



**QLDC Council
7 March 2019**

Report for Agenda Item: 3

Department: Planning & Development

Expression of Interest for a Special Housing Area: Laurel Hills Ltd (adjacent to Shotover Country)

Purpose

- 1 The purpose of this report is to present the Laurel Hills Ltd Expression of Interest for consideration for recommendation to the Associate Minister for Housing and Urban Development as a Special Housing Area.

Executive Summary

- 2 This report to Council assesses the Laurel Hills Ltd Expression of Interest (**EOI**) against the various criteria of the Council's Housing Accords and Special Housing Areas Act 2013 Implementation Guidelines (**the Lead Policy**). The proposal is for 156 smaller, more affordable houses and includes a Local Park, walking and cycling trails, creation of additional footpaths and bus stops, and a possible bus priority route through the development. An offer has been made to the Queenstown Lakes Community Housing Trust.
- 3 Reporting and peer reviews confirm that at a high level, the land can be serviced for three waters, power and telecommunications. Servicing for stormwater presents the biggest challenge and while a feasible concept has been proposed, this has its risks and further detailed work is required. Safeguards can be provided in the Stakeholder Deed to ensure the final system is effective.
- 4 Transport is a key issue for the EOI and the wider Ladies Mile area. Vehicle transport infrastructure is limited with only SH6 and SH6A providing access into the Frankton Flats. There is a tension between New Zealand Transport Agency (**NZTA**) objectives to maintain bridge capacity at 1600 vmph at peak times to serve the through function of a State Highway, and the local access function the road provides to serve residential areas. There is no plan for a second crossing of the Shotover River in NZTA planning documents.
- 5 The Laurel Hills EOI is the first 156 of the 1100 homes provided for through the Council approved Housing Infrastructure Fund (**HIF**) Detailed Business Case (**DBC**). The total 1100 homes and background growth will exceed the 1600vmph Shotover Bridge capacity at completion. To limit this number above 1600vmph, the Council, NZTA and the Otago Regional Council have committed to a significant programme including capacity improvements and mode shift, which is expected to improve the transport system through improved transport choice and level of service for all modes. Even with these actions this is expected to be insufficient to reduce demand to levels below available the 1600vmph bridge capacity *at peak times*. Reducing the proportion of single occupancy vehicles (69%) at peak times is a key challenge.

- 6 The consequence of traffic demand exceeding the 1600 vmp/h bridge capacity is flow breakdown occurring, which ultimately results in longer average delays at peak times. Peak time congestion already extends down Stalker Road past the proposed access road to Laurel Hills (road works at Tucker Beach are also a current factor). The development could result in an additional 130 vehicle movements per hour onto Stalker Road at peak times, and a total of 1,200 vehicle movements per day. This is of real concern to local residents.
- 7 The Laurel Hills EOI is contrary to the Operative and Proposed District Plans as it is on land that is zoned Rural General / Large Lot Residential (but is now within the urban growth boundary). However the EOI is consistent with the Lead Policy including the Indicative Master Plan for Ladies Mile, the purpose of the Housing Accord and Special Housing Areas Act (**HASHAA**), the Detailed Business Case for the Housing Infrastructure Fund and the Queenstown Lakes District Housing Accord. The proposal was anticipated through the Housing Infrastructure Fund Detailed Business Case application.
- 8 Council will have to reconcile the obvious transport challenges with the physical limitations of roading infrastructure, the need to encourage mode shift, the high percentage of single occupancy vehicles and the urgent need to provide more housing, given the most unaffordable house and rental prices in the country.

Recommendation

That Council:

1. **Note** the contents of this report;
2. **Note** that public feedback received has been provided to Councillors separately prior to the meeting;
3. **Approve in principle** the Laurel Hills EOI for a Special Housing Area and instruct the General Manager of Planning and Development to proceed with negotiation of the Stakeholder Deed that addresses the requirements of the Lead Policy including:
 - a. The contribution to the Queenstown Lakes Community Housing Trust;
 - b. A legal restriction on visitor accommodation;
 - c. Infrastructure requirements, including public transport infrastructure;
 - d. Parks and reserves (including trails, footpaths and connections); and
 - e. Qualifying development criteria for the proposed Special Housing Area.
4. **Instruct** Council officers to report back to the Council on the measures discussed in Point 4 above at the 18 April 2019 Council meeting.

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21/02/2019

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21/02/2019

Background

Purpose of HASHAA, the Housing Accord and Other SHAs

9 The purpose of the HASHAA is:

to enhance housing affordability by facilitating an increase in land and housing supply in certain regions or districts, listed in Schedule 1, identified as having housing supply and affordability issues.

10 Council entered into the Queenstown Lakes District Housing Accord (**the Accord**) with the Government in 2014, which was subsequently updated on 12 July 2017. The Housing Accord applies District Wide. The Accord “sets out the Government’s and the Council’s commitment to work together to facilitate an increase in land and housing supply, and improve housing affordability and suitability in the Queenstown Lakes-District. The Accord recognises that by working collaboratively the Government and the Council can achieve better housing outcomes for the District. The priorities are:

- a. *The continued development of additional land supply, as quickly as possible, to alleviate pressures in the housing market*
- b. *The development of a mix of housing types that are aligned with the Council’s intended plan for residential development to be more affordable, of medium density, closer to key central areas, and on good public transport routes”.*

11 On 26 October 2017 and 28 June 2018 the Council adopted an amended Lead Policy to guide the Council’s implementation of the HASHAA. Eight SHAs have been recommended by Council and approved by the Minister as shown in the table below:

SHA	Under Construction	EOI / Resource Consent Approval – lots/dwellings	Residential parcels created	New dwelling building consents 6 Dec 2018
Bridesdale	Yes	134	136 (2 existing)	124
Queenstown Country Club & Onslow Road	Yes	346 (+aged bed care facility)	14	51
Onslow Road	Yes	21	21	0 ¹
Arthurs Point (Stage 1)	Yes	88	30	43
Arthurs Point (Stage 2)	No	92	0	0 ²
Gorge Road	No	0	0	0 ³
Shotover Country	Yes	101	101	5
A'town Retirement Village	Yes	195 (+aged bed care facility)	2	26
TOTAL		977 +2 aged-bed facilities	302	249

12 As the table illustrates, these SHAs will deliver a yield of approximately 977 residential units and 182 beds of aged care facilities, thus contributing significantly to the Council's obligations under the Accord.

13 Six of the eight SHAs are under construction (Gorge Road and Bullendale Stage 2 are the exceptions). On 6 December 2018 the SHAs have resulted in 249 residential units having building consent. Allowing three people per household, this means housing for approximately 747 residents has already been directly provided through SHAs.

