size. It is not anticipated that any significant upgrades to existing transport infrastructure would be necessitated by the rezoning.
Compact city –	No issues	

proximity to existing residential areas		
Compact city - ability to develop land efficiently	Very good	Estimated feasible capacity 32 - 54 dwellings under a mix of General Residential 1 and General Residential 2 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	The site is subject to a number of easements, an encumbrance and other matters. It is not clear of the impact of these on development of the site. However, the site owners have requested rezoning to a mix of GR1 and GR2 density, so it is presumed that these matters will not significantly affect development.

APPENDIX C.9 Rezoning Assessment Sheet – 41-49 Three Mile Hill Road (GF09)		
SITE DETAILS		
Change Number	GF09	
Site outline image		
Site Address	41 – 49 Three Mile Hill Road	
Full area assessed	As shown in map above	
Site Area	1.16 hectares	
Current zoning	Rural Residential 1	
PROPOSAL DETAILS		
2GP Zone assessed	Large Lot Residential 1	
ASSESSMENT CRITERIA		
Slope	No issues	
Aspect - Solar access	Poor	Generally southwest facing, and moderately sloping
Accessibility – Public Transportation	Good	The nearest high frequency bus stop is approximately 800m away
Accessibility - Centres	Poor	Helensburgh neighbourhood centre is approximately 2,000m away
Accessibility – Schools	Very good	Halfway Bush School is the closest primary school to the site, approximately 1.8km away.

Rural character/visual amenity	No issues	
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	No issues	
Potable water supply	No issues	These sites are outside the area which DCC currently services and would need a restriction requiring self-servicing for water supply.
Wastewater supply	No issues	These sites are outside the area which DCC currently services and servicing for the low number of sites is unaffordable. Zoning would need a restriction requiring self-servicing for wastewater.
Stormwater management	No issues	These sites are outside the area which DCC currently services and servicing for the low number of sites is unaffordable. These sites require stormwater management due to unknown capacity of channels downstream. Zoning would need a restriction requiring self-servicing for stormwater.
Transport effects (local)	No issues	
Transport effects (wider network)	No issues	
Compact city – proximity to existing residential areas	No issues	

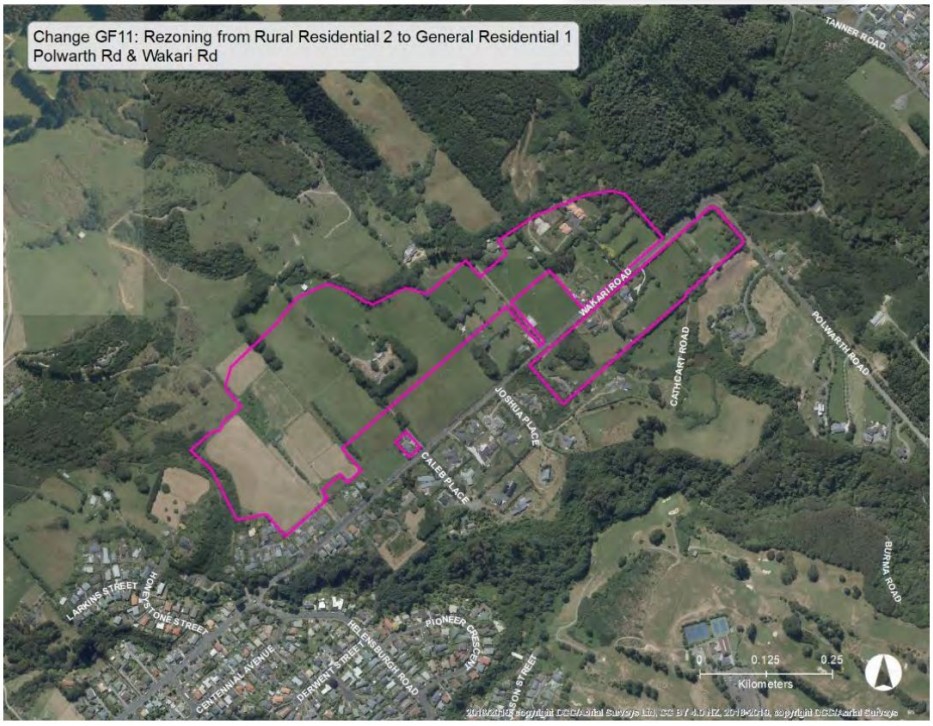
Compact city - ability to develop land efficiently	No issues	N/A - no additional development is planned at this site
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	No issues	

APPENDIX C.10 Rezoning Assessment Sheet – 32 and 45 Honeystone Street (GF10)		
SITE DETAILS		
Change Number	GF10	
Site outline image		
Site Address	32 and 45 Honeystone Street	
Full area assessed	As shown in map above	
Site Area	8.9 hectares	
Current zoning	Rural (hill slopes)	
PROPOSAL DETAILS		
2GP Zone assessed	Large Lot Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	The majority of the site is flat or gently sloping, with some steeper areas adjoining a gully and watercourse, and an area to the north of the site.
Aspect - Solar access	Good	Generally east facing

Accessibility – Public Transportation	Very good	The nearest high frequency bus stop is approximately 240m away.
Accessibility - Centres	Ok	Helensburgh neighbourhood centre is approximately 1,000m away
Accessibility – Schools	Very good	Wakari School is the closest primary school to the site, approximately 1.3km away.
Rural character/visual amenity	Some issues	The site is not easily viewed from nearby streets due to the nature of the topography, existing vegetation and the existing residential properties. There will be a loss of rural outlook for neighbouring properties, but minor effects on a broader scale. (Updated 2022 comments): The existing s32 assessment remains applicable. The site is not easily viewed from nearby streets due to the nature of the topography, existing vegetation, and existing residential properties. There will be a loss of rural outlook for neighbouring properties, but minor effects at a broader scale. Given the context of the adjacent SNL, it is appropriate to place some control on external materials of buildings to prevent the use of highly reflective materials or colours that contrast strongly with the surrounding environment.
Impacts on productive rural land	Some issues	Approximately half the site is mapped as having high class soils, but the site does not contain any LUC Class 1 to 3 land. There is potentially 6ha of productive land. The loss of primary productivity is relatively low.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Some issues (manageable)	The site supports a 0.2ha area of regenerating kanuka-broadleaved forest in the north-west of the site, which meets the criteria for ASBV. Vegetation along the creek adjoining 195 Wakari Road is mixed regenerating exotic and indigenous forest with heavy infestation of invasive weeds. Some of this vegetation should be retained as a riparian buffer (minimum of 5m either side) to the waterway which appears to be in good condition. A structure plan is proposed to protect these areas of vegetation. (see Appendix 8 of s32 report)
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues (manageable)	There is a small watercourse on the site. Access can be considered during any subdivision application.
Significant Trees, heritage items,	No issues	

important vistas or viewshafts, important green or open spaces		
Natural Hazards	Some issues (manageable)	The site is assessed as having a low level hazard associated with slope angles and geology of the site, and medium level hazard associated with slope instability within the wider area. Geotechnical assessment will be required prior to development.
Potable water supply	Some issues (manageable)	A very minor network extension is required. Some minor network upgrades are required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Wastewater supply	Some issues (manageable)	A very minor network extension would be required to service this site. The immediate downstream receiving infrastructure appears to have sufficient capacity to manage the additional flows from the proposed development. Minimal downstream upgrades would be required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Significant issues (manageable)	The post development flows would exceed the capacity of the existing 300mm culvert, with the excess flows following the overland flow path and posing a risk of flooding to private property. Attenuation will be required to avoid this occurring.
Transport effects (local)	Some issues (manageable)	Access is from a cul-de-sac. The DCC code of Subdivision limits the number of sites that can be accessed from a cul-de-sac, so the overall yield and the ability of the site to be connected to the wider network by footpath and cycleway links are important considerations. The existing legal width of Honeystone Street is substandard, and it is important that any new road constructed as part of the development is in accordance with current engineering standards. (Updated 2022 comments): The existing width of Honeystone Street is substandard, and subdivision would require increasing the legal width from 12.0m to 16.0m. It is considered that a transportation assessment should be undertaken at the time of subdivision to ensure that an appropriate internal roading layout / design is achieved.
Transport effects (wider network)	Significant issues (manageable)	A Local Area Traffic Management (LATM) study would be needed. Cumulative development in the area is likely to require an upgrade of Wakari Road in relation to formation standards, speed management treatments and safety upgrades for active modes. There are current ‘rat running' issues through the existing local streets to Helensburgh

		Road, which could be compounded by additional development, prompting the requirement for speed management treatments. The Helensburgh Road/Taieri Road intersection and the Wakari Road/Taieri Road intersection would need to be improved for safety and efficiency. (Updated 2022 comments): The Honeystone Street site could be considered alongside the Wakari Road sites (GF11), and the site could be used as a secondary access point to the 195 Wakari Road site. A bridge may be necessary to connect 45/32 Honeystone Street with the 195 Wakari Road site as they appear separated by a gully. Assuming 29 sites or more are developed at GF10, consideration should be given to a secondary access point. A transportation assessment should be undertaken at the time of subdivision to ensure that an appropriate layout/design is achieved.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	Estimated feasible capacity 28 - 29 dwellings under Large Lot Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	157 Wakari Road, a split zoned property, has a consent notice restricting building location and limiting development to one residential activity. This will prevent further development of this site unless the consent notice is removed.

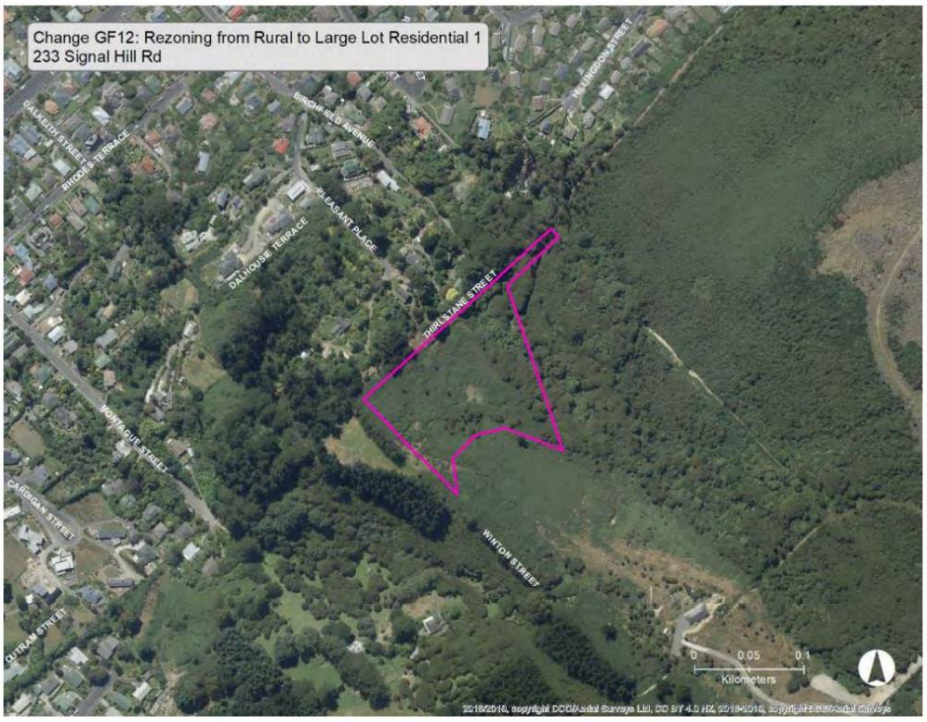
APPENDIX C.11 Rezoning Assessment Sheet – Wakari Road Area (GF11)		
SITE DETAILS		
Change Number	GF11	
Site outline image		
Site Address	307 Wakari Road, 312 Wakari Road, 280 Wakari Road, 296 Wakari Road, 245 Wakari Road (in part), 195 Wakari Road (in part), 311 Wakari Road (in part), 301 Wakari Road (in part), 265 Wakari Road (in part), 225 Wakari Road (in part).	
Full area assessed	As shown in map above	
Site Area	23.3 hectares	
Current zoning	Rural Residential 2	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	The majority of the site is gently to moderately sloping, with some steeper slopes on 280 Wakari Road.
Aspect - Solar access	Ok	Generally south or east facing, and gently to moderately sloping

Accessibility – Public Transportation	Good	The nearest high frequency bus stop is approximately 500m away.
Accessibility - Centres	Ok	Helensburgh neighbourhood centre is approximately 1,000m away
Accessibility – Schools	Very good	Wakari School is the closest primary school to the site, at approximately 1.4km. away
Rural character/visual amenity	Moderate issues	The site has relatively high rural character and amenity values and this will change with general residential scale development. Parts of the area are visible from Wakari Road and in long views from the Roslyn area. Note that part of the area adjoining the Wakari Road has already been identified for future residential development (RTZ). (Updated 2022 comments): It is considered that adverse effects of the proposed rezoning on existing rural rural/residential character values are likely to be moderate-high at a local level, adversely affecting the amenity of residents in the adjacent suburbs of Wakari and recreation users of the nearby walking and mountain biking tracks. There is a risk that GR1 development will contrast strongly with existing landscapes. Large Lot Residential development may be more appropriate, at least for some of the sites (particularly 205, 280, 296, and 312 Wakari Rd). Consideration should also be given to implementing low impact urban design and development principles. Consideration should also be given to establishing a planted buffer zone along Wakari Rd (and possibly linking this with the encumbrance).
Impacts on productive rural land	Some issues	The majority of this area is identified as having high class soils, but there are no LUC Class 1 - 3 soils. Most sites in the area are rural residential scale, with only two being of a scale that might result in loss of primary productivity. Overall losses per new site are likely to be low - moderate.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or	Some issues (manageable)	There are two scheduled trees (T1171 & T1172) along the south-eastern boundary of 312 Wakari Road. Existing 2GP rules require resource consent for activities affecting scheduled trees. The trees

viewshafts, important green or open spaces		should not affect the development potential of the area.
Natural Hazards	No issues	(Updated 2022 comments): Stantec have reviewed the original assessment, and have recommended no change from the original hazard assessment level (low). The risk of flooding, as raised by one submitter, is considered low and can be addressed through the subdivision process.
Potable water supply	Some issues (manageable)	Some local upstream network upgrades required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Wastewater supply	Some issues (manageable)	Localised downstream upgrade is required for part of site. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Significant issues (manageable)	The site discharges to open channels to the north-east and south-east. There is no capacity information for these channels. Attenuation is required to preserve the receiving environment from erosion. The site eventually discharges to Leith Stream, so there may be significant costs to attenuate stormwater to ensure flood hazard for the Leith Stream is not increased. These would be at the developers cost.
Transport effects (local)	Significant issues (manageable)	Consideration of connectivity will be required at subdivision stage. An upgrade of Wakari Road would be required in relation to formation standards, speed management treatments and safety upgrades for active modes. (Updated 2022 comments): As has been previously noted, Wakari Road would need to be upgraded in order to support the increased demand on the network. This upgrade is not currently planned or budgeted for. The upgrade of Wakari Road will need to include suitable provisions for pedestrians and cyclists, traffic capacity and street lighting. Currently, the formation standard of Wakari Road changes significantly at 205 Wakari Road. East of this property, the formed width of the road reduces and there is no kerb and channel or footpaths, and no space for on-road parking. There are steep banks either side of the road and there is a line of power poles which could create issues with footpath construction and/or road widening. It is possible land acquisition would be required. With respect to the design of the internal roading network for the subdivision, it would be appropriate for a structure plan to be developed which includes minimum road design and connectivity

		requirements. This should include: a. A requirement to link the site with the Honeystone Street mapped area with a road for the benefit of both sites. b. A requirement to provide access to the subdivision through 245 and 297-301 Wakari Road. Road access through 195 Wakari Road is considered beneficial from a strategic connectivity perspective but could be problematic to achieve due to the constrained width of the leg-in and location of existing driveways immediately adjacent. DCC Transport recommend that a structure plan is put in place over the wider area to ensure the site is developed holistically.
Transport effects (wider network)	Significant issues (manageable)	A Local Area Traffic Management (LATM) study would be needed. There are current 'rat running' issues through the existing local streets to Helensburgh Road which could be compounded by additional development, prompting the requirement for speed management treatments. The Helensburgh Road/Taieri Road intersection and the Wakari Road/Taieri Road intersection would need to be improved for safety and efficiency. (Updated 2022 comments): Provisions for public transport will need to be reviewed given the size of the development. Overall, it should be noted that this development will generate the need for substantial upgrades to the existing transport network, and the detail of these upgrades is not yet fully understood. More work is therefore required to identify the extent of the required upgrades and a funding plan should be developed to ensure the upgrades are delivered in a coherent, fair manner.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	Estimated feasible capacity of 240 - 308 dwellings under General Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	Some issues (manageable)	There are electricity transmission lines located on 312 Wakari Road. Existing 2GP rules require setbacks for earthworks from network utility structures. It is likely that the presence of the lines will reduce the development potential on this site.

Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	There is a building line restriction for future road widening on some sites; however, this falls within the road frontage setback and so should not affect development. There is a building restriction on 195 Wakari Road to provide a setback from the Bain Reserve, to protect its amenity and those of the adjacent residential properties. This will have minor impacts on development unless it is removed. Some sites are subject to easements in relation to rights of way and 3 waters infrastructure. These are unlikely to have any significant impacts on development. The property owner of 265 Wakari Road is not interested in developing this site. The site is subject to a 2GP appeal by The Coalition Preservation Trust to rezone the land from Rural Residential to Rural.