14 Two additional SHAs in Hawea and Wanaka (Bright Sky) have recently been recommended by Council to the Minister. If both are approved by the Minister, they would enable an additional 681 residential units (giving a total of 1658 residential units through SHAs).

15 Other possible SHAs include:

- Coneburn, 600 houses/units – located north of Haley's Farm. EOI proposal to go to 18 April Full Council meeting.
- Glenpanel West, 153-207 houses/units on northern side of Ladies Mile. EOI proposal to go to 18 April Full Council meeting.
- Glenpanel East, 156 units on northern side of Ladies Mile. EOI proposal to go to 18 April Full Council meeting.
- Avalon, 1500 houses - Victoria Flats at the end of Gibbston Valley. EOI to potentially go to 18 April Full Council meeting.

16 Applicants within any new Special Housing Areas (**SHAs**) will have until 16 September 2019 to apply for a resource consent until they are disestablished. Provided the application is lodged before that date, the application may continue through the resource consent process under the HASHAA but must be completed before 16 September 2021 when HASHAA will expire.

¹ Purchased by Queenstown Country Club and being developed as part of that development

² Was only Gazetted by the Government as a SHA in December 2018.

³ Being developed under the RMA rather than HASHAA following rezoning to BMUZ

Background to adding Ladies Mile into the Lead Policy

- 17 Council considered three agenda items before deciding to add the Ladies Mile into the Category 2 of the Lead Policy. The decisions stemmed from a Council resolution following the approval of the Queenstown Country Club which was the first development approved on the flatter, more visible parts of the Ladies Mile.
- 18 The 23 June 2017 agenda item sought approval to consult on adding the Ladies Mile into the Lead Policy due to the district's housing affordability problem, and the high levels of growth being experienced, which required the Council to consider how it can enable and provide more land for housing. This is reinforced by a number of drivers from central government including the Housing Accord and the National Policy Statement on Urban Development Capacity.
- 19 The 17 August 2017 agenda item reported back on the 310 responses received and made a range of changes to the proposed indicative master plan. This agenda item included a transport assessment by Abley Consultants based on an additional 1000 houses, which showed the bridge reaching capacity (1600 vmp/h) during the evening peak at 2024 or 2032 with a 10% uptake of public transport. Since this report, the far more detailed integrated transport assessment has been prepared based on the latest growth figures and traffic data (refer paragraphs 64 to 92).
- 20 The 26 October 2017 agenda item reported back to Council on what level of contribution could come to the QLCHT, how can speculation in vacant sections be prevented, and what other large tracts of land may be available to provide affordable housing at suitable cost in the district. The Council ultimately resolved to add the Ladies Mile into the Lead Policy as Category 2, noting that *"the Indicative Master Plan is high level and that detailed design and location of activities such as public transport infrastructure, day care centres, schools, and parks / reserves is not precluded and can be addressed through the 'expression of interest' process"*.
- 21 The Detailed Business Case (**DBC**) for Housing Infrastructure Funding was approved by Council on 23 March 2018. It was subsequently approved by both the Otago Regional Council (**ORC**) and the New Zealand Transport Agency (**NZTA**) Board in August 2018. The NZTA board resolution was sought due to the significance of balancing housing priority and roading capacity. The DBC was the basis for the Ladies Mile Loan and Funding Agreement which was executed on 30 September 2018.
- 22 At the time of writing this report, Council had just announced that it had entered into a conditional contract to purchase 516 Frankton Ladies Mile Highway. It has not been possible to assess the possible impact of that prospective purchase on this SHA proposal but within the context of the masterplan included within the Lead Policy for Ladies Mile, it potentially provides options to serve an array of uses from recreation and community facilities, to education and transport in the Ladies Mile area

Criteria and process for considering SHAs

- 23 The Council considers each proposed SHA on its own merits. In addition, to the degree of consistency with the Lead Policy, other factors, such as planning and RMA matters, may be relevant to the Council's exercise of discretion to make a

recommendation to the Minister. The below process is followed when assessing the EOI:

Step 1 - An initial review by officers of an EOI to ensure it is consistent with the Council’s intent, and there is sufficient information provided to assess it;

Step 2 - Seek public feedback including statutory agencies and iwi;

Step 3 - Seek comments from internal Council departments and others as necessary;

Step 4 - Report to Full Council to consider whether or not to agree in principle the establishment of an SHA;

Step 5 - Should the EOI be agreed in principle, negotiate an appropriate Stakeholder Deed that fulfils the requirements of the Lead Policy (and other matters that are deemed to be relevant) and any other outstanding matters;

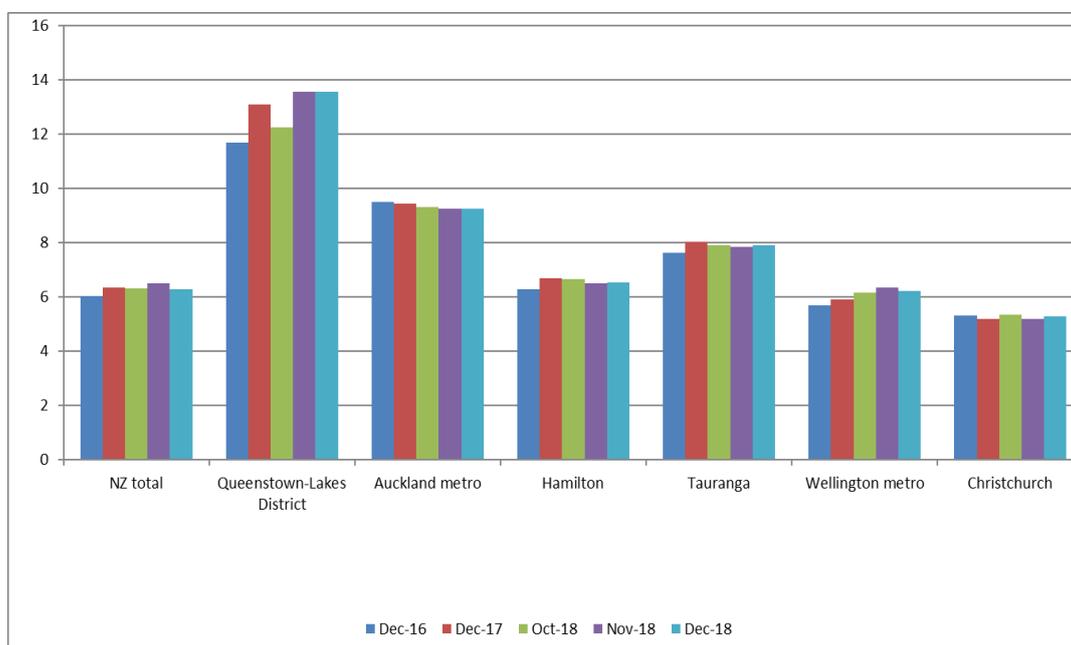
Step 6 - Council considers the draft Stakeholder Deed and makes a determination on whether or not to recommend the EOI to the Minister as a potential SHA; and

Step 7 - If a Stakeholder Deed is agreed and signed, the proposed SHA will be recommended to the Minister.

- 24 Steps 1 to 3 have been completed. This report addresses Step 4. If the EOI is accepted in principle a further report to Full Council will address Steps 5 and 6.
- 25 The EOI for the proposed Laurel Hills EOI was formally received by Council on 14 January 2019. Public feedback was sought from 1 February 2019 to 1 March 2019. This feedback has been circulated to Councillors.

The housing affordability problem in the Queenstown Lakes District

- 26 The analysis of median house price to median annual household income in Figure 1 below over December 2016 to December 2018 (the latest figures available) shows increasing rates of unaffordability for the Queenstown Lakes district. It



shows that affordability relative to income has decreased significantly over the past three years in the Queenstown Lakes district. An accepted median multiple of 3.0 or less is considered to be a “good” marker for housing affordability. All areas are sitting above this level and the Queenstown Lakes district is the most unaffordable in New Zealand at over 13.

Figure 1: Multiples of median annual household income ⁴ to median house price

27 The fourth quarter 2018 data based on bonds received by Tenancy Services (MBIE) shows the average weekly rent in the Queenstown Lakes district has increased to \$633, also the highest in New Zealand.

District	Average rent Q4 2018 \$/week	% change Q4 2017 – Q4 2018	% change Q4 2016 – Q4 2017
Queenstown Lakes district	\$633	14.5%	4.6%
New Zealand	\$456	5.5%	4.1%
Auckland Region	\$549	3.6%	3.6%
Hamilton City	\$395	6.1%	4.0%
Tauranga City	\$465	3.9%	5.2%
Wellington Region	\$500	9.4%	6.3%
Canterbury region	\$378	2.3%	0.7%

Figure 2: Changes in Average Rents by District (4th quarter 2018)

28 It is noted the *median* house price multiple and *average* rent figures above are for the whole Queenstown Lakes district, and Queenstown itself is typically the highest priced in the district, meaning Queenstown specific figures may be higher than these medians and averages.

The supply of land for housing in Queenstown

29 As part of the requirements for the National Policy Statement on Urban Development Capacity (NPS-UDC), the Council is required to prepare a housing capacity assessment. This was reported to Council’s Planning and Strategy committee on 10 May 2018.

30 The analysis of demand and feasible plan enabled capacity for housing shows that the Proposed District Plan and Operative District plan (where relevant) are able to meet all the requirements under the National Policy Statement in terms of total feasible development capacity for growth for the next 30 years. These results are based on a number of assumptions and will need to be subject to monitoring. The delivery of houses through infill and redevelopment will only make up a small portion of the new housing stock, noting that increased densities have been promoted in the Proposed District Plan that encourage this form of development.

31 The analysis across different price bands shows a shortfall of feasible capacity in the lower band priced housing. The analysis suggests the plans provides capacity for the market to provide a substantial share of the shortfall of houses in the lower to medium price bracket. However, because of high demand and the potential for

⁴ Median house prices as reported by REINZ. The household income for a standard household is made from one full time male median income, 50% of one female median income, both in the 30-34 age range, plus the *Working for Families* income support they are entitled to receive under that program. This standardised household is assumed to have one 5 year old child. Incomes are before tax and retrieved from the Statistics NZ / IRD LEEDS income series. LEEDS data are subject to revision.

developers to sell houses at much higher prices the market is not delivering these dwellings. The Laurel Hills housing is likely to fall into the lower band priced housing.

- 32 While the Council has done its part in ensuring enough land is zoned, it cannot be predicted when this will be developed or come to the market. The 23 June 2017 Full Council agenda item on whether to add the Ladies Mile into the Lead Policy noted that the issue is not the shortage of zoned land, but rather the low uptake of land that is zoned for development. Large zoned areas of Queenstown such as on the Kelvin Peninsula and Remarkables Park are only slowly being developed for residential housing, and both zones have been in place for around 20 years.

Description of EOI

- 33 The proposal is for a residential development of approximately 156 sections, a 4000m²+ neighbourhood reserve, and associated earthworks, roading, walking and cycling trails and associated infrastructure. The detailed EOI comprises of plans and images of the proposal, with supporting assessments from a landscape architect, urban designer and engineers. The EOI document and Appendices 2 and 8 (the key plans) are attached as **Attachment A**. All other appendices to the EOI are not included in the published version of the agenda but are available on the Council's website: <https://www.qldc.govt.nz/your-council/your-views/laurel-hills-special-housing-area/>
- 34 The total area of the site is approximately 9.4 hectares and it is adjacent to State Highway 6 and in close proximity to the urban area of Shotover Country. The land is currently zoned Rural General under the Operative District Plan, and is recommended to be Large Lot Residential A under the Panel recommendations in an accompanying agenda item. The proposal site is shown in relation to Shotover Country, in Figure 3 below.