APPENDIX C.12 Rezoning Assessment Sheet – Part 233 Signal Hill Road (GF12)		
SITE DETAILS		
Change Number	GF12	
Site outline image		
Site Address	Part 233 Signal Hill Road	
Full area assessed	As shown in map above	
Site Area	1.7 hectares	
Current zoning	Rural (hill slopes)	
PROPOSAL DETAILS		
2GP Zone assessed	Large Lot Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	The majority of the site slopes moderately to steeply, with some areas of gentle slope.
Aspect - Solar access	Very good	North - north west facing
Accessibility – Public Transportation	Good	The nearest high frequency bus stop is approximately 400m away

		(Updated 2022 comments): If access is not possible from North Road, then the nearest bus stop would be on Opoho Road, 1,370m away.
Accessibility - Centres	Poor	Opoho suburban centre is approximately 4,000m away
Accessibility – Schools	Very good	North East Valley Normal School is the closest primary school, at approximately 1.3km from the site.
Rural character/visual amenity	Some issues	The site is not easily viewed from Signal Hill Road, due to the nature of the topography and existing vegetation. It may be visible from some houses on the west side of north-east valley. Potential development on the site is limited and will result in a small extension of houses above the existing residential areas. It is likely to have a minor effect on visual amenity/ rural character. (Updated 2022 comments): The existing s32 assessment remains applicable. Due to the relatively small area proposed for rezoning and its relatively unobtrusive location, effects on existing visual amenity and landscape character will be low.
Impacts on productive rural land	Some issues	A very small area (3%) of the site contains a high class soils mapped area. The benefits of housing are likely to outweigh the costs of loss of this area of potential primary productivity.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Some issues (manageable)	Part of the site contains native bush that meets the ASBV criteria. This is currently covenanted. It is proposed to include this area in the 2GP as an ASBV. This ASBV area will not be rezoned residential. (see Appendix 8 of s32 report) (Updated 2022 comments): General comment was sought from Wildlands, regarding the potential ecological impacts of increased residential development in the North East Valley. Increasing residential development has the potential to result in the clearance of mature indigenous tree species or clearance of gorse with regenerating indigenous forest trees. One of the most concerning adverse effects of increasing residential development is the fragmentation of existing indigenous vegetation. Areas of indigenous vegetation should therefore be protected from development, unless compensatory planting programmes are developed to address any loss. Intensive residential development has the potential to adversely affect the nearby Lindsay Creek through increased runoff (leading to increased erosion) and degraded water quality (though increased sedimentation). Areas of the upper Lindsay Creek still contain good stream habitats and biodiversity. If development is increased in

		North East Valley the existing vegetation surrounding the Creek (particularly the upper reaches) should be protected, and compensatory planting and enhancement measurements should be undertaken to further limit adverse effects of development. If residential development is increased in North East Valley it is likely to result in increased predation on and disturbance of indigenous fauna by pets (e.g. cats).
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues (manageable)	There is a small watercourse on the site. Access can be considered during any subdivision application.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	The site is assessed as having a low hazard level in part and a medium hazard level on the remainder of the site, associated with slope instability and stormwater management. Geotechnical investigations will be required prior to development. (Updated 2022 comments): Stantec have reviewed the original assessment, and have recommended no change from the original hazard assessment level. The development of this slope is will likely be dictated by geotechnical and stormwater constraints, rather than simply optimizing the boundaries for maximum geometric efficiency.
Potable water supply	Significant issues (manageable)	Servicing is theoretically possible and would require a moderate extension to connect to the reticulated network. There would be potential low flow pressure at higher elevations and a booster pump station and possibly reservoir may be required. Some downstream upgrades are also required. However, given that the site cannot be serviced for wastewater and on-site disposal is required (see below), servicing for water supply is not desirable, due to the risk of overloading the wastewater disposal system. To self-service feasibly, the minimum site size required would be 2,000m^2 (assuming max building site coverage, all used to collect rainwater, 25m^3 tank, 1,000l/d demand (supply available approx. 88% of year)). Large lot residential 1 zoning is therefore appropriate.
Wastewater supply	No issues	This site cannot be serviced for wastewater due to network capacity constraints downstream. On-site disposal of wastewater is therefore required. This requires a minimum of 1000m^2 site area, based on a 300m^2 disposal field area (200m^2 for primary area and 100m^2 for reserve area). Consequently, Large Lot Residential 1 zoning is

		necessary. A no DCC reticulated wastewater mapped area will be applied.
Stormwater management	Some issues (manageable)	There is a series of open and piped watercourses downstream of the site. The capacity of these is unknown. It is assumed they are under-capacity and not easily upgradeable. Attenuation is likely to be required.
Transport effects (local)	Significant issues (not manageable)	There is no apparent satisfactory means of accessing this site from North Road. There are particular problems should Pleasant Place be proposed as the access route, due to the restricted nature of the road. This is equally applicable to other roads in this vicinity. Therefore, any proposed increase in yields / intensification of development here would be particularly problematic from a Transport point of view. (Updated 2022 comments): The site has frontage to Thirlstane Street and Winton Street, both of these are paper roads. The Winton Street corridor intersects with Signal Hill Road, however, access in this location does not appear feasible because the land within the Winton Street alignment drops off sharply from the Signal Hill Road formation. Even if access could be practically provided for vehicles from Signal Hill Road, this road does not have any dedicated infrastructure for non-motorised road users. This is problematic given that this type of infrastructure would normally be expected in a residential zone. To the north, legal access is available from Thirlstane Street via Pleasant Place and Birchfield Avenue. The formation of both of these roads is considered inadequate to support any further residential development in their current state. The roads typically support one-way movement of traffic only and there are no footpaths. It is not clear as to the feasibility of upgrading these roads to an acceptable standard. It is considered that unless DCC Transport's concerns in relation to access can be adequately addressed, that a rezoning of this site cannot be supported from a traffic and transportation perspective.
Transport effects (wider network)	Significant issues (manageable)	There are existing congestion issues at North Road / Great King Street / Bank Street / Opoho Road intersection (near the Botanic Gardens). Additional development would add to the congestion. An efficiency assessment is currently being undertaken to determine potential solutions for this intersection.
Compact city – proximity to existing residential areas	No issues	

Compact city - ability to develop land efficiently	Poor	Site has an approximate feasible capacity of 6 dwellings under Large Lot Residential 1 zoning
Effects on Manawhenua values	Some issues (manageable)	Manawhenua raised concerns in relation to 3 waters management in proximity of water bodies. For this site, all 3 waters (wastewater, stormwater and water supply) will be managed on site. There is a waterbody running through the site. Appropriate management will be assessed through the subdivision and building consent processes.
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	Some issues (manageable)	SDHB raised concerns in relation to wastewater self-servicing generally. Appropriate management will be assessed through the subdivision and building consent processes.
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	The site is subject to an easement for right of way and services. This is unlikely to affect development. Part of the site is subject to a covenant to protect indigenous vegetation. This area is not proposed to be rezoned but an ASBV will be applied.

APPENDIX C.13 Rezoning Assessment Sheet – Part 336 and 336A Portobello Road, The Cove (GF14)		
SITE DETAILS		
Change Number	GF14	
Site outline image		
Site Address	Part 336 and 336A Portobello Road, The Cove	
Full area assessed	As shown in map above	
Site Area	1.2 hectares	
Current zoning	Rural Residential 2	
PROPOSAL DETAILS		
2GP Zone assessed	Township and Settlement	
ASSESSMENT CRITERIA		
Slope	Significant issues	The site slopes steeply.
Aspect - Solar access	Very good	The site slopes to the north
Accessibility – Public	Very good	There is a bus stop adjacent to the site on Portobello Road.

Transportation		
Accessibility - Centres	Poor	Macandrew Bay neighbourhood centre is approximately 3,900m away
Accessibility – Schools	Good	Grant Braes School is the closest primary school, at approximately 4.5km.
Rural character/visual amenity	Some issues	The site is not easily seen from Portobello Road and Weller Street due to the topography and roadside vegetation. Any development would be viewed alongside the existing township and settlement zoned area. (see Appendix 8 of s32 report) (Updated 2022 comments): The existing s32 assessment remains largely applicable. If GF14 is amended so that it only includes areas outside the new SNL overlay area (as amended by an appeal), effects of this rezoning on landscape character can be kept to low levels. As viewed from West Harbour locations, it is considered that this additional Township and Settlement area will visually integrate with the wider residential pattern of small, clustered development at the harbour edge. The diminishing effect of distance will also ensure that from West Harbour locations the proposed extent of additional residential development will not detract from perceptions of the SNL above the site.
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	Significant issues (manageable)	Site boundary amended to exclude overlap with the North West Peninsula SNL. (Updated 2022 comments): As a result of an appeal, SNL boundary has been adjusted at this location and there is a new overlap.
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important	No issues	

green or open spaces		
Natural Hazards	Some issues (manageable)	The site is assessed as having a medium hazard level associated with slope instability, particularly on steeper parts. Geotechnical assessment will be required prior to development. (Updated 2022 comments): Stantec have reviewed the original assessment, and have recommended no change from the original hazard assessment level. The ability to develop this site will be dependent on geotechnical investigations and advice.
Potable water supply	Some issues (manageable)	Water supply could be connected to Highcliff Road instead of Portobello Road to avoid the significant network extension that would be required. There are known issues meeting water supply demand on the peninsula in summer. However, based on the proposed total additional capacity of approximately 100 dwellings on the peninsula (through Variation 2 and 2GP appeals), the impact on the water supply network is considered to be minimal and acceptable.
Wastewater supply	Some issues (manageable)	Minimal network extension required. The network model lacks detail on the peninsula, so more detailed investigation is required to confirm whether any downstream upgrades are required. If any are required they will be relatively minor.
Stormwater management	Some issues (manageable)	The existing infrastructure is two 300mm diameter culverts below Portobello Road north of the site. The culverts would likely need to be upgraded for capacity and erosion protection for the overland flowpath.
Transport effects (local)	Significant issues (not manageable)	Consideration of connectivity will be required at subdivision stage, and whether improvement of the Weller Street and Portobello Road intersection is required. (Updated 2022 comments): Weller Street is substandard in its current state. It is significantly under width and intersects with Portobello Road at an acute angle. Further work is required to determine whether securing safe and efficient access to the sites is possible. It is considered that further design work and consideration of potential options is necessary before DCC Transport was able to provide its support to the proposed rezoning. While it is acknowledged that the subdivision consent process provides an appropriate platform to consider detailed matters such as vehicle access, it is considered counterintuitive for the Council to rezone land if it was not satisfied that it could be developed in accordance with the applicable zoning. Therefore, further work is requested regarding the upgrade of Wellers Rd to ensure that an acceptable outcome is possible before DCC Transport can support any rezoning.

Transport effects (wider network)	Significant issues (manageable)	The road network adjacent to the harbour, from the intersection of Marne Street / Portobello Road to approximately Strathallan Street is under performing during the morning and afternoon peak. Any additional development in the Otago Peninsula area will exacerbate this situation.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Poor	Site has an approximate feasible capacity of 5 - 8 dwellings under Township and Settlement zoning
Effects on Manawhenua values	Some issues (manageable)	The Ōtākou Harbour wāhi tupuna (ID 23) slightly encroaches into the northern part of the site. Existing 2GP rules require that effects on Manawhneua must be assessed as part of any consent applications required for activities in this area that may affect water quality / sedimentation in the harbour.
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	The site is subject to a number of easements for access and services to neighbouring properties. There is a building line restriction on 336 Portobello Road, which appears unlikely to significantly affect development on the site. The site is subject to a 2GP appeal by The Coalition Preservation Trust to rezone the land from Rural Residential to Rural.

APPENDIX C.14 Rezoning Assessment Sheet – Area surrounding Highcliff Road, Portobello (GF15, GF16, GF17)	
SITE DETAILS	
Change Number	GF15, GF16, GF17
Site outline image	 

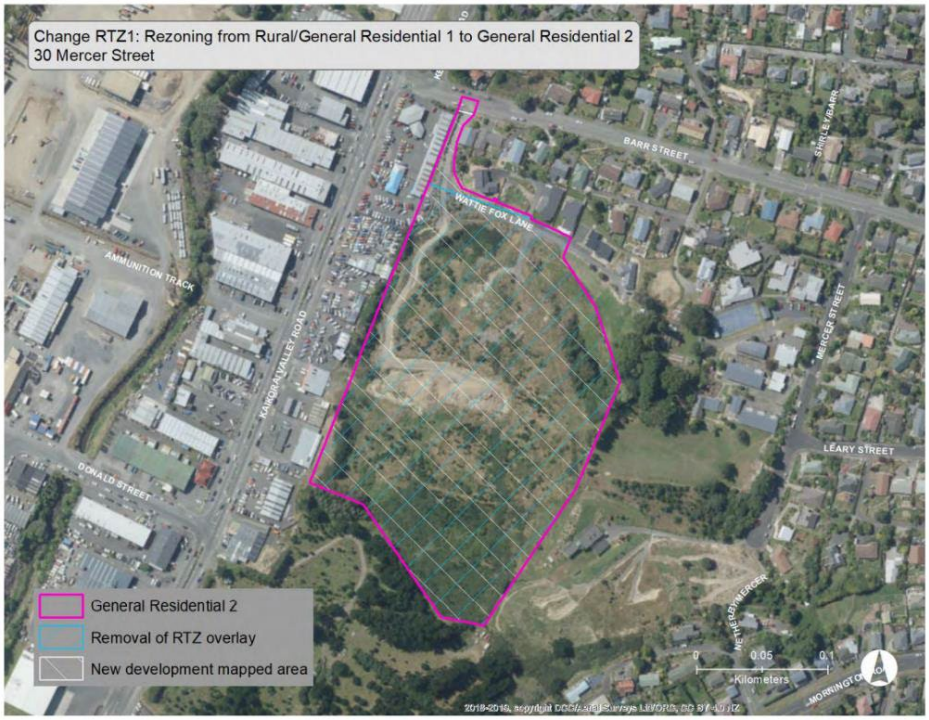
		
Site Address	GF15: 23 and 25 McAuley Road, 1693, 1687, 1683 and 1661 Highcliff Road, Portobello. GF16: 1694, 1680 Highcliff Road, 1664 Highcliff Road (in part), 27 Hereweka Street, Portobello. GF17: 26 McAuley Road (in part), Portobello.		
Full area assessed	As shown in map above		
Site Area	14.6 hectares		
Current zoning	Rural Residential 2		
PROPOSAL DETAILS			
2GP Zone assessed	Large Lot Residential 1 / Township & Settlement / Recreation (GF17)		
ASSESSMENT CRITERIA			
Slope	Some issues	The site has an undulating topography, generally moderately sloping. with a steep gully on GF15	
Aspect - Solar access	Good	GF15 generally slopes to the north-west. GF16 slopes to the north and east.	
Accessibility – Public Transportation	Good	The nearest bus stop is approximately 250m away from the closest part of the site	

Accessibility - Centres	Good	Portobello neighbourhood destination centre is approximately 400m away
Accessibility – Schools	Very good	Portobello School is the closest primary and intermediate school to the site, at approximately 1 km away.
Rural character/visual amenity	Moderate issues	The area to the west of Highcliff road (GF15 and GF17) includes a gully with quite steep topography, pockets of vegetation and ponds at the base of the gully. There are a small number of established dwellings around the boundary of the area. A landscape assessment undertaken of this area for the 2GP hearings (sites to the west of Highcliff Road) considered that the semi-rural, harbourside character of Portobello is considerably enhanced by this rural area, which provides a foreground for views of established dwellings and the harbour beyond, when travelling down Highcliff Road into Portobello. The area to the east of Highcliff Road (GF16) is an elevated area with patches of vegetation and rural residential scale development. This slopes sharply down to Hereweka Street. 27 Hereweka St is developed as a camp ground. The elevated parts will contribute to the semi-rural character enjoyed from Highcliff Road. Development will result in a local reduction of this rural character and amenity.
Impacts on productive rural land	No issues	Part of GF16 (the campground on Hereweka Street and a small area at 1604 Highcliff Road near the Latham Bay Stream) has high class soils. This is currently not used for any productive purposes and is a small area. The loss of these soils is not considered to be significant.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Some issues (manageable)	An area of potential biodiversity value within the wider area initially assessed (26 McAuley Road) has been excluded from the rezoning area. - this is now separate change GF17 - Recreation
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues (manageable)	The eastern part of the site (GF16) includes the Latham Bay Stream, which is subject to an esplanade strip. Existing 2GP rules require subdivision activities along the bank to provide an esplanade strip of a minimum width of 20m.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	

Natural Hazards	Some issues (manageable)	Part of the area (GF15, GF17 and part of GF16 closest to Highcliff road) has been assessed for hazards. The area has a medium hazard level associated with slope instability, particularly on steeper parts of the site. Geotechnical assessment will be required prior to development. (Updated 2022 comments): Stantec have reviewed the original assessment, and have recommended no change from the original hazard assessment level.
Potable water supply	Some issues (manageable)	Minor network extension required. The site is located at the end of the water supply network, beyond the last reservoir. There are known issues meeting demand in summer. However, based on the proposed total additional capacity of approximately 100 dwellings on the peninsula (through Variation 2 and 2GP appeals), the impact on the water supply network is considered to be minimal and acceptable.
Wastewater supply	Some issues (manageable)	A minor network extension would be required, as well as some downstream upgrades. The network model lacks detail on the peninsula, so more detailed investigation is required to confirm whether any downstream upgrades are required. Investigations are currently in progress. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Stormwater management	Some issues (manageable)	An overland flowpath traverses the site along the south-western boundary and there are three ponds in series that are assumed to provide some attenuation. However, their capacity is unknown and attenuation is consequently required to ensure there are no adverse stormwater impacts on the downstream environment (including downstream properties).
Transport effects (local)	Some issues (manageable)	It may be challenging to achieve satisfactory access points off Highcliff Road, where there is good visibility from both directions. Consideration of connectivity will be required at subdivision stage. There may also be a need for isolated barrier and signage improvements. Upgrades / extension of footpaths to connect the development sites to pedestrian infrastructure within existing settlements will be required. There is a proposed reduction of the speed limit on Highcliff Road to 60km/h. (Updated 2022 comments): It is considered unlikely that access would be obtained from Hereweka Street to the remainder of the area on the eastern side of Highcliff Road. This is because the foot of

		a very steep bank is situated about 20m into the site from Hereweka Street, which would make it untenable to provide for a road link from Hereweka Street to Highcliff Road. Upgrades to urban roading infrastructure would be required (e.g. footpaths) and these would need to link to existing infrastructure and may be challenging to provide for in places. It appears that some sections of the road present topographical constraints for footpath construction and would likely require construction of retaining walls or creation of suitable batter slopes within the site, but this has not been investigated in detail. It is considered that the width of the road is such that it would not be appropriate to reduce the width of the carriageway any further. Provisions for access would need to be considered at subdivision stage. The unformed section of McAuley Street appears problematic to be formed as a new intersection due to constrained sight distances to the north up Seaton Road. Land acquisition from 47 Seaton Road would solve this problem. It is not clear whether the unformed section of McAuley Street would be used for access and hence, this has not been investigated any further at this stage. Moss Street and the northern parts of McAuley Road are currently substandard and are not suitable for serving residential development in their current form. It is considered that these matters can be addressed at the time of subdivision. Overall, it is considered that the proposed rezoning can be supported from a traffic and transportation perspective, with provisions for access and necessary upgrades appropriate to consider at the time of subdivision.
Transport effects (wider network)	Significant issues (manageable)	The road network adjacent to the harbour, from the intersection of Marne Street / Portobello Road to approximately Strathallan Street is under performing during the morning and afternoon peak. Any additional development in the Otago Peninsula area will exacerbate this situation.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	GF15 has an approximate feasible capacity of 11 - 18 dwellings under Large Lot Residential 1 zoning. GF16 has an approximate feasible capacity of 39 - 93 dwellings under Township and Settlement zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern	No issues	

District Health Board ● Ministry for Education ● FENZ		
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	1661, 1664 &1694 Highcliff Road are subject to a building line restriction. This falls within the road frontage setback and is unlikely to affect development of the sites. Two sites are subject to easements for water supply. These also appear unlikely to affect development. The site is subject to a 2GP appeal by The Preservation Coalition Trust to rezone the land to rural. The owner of 23 and 25 McAuley Road is not supportive of rezoning and has no aspirations to develop this site; however, at the proposed Large Lot Residential 1 zoning for this area, there is no additional development potential for these sites (they are currently Rural Residential 2).