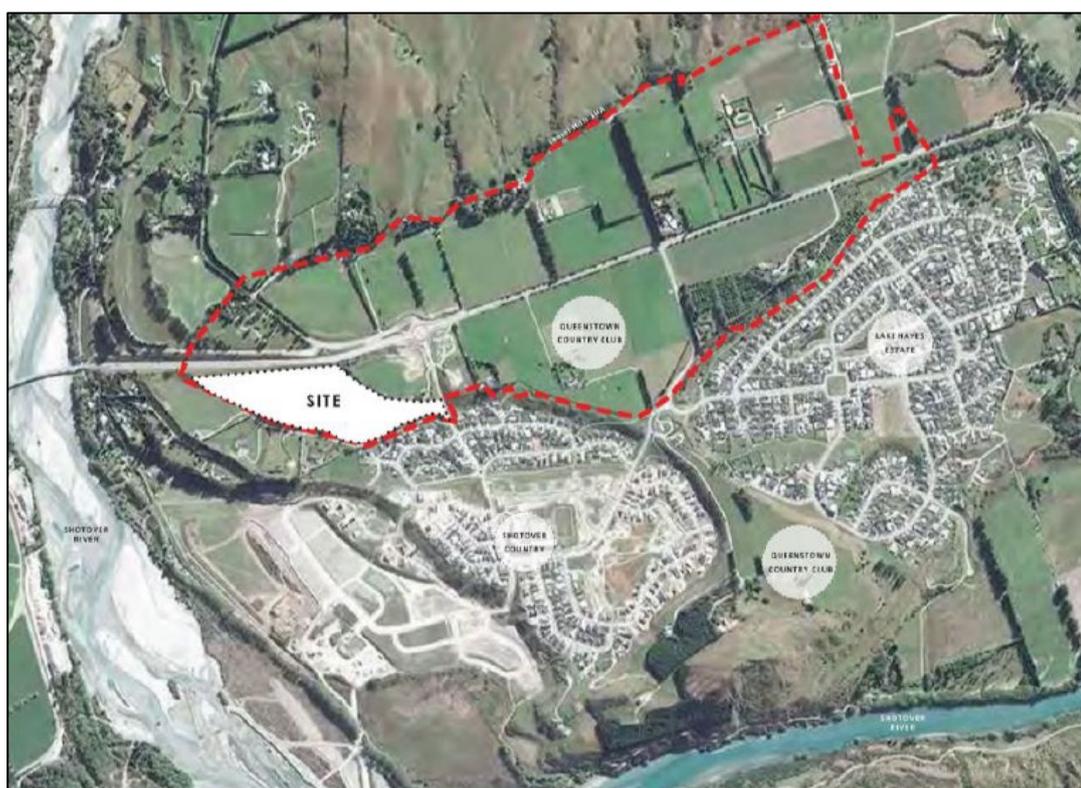


Figure 3: Proposed SHA location within wider context

- 35 The site is subject to a private covenant that restricts building height to 5.5m above the ground level. This is a significant site constraint that restricts the ability to go beyond two stories in height, and requires earthworks to achieve two storey designs.
- 36 The Lead Policy requires a 10% contribution of the developable land area to the Queenstown Lakes Community Housing Trust (**QLCHT**). This will result in approximately 15 sections for the QLCHT.
- 37 The proposed indicative roading layout and housing and reserve locations are shown in Figure 4. It is noted the EOI is already quite detailed, however the consideration of the suitability of the roading network, design and scale of development would be thoroughly addressed through the resource consent stage.
- 38 It is important to note that Council is not being asked to assess the details of the proposal like a resource consent, but rather determine at a high level whether it would recommend the EOI to the Minister as a potential Special Housing Area. The detailed assessment will occur when subdivision and resource consents are submitted.



Figure 4: Proposed roading and reserve layout

Comment – Assessment of the Proposal against Council’s Lead Policy on SHAs

- 39 The developer has prepared an assessment of the proposal against the Lead Policy. It should be noted that consideration of the Lead Policy is not a ‘tick box’ exercise – whilst important the Lead Policy provides a framework of relevant considerations for the Council to assess proposed SHAs, other factors, such as planning and RMA matters may be relevant to the Council’s exercise of discretion to make a recommendation to the Minister. These still need to be considered in the context of the HASHAA purpose of increasing housing supply. Full discretion lies with Council on whether or not to recommend an area to the Minister to be a SHA.
- 40 An assessment of the criteria for recommending a SHA to the Minister is set out below:

Location (Point 3.1 of the Lead Policy)

- 41 The site is directly adjacent to Shotover Country, a residential area accessed off Stalker Road and located approximately 11km from central Queenstown and 3km from the approximate centre of the Frankton Flats (Pak 'n' Save). The site entrance is approximately 400m from the Shotover Country School. A range of small reserves are available in Shotover Country, and there is good access to the local trails network.
- 42 The site is listed in Category 2 of the Council's Lead Policy. Category 2 includes areas that 'may be suitable' for the establishment of SHAs, and includes the area of the Ladies Mile and certain areas in Wanaka. Ladies Mile was put into Category 2 rather than Category 1 by Council. As noted in paragraph 15 above, Council wanted to ensure the right density and type of development occurred on the Ladies Mile to facilitate public transport.
- 43 The location is consistent with the Lead Policy however the road layout does depart slightly from that envisaged. The road layout envisaged the two access points through the Kelly property located on the corner of the State Highway and Stalker Road. The EOI provides for one of these connections should the Kelly land be developed, but as Figure 4 above shows, the proposed access is at the bottom of the incline in Stalker Road rather than the top. Figure 5 below shows the site layout in the context of the Indicative Master Plan.

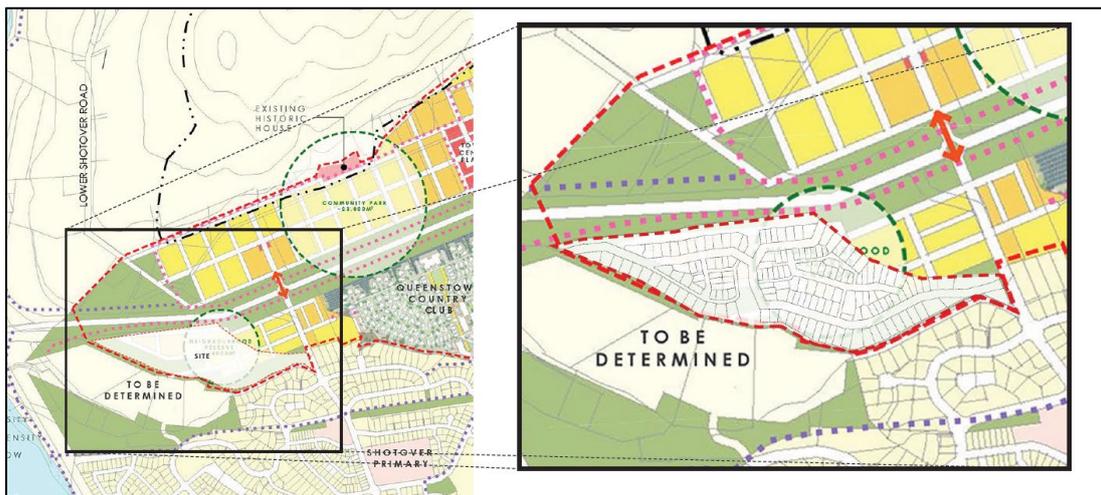


Figure 5: Site layout in the context of the Indicative Master Plan

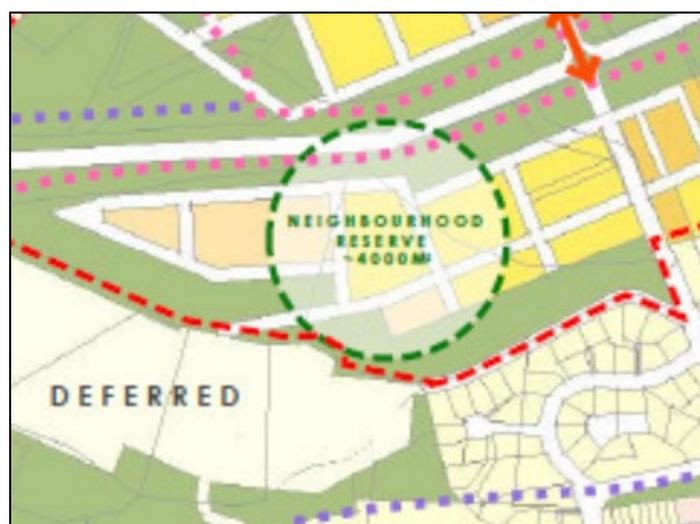


Figure 6: Extract of the site from the Indicative Master Plan

Strategic Direction (Point 3.2 of the Lead Policy)

44 The current Lead Policy specifically refers to Strategic Direction Objective 3.2.2.1 set out in the PDP as it was notified in 2015. In particular, Objective 3.2.2.1 of the PDP is listed (as notified):

3.2.2.1 Ensure urban development occurs in a logical manner:

- i. to promote a compact, well designed and integrated urban form;*
- ii. to manage the cost of Council infrastructure; and*
- iii. to protect the District's rural landscapes from sporadic and sprawling development.*

45 The proposal is considered to be a 'logical' urban extension of the Shotover Country urban area, recognising the limited greenfield growth opportunities for Queenstown. Other greenfield growth options were reported to Council on 26 October 2017 when Council was contemplating whether to add the Ladies Mile into the Lead Policy.

46 The proposal is considered to be compact, well designed (at a high level) and it will be part of an integrated urban form as part of Shotover Country and the wider Ladies Mile. The alignment of the roads to provide future links to the east and west is considered crucial to ensuring adjoining land can also be interconnected without also needing separate access roads or cul de sacs.

47 If approved the proposal will result in the loss of rural landscapes, however it is not considered to be a sporadic or sprawling development because it is part of a master planned development of the Ladies Mile that physically adjoins an existing urban area. With regard to the landscape values, the land is not identified as being an Outstanding Natural Landscape but rather a Visual Amenity Landscape, is in open pasture and retains a strong degree of rural character and provides a high degree of visual amenity. The full landscape assessment forms Appendix 3 to the EOI.

48 The land features flat terraces, has good access to sunlight, is accessible from existing roads, has a low hazard risk and adjoins an existing urban area. At a high level, the site is considered to be a suitable area for urban development.

49 Overall, the proposal is considered to be well located for SHA purposes, and not contrary to the Strategic Direction Objective 3.2.2.1 as notified.

Decisions Version of Objective 3.2.2.1

50 With the release of the 'decisions on submissions' on Stage 1 of the Proposed District Plan, the Strategic Direction chapter has changed. The new equivalent Objective and related policy is set out below:

3.2.2 Urban growth is managed in a strategic and integrated manner.
(addresses Issue 2)

3.2.2.1 Urban development occurs in a logical manner so as to:

- a. promote a compact, well designed and integrated urban form;
- b. build on historical urban settlement patterns;
- c. achieve a built environment that provides desirable, healthy and safe places to live, work and play;
- d. minimise the natural hazard risk, taking into account the predicted effects of climate change;
- e. protect the District's rural landscapes from sporadic and sprawling development;
- f. ensure a mix of housing opportunities including access to housing that is more affordable for residents to live in;
- g. contain a high quality network of open spaces and community facilities; and.
- h. be integrated with existing, and planned future, infrastructure.

(also elaborates on S.O. 3.2.3, 3.2.5 and 3.2.6 following)

- 51 With regard to the first part of the policy, the location for the urban development in relation to Shotover Country and Ladies Mile is considered to be in a 'logical' location for urban development.
- 52 With regard to (a) as noted above, the proposal will still retain a compact, well designed (at a high level) and integrated urban form. Again the provision for interconnections through to adjoining land is crucial to ensure connections with adjoining land and to avoid a series of isolated cul de sacs.
- 53 In terms of (b), the proposal will arguably build on historical urban settlement patterns by extending the existing Shotover Country settlement, rather than creating a new separate township.
- 54 With regard to (c), the proposal will form part of the Shotover Country built environment. This area has desirable, healthy and safe places to live and play, but offers very little opportunity for employment, which is centred across the Shotover River in the Frankton Flats and in Queenstown. This has consequent transport implications which are discussed in paragraphs 64 to 92 of this agenda item.
- 55 With regard to (d), the site is identified as being potentially susceptible to liquefaction, however the detailed geotechnical report submitted states that this is not a risk due to the depth of the water table. Natural hazard risk is not an issue.
- 56 With regard to (e), as noted in paragraphs 47 above, the proposal is not considered to be sporadic or sprawling.
- 57 With regard to (f), the development will ensure a mix of housing opportunities that are more affordable options for residents to live in.
- 58 With regard to (h), the Laurel Hills site is part of the detailed business case area for the Ladies Mile, and can be integrated with existing and planned future infrastructure, including enhancements to the transport infrastructure, relying on programmed upgrades funded through the HIF loan facility. Transport implications and the work committed to through the Housing Infrastructure Fund Detailed Business Case are discussed further in paragraphs 64 to 92.
- 59 The proposal is not considered contrary to the decisions version of Objective 3.2.2.1.

Urban Growth Boundary (UGB)

- 60 The Panel appointed to hear submissions on the PDP have recommended that the land subject to the Laurel Hills EOI is zoned Large Lot Residential A (2000m² minimum site size) and that the land is included within the UGB (the red dashed line below):