APPENDIX C.15 Rezoning Assessment Sheet – 30 Mercer Street (RTZ1)		
SITE DETAILS		
Change Number	RTZ1	
Site outline image		
Site Address	30 Mercer Street	
Full area assessed	As shown in map above	
Site Area	9.1 hectares	
Current zoning	Rural (RTZ)	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 2	
ASSESSMENT CRITERIA		
Slope	No / Some issues	The site slopes gently to moderately
Aspect - Solar access	Good	Generally sloping west
Accessibility – Public Transportation	Very good	The nearest high frequency bus stop is approximately 55m away.

Accessibility - Centres	Poor	The Mornington suburban centre is approximately 1,800m away
Accessibility – Schools	Very good	The site adjoins Balaclava primary school, although access may be necessary by road (approximately 450m)
Rural character/visual amenity	N/A	Not applicable
Impacts on productive rural land	N/A	Not applicable
Reverse sensitivity	N/A	Not applicable
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	The site is assessed as having a medium level hazard associated with slope instability. Geotechnical investigation will be required prior to development.
Potable water supply	No issues	A network extension is required to connect to the site.
Wastewater supply	Significant issues (manageable)	If the site is connected directly to the reticulated wastewater network, the additional flows would exacerbate downstream wastewater overflows. This is not supported. Development could be acceptable if an on-site wastewater detention system prevented discharge into the public network during peak flows. This solution would only be supported if over 50 dwellings were being developed, due to the ongoing maintenance required.
Stormwater management	Significant issues (manageable)	The site discharges to private and DCC piped and open channel network, the capacity of all of these is unknown. All discharges eventually enter the Kaikorai Stream. An attenuation assessment will need to be done and attenuation is likely to be required to prevent negative impacts on downstream properties and ensure no

		increase in flood hazard in Kaikorai Stream
Transport effects (local)	Significant issues (manageable)	Access could be problematic for this site, as it is steep. The Code of Subdivision limits the number of sites to be accessed off a cul de sac to 20, so two accesses are likely to be required. Whilst the site potentially has frontage to both Mercer Street and Barr Street, Mercer Street is very narrow and additional traffic may not be appropriate. Upgrades to Wattie Fox Lane are likely to be required. (Updated 2022 comments): It is emphasised that two connection points would be required for a subdivision of this size. It is considered that a loop road should be provided which connects Barr Street with Kaikorai Valley Road. Further consideration is needed to understand where such a loop road could connect to Kaikorai Valley Road. The existing standard of Wattie Fox Lane is problematic. It is considered that it would be necessary to demolish the existing dwelling at 127 Wattie Fox Lane to enable a wider road corridor to be created to access the subdivision. For a development of this size, a minimum corridor width of 16.0m would be necessary. The road would need to be constructed to Council's standards for a legal road and vested as part of a subdivision. This would include footpaths and street lighting. The location of Wattie Fox Lane is considered to be potentially problematic from a traffic engineering perspective and needs to be considered further. This is because it is very close to the Kenmure Road / Barr Street intersection. An Integrated Transport Assessment is required. In particular, the ITA will need to consider the design and location of the new intersection, and how this will safely integrate with the existing intersections nearby. The transport engineer will need to consult with DCC's intersection designers to achieve a coordinated, acceptable outcome.
Transport effects (wider network)	Significant issues (manageable)	There are plans to introduce a roundabout at the Barr St / Kaikorai Valley Road intersection. There are also proposals to introduce a central median along this section of Kaikorai Valley Road. However, this work is not currently funded. Work is also planned at the Kenmure road / Barr Street intersection. (Updated 2022 comments): Unless a roundabout at Kaikorai Valley Road / Barr Street is installed, the development would exacerbate existing issues at this intersection. Since the upgrades to this intersection are currently unfunded, and hence the timing of any upgrades is unknown, a conversation between the developer and the Council is likely to be necessary to allow for coordination between the two projects including agreement regarding the apportionment of the necessary funding.

Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	Site has an approximate feasible capacity of 49 - 79 dwellings under General Residential 2 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	No issues	

APPENDIX C.16 Rezoning Assessment Sheet – 87 Selwyn Street (RTZ2)		
SITE DETAILS		
Change Number	RTZ2	
Site outline image		
Site Address	87 Selwyn Street, 42 Crown Street, and 44 Crown Street, North East Valley	
Full area assessed	As shown in map above	
Site Area	4.9 hectares	
Current zoning	Rural Residential 2 (RTZ)	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 2	
ASSESSMENT CRITERIA		
Slope	Significant issues	Site slopes moderately to steeply
Aspect - Solar access	Good	Generally sloping east
Accessibility – Public Transportation	Very good	There is a high frequency bus route along North east Valley, approximately 280m from the site.

Accessibility - Centres	Poor	The Gardens suburban centre is approximately 1,400m away
Accessibility – Schools	Very good	North East Valley Normal School is the closest primary school, at approximately 500m from the site.
Rural character/visual amenity	Some issues	(Updated 2022 comments): It is considered that from both an urban ecology and amenity perspective, the protection of the bush remnants and the creation of a biodiversity strip along the western edge of the Lindsay Creek would have positive effects. It is recommended that consideration is given to linking the two remnant clusters of kanuka forest within the northern part of the site with additional native planting to create one larger area. This will both enhance existing biodiversity values and create a more prominent green space that will provide a less abrupt transition from this proposed rezoned site to the adjoining SNL overlay area.
Impacts on productive rural land	N/A	Not applicable
Reverse sensitivity	N/A	Not applicable
Significant indigenous biodiversity	Some issues (manageable)	Two areas of low diversity young regenerating kanuka (0.14ha and 0.2ha) are present on the northern part of the property, with an area of older more diverse broadleaved-kanuka forest (0.22ha) present on the southern corner boundary. All the patches are on steep slopes, and two are located in small gully systems with waterways present. The more diverse broadleaved-kanuka forest also supports tree fuchsia, mahoe, lemonwood and round-leaved coprosma. A structure plan mapped area is proposed to protect these areas of vegetation. (see Appendix 8 of s32 report) (Updated 2022 comments): General comment was sought from Wildlands, regarding the potential ecological impacts of increased residential development in the North East Valley. Increasing residential development has the potential to result in the clearance of mature indigenous tree species or clearance of gorse with regenerating indigenous forest trees. One of the most concerning adverse effects of increasing residential development is the fragmentation of existing indigenous vegetation. Areas of indigenous vegetation should therefore be protected from development, unless compensatory planting programmes are developed to address any loss. Intensive residential development has the potential to adversely affect the nearby Lindsay Creek through increased runoff (leading to increased erosion) and degraded water quality (though increased sedimentation). Areas of the upper Lindsay Creek still contain good stream habitats and biodiversity. If development is increased in North East Valley the existing vegetation surrounding the Creek (particularly the upper reaches) should be protected, and

		compensatory planting and enhancement measurements should be undertaken to further limit adverse effects of development. If residential development is increased in North East Valley it is likely to result in increased predation on and disturbance of indigenous fauna by pets (e.g. cats).
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Significant issues (not manageable)	(Updated 2022 comments): The site is assessed as having a high level hazard associated with slope instability. Geotechnical investigation will be required prior to development. If the site is assessed to be stable by a geotechnical engineer, it is likely that development on slopes greater than 15 degrees within this area will still have restrictions such as limitations to earthworks and control of stormwater runoff.
Potable water supply	Some issues (manageable)	A minor network extension and significant downstream upgrades would be required. The 10 year plan includes funding for all costs associated with extending 3 Waters servicing to new sites, where this is necessary or desired. The 10 year plan also includes the majority of funding required for existing network upgrades across the city, however the exact upgrades funded aren't yet confirmed.
Wastewater supply	Significant issues (manageable)	If the site is connected to the reticulated wastewater network, the additional flows would exacerbate downstream wastewater overflows. This is not supported. Development could be acceptable if an on-site wastewater detention system prevented discharge into the public network during peak flows. This solution would only be supported if over 50 dwellings were being developed, due to the ongoing maintenance required.
Stormwater management	Significant issues (manageable)	Lindsay Creek is immediately downstream from the site. This has a massive upstream and downstream catchment. The capacity of the creek is unknown and attenuation is therefore required to avoid adversely affecting downstream properties, as there is existing flood risk associated with the Lindsay Creek.
Transport effects (local)	Significant issues	The inclusion of this site in Variation 2 is predicated on the developer being responsible for the upgrade of the Selwyn Street bridge and

	(manageable)	the road between the bridge and the site. The intersection between Selwyn Street and North Road may need to be upgraded. (Updated 2022 comments): Consideration should be given to alternative connection points to reduce the reliance on Selwyn Street and enhance connections for pedestrians and cyclists and improve general inter-neighbourhood connectivity into Liberton/Pine Hill. Upgrades are required to Selwyn Street. A suitable internal roading network would need to be designed. It is emphasized that the developer would be required to address transportation issues and implement suitable solutions. It is considered appropriate for the developer to undertake an ITA by an independent transport planner / traffic engineer at the time of subdivision to ensure that the effects of the development on the transport network are properly considered and adequately mitigated. This is likely to require widening of the bridge and also the road carriageway north of the bridge, and construction of suitable pedestrian facilities with adequate drainage. The ITA will also consider the internal design of the new roading network, and consideration will need to be given as to the potential linkages from the development to other parts of the existing transport network.
Transport effects (wider network)	Significant issues (manageable)	There are existing congestion issues at North Road / Great King Street / Bank Street / Opoho Road intersection (near the Botanic Gardens). Additional development would add to the congestion. An efficiency assessment is currently being undertaken to determine potential solutions for this intersection.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	The site has an approximate feasible capacity of 48 - 50 dwellings under General Residential 2 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education	No issues	

• FENZ		
Other constraints on development (encumbrances, owner aspirations, appeals)	No issues	The site is subject to a 2GP appeal by The Coalition Preservation Trust to rezone the land from Rural Residential to Rural.

APPENDIX C.17 Rezoning Assessment Sheet – 13 Wattie Fox Lane (RTZ3)		
SITE DETAILS		
Change Number	RTZ3	
Site outline image		
Site Address	Part 13 Wattie Fox Lane	
Full area assessed	As shown in map above	
Site Area	2,350m^2 (area zoned Rural with RTZ)	
Current zoning	General Residential 1 / Rural (RTZ)	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	Site slopes gently to moderately. Site is a shallow gully which distorts the average slope of the site (17.38 degrees)
Aspect - Solar access	Ok	West to south-west slope
Accessibility – Public Transportation	Very good	350m to the nearest bus stop

Accessibility - Centres	Poor	2,050m to middle of Mornington suburban centre
Accessibility – Schools	Very good	The site is immediately adjacent to Balaclava Primary school, but access via roading network is approximately 600m
Rural character/visual amenity	N/A	Not applicable
Impacts on productive rural land	N/A	Not applicable
Reverse sensitivity	N/A	Not applicable
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	N/A	Not assessed - small site and immediately adjacent to RTZ1. It is considered that the RTZ1 assessment is also relevant for this site.
Potable water supply	N/A	Refer to comments on RTZ1
Wastewater supply	N/A	Refer to comments on RTZ1
Stormwater management	N/A	Refer to comments on RTZ1
Transport effects (local)	N/A	Refer to comments on RTZ1
Transport effects (wider network)	N/A	Refer to comments on RTZ1
Compact city – proximity to existing residential areas	No issues	

Compact city - ability to develop land efficiently	Ok	The site has an approximate feasible capacity of 3 dwellings under General Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	No issues	

APPENDIX C.18 Rezoning Assessment Sheet – Freeman Close and Lambert Street, Abbotsford (RS14)		
SITE DETAILS		
Change Number	RS14	
Site outline image		
Site Address	25 McMeakin Road, 42A Lambert Street, 45 McMeakin Road, part 188 North Taieri Road, 55 McMeakin Road, Abbotsford.	
Full area assessed	As shown in map above	
Site Area	54.6 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	Mean slope of 7.7 degrees
Aspect - Solar access	Poor	Generally south facing and moderately/significantly sloping
Accessibility – Public Transportation	Very good	There is a non-frequent bus stop approximately 131m away, and a high-frequency bus stop approximately 362m away.

Accessibility - Centres	Poor	The Green Island principal centre is approximately 2,390m away.
Accessibility – Schools	Very good	The nearest primary school is approximately 587m away.
Rural character/visual amenity	Significant issues	The land covered by RS14 comprises a large rural block of pastoral farmland north of Abbotsford. Topography is gently rolling to moderately steep in places. These hillslopes display some of the values attributed to the wider Hillslopes Rural Zone. They provide a rural backdrop to nearby residential Abbotsford, particularly the area at the end of North Taieri Road and its surrounding streets. Four submissions were received on RS14, each seeking to rezone a discrete area. A summarised assessment of landscape effects is provided below for each. S298.001 (rezone 25 McMeakin Road) - Residential development here would conform to the existing pattern of nearby residential development, which is restricted the flatter parts of the valley floor. It is not a highly prominent location as viewed from most nearby residential areas. S281.001 (rezone 42 Lambert Street) - Effects on wider surrounding rural character will be low-moderate. There will likely be some adverse visual amenity effects on a small number of nearby residents on Hyslop and Lambert Streets. S228.003 (rezone 45 McMeakin Road and part of 188 North Taieri Road) - There will likely be at least moderate adverse effects on existing rural amenity values associated with the proposed low density residential and general residential areas proposed. If considered alongside S302.002 and S298.001, the cumulative effect on rural character values of this large conversion of rural pastoral land to residential use would be considerable. Effects on existing rural character values are likely to be at least moderate when considered in isolation to S302.002 and s298.001 and high, if considered cumulatively. S302.001 (rezone 55 McMeakin Road) - Conversion of such as large area of distinctly rural land, which is part of a largely contiguous area of rural or rural residential land, will have high adverse effects on existing rural character values. There will also be adverse visual amenity effects on nearby rural residential and residential properties.
Impacts on productive rural land	Significant issues	The site is largely covered by LUC Class 3 soils. The land appears to be used in primary industry and development will result in loss of primary productive capacity in this area.
Reverse sensitivity	Some issues (manageable)	A small part of the site is adjacent to a rail corridor. 2GP performance standards require acoustic insulation within 70m of a rail line.
Significant indigenous biodiversity	No issues	

Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues (manageable)	Abbotsford Creek passes through the area. Access can be considered during any subdivision application.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	Some issues (manageable)	There is a scheduled tree within the site.
Natural Hazards	Significant issues (not manageable)	The site is assessed as having medium and high level hazards. There are high level hazards associated with slope instability and precedent for land instability within similar geology and slope angles nearby. There are also several medium level hazards associated with stormwater. Extensive geotechnical assessments are required to identify suitability (or not) of the site for higher density development.
Potable water supply	Significant issues (manageable)	There is a connection point close to the site boundary. A minor local network upgrade is required to service the site. Within the site are a 750mm diameter raw water trunk main, and a 200mm diameter treated water trunk main. The raw water trunk main is the primary source water feed to the Southern Water Treatment Plant as so is a critical water supply main for Dunedin. An access corridor and buffer easement would be required to ensure that DCC can access and maintain the raw water trunk main. The 200mm treated water main does not have adequate capacity for the proposed development and would need to be upgraded. Higher elevation areas of the site would require pumping. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. Significant upstream network upgrades required. Medium to long term to resolve. Eastern and south western sides of site are within the Mt Grand Raw Water Reservoir Dam Break Hazard Zone. Any development would need to either avoid development in this zone or be designed to mitigate property and life safety risks.
Wastewater supply	Some issues (manageable)	The existing wastewater infrastructure in this area gravitates to a pump station. Pump station capacity would likely need to be increased but verification of capacity is required through modelling. From a high-level desktop study it appears the local network has the capacity for the proposed development density and future development in the existing zoned catchment. Additional pumping would be required to service the lower lying western block of land but this may be undevelopable due to flood risks. 3 Waters prefers

		gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. Some downstream network upgrades required
Stormwater management	Significant issues (manageable)	The proposed site discharges to a stream which passes under the railway line downstream and is an upper tributary of Abbots Creek. No stormwater infrastructure is present downstream of the area to be developed. As the channel capacities are unable to be determined and the risk exists for flooding to neighbouring properties, it is advised to attenuate the 100yr ARI storm event to predevelopment levels to ensure post development flows are kept to predevelopment levels to ensure the stream integrity is maintained. Neighbouring properties have contacted DCC repeatedly about concerns over flooding, particularly as it relates to increasing development in the catchment. There is evidence that downstream watercourses are not properly maintained, increasing flood risks. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable, however despite this there is still significant risk to downstream landowners if watercourses are not being properly maintained.
Transport effects (local)	Significant issues (not manageable)	The site is constrained in terms of options for access, and it is considered that this level of development would create unacceptable pressure on North Taieri Road and the wider transport network. It is considered that, as a minimum, a development of this size would require construction of additional connection points to other parts of the existing transport network. There are existing legal roads in McMeakin Road and Abbots Hill Road which provide these possible connections. However, these roads are not fully formed and where they are formed, the standard is not suitable for residential development. They also have narrow reserve widths. DCC Transport is unable to provide its support for the proposed rezoning, based on the quantum of development being proposed and the lack of sufficient transport assessment on behalf of the submitters.
Transport effects (wider network)	Significant issues (not manageable)	There would be significant effects on the transport network, these effects have not been evaluated by the submitters. Since the development site is located at the end of North Taieri Road, a large proportion of this traffic would be required to travel the full length of the road when entering and leaving the site. The effects of this additional traffic on downstream intersections, such as North Taieri Road / Abbotsford Road and also the motorway on-ramp and nearby roundabouts, has not been assessed by the submitters. From a structural integrity perspective, it is unlikely that North Taieri Road would be able to accommodate the additional traffic loading. This is especially the case noting the amount of heavy construction traffic that would be required to access the site during earthworks/subdivision construction phase, and house construction phase. The railway bridge also presents constraints in this regard,

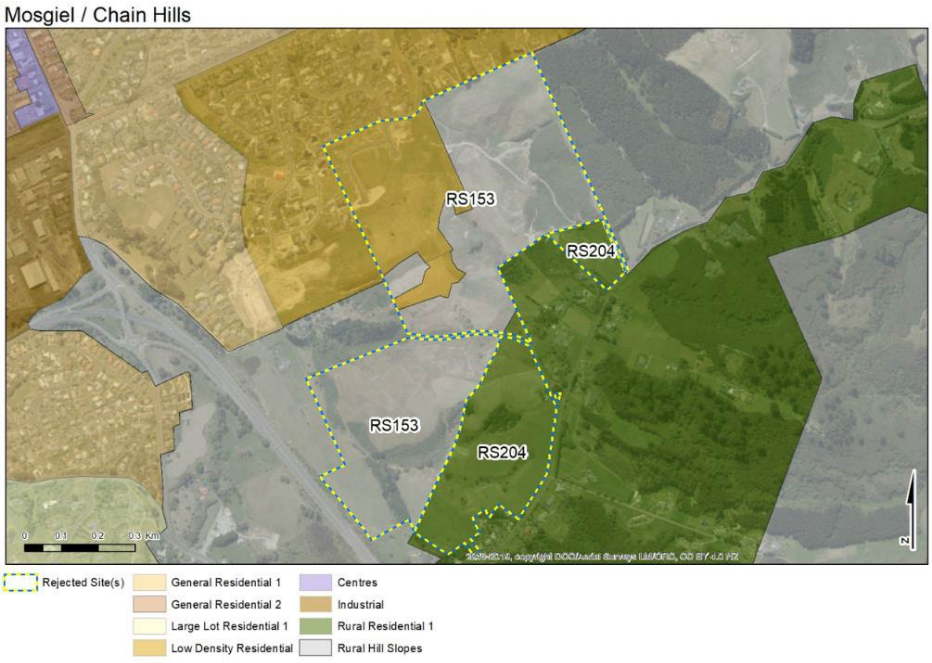
		since the bridge is structurally incapable of supporting heavy overweight type vehicles, such as mobile cranes. DCC Transport is unable to provide its support for the proposed rezoning, based on the quantum of development being proposed and the lack of sufficient transport assessment on behalf of the submitters.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	The site has an approximate feasible capacity of 761 dwellings under General Residential 1 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to easements, compensation certificate, consent notice.

APPENDIX C.19 Rezoning Assessment Sheet – 23 Sretlaw Place (RS110)		
SITE DETAILS		
Change Number	RS110	
Site outline image		
Site Address	23 Sretlaw Place	
Full area assessed	As shown in map above	
Site Area	1.9 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 14.8 degrees
Aspect - Solar access	Very Good	Generally sloping north
Accessibility – Public Transportation	Good	There is a non-frequent bus stop approximately 383m away.
Accessibility - Centres	Poor	The Roslyn suburban centre is approximately 2,270m away and the Brockville neighbourhood centre is approximately 1,200m away

Accessibility – Schools	Very good	The nearest primary school is approximately 1,039m away
Rural character/visual amenity	Some issues	The pastoral site comprises a relatively small, broadly rectangular block of land that borders Frasers Gully Reserve and the nearby Kaikorai Stream. The site is not highly prominent from surrounding publicly accessible locations, except from the reserve track that links Turnbull Street in Brockville with The Frasers Gully Track. The site is overlooked by some nearby residents on Sretlaw Street and there will likely be adverse visual amenity effects on nearby residents. For users of the reserve track that passes along the northern boundary of the site and across the hillside to the west of the site, there will be adverse visual amenity effects associated with residential development occurring in this location. In general, effects on wider rural character will be relatively low, given that this is a small remnant rural block adjacent to residential development, however, as addressed above there will be adverse effects on the natural character of this area, particularly for users of the nearby reserves track. It is considered that the 12-lot structure plan will visually integrate more successfully than the 17-lot plan. Mitigations including planting around the existing pond as proposed, boundary conditions, native planting buffer on northern boundary, rural type fencing, and other native planting is recommended.
Impacts on productive rural land	Some issues	A small portion of the site is assessed as having high class soils. The site does not contain any LUC class 1-3 land. Given its location immediately adjacent to existing General Residential 1 zoning and the small amount of high class soil present, the loss of primary productivity is likely to be low.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues	Northern part of the site is adjacent to Frasers Stream which is subject to an esplanade reserve. Existing 2GP rules require subdivision activities along the bank to provide an esplanade strip of a minimum width of 20m.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	

Natural Hazards	Some issues (manageable)	The site is assessed as having a low to medium hazard level associated slope instability. Geotechnical assessment will be required to confirm the stability of the site and address the landslide mapping concerns.
Potable water supply	No issues	Minor network extensions required to connect the site. There is a water connection within Sretlaw Place. Possibly some minor network upgrades required.
Wastewater supply	Significant issues (not considered manageable)	Minor network extension required to connect the site. The existing local infrastructure provides enough capacity for additional flow and achieves grade for self-cleaning. The site will require a pump system to be installed to connect to the existing infrastructure. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. Flow goes to Kaikorai Valley then South Dunedin in wet weather to reach Tahuna Wastewater Treatment Plant. Wastewater overflows occur into Kaikorai Stream and South Dunedin (entering Dunedin Harbour) including Surrey St affecting the environment and creating a public health risk. Significant downstream upgrades required to address this. Long term timeframe to resolve these
Stormwater management	Significant issues (not considered manageable)	Downstream of the site is Frasers Creek. Water flows from Fraser Creek into Kaikorai Stream. There are known flooding issues downstream at Glenelg St that affect Stone St roundabout and downstream areas. The capacity of Frasers Creek is unknown. Therefore on-site attenuation for the 100-year ARI storm flows has been assessed. The area of land required for stormwater management is over 20% of the total area of the site and is not considered feasible. ORC has flood hazard mapping of the Kaikorai Stream (*Flood hazard of Dunedin's urban streams, ORC, 2014*). Frasers Gully also has high ecological value. Potential degradation of Frasers Creek is counter to the principles of Te Mana o te Wai.
Transport effects (local)	Significant issues (manageable)	Access to the site is problematic, with access required over at least one of two private shared access lots (18 Sretlaw Place and/or 25 Sretlaw Place). These access lots are not of a standard that Council would accept to adopt as legal roads. For this to happen, they would need to be widened/upgraded to Code of Subdivision standards as part of a subdivision and vested back to the Council as legal roads. This would require agreement from other owners/users. Increased use of these access lots of private access-ways to the numbers being contemplated would be contrary to recent policies notified relating to number of lots accessed from a private way (where it is suggested that an access-way serving more than 12 sites should be made a legal road). Therefore, unless the developer is able to demonstrate suitable road access can be achieved, it is considered that development is constrained by lack of access.

Transport effects (wider network)	No issues	It is expected that development would have minimal impact on the wider transport network.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Ok	The site has an estimated capacity of 17 dwellings under the proposed structure plan. There is also a second structure plan for 12 dwellings.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to easements and a land covenant.

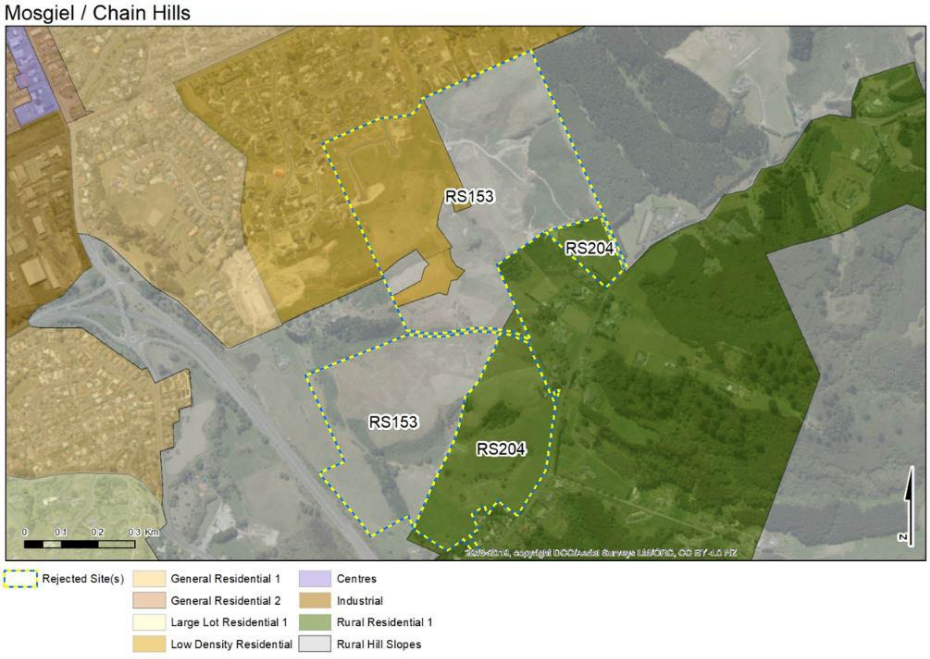
APPENDIX C.20 Rezoning Assessment Sheet – Chain Hills Area (RS153)		
SITE DETAILS		
Change Number	RS153	
Site outline image		
Site Address	RS153: 77, 121 Chain Hills Road, part 100 Irwin Logan Drive, 3-20 Jocelyn Way, 38 and 40-43 Irwin Logan Drive, 25-27 Pinfold Place	
Full area assessed	As shown in map above	
Site Area	51.2 hectares	
Current zoning	Rural, Rural Residential 1, Low Density Residential	
PROPOSAL DETAILS		
2GP Zone assessed	Mix of residential zones	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 23.5 degrees
Aspect - Solar access	Good	Generally sloping west
Accessibility – Public Transportation	Poor	There is a non-frequent bus stop approximately 1,145m away, and a high-frequency bus stop approximately 1,271m away.

Accessibility - Centres	Poor	The Mosgiel principal centre is approximately 2,580m away.
Accessibility – Schools	Very good	The nearest primary school is approximately 1,998m away.
Rural character/visual amenity	Significant issues	RS204 and RS153 and assessed together. The surrounding area consists of a series of broad ridges and gullies with a generally north-westerly aspect. Land cover is predominantly pastoral, with some areas of scrub and indigenous vegetation in the gullies and small blocks of Pine, Oregon and Eucalyptus trees. There is a pattern of rural residential development on the plateau ridge of Chain Hills. Higher density residential development is predominantly concentrated on the foothills. The supplied landscape assessment questions the appropriateness of a node of relatively intense residential development on the hilltop, separated from Mosgiel (and other existing urban areas) by steeper hill slope. The landscape assessment concludes that landscape and visual effects will be adverse / moderate – high and that the Rural Residential zoning should be retained in this area. The supplied landscape assessment identifies that the spread of residential land use into the mid-slope spur areas will be a significant departure for the Chain Hills landscape. The assessment concludes that these adverse effects will remain at a moderate level in the long term. The landscape assessment concludes that the extension of the current urban edge of Mosgiel up the lower slope areas of Chain Hills will integrate with landscape character and quality well and that adverse effects associated with this will be low (minor). The extent and location of the extension needs to be very carefully considered.
Impacts on productive rural land	Some issues	This site has LUC Class 3 soils. Given its location and the existing zoning nearby (both residential and Rural Residential), the primary productive capacity of the site is likely to be relatively low.
Reverse sensitivity	Some issues (manageable)	Part of 77 Chain Hills Road is adjacent to SH1. 2GP performance standards require acoustic insulation within 40m of a state highway.
Significant indigenous biodiversity	Some issues (manageable)	The site largely comprises pasture developed after clearance of gorse scrub. There are two areas of indigenous vegetation remaining. The largest is within a gully in the south of the proposed site that protrudes toward the east. When combined with the vegetation on the adjacent RS204 it would comprise a reasonable sized area of indigenous vegetation, which has been largely cleared from the Chain Hills ridge. These areas of indigenous forest warrant protection. Consideration should be given to retaining this indigenous vegetation and how this could be achieved (e.g. Scheduled ASBV or QEII covenant. Ecological restoration could be considered.
Natural landscapes and natural coastal	No issues	

character		
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	The site is assessed as having a medium hazard level associated with slope instability. It is not anticipated that this site will be generally unstable, though much of it will be unsuitable for structures. Geotechnical assessment will be required prior to development.
Potable water supply	Significant issues (manageable)	The existing infrastructure is inadequate to service the proposed development due to current supply constraints to Mosgiel in peak summer demand periods and low pressures for the higher elevation parts of the site, above 100m. Booster pumps would be required to service the higher elevation parts of the site as well as additional reservoir storage. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. Significant upstream network upgrades required and will be medium term timeframe to resolve.
Wastewater supply	Significant issues (manageable)	The site's northern location has an adequate connection to wastewater pipes, flow from some of these goes to Mosgiel Wastewater Treatment Plant (WWTP), while some goes to Green Island WWTP. However, the southern end of the proposed site is far from a connection point and unless easements through neighbouring property were obtained, would require pumping. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. Significant downstream network upgrades required as the network and treatment plants have issues in wet weather events. Medium to long term to resolve.
Stormwater management	Significant issues (manageable)	There is no stormwater infrastructure close to the subject site, flow is by open watercourse eventually connecting to ORC Schedule Drains (O5 to the west, also known as Quarry Creek, and O11 to the north). Both of these then connect to the Owhiro Stream. The Owhiro Stream has capacity issues in rainfall events when the Taieri River level is up and the Owhiro can not discharge into it, this results in flood issues in Mosgiel. There are known and significant flooding issues downstream of the proposed site and concerns from residents at Woodland Avenue, business in the Gladstone Road

		South Industrial area and East Taieri School. Some of the other developments adjacent to the proposed site have implemented stormwater management poorly, resulting in issues for residents and DCC. The fragmented nature of the stormwater management approach has exacerbated this. The capacity of the overland flowpaths is unknown, therefore onsite attenuation is required for 100-year storm event. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable, however there are concerns over the affordability of the stormwater infrastructure and the risks to downstream areas if stormwater management is not properly implemented.
Transport effects (local)	Significant issues (manageable)	The developer proposes a roading link between Chain Hills Road and Gladstone Road North. This would occur via an extension of Irwin Logan Drive. Chain Hills Road extends from Morris Road and terminates at a dead end after a length of about 3.4km. The proposed new intersection with Chain Hills Road is shown to be located about 800m north of the Morris Road intersection and hence, this section of Chain Hills Road would receive additional demand should the connection proceed. The proposed intersection location would require assessment against Austroads. This would need to be done by the developer's traffic engineer and submitted to Council for review. There are issues with safety on Chain Hills Road that the developer would need to address. In addition to upgrades on Chain Hills Road, there is also no footpath/cycle infrastructure on Morris Road which would likely be required should development proceed. An Integrated Transport Assessment is needed. This will need to include an analysis of traffic generation, but also distribution of existing and new traffic which could be changed with the proposed roading connection. This will allow the Council to better understand the scale of the potential wider effects of the connection on the wider transport network. In the absence of any detailed transport assessment / traffic modelling, the scale of this potential problem is not understood to a point where the Council is able to make a conclusive determination on Transport rounds as to the acceptability (or otherwise) of the development at this stage. Overall it is considered that in the absence of any detailed traffic/transport analysis, that DCC Transport is currently unable to provide its support to the proposed rezoning.
Transport effects (wider network)	Significant issues (manageable)	The submitter has not undertaken an analysis of the proposed road connection on the wider transport network. While DCC Transport is typically supportive of proposals that enhance network connectivity, this needs to be assessed in the context of the surrounding environment. An Integrated Transport Assessment is needed. This will need to include an analysis of traffic generation, but also distribution of existing and new traffic which could be changed with the proposed roading connection. This will allow the Council to better understand the scale of the potential wider effects of the

		connection on the wider transport network. In the absence of any detailed transport assessment / traffic modelling, the scale of this potential problem is not understood to a point where the Council is able to make a conclusive determination on Transport rounds as to the acceptability (or otherwise) of the development at this stage. Overall it is considered that in the absence of any detailed traffic/transport analysis, that DCC Transport is currently unable to provide its support to the proposed rezoning.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	RS204 and RS153 have an estimated combined capacity of 130 dwellings under the proposed structure plan
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	Some issues (manageable)	Waka Kotahi commented that development at this site will not support the approach of maintaining a contained urban form and restricting urban sprawl.
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Sites have multiple easements, land covenants, consent notices, building line restrictions, right of ways, caveats.