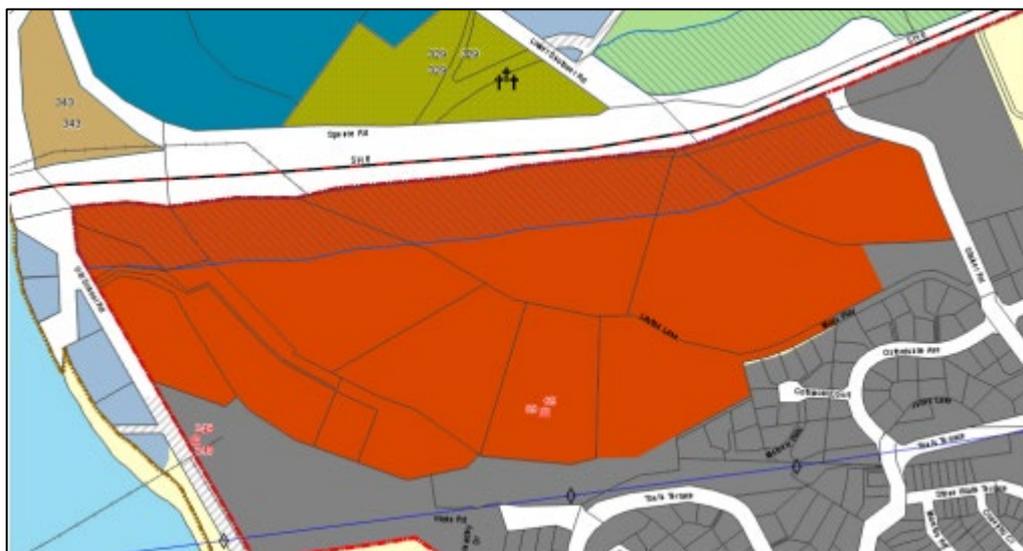


Figure 7: Proposed District Plan Panel Recommendation

- 61 The Lead Policy emphasises the establishment of SHAs within existing or proposed urban areas that are contained within the proposed UGB of the PDP. The Laurel Hills land is now within the UGB if the Panel recommendations in a separate agenda item are adopted.
- 62 Large Lot residential zoning could result in the land being subdivided into 2000m² blocks, which would typically be expensive with large houses built on them. If this zoning was acted upon rather than through the HASHAA process, the land could be subdivided into 34 lots of 2000m², and the land would be lost for full urban development.
- 63 The Panel noted that *“an urban zone and Structure Plan process would be a good outcome. However this is not one of the alternatives open to us”*⁵. Council officers sought that the land remain Rural or Rural Amenity to preserve its ability to be fully urbanised under the HASHAA (given the scarcity of serviceable land available for urban development), as once land is carved up for rural residential style development it is almost impossible to develop for urban purposes.

Infrastructure (including transportation) (Point 3.3 of the Lead Policy)

Transport / Traffic

- 64 The recently announced ‘Wakatipu Way to Go’ initiative reflects that integrating transport and land use planning in Queenstown requires the three relevant agencies to work together. Council manages land use under the RMA / HASHAA

⁵ p.17, paragraph 69, Report 18.11 – Area 1 Ladies Mile.

and local roads, whereas NZTA manage the State Highways and ORC provide public transport.

- 65 The site is within the area identified to be serviced through the DBC for the Ladies Mile Housing Infrastructure Fund works. The DBC provides infrastructure to service 1100 additional residential units on the Ladies Mile, including some transportation infrastructure. Other transport infrastructure is to be worked through in a Memorandum of Understanding between the three agencies.
- 66 The DBC was prepared by QLDC and was considered and ultimately approved by QLDC on 23 March 2018. It was subsequently approved by both ORC and the NZTA Board in August 2018. The Ladies Mile Loan and Funding Agreement which was executed on 30 September 2018.
- 67 The proposal includes a transportation assessment (Appendix 6) in two parts:
 - a. Consideration of the new connections to the local transport network (Bartlett Consulting). This assessment was peer reviewed by Novo Group.
 - b. Adoption of the Integrated Transport Assessment prepared by WSP-Opus as part of the DBC for the Ladies Mile. The wider impacts of the 1100 additional houses on the Ladies Mile on State Highway 6 were specifically considered and this assessment has been adopted by the applicant given that it was approved by QLDC, ORC and NZTA. **Attachment B** is the addendum to the ITA that specifically considers the 1100 houses scenario and vehicle occupancy.

Impact on Local Transport Network

- 68 It is proposed to construct a new T-intersection from Stalker Road to serve the 156 residential dwellings. This intersection would be constructed approximately 90m to the north of the existing roundabout intersection of Stalker Road with Banbury Terrace and Oxfordshire Avenue, and approximately 250m south of the Stalker Road roundabout intersection.
- 69 The proposal includes a new footpath up Stalker Road to the roundabout, and to connect with the existing footpath network on both sides of Stalker Road. Two new bus stops are also proposed on Stalker Road to service the new development.
- 70 The new T intersection is 40m from Maxs Way, a private right of way that will only serve four rural residential lots if the EOI is recommended to the Minister. Maxs Way could potentially join the new road if the four owners were to agree.
- 71 The internal roading network has been designed to allow for extensions should adjoining residential properties one day seek consent to subdivide. In this regard the proposal is designed to not be a cul de sac and provides for an alternative entry / exit onto Stalker Road via a loop road, and for access down onto the terrace accessed off Maxs Way if that were to be developed in the future.
- 72 Providing an alternative exit out of Shotover Country via Old School Road / Spence Road was not provided for in the private plan change that created the Shotover Country Special Zone, and would now be very difficult due to existing residential development between Laurel Hills and Old School Road.

- 73 The development is likely to generate up to 1,200 vehicle movements per day, or during the 7am – 9am peak period approximately 130 vehicles per hour. The report acknowledges that in the morning peak queueing occurs past the proposed intersection, meaning an extra 130 vehicles per hour would be entering into an already congested peak time environment. This is discussed further in paragraphs 64 to 92 below relating to the wider transport network.
- 74 The applicant is exploring an option with NZTA to provide bus priority through the development, whereby buses could be prioritised and avoid the Stalker Road roundabout and access onto the State Highway through a gate or moving bollard which provides for buses only, as shown in Figure 8 below:

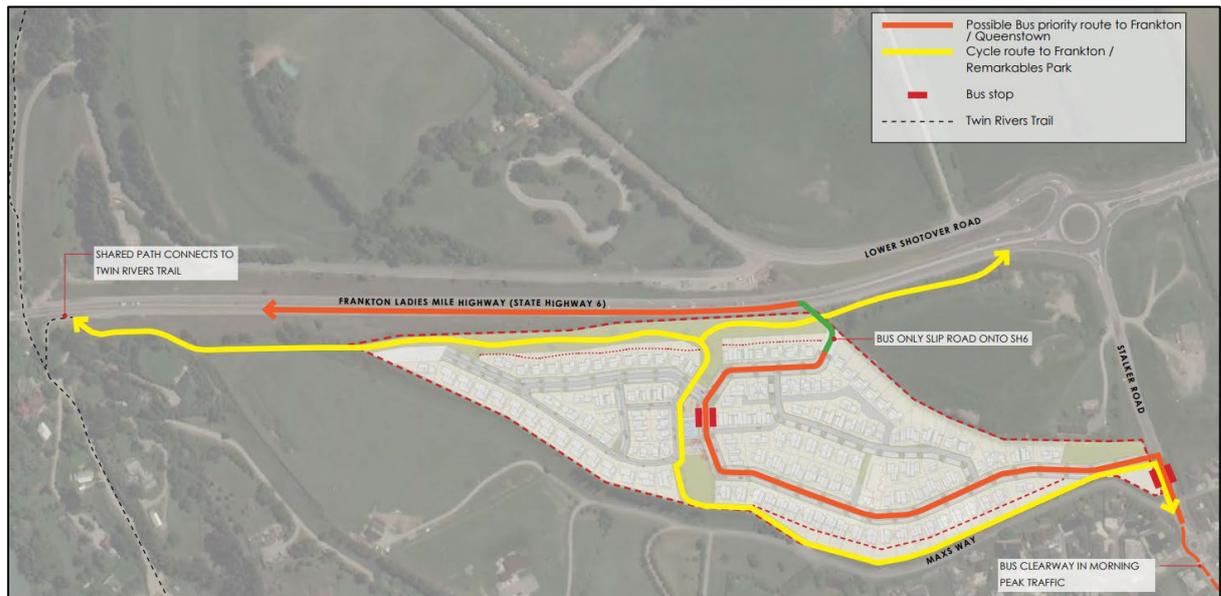


Figure 8: Possible Bus Priority Route

- 75 This option is not confirmed but could be provided for through the Deed. This would be a positive development that would prioritise buses over private vehicles.
- 76 In summary, the new intersection design provided is based on the requirements of NZS4404:2010 and the Council Land Development and Code of Practice. The internal road network has one cross section that may not meet the necessary standards (the neighbourhood street (12m)) as it does not have a footpath and would appear to serve more than 20 units. This very detailed design matter can be considered at the resource consent stage.

Wider Transport Network

- 77 The impact of the additional 1100 residential units on the wider network was assessed as part of the DBC for the HIF. A comprehensive integrated transport (ITA) assessment was prepared and has been adopted by NZTA, ORC and QLDC. The ITA is Appendix 6 to the EOI. The addendum is **Attachment B**. Four options were considered in the DBC, providing for 450 lots (do minimum), 750 lots, 1100 lots and 2185.
- 78 Traffic growth on SH6 is placing a significant strain on the already-busy corridor, with 2-year growth rates at 9.0%. With considerable development continuing in Frankton and the wider Queenstown area, growth rates are not expected to decrease significantly.

- 79 The ITA is extensive and difficult to summarise, however a key driver is maintaining 1600 vehicles per hour across the Shotover Bridge. Recent surveys confirm that the pinch point in the network is in the vicinity of Shotover Bridge where the maximum traffic flow that can be accommodated in one hour is approximately 1,600 vehicles. NZTA is not supportive of any scenarios that (in combination with background growth) result in peak traffic flows of more than 1,600 vehicles at this location.
- 80 Congestion is already being experienced on the State Highway during the morning and evening peak. This has been exacerbated recently with the Tucker Beach Road intersection works, and all Quail Rise / Tucker Beach traffic having to utilise the Stalker Road roundabout.
- 81 On 17th May 2018, a vehicle occupancy survey was undertaken looking at vehicle occupancy. During the morning peak, there were 1750 people travelling westbound in 1300 vehicles.
- 82 Approximately 69% of vehicles were single occupancy. About 25% of vehicles had two people and a further 6% had three or more. The overall numbers are slightly higher during the afternoon peak travelling eastbound over the bridge, and 35% of vehicles carrying two or more people.
- 83 The ITA forecasts that Programme 3 (1100 houses) on the Ladies Mile would result in 770 vehicles above capacity at completion. To keep peak hour flows at the bridge below 1,600 vehicles per hour, a mode shift of 40% is required at Ladies Mile and Lake Hayes/Shotover Country respectively, in addition to a Park and Ride on SH6 with a turn in rate of 20%. This would require a step change in transport infrastructure, including mass transit, an increase in highway capacity or a combination of the two.
- 84 Given the high percentage of single occupancy vehicles (69%), an additional memorandum to the ITA was prepared that focused on the Programme 3 option of 1100 lots (of which Laurel Hills is 156), and factored in a *vehicle occupancy* parameter (**Attachment B**). The conclusion of the memorandum is that:
- *Construction of Programme 3 [1100 houses] at the Ladies Mile HIF site will result in traffic volumes exceeding the 1,600 vehicles/hr approximate capacity of the Shotover Bridge before the development is complete.*
 - *By investing in public transport, Park and Ride and active mode improvements, significant mode shift away from single occupancy car travel can be achieved. However, this is expected to be insufficient to reduce demand to levels below available capacity [1600 vmph]. As such, capacity upgrades are also likely to be required to enable construction of Programme 3.*
 - *There are multiple options available to increase capacity at existing bottlenecks. However, increasing general traffic capacity at the Shotover Bridge will potentially migrate congestion to critical downstream sections of the network. Constructing a new bridge or an entirely new route are also considered expensive, long-term solutions.*
 - *Adding supplementary high-occupancy vehicle lanes across the Shotover Bridge is expected to present a more cost-effective solution without causing congestion downstream. The option is expected to reduce demand across the*

Shotover Bridge by increasing vehicle occupancy as well as increasing capacity. Construction could be staged to meet demand by preceding the bridge upgrade with transit lanes on SH6 up to the bridge approaches.

- *Lower cost options include traffic signals on SH6, which could be used to meter demand arriving at the Shotover Bridge to distribute delay and queues across the corridor. Signals could also be used to provide bus priority at the Shotover Bridge merge. However, the implementation of traffic signals on SH6 is unlikely to be favourable to NZTA on the grounds of safety and efficiency.*
- *The consequence of traffic demand exceeding capacity is flow breakdown occurring, which ultimately results in longer average delays. NZ Transport Agency has indicated its objective is to minimise the increase in traffic demands from significantly exceeding the capacity of the Shotover Bridge (1,600 vehicles/hr), though the amount of acceptable delay on SH6 is not currently defined.*
- *Furthermore, the effect of peak spreading has not been assessed in detail and could lead to levels of service being maintained across the Shotover Bridge through a longer peak period.*
- *Staging of required improvements cannot be tied exclusively to the number of houses built at Ladies Mile as it is dependent on the realisation of background traffic growth rates and the rate of building achieved at the Ladies Mile site. Capacity improvements are highly likely to be required before the construction of Programme 3 is complete.*

85 As a result of the ITA (which is one part of the DBC), the proposed actions prescribed through the DBC are shown in the table below. As the above summary notes, even with the physical works identified in the table, maintaining the Shotover Bridge at 1600vmp/h requires significant behavioural changes to achieve the level of diversion to public transport and park and ride required, noting 69% of morning peak trips are currently in single occupancy vehicles. Peak spreading, where people choose to adjust their travel times to avoid the morning and evening peak times, ride sharing, and going via Arthurs Point could also reduce vehicle numbers at peak times.