APPENDIX C.21 Rezoning Assessment Sheet – 21, 43, 55, 65, 75, 79, and 111 Chain Hills Road (RS204)		
SITE DETAILS		
Change Number	RS204	
Site outline image	Mosgiel / Chain Hills  	
Site Address	RS204: 21, 43, 55, 65, 75, 79 and 111 Chain Hills Road	
Full area assessed	As shown in map above	
Site Area	14.1 hectares	
Current zoning	Rural Residential 1	
PROPOSAL DETAILS		
2GP Zone assessed	Mix of residential zones	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 23.7 degrees
Aspect - Solar access	Good	Generally sloping west
Accessibility – Public Transportation	Ok	There is a non-frequent bus stop approximately 747m away.

Accessibility - Centres	Poor	The Mosgiel principal centre is approximately 4,420m away.
Accessibility – Schools	Good	The nearest primary school is approximately 3,837m away
Rural character/visual amenity	Significant issues	RS204 and RS153 and assessed together. The surrounding area consists of a series of broad ridges and gullies with a generally north-westerly aspect. Land cover is predominantly pastoral, with some areas of scrub and indigenous vegetation in the gullies and small blocks of Pine, Oregon and Eucalyptus trees. There is a pattern of rural residential development on the plateau ridge of Chain Hills. Higher density residential development is predominantly concentrated on the foothills. The supplied landscape assessment questions the appropriateness of a node of relatively intense residential development on the hilltop, separated from Mosgiel (and other existing urban areas) by steeper hill slope. The landscape assessment concludes that landscape and visual effects will be adverse / moderate – high and that the Rural Residential zoning should be retained in this area. The supplied landscape assessment identifies that the spread of residential land use into the mid-slope spur areas will be a significant departure for the Chain Hills landscape. The assessment concludes that these adverse effects will remain at a moderate level in the long term. The landscape assessment concludes that the extension of the current urban edge of Mosgiel up the lower slope areas of Chain Hills will integrate with landscape character and quality well and that adverse effects associated with this will be low (minor). The extent and location of the extension needs to be very carefully considered.
Impacts on productive rural land	Some issues	This site has LUC Class 3 soils. Given its location and existing zoning (Rural Residential 1), the primary productive capacity of the site is likely to be relatively low.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Some issues (manageable)	The site largely consists of pasture. The only area within the site that is dominated by indigenous species is a gully in the centre of the site that protrudes towards the east. Although the area of vegetation is dominated by indigenous tree species and provides habitat for fauna, this area is small and only meets the 2GP ecological significance criteria as an example of indigenous vegetation on land environments that retain less than 10% of their original cover. When combined with the vegetation on the adjacent RS153 site, it would comprise a reasonable sized area of indigenous vegetation which has been largely cleared from the Chain Hills ridge and would warrant protection. Consideration should be given to retaining this indigenous vegetation and how this could be achieved (e.g. Scheduled ASBV or QEII covenant). Ecological restoration could be considered.

Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	The site is assessed as having a low to medium hazard level associated with slope instability, particular within gully features. Geotechnical assessment will be required to confirm the stability of gullies across the site.
Potable water supply	Significant issues (manageable)	The existing infrastructure is inadequate to service the proposed development due to current supply constraints to Mosgiel in peak summer demand periods and low pressures for the higher elevation parts of the site, above 100m. Booster pumps would be required to service the higher elevation parts of the site as well as additional reservoir storage. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. Significant upstream network upgrades required and will be medium term timeframe to resolve.
Wastewater supply	Significant issues (manageable)	The site's northern location has an adequate connection to wastewater pipes, flow from some of these goes to Mosgiel Wastewater Treatment Plant (WWTP), while some goes to Green Island WWTP. However, the southern end of the proposed site is far from a connection point and unless easements through neighbouring property were obtained, would require pumping. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. Significant downstream network upgrades required as the network and treatment plants have issues in wet weather events. Medium to long term to resolve.
Stormwater management	Significant issues (manageable)	There is no stormwater infrastructure close to the subject site, flow is by open watercourse eventually connecting to ORC Schedule Drains (O5 to the west, also known as Quarry Creek, and O11 to the north). Both of these then connect to the Owhiro Stream. The Owhiro Stream has capacity issues in rainfall events when the Taieri River level is up and the Owhiro can not discharge into it, this results in flood issues in Mosgiel. There are known and significant

		flooding issues downstream of the proposed site and concerns from residents at Woodland Avenue, business in the Gladstone Road South Industrial area and East Taieri School. Some of the other developments adjacent to the proposed site have implemented stormwater management poorly, resulting in issues for residents and DCC. The fragmented nature of the stormwater management approach has exacerbated this. The capacity of the overland flowpaths is unknown, therefore onsite attenuation is required for 100-year storm event. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable, however there are concerns over the affordability of the stormwater infrastructure and the risks to downstream areas if stormwater management is not properly implemented.
Transport effects (local)	Significant issues (manageable)	The developer proposes a roading link between Chain Hills Road and Gladstone Road North. This would occur via an extension of Irwin Logan Drive. Chain Hills Road extends from Morris Road and terminates at a dead end after a length of about 3.4km. The proposed new intersection with Chain Hills Road is shown to be located about 800m north of the Morris Road intersection and hence, this section of Chain Hills Road would receive additional demand should the connection proceed. The proposed intersection location would require assessment against Austroads. This would need to be done by the developer's traffic engineer and submitted to Council for review. There are issues with safety on Chain Hills Road that the developer would need to address. In addition to upgrades on Chain Hills Road, there is also no footpath/cycle infrastructure on Morris Road which would likely be required should development proceed. An Integrated Transport Assessment is needed. This will need to include an analysis of traffic generation, but also distribution of existing and new traffic which could be changed with the proposed roading connection. This will allow the Council to better understand the scale of the potential wider effects of the connection on the wider transport network. In the absence of any detailed transport assessment / traffic modelling, the scale of this potential problem is not understood to a point where the Council is able to make a conclusive determination on Transport rounds as to the acceptability (or otherwise) of the development at this stage. Overall it is considered that in the absence of any detailed traffic/transport analysis, that DCC Transport is currently unable to provide its support to the proposed rezoning.
Transport effects (wider network)	Significant issues (manageable)	The submitter has not undertaken an analysis of the proposed road connection on the wider transport network. While DCC Transport is typically supportive of proposals that enhance network connectivity, this needs to be assessed in the context of the surrounding environment. An Integrated Transport Assessment is needed. This will need to include an analysis of traffic generation, but also

		distribution of existing and new traffic which could be changed with the proposed roading connection. This will allow the Council to better understand the scale of the potential wider effects of the connection on the wider transport network. In the absence of any detailed transport assessment / traffic modelling, the scale of this potential problem is not understood to a point where the Council is able to make a conclusive determination on Transport rounds as to the acceptability (or otherwise) of the development at this stage. Overall it is considered that in the absence of any detailed traffic/transport analysis, that DCC Transport is currently unable to provide its support to the proposed rezoning.
Compact city – proximity to existing residential areas	Some issues	
Compact city - ability to develop land efficiently	Very good	RS204 and RS153 have an estimated combined capacity of 130 dwellings under the proposed structure plan
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	Some issues (manageable)	Waka Kotahi commented that development at this site will not support the approach of maintaining a contained urban form and restricting urban sprawl.
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to easements, building line restrictions, and consent notices.

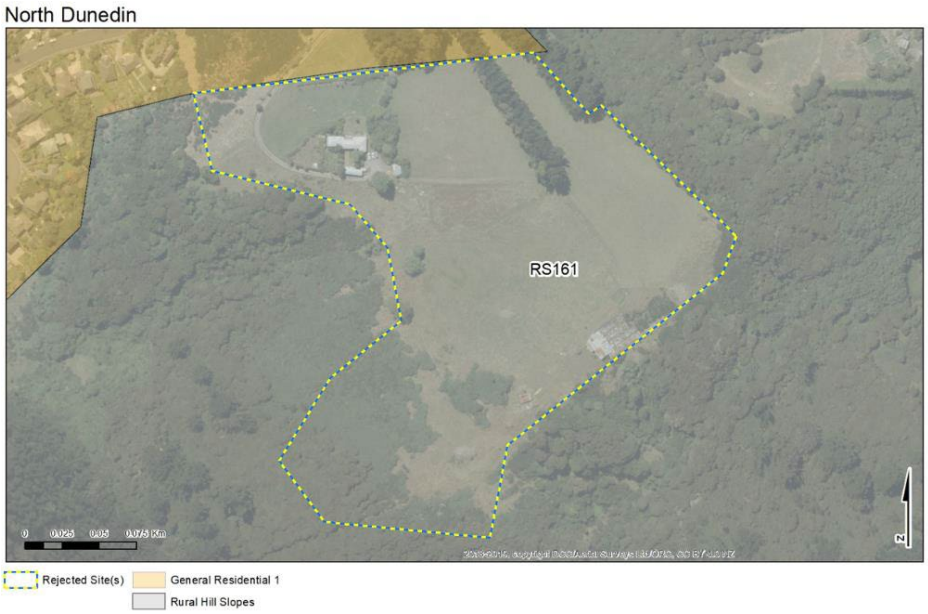
APPENDIX C.22 Rezoning Assessment Sheet – Part 155 Scroggs Hill Road (RS160)		
SITE DETAILS		
Change Number	RS160	
Site outline image		
Site Address	Part 155 Scroggs Hill Road	
Full area assessed	As shown in map above	
Site Area	40 hectares	
Current zoning	Rural Residential 1, Rural	
PROPOSAL DETAILS		
2GP Zone assessed	Mix of residential zoning (Township and Settlement, Large Lot Residential) as shown in submitters proposed structure plan.	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 16.6 degrees
Aspect - Solar access	Poor	Generally south facing and moderately/significantly sloping
Accessibility – Public Transportation	Poor	There is a non-frequent bus stop approximately 1,439m away, and a high-frequency bus stop approximately 11,586m away.

Accessibility - Centres	Poor	There is a non-frequent bus stop approximately 1,439m away, and a high-frequency bus stop approximately 11,586m away.
Accessibility – Schools	Good	The nearest primary school is approximately 2,160m away.
Rural character/visual amenity	Significant issues	Concentrating development on the lowest parts of the site, near the existing urban boundary would limit the extent of adverse effects on existing rural character values. The broader site has moderate to high rural character values related to gently rolling pastoral paddocks, a general visual dominance of natural elements, largely natural landforms expressive of formative processes and some areas of remnant native vegetation within gullies. The visual influence of buildings or other large structures is limited. There are also high quality, broad views to dramatic coastal landscapes and the nearby outstanding natural feature of Saddle Hill from the site and surrounding area. The extent of development should generally not exceed that proposed by GF01 to limit adverse effects on existing rural character values. Density should be restricted to Large Lot Residential. If potential adverse effects of earthworks can be managed, an extension of GF01 to the west and south of the water reservoir could be supported. It is considered that various mitigation measures including a planted buffer zones along the Scroggs Hill Road boundary, enhancement of gullies with locally appropriate native revegetation and implementation of low impact methods of managing stormwater, if appropriate, would help to limit potential adverse effects on existing rural character values.
Impacts on productive rural land	Some issues	The site is partially covered by LUC Class 3 soils and a very small amount of mapped high class soils. Given that the existing zoning is largely Rural Residential 1, the primary productive capacity of the site is likely to be relatively low.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Significant issues (manageable)	The two areas of vegetation in the western part of the site comprise significant indigenous vegetation as they meet several 2GP criteria. The indigenous wetland vegetation meets the criteria of rarity as wetlands are widely held to have been reduced to less than 10% of their original extent. A small amount of the indigenous forest is located on land environments that retain less than 20% of their original cover. The broadleaved and kānuka forest surrounding the wetland habitats are important as buffering vegetation. Additionally, the forest has important ecological context attributes including connectivity and provision of indigenous fauna habitat. The area of indigenous forest and wetland vegetation should be protected, either via remapping of RS160, scheduling an ASBV, or by a QEII covenant. Rezoning the entire area to T&S will result in adverse effects to biodiversity, a range of zoning could be considered.

Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues (manageable)	This site is assessed as having a medium level hazard associated with slope instability. Geotechnical investigations will be required prior to development. It is likely that removal of trees from the gully areas will exacerbate instability. The ridgelines and flatter areas appear to be suitable for building platforms.
Potable water supply	Significant issues (manageable)	The site elevation varies from approximately 116m to 6m. The site location is outside the area that is currently serviced by DCC. However, the Brighton Reservoir is within the site location at an elevation of approximately 86m. This is fed by Southern WTP, elevation approximately 114m. The existing infrastructure is adequate to service a portion of the proposed development at lower elevations. The topography of the site suggests that an additional reservoir would be required to service higher elevation areas of the site (to the north of the site) up to an approximate elevation of 84m (therefore the RS220 site but no further). Booster pumps and pressure reducing valves would be required to service any areas at higher elevation than approximately 84m. Dunedin's water supply is fortunate in many areas to not require pumping. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. 3 Waters do not support servicing water supply for development above 84m elevation. It may be possible to consider development up to 84m pending further detailed analysis to investigate the feasibility of the proposed reservoir. Some major upstream network upgrades would be required in the future. At this stage the proposal is not supported from a water supply perspective. Further investigation and assessment is required.
Wastewater supply	Significant issues (manageable)	There is existing infrastructure within Scroggs Hill Road. Small extension required, however many areas of the site are at lower elevation to the adjacent road. For these areas, wastewater pumping may be required. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. While servicing by gravity would be possible for areas of the site with elevation similar to adjacent Scroggs Hill Road, 3 Waters do not support servicing for wastewater for areas of the site that would require pumping.

		Significant downstream network upgrades would also be required. At this stage the proposal is not supported from a wastewater servicing without an understanding of the balance of gravity and pumped reticulation. Further investigation and assessment is required.
Stormwater management	Some issues (manageable)	The proposed development's stormwater runoff contributes to overland flow path which flows down various valleys and gullies, eventually discharges over McIntosh Rd and finally into the river tributary before heading out to sea. The capacity of the gullies and channels are unknown therefore an attenuation assessment is required for the 100 year storm flows. Due to the large site area, onsite attenuation would be required. The campground downstream has had previous flooding issues. Provided the stormwater management rules in GF01 were applied to the whole proposed structure plan area the site may be considered developable, however 3 Waters have concerns over the affordability of the stormwater infrastructure.
Transport effects (local)	Significant issues (not manageable)	The comments for GF01 are also relevant for this site. Overall, DCC Transport consider that in the absence of any detailed transportation assessments, that even at the lower end of development generated by the rejected sites (should they be rezoned), that DCC Transport would not be able to support these zone changes without significant Transportation infrastructure upgrades which may not be possible without land acquisition and significant engineering works. Works which even if achievable may not be acceptable from an overall Planning Policy perspective.
Transport effects (wider network)	Significant issues (not manageable)	The comments for GF01 are also relevant for this site. Overall, DCC Transport consider that in the absence of any detailed transportation assessments, that even at the lower end of development generated by the rejected sites (should they be rezoned), that DCC Transport would not be able to support these zone changes without significant Transportation infrastructure upgrades which may not be possible without land acquisition and significant engineering works. Works which even if achievable may not be acceptable from an overall Planning Policy perspective.
Compact city – proximity to existing residential areas	Significant issues	
Compact city - ability to develop land efficiently	Very good	The site has an estimated capacity of 102 dwellings under the proposed structure plan.
Effects on	No issues	

Manawhenua values		
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	Some issues (manageable)	Waka Kotahi commented that development at this site will not support the approach of maintaining a contained urban form and restricting urban sprawl.
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to a right of way, easement, fencing agreement in deed, caveats.

APPENDIX C.23 Rezoning Assessment Sheet – 210 Signal Hill Road (RS161)		
SITE DETAILS		
Change Number	RS161	
Site outline image		
Site Address	Part 210 Signal Hill Road	
Full area assessed	As shown in map above	
Site Area	6.3 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	Large Lot Residential 1, or Large Lot Residential 2, or Rural Residential 1	
ASSESSMENT CRITERIA		
Slope	Some issues	Mean slope of 10.7 degrees
Aspect - Solar access	Good	Generally sloping west
Accessibility – Public Transportation	Good	There is a high frequency bus stop 572m away.
Accessibility - Centres	Poor	The Gardens suburban centre is approximately 2,200m away.
Accessibility – Schools	Very good	The nearest primary school is approximately 849m away

Rural character/visual amenity	Significant issues	Landcover consists of a mix of pastoral areas, remnant native bush interspersed with some wilding pine, gorse, and exotic shelter vegetation. The site forms part of a contiguous area of rural zoned land that surrounds Signal Hill, part of an area sometimes referred to as Dunedin's outer green belt. The southern corner of the site meets a corner of the nearby Signal Hill Reserve. It is considered that the site retains values that are consistent with those of the wider Flagstaff-Mt Cargill SNL. It forms an important component of the rural backdrop to surrounding urban parts of Dunedin. There is a visual dominance of natural landscape elements within the site and landform is largely unmodified, with the exception of farm tracks and building platforms. It is considered that the proposed development controls and the house site locations around the periphery of the adjoining bush areas will likely help to reduce the visual prominence of dwellings from some surrounding locations. However, on balance, it is considered that this proposed rezoning to residential land-use would likely have at least moderate adverse effects on existing landscape values of this SNL related to the currently low impact of built elements and relative dominance of natural landscape elements.
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Significant issues (manageable)	The area of kānuka forest on the south western margin of the proposed rezoned area warrants protection from development. Other kānuka and broadleaved forest on the property, while affected by wilding conifers, provides significant habitat for indigenous forest birds and also warrants protection. Consideration should be given to protection of the regenerating forest and kānuka forest within the rezoning area, and of the remaining indigenous forest on the property, either as an Area of Significant Biodiversity Value scheduled in the Dunedin District Plan, or by a QEII covenant.
Natural landscapes and natural coastal character	Significant issues (not manageable)	Entire area overlaps with the Flagstaff-Mt Cargill Significant Natural Landscape Overlay Zone.
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	

Natural Hazards	No issues	The site is assessed as having low level hazards associated with slope instability.
Potable water supply	Some issues (manageable)	A minor local network extension would be required to connect the site to the existing network. Significant upstream upgrades required. Note that water supply would not be provided if the site were to be zoned to Rural Residential. Self-servicing for water supply would be necessary under this zoning. This has been assessed and is considered to be constrained, self-servicing may be possible in this zoning.
Wastewater supply	Significant issues (not considered manageable)	A minor local network extension would be required to connect the site to the existing network. The existing local infrastructure provides enough capacity for additional flow and achieves the grade for self-cleaning. Downstream of the site wastewater flows enter an infrastructure constrained mapped area (ICMA) which eventually flows into a trunk main down North Road. There are existing wastewater overflows occurring in wet weather in North Road with discharge to the environment (Lindsay Creek). Additional flows would exacerbate this. The site should not be rezoned until wastewater upgrades are completed. Medium to long timeframe for these. Note that wastewater servicing would not be provided if the site were to be zoned to Rural Residential. Self-servicing for wastewater would be necessary under Rural Residential zoning. Self-servicing for wastewater is feasible, however, would not be supported if serviced for water supply as this would risk overloading of on-site wastewater disposal systems.
Stormwater management	Some issues (manageable)	The existing receiving stormwater's open channel (located downstream of the site location) capacity is unknown. It is assumed that the infrastructure is not easily upgradeable. Due to the unknown capacity of the open channel on-site attenuation to meet the 100-year ARI conditions has been assessed to ensure that post-development flows do not exceed existing conditions. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable, however there are concerns over the affordability of the stormwater infrastructure.
Transport effects (local)	Some issues (manageable)	Large Lot Residential zoning may result in a density where residents would expect urbanised transport infrastructure to be provided which is not currently in place, such as footpaths (or, if density low enough, a shoulder on the road). This would best be determined at the time of subdivision. However, prior to rezoning, it is recommended that the developer be required to confirm that there are no insurmountable constraints (including the steep embankment and utility poles in places) that would prevent footpath construction linking the development site with the existing footpath kerb and

		channel outside 188 Signal Hill Road. Details could then be deferred until the time of subdivision.
Transport effects (wider network)	No issues	It is considered that the rezoning would have only an insignificant effect on the wider transport network because the quantum of development being considered is relatively small.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Poor	The site has an approximate feasible capacity of 11 dwellings under Large Lot Residential 2 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to batter rights (in gross).

APPENDIX C.24 Rezoning Assessment Sheet – 41 Emerson Street (RS169)		
SITE DETAILS		
Change Number	RS169	
Site outline image		
Site Address	41 Emerson Street	
Full area assessed	As shown in map above	
Site Area	2.4 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 14.3 degrees
Aspect - Solar access	Very good	Generally sloping north
Accessibility – Public Transportation	Ok	There is a non-frequent bus stop approximately 654m away, and a high-frequency bus stop approximately 1,443m away.
Accessibility - Centres	Poor	The Corstorphine neighbourhood centre is approximately 1,571m away, and the Caversham suburban centre approximately 2,990m

		away.
Accessibility – Schools	Very good	The nearest primary school is approximately 539m away.
Rural character/visual amenity	Some issues	The site forms part of the eastern edge of a broader band of rural land, which provides a backdrop to nearby parts of Concord and Green Island. Most of the site has a pastoral landcover. The site is visible from residential parts of Concord and Corstorphine to the east and from some nearby sections of SH1. It is considered that rezoning of this site needs to be considered in the context of the proposed rezoning of the adjacent site at 33 Emerson Street (GF07). If rezoning of 33 Emerson Street proceeds, then the rezoning of 41 Emerson Street would likely be seen as a logical extension. Alternatively, if rezoning of 33 Emerson Street did not proceed, General Residential 1 development within 41 Emerson Street, could be seen as a satellite node of residential development separated from nearby residential development by rural land. It is considered that general residential zoning in this location would have low-moderate adverse visual amenity effects on nearby areas in the context of the adjacent rezoning of 33 Emerson Street and the close proximity to existing residential development within the suburb of Concord. Rezoning would likely be seen as a logical extension of neighbouring residential areas. There will, nevertheless, be some adverse effects on existing rural character attributes of this site which are currently influenced by a general visual dominance of natural elements over human landscape elements and limited visual influence of large-scale structures.
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	

Natural Hazards	Some issues (manageable)	This site is assessed as having a medium level hazard associated with slope instability. Geotechnical investigations will be required prior to development.
Potable water supply	Some issues (manageable)	A minor network extension is required. Moderate upstream network upgrades are required.
Wastewater supply	Some issues (manageable)	A minor network extension required. Moderate downstream network upgrades required.
Stormwater management	Some issues (manageable)	The site currently discharges via an overland flowpath, through a 225mm pipeline along Emerson Street, and then to an open watercourse. The pipe is under capacity for the expected 10-year annual recurrence interval (ARI) and the capacity of the open watercourse is unknown. Therefore, attenuation is required. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable.
Transport effects (local)	Significant issues (not manageable)	The existing transport infrastructure on Emerson Street is inadequate to accommodate urbanised development such as this. At a minimum, Emerson Street would need to be upgraded to an urban roading standard and nearby intersections would need to be assessed with the additional traffic volumes to determine what upgrades would be required. In the absence of any supporting transportation information, DCC Transport is unable to provide its support this rezoning
Transport effects (wider network)	Significant issues (not manageable)	Additional dwellings have the potential to have an impact on the transport network and further assessment would need to be undertaken by the submitter to further understand and evaluate these effects. In the absence of any supporting transportation information, DCC Transport is unable to provide its support this rezoning
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	The site has an approximate feasible capacity of 27 dwellings under General Residential 1 zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators	No issues	

• Southern District Health Board • Ministry for Education • FENZ		
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to a fencing agreement in transfer.

APPENDIX C.25 Rezoning Assessment Sheet – Part 103, 105, 107 Hall Road, Sawyers Bay (RS170)		
SITE DETAILS		
Change Number	RS170	
Site outline image		
Site Address	Part 103, 105, 107 Hall Road, Sawyers Bay	
Full area assessed	As shown in map above	
Site Area	1.3 hectares	
Current zoning	Rural Residential 1	
PROPOSAL DETAILS		
2GP Zone assessed	Some form of residential zoning	
ASSESSMENT CRITERIA		
Slope	No issues	Mean slope of 5.8 degrees
Aspect - Solar access	Very good	Flat/gently sloping
Accessibility – Public Transportation	Good	There is a non-frequent bus stop approximately 318m away.
Accessibility - Centres	Poor	The Port Chalmers principal centre is approximately 2,800m away.

Accessibility – Schools	Very good	The nearest primary school is approximately 1,100m away
Rural character/visual amenity	Some issues	103 Hall Road and the part of 105 Hall Road subject to the rezoning submission are residential properties, both with well-established curtilage vegetation. 107 Hall Road consists of a small flat to gently undulating pastural paddock with a cluster of trees to the north. It is considered that Large Lot residential sites could be accommodated in this location with relatively low adverse effects on existing rural-residential character or visual amenity.
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	Some issues (manageable)	Part of the site includes the Sawyers Bay Stream which is subject to an esplanade strip. Existing 2GP rules require subdivision activities along the bank to provide an esplanade strip of a minimum width of 20m.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	No issues	The site is assessed as having no hazards associated with slope instability.
Potable water supply	Significant issues (manageable)	Minor local network upgrade required to service the site. Water pressure at the higher elevations is estimated to be approximately at DCC's target minimum water pressure (30m head). Significant upstream upgrades required. Fed from Port Chalmers supply which is constrained during peak hot summer periods. Medium term to resolve (5-8 years).
Wastewater supply	Significant issues (manageable)	There is a 150mm wastewater main running down Hall Road. The end of the location is in-line with property 103 Hall Road. Downstream of the site are a number of wastewater pumping stations, wastewater overflows occur at Sawyers Bay in wet weather, negatively impacting the environment and local shellfish business. Significant downstream wastewater upgrades may be required. Long

		term to resolve.
Stormwater management	Some issues (manageable)	Existing Stormwater infrastructure is greater than 50m away, therefore, on-site attenuation is required. Downstream of the site is a naturally formed gully/channel, the capacity is unknown. An attenuation assessment is required for the 100-year storm flows. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable.
Transport effects (local)	Some issues (manageable)	A nearby bridge is not expected to cause any issues for development. Likewise, there is a blind corner adjacent to 105 Hall Road that could be resolved relatively easily as part of any roading upgrade. The key transport relating to this site is the intersection between two private drives within legal road and the end of the Hall Road formation. Any increase in traffic usage at this intersection will require careful consideration by a suitably qualified and experienced traffic engineer to identify a solution that is safe. Road widening and upgrading would likely be required to the west of this intersection. An Integrated Transport Assessment should be completed at the time of subdivision.
Transport effects (wider network)	Some issues (manageable)	It is likely that Hall Road could service the increased traffic volumes. It is unlikely that additional traffic generated by development would impact the safe or efficient operation of nearby intersections. Discussion with Waka Kotahi regarding the Station Road / Sir John Thorn Drive should occur.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Ok	The site has an approximate feasible capacity of 18 dwellings under Township and Settlement zoning
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	

Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	The site is subject to easements, building line restrictions, and a consent notice.

APPENDIX C.26 Rezoning Assessment Sheet – 3 Brick Hill Road and 18 Noyna Road, Sawyers Bay (RS171)		
SITE DETAILS		
Change Number	RS171	
Site outline image	Sawyers Bay  	
Site Address	3 Brick Hill Road and 18 Noyna Road, Sawyers Bay	
Full area assessed	As shown in map above	
Site Area	3.4 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	Township and Settlement	
ASSESSMENT CRITERIA		
Slope	Some issues	Mean slope of 12.8 degrees
Aspect - Solar access	Good	Generally sloping east
Accessibility – Public Transportation	Very good	There is a non-frequent bus stop approximately 19m away
Accessibility - Centres	Poor	The Port Chalmers principal centre is approximately 1,800m away.

Accessibility – Schools	Very good	The nearest primary school is approximately 850m away
Rural character/visual amenity	Moderate issues	The site is currently characterised by a long, relatively narrow block of rolling pastoral land. At present, these sites and 5 Brick Hill Road provide a green break between the western edge of Sawyers Bay and a small cluster of hillside residential development on the centred on the intersection of Bells Road and Brick Hill Road. It is considered that the proposed rezoning will have moderate - high adverse visual amenity effects on existing residents within the rural residential area and from nearby sections of Brick Hill Road. If rezoning proceeds it is recommended that consideration is given to retaining the poplar shelterbelt along the southern boundary of the site as a form of visual mitigation for nearby residents to the north and west. At a broader scale, this site represents a relatively small, remnant block of rural land surrounded by industrial, residential, and rural residential land. As such, it does not contribute significantly to the wider rural character of Sawyers Bay. It is considered that adverse visual amenity effects of the proposed rezoning will be most pronounced on nearby residents of rural residential properties to the west and north of the site. Effects on wider rural character values will be limited.
Impacts on productive rural land	No issues	
Reverse sensitivity	Some issues (manageable)	The site is adjacent to Industrial activity (Port Otago)
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	No issues	The site is assessed as having low level hazards associated with alluvial materials on the site and with flood hazard/stormwater flow on the site. Typical engineering design can be applied to the proposed area with some consideration to stormwater flow paths.

Potable water supply	Significant issues (manageable)	Existing local infrastructure is adequate to service the proposed site. The water supply zoning and pressure requirements are within specification. The location of connection would be on Sir John Thorn Drive. Significant upstream upgrades required. Fed from Port Chalmers supply which is constrained during peak hot summer periods. Medium term to resolve (5-8 years).
Wastewater supply	Significant issues (manageable)	Existing local infrastructure (located on Sir John Thorn Drive) provides enough capacity for additional flow. Downstream of the site are a number of wastewater pumping stations, including the most immediate downstream pump station at Sawyers Bay. Wastewater overflows occur at Sawyers Bay in wet weather, negatively impacting the environment and local shellfish business. Significant downstream wastewater upgrades may be required. Long term to resolve. Could be a candidate for communal wastewater retention alternative if sufficient scale and developed as one development.
Stormwater management	Some issues (manageable)	Downstream of the site there is an open channel. The existing capacity of the receiving open channel is unknown. Would have to pass through DCC and/or NZTA road culverts to reach harbour. It is assumed that the infrastructure is not easily upgradable. Due to this and the unknown capacity of the open channel on-site attenuation to meet the 100-year ARI conditions has been assessed to ensure that post-development flows do not exceed existing conditions. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable, however there are concerns over the affordability of the stormwater infrastructure.
Transport effects (local)	Significant issues (manageable)	Noyna Road would not be able to accommodate the level of development being contemplated, and hence, would need to be upgraded to the standards set out in the Code of Subdivision if it was to be used for access. This would need to include carriageway widening and footpath extensions to connect with existing infrastructure on Sir John Thorn Drive. Brick Hill Road typically comprises a 20m wide legal road corridor. The formed carriageway varies from approximately 7.5m wide down to less 5.0m at the bridge / culvert crossing at the beginning of Stevenson Avenue. It is considered that the carriageway over the bridge is constrained to a point where it could present issues with additional traffic volumes generated by the proposed rezoning. The structural condition of the bridge would also need to be reviewed. A footpath extension would need to be provided. Any new intersection from Brick Hill Road would need to satisfy standards within Austroads and the Code of Subdivision. DCC Transport would request that the developer be required to provide an integrated transport assessment to the Council for

		review, in order for the rezoning be assessed further.
Transport effects (wider network)	Significant issues (manageable)	Development of this site would have a potential effect on the State Highway network due to the potential for increased turning movements at the Noyna Street / Sir John Thorn Drive intersection. Waka Kotahi would need to be consulted regarding this. Traffic distribution requires consideration because Brick Hill Road and Blanket Bay Road are both narrow, winding roads and additional traffic could therefore create safety issues
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	The site has an approximate feasible capacity of 43 dwellings under General Residential 1 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to a building line restriction

APPENDIX C.27 Rezoning Assessment Sheet – 85, 91, and 103 Formby Street, Outram (RS175 and RS154)		
SITE DETAILS		
Change Number	RS175 and RS154	
Site outline image	Outram  	
Site Address	85, 91, and 103 Formby Street, Outram	
Full area assessed	As shown in map above	
Site Area	10.4 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	Township and Settlement	
ASSESSMENT CRITERIA		
Slope	No issues	RS154: mean slope of 7.7 degrees RS174: mean slope of 5 degrees
Aspect - Solar access	Very good	Flat/gently sloping site facing north.
Accessibility – Public Transportation	Ok	There is a non-frequent bus stop approximately 391m away.

Accessibility - Centres	Poor	The Mosgiel principal centre is approximately 12,000m away.
Accessibility – Schools	Very good	The nearest primary school is approximately 348m away.
Rural character/visual amenity	Moderate issues	This assessment applies to both RS154 and RS175. Whilst at the edge of Outram, it is considered that the subject sites display attributes that are consistent with rural character values of the surrounding plains landscape. These sites are part of a broader patchwork of flat, pastoral land west of Outram. The proposed rezoning would result in a substantial expansion of urban development for the small rural settlement of Outram into these distinctly rural sites, which are part of a broader, coherent pastoral landscape. It is considered that the proposed rezoning would have at least moderate adverse effects on existing rural character values, which are strongly linked to the consistent, grid-like pastoral character of the surrounding area.
Impacts on productive rural land	Significant issues	The site is entirely covered in LUC Class 1 soils and high class soils. Development will result in loss of primary productive capacity.
Reverse sensitivity	Some issues	A Critical Electricity Infrastructure Corridor Mapped Area passes through the site. The existing 2GP rules manage activities within these areas.
Significant indigenous biodiversity	No issues	
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	No issues	The site is assessed as having low level hazards associated with flooding. Minimum floor levels will be required to be set for any subdivision within the proposed area. A stormwater assessment may be required to confirm the flooding hazard of the adjacent stream and cumulative effects of filling large areas with respects to neighbouring lots. The result of this assessment might be that development in this area will necessitate additional floor level requirements, floodbanks, or stormwater detention.

Potable water supply	Significant issues (manageable)	There are services at existing boundaries to the site but these would need to be upgraded. Water supply capacity is constrained during peak summer demand periods with no spare capacity available at these times. Medium to long term timeframe to address this.
Wastewater supply	Some issues (manageable)	Outram is not serviced for wastewater by the DCC, the site is outside the DCC reticulated wastewater area. An on-site self-servicing assessment has been carried out. Self-servicing for wastewater is considered feasible, pending soil investigations. Consent to discharge treated wastewater would be required from the Otago Regional Council.
Stormwater management	Significant issues (not considered manageable)	The site is flat and there is no obvious natural flow path other than the channel to the north of the site which is an old "ox-bow" of the Taieri River. Stormwater drainage in Outram is complex and constrained. Due to the position of the Taieri flood protection bank there is no natural outlet for stormwater drainage in Outram. Instead, Outram's stormwater drains to an "ox-bow" lake, at the southern end of Outram and just to the east of the proposed site. From here the stormwater is disposed of through infiltration into the ground. The infiltration capacity of the "ox-bow" lake is unknown and there have been past rainfall events in which the "ox-bow" lake has flooded. As the capacity of the open channel and "ox-bow" lake is unknown, an on-site attenuation assessment has been carried out. The area of land required for stormwater management is over 30% of the total area of the site and is not considered feasible. Even if stormwater management were feasible at the site, the additional stormwater volumes generated are a risk due to the unknown disposal capacity of the "ox-bow" lake.
Transport effects (local)	Some issues (manageable)	The site has frontage to Formby Street to the east and Huntly Road to the south. There is no pedestrian/cycle infrastructure at this location and this would need to be provided by the developer to connect development with existing infrastructure. The speed limit on Huntly Road (70km) would need to be reviewed and likely reduced and the Huntly Road / Formby Street intersection would also need review. An Integrated Transport Assessment would need to be undertaken at the developer's expense to ensure all transport effects are adequately evaluated and suitable mitigation / design measures implemented to manage any adverse effects. DCC Transport notes that the site is distant from the city centre, has minimal transport options, and development in Outram is considered to be at odds with key focus areas within the Dunedin Integrated Transport Strategy. Hence, overall, DCC Transport is not supportive of this rezoning.
Transport effects (wider	Some issues	It is likely that development would have only a minor impact on the wider transport network. However it is noted that if both RS154 and

network)	(manageable)	RS175 were developed, this would increase the transport effects.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	RS154 and RS175 have an estimated combined capacity of 131 dwellings under the proposed structure plan. There is also a second structure plan option which has 72 dwellings across both sites.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to exemptions from the Public Works Act, consent notice, land covenant, easements.

APPENDIX C.28 Rezoning Assessment Sheet – 234 and 290 Malvern Street, Leith Valley (RS176)		
SITE DETAILS		
Change Number	RS176	
Site outline image	Leith Valley  	
Site Address	234 and 290 Malvern Street, Leith Valley	
Full area assessed	As shown in map above	
Site Area	16.5 hectares	
Current zoning	Rural Residential 2	
PROPOSAL DETAILS		
2GP Zone assessed	Large Lot Residential 1, Large Lot Residential 2, or Rural Residential 1	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 21.7 degrees
Aspect - Solar access	Poor	Generally south facing and moderately/significantly sloping
Accessibility – Public Transportation	Very good	There is a non-frequent bus stop approximately 38m away.

Accessibility - Centres	Poor	The Gardens suburban centre is approximately 2,800m away.
Accessibility – Schools	Good	The nearest primary school is approximately 2,341m away
Rural character/visual amenity	Significant issues	The site comprises steep bush-clad slopes at the southern end of the property. Topography over the balance of the site is gently to moderately sloping. Landcover comprises areas of remnant native vegetation, which are included within a UBMA. Pastoral paddocks comprise most of the remainder of the site. A single storey dwelling is located near the western boundary of the site and is largely surrounded in bush. The site displays high rural amenity values. It is considered that the current zoning is the most appropriate in terms of maintaining and enhancing the character and visual amenity of the surrounding area. This site makes a notable contribution to the rural outlook of surrounding residential areas and forms part of a large contiguous area of rural-residential or rural land. This site and surrounding area form a prominent middle-distance component of rural views towards Mount Cargill from parts of Glenleith, particularly from elevated locations on the southwestern side of the valley. Whilst large parts of the site are hidden from view from nearby Leith Valley locations due to intervening landform, some view shafts are available towards the bush clad and pastoral parts of the site, which provide a natural, rural counterpoint and backdrop to residential development in Leith Valley. The proposed rezoning to Large Lot or Rural-Residential 1 zoning is not supported from a landscape and visual amenity perspective.
Impacts on productive rural land	No issues	
Reverse sensitivity	Some issues (manageable)	A Critical Electricity Infrastructure Corridor Mapped Area passes through the site. The existing 2GP rules manage activities within these areas.
Significant indigenous biodiversity	Significant issues (manageable)	The areas of vegetation to the north and to the west of the existing house comprise significant indigenous vegetation as they meet the 2GP criteria of rarity (as tōtara and matai are uncommon in the Dunedin Ecological District) and ecological context (due to its habitat value and as part of network of connected habitats in the local area). If the forest along the northern and western borders of the proposed site were to be cleared for development then significant biodiversity would be lost. The RS176 rezoning boundary should either be remapped to exclude this vegetation from the development site, or alternatively the vegetation could be protected as an Area of Significant Biodiversity Value scheduled in the 2GP, or by a QEII covenant.
Natural landscapes and natural coastal character	No issues	

Access to the coast and water bodies	Some issues (manageable)	The southern part of the site includes the Water of Leith which is subject to an esplanade reserve. Existing 2GP rules require subdivision activities along the bank to provide an esplanade strip of a minimum width of 20m.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Some issues	The site is assessed as having a low to medium hazard level associated slope instability. Geotechnical assessment will be required to confirm the extents of any instabilities and ensure it will not affect any lots.
Potable water supply	Some issues (manageable)	Existing infrastructure is adequate to service the proposed site through a 150mm pipe. Some upstream network upgrades required.
Wastewater supply	Some issues (manageable)	Existing local infrastructure is already at the site boundary within Malvern Street and achieves grade for self-cleaning. There are known wastewater overflows immediately downstream in significant wet weather (corner of Patmos Ave and Malvern St). Some downstream upgrades required.
Stormwater management	Some issues (manageable)	Downstream of the site is the Water of Leith. Any increase in peak flows could potentially have a negative impact on ORC's level of service for flood protection associated with the Water of Leith. It is assumed that the infrastructure is not easily upgradeable. It is therefore proposed to assess on-site attenuation to meet the 100-year ARI conditions. There are concerns over the affordability of stormwater infrastructure. There is flood hazard to downstream properties identified by ORC flood hazard report (*Flood hazard of Dunedin's urban streams, ORC, 2014*). Potential degradation of Water of Leith is counter to principles of Te Mana o te Wai.
Transport effects (local)	Some issues (manageable)	It is considered that residential development on the site can be supported from a traffic and transportation perspective. That said, it is not clear how access would be provided and what sort of standard could be achieved. Depending on the number of sites being contemplated, it is likely that new public roading would need to be provided, ensuring a suitable number of connection points to the existing transport network. Hence, an Integrated Transport Assessment would need to be provided to ensure all localised and wider transport impacts are adequately evaluated in detail.

		The landowner has indicated that they are only proposing two additional lots, which would be accessed via a right of way to Patmos Avenue. If this proposal is adopted, any detailed matters can be addressed as part of the subdivision consent.
Transport effects (wider network)	No issues	While additional development on Malvern Street will likely have cumulative effects on the efficiency of the Duke Street / George Street signalised intersection, it is considered unlikely that a development of this size would create any significant effects in this regard. In making this statement, it is noted that the site is well located to make use of alternative modes of transport such as walking, cycling and public transport. This supports the network resilience and travel choice focuses within the Council's Integrated Transport Strategy.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	The site has an approximate feasible capacity of 58 dwellings under Large Lot Residential 1 zoning, and 33 dwellings under Large Lot Residential 2 zoning. The submitter is wishing to develop an additional two dwellings, in additional to the existing one.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues	Site is subject to easement, esplanade strip, consent notice, right of way, caveat.

APPENDIX C.29 Rezoning Assessment Sheet – 177 Tomahawk Road (RS193)		
SITE DETAILS		
Change Number	RS193	
Site outline image		
Site Address	177 Tomahawk Road	
Full area assessed	As shown in map above	
Site Area	7.8 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	General Residential 1	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 17.9 degrees
Aspect - Solar access	Good	Generally sloping east
Accessibility – Public Transportation	Ok	There is a non-frequent bus stop approximately 427m away, and a high frequency bus stop approximately 870m away.
Accessibility - Centres	Poor	The Andersons Bay neighbourhood centre is approximately 850m away and the South Dunedin principal centre is approximately

		3,700m away.
Accessibility – Schools	Very good	The nearest primary school is approximately 1,116m away
Rural character/visual amenity	Significant issues	The site is located between the western banks of the western lobe of Tomahawk Lagoon and residential development within Ocean Grove. Landcover is mixed, with pasture on the flatter areas, and a combination of trees, patches of pasture, some remnant native vegetation and widespread exotic weed species on the steeper slopes. There is also a small cluster of farm buildings and a dwelling. The western lobe of the lagoon is largely encircled by rural land, with a small part of the southern boundary bordering Tomahawk Road and residential properties. This surrounding rural land, including the subject site, contribute to the natural character setting of the lagoon. It is considered that there will be high adverse effects on the natural character values of the lagoon and the rural character of the lagoon surrounds if this entire site were to be rezoned General Residential. It is considered that these effects could not be mitigated. It is considered that a limited extent of residential development could potentially be accommodated within a much smaller area adjacent to existing residential development near Gloucester Street without adversely affecting existing landscape character values to a high degree. Due to the moderate - steep slopes of this part of the site, it appears likely that some residential development could occur here without intruding on the visual amenity of nearby residents, who would be able to look over this area to the rural and coastal vistas to the east.
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Some issues (manageable)	The vegetation communities on the site do meet the criteria set out in the 2GP, being largely dominated by exotic species and pasture. The individuals of lowland totara are significant and warrant protection (south-west boundary). Large individuals of ngaio, although relatively common in coastal Otago, also warrant protection (located behind the old house in the centre of the site). The biodiversity recommendation is that the upper part of the site could support relatively dense residential use, but development should be avoided on the lower part of the site due to proximity to Tomahawk Lagoon and its regionally important wildlife values. Consideration could be given to ecological restoration on the lower part of the site. Consideration should be given to protection of the totara and the larger ngaio in the rezoning area.
Natural landscapes and natural coastal character	Significant issues (manageable)	Eastern part of the site overlaps with the Tomahawk Lagoon Natural Coastal Character Overlay Zone.

Access to the coast and water bodies	Significant issues (manageable)	Eastern part of the site is adjacent to Tomahawk Lagoon.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Significant issues (not manageable)	The site is assessed as having a high level hazard associated with slope instability on the steep portion of the site, and liquefaction and landfill on the flat portion of the site. Geotechnical assessments are required to substantiate the appropriateness of higher density development in this area. Specific assessment and design would be required to confirm the global stability of the site and implications of smaller lots. It is possible that much of this area is deemed unsuitable for dense residential development, though there are some flatter sections within the site that would be suitable for a structure.
Potable water supply	Some issues (manageable)	Existing infrastructure appears to be adequate based on a high-level assessment. Connection points would be Gloucester Street and Tomahawk Road. Upgrade to the main in Gloucester Street may be required. High water pressure at low elevations on the site may be an issue and pressure reduction may be necessary. Further detailed modelling of the water supply infrastructure would be required to confirm. Some upstream upgrades required.
Wastewater supply	Some issues (manageable)	Existing infrastructure provides enough capacity for additional flow but does not achieve the grade for self-cleaning. Connection would be to the existing network across Tomahawk Road. The existing wastewater infrastructure in this part of Dunedin connects into a pumped system downstream. The capacity of the pump station to accept additional flows would need further assessment.
Stormwater management	Significant issues (not considered manageable)	The site is located adjacent to and discharges to Tomahawk lagoon and other tidal-influenced coastal areas, all downstream of the site. It is assumed that an overland flow path can be established/designed to be directed to safely discharge to these tidal areas from the site, without the need for onsite attenuation. Erosion protection and stormwater quality treatment would be required to protect water quality. Tomahawk Lagoon is classed as a regionally significant wetland. Discharge would require resource consent from ORC. Experience with existing consents for stormwater discharges to Tomahawk Lagoon indicate that obtaining consent would be extremely difficult. Strong community and manawhenua opposition to a consent would be expected. Development of the site gives no natural buffer zone to the lagoon. We would suggest that it is better to rezone this to a recreation zoning or at least incorporate a lagoon buffer to natural/biodiversity zone. Meeting the new stormwater management rules in Variation 2 is not

		expected to be sufficient to address stormwater issues due to the consenting requirement and Tomahawk Lagoon's status as a regionally significant wetland.
Transport effects (local)	Significant issues (manageable)	The site has frontage to both Tomahawk Road and Gloucester Street. Two access points would be required. Gloucester Street does not currently meet the required standard (for servicing between 1-20 dwelling units) and would require upgrading. Gloucester Street intersects with Spencer Street and Tomahawk Road, and this intersection would need to be reviewed and potentially upgraded. The ability for Gloucester Street to be able to accommodate additional development traffic is a key issue for RS193, and further information is required from the developer on this. DCC Transport notes that there also does not appear to be any potential for widening of Gloucester Street due to the location of existing buildings on adjacent properties. An ITA would be required to be undertaken by the developer.
Transport effects (wider network)	Some issues (manageable)	Tomahawk Road has a suitable cross section to absorb additional traffic volumes. However, there are known speed issues on this road. The likely point of site access is located near a curve which will have implications for sight distances. An ITA would need to be undertaken by the developer to assess these matters. This may need to include traffic modelling to review impacts of development traffic on localised intersections. The ITA would also need to consider how active road users such as pedestrians and cyclists would be safely provided for.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	The site has an approximate feasible capacity of 109 dwellings under General Residential 1 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development	Some issues	Site is subject to a fencing provision.

(encumbrances, owner aspirations, appeals)	(manageable)	

APPENDIX C.30 Rezoning Assessment Sheet – 489 East Taieri-Allanton Road (RS200)		
SITE DETAILS		
Change Number	RS200	
Site outline image		
Site Address	Part 489 East Taieri-Allanton Road	
Full area assessed	As shown in map above	
Site Area	8.6 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	Township and Settlement, Large Lot Residential 1	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 14.9 degrees
Aspect - Solar access	Very good	Generally sloping north
Accessibility – Public Transportation	Poor	There is a non-frequent bus stop approximately 1,661m away, and a high-frequency bus stop approximately 7,673m away.
Accessibility - Centres	Poor	The Mosgiel principal centre is approximately 8,990m away.

Accessibility – Schools	Poor	The nearest primary school is approximately 6,891m away
Rural character/visual amenity	Significant issues	This site occupies gently to moderately sloping pastoral land to the east of Allanton. The slopes above the site are contained within the Saddle Hill SNL. The site displays attributes consistent with key values of this rural zone, it is part a broader, consistent rural, pastoral landscape to the east of Allanton and there is a currently well-defined eastern edge to residential development within this small township. The proposed rezoning is not supported from a rural character and visual amenity perspective.
Impacts on productive rural land	Significant issues	The site is largely covered by LUC Class 3 soils. The land appears to be used in primary industry and development will result in loss of primary productive capacity in this area.
Reverse sensitivity	Some issues (manageable)	The site is adjacent to SH1. 2GP performance standards require acoustic insulation within 40m of a state highway.
Significant indigenous biodiversity	No issues	The site is largely pasture, with an area of gorse. There are no areas of vegetation within the site that meet the 2GP ecological significance criteria. As there is currently no indigenous vegetation within the site, rezoning the proposed site would have minimal effect on indigenous biodiversity. Consideration could be given to creating an ecological restoration site within the area of residential development, for example by establishing a corridor of indigenous forest along the drain in the centre of the site.
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	No issues	The site is assessed as having low level hazards associated with flooding. Specific engineering design and assessment will be required to identify zones that are unsuitable for development near the ephemeral watercourse.
Potable water supply	Significant issues (manageable)	The site is outside of the area serviced for water supply by DCC. Adjacent Allanton is self-serviced for water. Therefore, an on-site self-servicing assessment has been completed. The portion of site that is proposed to be zoned as Township and Settlement is not considered feasible for self-servicing based on our assessment, however it is acknowledged that existing adjacent sites in Allanton at

		the same zoning are already self-serviced for water supply. The adequacy of the existing self-servicing in Allanton and how much tankered water top-up is required by existing residents is unknown. The portion of the site that is proposed to be zoned Large Lot Residential 1 is considered to be constrained, self-servicing may be possible in this zoning.
Wastewater supply	Some issues (manageable)	West of the site location is Allanton and a potential service connection to the wastewater scheme. The Allanton wastewater scheme is a pressure sewer scheme with individual pump stations for each lot discharging to a rising main to the Mosgiel wastewater treatment plant. A high-level assessment suggests connecting to this is feasible. However, a detailed analysis is recommended for confirmation.
Stormwater management	Significant issues (manageable)	There is no existing stormwater infrastructure close to the subject site. Downstream of the site is a naturally contoured field leading to a small pond. This is connected to ORC Schedule Drain 01A which flows into the Owhiro Stream, eventually discharging into the Taieri River. Capacity of the watercourses prior to the Owhiro Stream cannot be determined therefore attenuation has been assessed for the 100-year storm event. The Owhiro Stream has capacity issues in rainfall events when the Taieri River level is up and the Owhiro can not discharge into it, this results in flood issues in Mosgiel. Provided the new stormwater management rules in Variation 2 are applied to the whole proposed area the site may be considered developable, however there are concerns over the affordability of the stormwater infrastructure.
Transport effects (local)	Significant issues (not manageable)	The site is located distant from the central city. Walking and cycling would not be a feasible form of transport and there is no infrastructure to support alternative modes of transport nor is there public transport. This section of SH1 is a Limited Access Road. Residential development on the site is anticipated to have a significant impact on the state highway network. This is because the Structure Plan provided implies access to State Highway 1 would be proposed and there is no evidence of consultation with Waka Kotahi in that regard. As above, this is particularly important noting that the road is a Limited Access Road. Ralston Street has no footpaths or kerbs. The development could potentially change the traffic dynamics on this road to a significant degree. Overall, from a transport perspective, it is considered that the site is not a good candidate for the zoning sought due to its isolated location, proximity to State Highway 1, and lack of provision for alternative modes of transport.

Transport effects (wider network)	No issues	No specific issues noted
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Good	The site has an estimated capacity of 49 dwellings under the proposed structure plan.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	Some issues (manageable)	Waka Kotahi commented that this site is remote from supporting urban amenities and has safety concerns due to accessing State Highway 1 in a high speed environment close to a passing lane.
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to a building line restriction and Gazette Notices declaring SH1 to be a limited access road.

APPENDIX C.31 Rezoning Assessment Sheet – Part 761 Aramoana Road (RS205)		
SITE DETAILS		
Change Number	RS205	
Site outline image		
Site Address	Part 761 Aramoana Road	
Full area assessed	As shown in map above	
Site Area	0.4 hectares	
Current zoning	Rural	
PROPOSAL DETAILS		
2GP Zone assessed	Township and Settlement	
ASSESSMENT CRITERIA		
Slope	Some issues	Mean slope of 9.8 degrees
Aspect - Solar access	Poor	Generally south facing and moderately/significantly sloping
Accessibility – Public Transportation	Poor	There is a non-frequent bus stop approximately 6,243m away
Accessibility - Centres	Poor	The Port Chalmers principal centre is approximately 9,000m away.

Accessibility – Schools	Poor	The nearest primary school is approximately 9,707m away.
Rural character/visual amenity	No issues	It is considered that the proposed rezoning will be consistent with the existing pattern of development within this small harbour edge settlement. This relatively small addition to the extent of residential development will not detract from the more natural characteristics of the bush clad slopes within Proposed Lot 4 or the landscape values of the wider surrounding area subject to the Significant Natural Landscape overlay
Impacts on productive rural land	No issues	
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Some issues (manageable)	Two vegetation types are present at the site. The largely exotic vegetation along the west of the property, and the broadleaved forest along the rear of the proposed site and continuing up the hill behind it. This area of broadleaved forest is not large enough or diverse enough to be considered ecologically significant. However, there is very little indigenous vegetation in the local area and it would be preferable for the indigenous vegetation not to be removed. Consideration should be given to protect this area, either by redrawing the rezoning area or though conditions attached to titles.
Natural landscapes and natural coastal character	Significant issues (not manageable)	Entire site overlaps with the Outer Harbourside Edge Significant Natural Landscape Overlay Zone.
Access to the coast and water bodies	Some issues (manageable)	Located across the road from Otago Harbour. No effects anticipated regarding access.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	No issues	
Natural Hazards	Significant issues (manageable)	The site is considered to be a low hazard level in the context of a T&S proposed zoning, considering the rest of the waterfront is also T&S zoned. However, it is considered that the site has a high hazard level for future development. There is a rockfall hazard from the slopes above and a Geotechnical assessment suggesting rockfall impaction in this area is possible. Further engineering assessment will be required to identify the safety of this area to be suited for further development with regards to rockfall and liquefaction

Potable water supply	Significant issues (manageable)	The site is located outside of DCC's water zone boundaries and would need to self-serviced for water. An on-site servicing assessment has been carried out and indicates that self-servicing for water is not feasible. However, existing adjacent sites already self-service for water supply. It is unclear whether adjacent properties are permanently occupied or are holiday homes, which changes water demand.
Wastewater supply	Some issues (manageable)	The site is outside the DCC reticulated wastewater area and is not serviced for wastewater. An on-site servicing assessment has been carried out. Shallow groundwater investigations are required to confirm the feasibility of wastewater self-servicing due to location (next to harbour). If groundwater depth is greater than 0.6m then self-servicing for wastewater is considered feasible. Sea level rise is likely to reduce the depth to groundwater over time, increasing the risk of any wastewater disposal system failing in future. Consent to discharge treated wastewater would be required from the Otago Regional Council.
Stormwater management	Significant issues (unsure whether manageable long term)	The site is located adjacent to the harbour. There is an existing 300mm diameter culvert from the site to the harbour. Due to the proximity to the coast stormwater attenuation will not be required however, erosion protection and stormwater treatment would be required. The elevation of the site is no more than 6 metres with the majority of the site below 4 metres. Risks of coastal flooding, inundation, storm surge and tsunami risk should be considered. Climate change and associated sea level rise is expected to increase the frequency and severity of some of these risks. This may have an impact on the insurability of any improvements to the site. DCC should consider this in light of potential future liabilities if it were to rezone the site.
Transport effects (local)	No issues	Access to new sites would need to be assessed by the developer at the time of subdivision and confirmed as complying with minimum sight distance requirements in the 2GP.
Transport effects (wider network)	No issues	Development of three lots, as proposed, would have an insignificant impact on the transport network.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Ok	The site has an approximate feasible capacity of 3 dwellings under Township and Settlement zoning.
Effects on Manawhenua values	Significant issues	Site sits partially or fully within three Wāhi Tupuna mapped areas (Views from Ōtākou Marae around Upper Harbour, Hill faces near / at Aramoana, and Ōtākou Harbour) and would be self-serviced for

	(manageable)	wastewater.
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Site is subject to a building line restriction.

APPENDIX C.32 Rezoning Assessment Sheet – Part 35 and 43 Watts Road, Part 309 North Road (RS206, RS206a, RS77)		
SITE DETAILS		
Change Number	RS206, RS206a, RS77	
Site outline image		
Site Address	35 Watts Road, 37 Watts Road, 43 Watts Road, Part 309 North Road	
Full area assessed	As shown in map above	
Site Area	9.4 hectares	
Current zoning	Rural, Rural Residential 2, General Residential 1	
PROPOSAL DETAILS		
2GP Zone assessed	Mix of residential zones (General Residential 2 and Large Lot Residential 1)	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope ranges from 23.1 - 32.9 degrees across the sites.
Aspect - Solar access	Poor - Good	RS77 and RS206 are rated poor (generally south facing and moderately/significantly sloping). RS206a is assessed as good (generally sloping east)
Accessibility – Public	Very good	There is a high-frequency bus stop approximately 291m away

Transportation		
Accessibility - Centres	Poor	The Gardens suburban centre is approximately 1,250m away
Accessibility – Schools	Very good	The nearest primary school is approximately 299m away
Rural character/visual amenity	Significant issues	A large part of 43 Watts is within a Significant Natural Landscape and it is considered inappropriate for residential development due to the significance of the landscape values and their protection under the 2GP policy framework. The overall site is seen in the context of the surrounding rural hill slopes on the north-western side of North East Valley. These slopes form a largely natural counterpoint to nearby residential areas. The subject site and surrounding rural hill slopes are highly prominent to residents on the south-eastern side of North East Valley. It is considered that the site is an important component of this wider rural setting and contributes significantly to the visual amenity of the surrounding area. Rezoning is not supported from a rural character of visual amenity perspective.
Impacts on productive rural land	Some issues	A portion of the site is assessed as having high class soils. The site does not contain any LUC class 1-3 land. The area of high class soil is relatively small compared to the larger site area, and is also overlain by a SNL meaning its primary productivity potential is low.
Reverse sensitivity	Some issues (manageable)	A Critical Electricity Infrastructure Corridor Mapped Area passes through the site. The existing 2GP rules manage activities within these areas.
Significant indigenous biodiversity	Significant issues (not manageable)	Access to this site was requested by the landowner, but was not received in time for a site visit to occur, so observations of biodiversity were undertaken from public roads adjacent to the property using binoculars. It is difficult to assess whether this area is ecologically significant without access to the interior forest vegetation and understory. Some areas of vegetation around the perimeter appear to be indigenous-dominant and contain a reasonable diversity of species, but this may not be reflective of the vegetation across the sites. It is possible that the sites may meet the 2GP ecological significance criteria in regards to ecological context (due to its habitat value and as part of network of connected habitats in the local area). The broadleaved vegetation adjacent to Lindsay Creek acts as an ecological buffer and should be preserved. RS206 may be appropriate for Large Lot Residential 1 zoning, however in the north-eastern part of this site there is broadleaved forest that should not be cleared for development. RS77 and RS206a are unlikely to be suitable for General Residential 2 density, although some Large Lot Residential 2 may be appropriate. However, in the absence of detailed assessment, this is uncertain.

Natural landscapes and natural coastal character	Significant issues (manageable)	Northern part of site overlaps with the Flagstaff-Mt Cargill Significant Natural Landscape Overlay Zone.
Access to the coast and water bodies	Some issues (manageable)	Part of the site includes the Lindsays Creek which is subject to an esplanade reserve. Existing 2GP rules require subdivision activities along the bank to provide an esplanade strip of a minimum width of 20m.
Significant Trees, heritage items, important vistas or viewshafts, important green or open spaces	Some issues (manageable)	There is a significant tree in each of RS77 and RS206.
Natural Hazards	Significant issues (not manageable)	The site is assessed as having a high level hazard associated with slope instability. Geotechnical assessment will be required to confirm the general stability of the site, specifically for the steeper areas, and the appropriateness of allowing smaller lots in this area.
Potable water supply	Some issues (manageable)	Minor local network extension would be required to connect the site to the existing network and some local upgrades to existing pipes (from 100mm diameter to 150mm diameter). Significant upstream upgrades required.
Wastewater supply	Significant issues (manageable)	A minor local network extension would be required to connect parts of the site to the existing network. Immediately downstream of the site wastewater flows enter an infrastructure constraint mapped area (ICMA). Flows enter the trunk main on North Road. There are existing wastewater overflows occurring in wet weather in North Road with discharge to the environment (Lindsay Creek). Additional flows would exacerbate this. Medium to long timeframe for resolving these. Wastewater detention may be a possibility given the number of lots proposed however, the site is split across at least two sub-catchments making this difficult so further investigation would be required to consider this.
Stormwater management	Significant issues (manageable)	Downstream of the site is Lindsay Creek. Any increase in peak flows could potentially have a negative impact on ORC's level of service for flood protection associated with the Water of Leith. It is assumed that the infrastructure is not easily upgradeable. It is therefore proposed to assess on-site attenuation to meet the 100-year ARI conditions. There are concerns over the affordability of stormwater infrastructure. There is flood hazard to downstream properties identified by ORC flood hazard report (*Flood hazard of Dunedin's urban streams, ORC, 2014*). Potential degradation of Lindsay Creek is counter to principles of Te Mana o te Wai.

Transport effects (local)	Significant issues (not manageable)	Watts road is a relatively constrained legal road corridor. It is only about 12m wide at the North Road intersection and reduces to about 10m wide at 35 Watts Road. It has steep banks on the private land on the western side of the road, meaning that even if the legal width was increased, that physical improvements would likely require significant and expensive engineering works. Watts Road would need to be upgraded to either 16m or 20m width, depending on number of dwellings. Additional development on Watts Road would result in additional turning movements at the Watts Road / North Road intersection, and assessment would be required as to the effects of this. There are access constraints relating to 309 North Road as access is only available from North Road. This would require a crossing structure to bring a new road over Lindsay Creek. It is considered that only a limited number of new dwellings could be constructed with a single access to avoid concerns relating to emergency access and ensuring that the demand on the one access to North Road is suitably managed. DCC Transport has concerns about the rezoning as requested and considers that there is insufficient detail / assessment for us to provide our support to the submitter's request.
Transport effects (wider network)	No issues	No specific issues noted
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	RS206 has an approximate feasible capacity of 7 dwellings under Large Lot Residential 1. RS206a has an approximate feasible capacity of 98 dwellings under General Residential 2 zoning. RS77 has an approximate feasible capacity of 135 dwellings under General Residential 2 zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education ● FENZ	No issues	
Other constraints on	Some issues	Site is subject to easement, building line restriction, compensation

development (encumbrances, owner aspirations, appeals)	(manageable)	certificate, consent notices, esplanade strip

APPENDIX C.33 Rezoning Assessment Sheet – 53, 64, 73, 74, 80, 86, 92, 100, 103, 103A, 123, 127 Scroggs Hill Road (RS220)		
SITE DETAILS		
Change Number	RS220	
Site outline image		
Site Address	53, 64, 73, 74, 80, 86, 92, 100, 103, 103A, 123, 127 Scroggs Hill Road	
Full area assessed	As shown in map above	
Site Area	25.1 hectares	
Current zoning	Rural Residential 1	
PROPOSAL DETAILS		
2GP Zone assessed	Large Lot Residential 1, Township and Settlement	
ASSESSMENT CRITERIA		
Slope	Significant issues	Mean slope of 15.6 degrees
Aspect - Solar access	Good	Generally sloping east
Accessibility – Public Transportation	Ok	There is a non-frequent bus stop approximately 750m away.

Accessibility - Centres	Poor	The Brighton neighbourhood centre is approximately 1,360m away, and the Green Island principal centre approximately 10,170m away.
Accessibility – Schools	Very good	The nearest primary school is approximately 1,536m away
Rural character/visual amenity	Moderate issues	It is considered that if this area were to be rezoned Large Lot Residential there would likely be significant visual amenity effects associated with this increase in density for existing residents, particularly on the eastern side of the road. At a broader landscape scale, rezoning from Rural Residential 1 to Large Lot Residential 1 would not represent as great a change in existing landscape character as will occur within GF01, based on current development patterns. Potential mitigation measures could include enhancement of existing gullies, extension of the proposed 10m enhancement planting strip proposed as part of RS160. Some of the proposed conditions regarding materials, size and maximum height of dwellings, boundary planting and lighting, as proposed in RS160 would also likely help to limit potential adverse effects on surrounding rural character values. Rezoning to T&S density at this location would create too strong a contrast with nearby or adjoining rural or rural residential areas.
Impacts on productive rural land	Some issues	The site is largely covered by LUC Class 3 soils. Given its location (adjacent to Township and Settlement Zoning) and existing zoning (Rural Residential 1), the primary productive capacity of the site is likely to be relatively low.
Reverse sensitivity	No issues	
Significant indigenous biodiversity	Some issues (manageable)	Although there are some areas of vegetation that are dominated by indigenous tree species and provides good habitat for indigenous forest birds, it has not been mapped as important habitat for forest birds (Wildland Consultants 2020), and this area of vegetation is not large enough or diverse enough to meet the 2GP criteria for ecological significance. However, it would help to provide connectivity between the remnants of indigenous vegetation in the adjacent landscape and any future residential development should avoid clearance of indigenous trees. Consideration should be given to protection of the vegetation to the west of Scroggs Hill Road in the gully area.
Natural landscapes and natural coastal character	No issues	
Access to the coast and water bodies	No issues	
Significant Trees,	No issues	

heritage items, important vistas or viewshafts, important green or open spaces		
Natural Hazards	Some issues (manageable)	The site is assessed as having a medium hazard level associated with slope instability, particularly on steeper parts. Geotechnical assessment will be required prior to development.
Potable water supply	Significant issues (manageable)	The site elevation varies from approximately 116m to 6m. The site location is outside the area that is currently serviced by DCC. However, the Brighton Reservoir is within the site location at an elevation of approximately 86m. This is fed by Southern WTP, elevation approximately 114m. The existing infrastructure is adequate to service a portion of the proposed development at lower elevations. The topography of the site suggests that an additional reservoir would be required to service higher elevation areas of the site (to the north of the site) up to an approximate elevation of 84m (therefore the RS220 site but no further). Booster pumps and pressure reducing valves would be required to service any areas at higher elevation than approximately 84m. Dunedin's water supply is fortunate in many areas to not require pumping. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. 3 Waters do not support servicing water supply for development above 84m elevation. It may be possible to consider development up to 84m pending further detailed analysis to investigate the feasibility of the proposed reservoir. Some major upstream network upgrades would be required in the future. At this stage the proposal is not supported from a water supply perspective. Further investigation and assessment is required.
Wastewater supply	Significant issues (manageable)	There is existing infrastructure within Scroggs Hill Road. Small extension required, however many areas of the site are at lower elevation to the adjacent road. For these areas, wastewater pumping may be required. 3 Waters prefers gravity to pumping where possible due to lower operating and maintenance costs and supporting DCC's Zero Carbon policy. While servicing by gravity would be possible for areas of the site with elevation similar to adjacent Scroggs Hill Road, 3 Waters do not support servicing for wastewater for areas of the site that would require pumping. Significant downstream network upgrades would also be required. At this stage the proposal is not supported from a wastewater servicing without an understanding of the balance of gravity and pumped reticulation. Further investigation and assessment is required.
Stormwater management	Some issues (manageable)	The proposed development's stormwater runoff contributes to overland flow path which flows down various valleys and gullies, eventually discharges over McIntosh Rd and finally into the river

		tributary before heading out to sea. The capacity of the gullies and channels are unknown therefore an attenuation assessment is required for the 100 year storm flows. Due to the large site area, onsite attenuation would be required. The campground downstream has had previous flooding issues. Provided the stormwater management rules in GF01 were applied to the whole proposed structure plan area the site may be considered developable, however 3 Waters have concerns over the affordability of the stormwater infrastructure.
Transport effects (local)	Significant issues (not manageable)	The comments for GF01 are also relevant for this site. Overall, DCC Transport consider that in the absence of any detailed transportation assessments, that even at the lower end of development generated by the rejected sites (should they be rezoned), that DCC Transport would not be able to support these zone changes without significant Transportation infrastructure upgrades which may not be possible without land acquisition and significant engineering works. Works which even if achievable may not be acceptable from an overall Planning Policy perspective.
Transport effects (wider network)	Significant issues (not manageable)	The comments for GF01 are also relevant for this site. Overall, DCC Transport consider that in the absence of any detailed transportation assessments, that even at the lower end of development generated by the rejected sites (should they be rezoned), that DCC Transport would not be able to support these zone changes without significant Transportation infrastructure upgrades which may not be possible without land acquisition and significant engineering works. Works which even if achievable may not be acceptable from an overall Planning Policy perspective.
Compact city – proximity to existing residential areas	No issues	
Compact city - ability to develop land efficiently	Very good	The site has an approximate feasible capacity of 340 dwellings under Township and Settlement zoning.
Effects on Manawhenua values	No issues	
Issues for: ● network utility operators ● Southern District Health Board ● Ministry for Education	Some issues (manageable)	Waka Kotahi commented that development at this site will not support the approach of maintaining a contained urban form and restricting urban sprawl.

• FENZ		
Other constraints on development (encumbrances, owner aspirations, appeals)	Some issues (manageable)	Sites have multiple easements, consent notices, rights of way, fencing covenants, land covenants.