Sequence	Action / Intervention	Trigger	Control Mechanism	Funding
1	Prior to first lots	Construct access Roundabout at Howards Drive	DA for Development	DA HIF
2	Prior to first lots	Construct Bus Stops and Underpass on SH	DA for Development	DA HIF
3	Prior to first lots	Improve PT Level of Service - Target 20%	DA for Development	MOU ORC
4	By end of 450th lot	Construct Park & Ride East of Ladies Mile	Design @150. Construct @300.	MOU NZTA
5	Park & Ride	Complete Improve PT Level of Service - Target 25%	Park & Ride Complete	MOU ORC
6	By end of 750th lot	Construct Bus Priority Lane (Park & Ride to Shotover Bridge)	Design @450. Construct @600.	MOU QLDC / NZTA
7	Priority Lane	Complete Improve PT Level of Service - Target 27%	Priority Lane Complete	MOU ORC
8	By end of 900th lot	Implement Diversion Improvements	Design @750. Construct @825.	MOU QLDC / NZTA
9	By end of 1,100th lot	Improve PT Level of Service - Target 29%	900 Lots	MOU ORC
10	Prior to 1,101st lot	Future PT Infrastructure / Modal Shift	900 Lots	MOU QLDC / NZTA / ORC

Figure 9: Programme of works from HIF DBC

86 Rows 1 – 3 from the table above would help address the transport situation. Rows 1 and 2 are funded through HIF and are subject to developer agreements with landowners on the northern side of Ladies Mile, whereas Row 3 is subject to a MOU between QLDC, ORC and NZTA. The “target” is 20% on public transport, a level similar to cities such as Wellington. For Row 4, the Laurel Hills proposal with 156 houses, would be the trigger for the design of a park and ride facility to the east of Ladies Mile. This would have to be *constructed* at 300 houses.

Transport Summary:

87 In summary, vehicle transport infrastructure is limited with only SH6 and SH6A providing access into the Frankton Flats. There is a tension between NZTA objectives to maintain bridge capacity at 1600 vmph at peak times to serve the through function of a State Highway, and the local access function the road provides to serve the residential areas of Lake Hayes Estate and Shotover Country. Walking and cycling infrastructure across the Shotover River is also poor, being indirect and steep in places. There is no plan for a second crossing of the Shotover River in the Regional Land Transport Strategy or other NZTA planning documents.

88 The Laurel Hills EOI is the first 156 of the 1100 homes provided for through the Housing Infrastructure Fund Detailed Business Case. The total of 1100 homes and background growth is forecasted to generate 770 vmph vehicles above the 1600vmph Shotover Bridge capacity at completion in 2028 unless mode shift and capacity improvements are completed. Mode shift alone is not sufficient.

89 NZTA, ORC and Council have therefore committed to programme of capacity improvements and mode shift as shown in Figure 9 above which illustrates the programme of transport work in place to provide for the 1100 houses. However even with these actions this is expected to be insufficient to reduce demand to levels below available the 1600vmph bridge capacity *at peak times*. This is also a problem for any development east of the Shotover Bridge.

- 90 The consequence of traffic demand exceeding the 1600 vmph bridge capacity is flow breakdown occurring, which ultimately results in longer average delays. This is of real concern to local residents.
- 91 Council will have to reconcile this with the physical limitations of roading infrastructure, the high percentage of single occupancy vehicles and the urgent need to provide more housing, given the most unaffordable house and rental prices in the country.
- 92 It must also be noted that providing housing close to employment areas such as the Frankton Flats also means alternatives to the car such as public transport and walking / cycling are feasible, whereas if the residential development occurs further out or in neighbouring towns, these options are generally not available.

Three Waters Infrastructure

- 93 An infrastructure assessment report was submitted with the EOI (Appendix 6) and this was peer reviewed by WSP-Opus who prepared the infrastructure assessment for the Council's Housing Infrastructure Fund detailed business case on the Ladies Mile. The peer review identified a range of matters requiring further attention, and the applicant then responded to the peer review matters.
- 94 If Council agrees with the establishment of the SHA in principle, a Stakeholder Deed would need to be negotiated that secures the infrastructure requirements. This would need to be reported back to Council at the 18 April meeting in order to meet HASHAA expiry timeframes.

Wastewater

- 95 Shotover Country has an existing reticulated wastewater system and the proposed development would connect by gravity at Stalker Road. It is proposed that new gravity sewer reticulation will be constructed internally to service the development. Average dry weather flows arising from the development are estimated to be 117m³ per day with a peak hour flow of 6.8 litres per second.
- 96 Amendments to the QLDC Code of Practice in 2018 reduced the average dry weather flow requirement, meaning there is now spare capacity in the existing system.
- 97 Based on meter readings taken from the Shotover Country Pump Station, the assessment initially calculated the spare capacity to be 284 residential units. This was reduced to 200 residential units in response to a different factor being recommended in the WSP-Opus peer review. The Laurel Hills proposal is for 156 residential units so can be serviced without the pipe being completely full.
- 98 The peer review noted that there is some uncertainty in that the flow readings were from 2016 and updated flow readings have been requested from Council contractors and these are being considered. The Shotover Country Waste Water Pump Station is currently servicing a consented design capacity of 970 dwelling equivalents within the Shotover Country catchment.
- 99 Emergency storage for 8 hours requires 39m³, however 60m³ of additional storage is to be provided and would provide 12 hours storage. This is estimated to cost

\$150K - \$200K and would be paid for by the developer. This amount of storage has been confirmed as acceptable by Council's Property and Infrastructure team.

- 100 The reporting therefore confirms that based on the high level assessment provided, the development can be serviced for wastewater. The additional emergency storage capacity required will be paid for by the developer and secured through the Stakeholder Deed. The Deed will also secure the costs associated with any unanticipated upgrades required as a result of the SHA.

Stormwater

- 101 There is an existing Stormwater Catchment Management Plan prepared for the Shotover Country Special Zone. It is proposed that this be updated to include Laurel Hills. The site is terraced and naturally drains towards its lowest point where it adjoins Stalker Road.
- 102 The Shotover Country reticulation was not designed to service other development areas as they were not zoned for development. The stormwater reticulation therefore will only have sufficient capacity to drain the land if the discharge enters the network after the peak flow from the Shotover Country main catchment has passed.
- 103 The concept design is for runoff from undeveloped areas (e.g. the setback from the State Highway) to be directed around the developed areas via grass swales, and then discharged to ground. A geotechnical report has assessed the soakage rates. This will replicate the pre-development runoff scenario for the undeveloped areas. Storage capacity could be provided for the 20-year annual return interval storm event on site by providing an underground gallery of 1230m³ in volume.
- 104 The developed areas will be serviced using a hybrid low impact design / sustainable urban drainage / 'big pipe' design. This will incorporate a combination of grass swales, kerbs, pipework and detention areas. The development area can be broken into smaller sub-catchments: Separate pipe networks are then proposed for each catchment. Each network will discharge either to its own disposal area adjacent the southern boundary of the site or a single combined storage area. Secondary overflow paths will be provided for in swales or road ways. Overflows will discharge to the same locations as the pre-development scenario.
- 105 The peer review raised a concern about the calculation formula used, however the response to the peer review provided updated volume calculations. By providing for the 20 year annual return interval storm event on site, the advice is that the hybrid low impact design / sustainable urban drainage / 'big pipe' design is feasible and will be able to detain storm water until the peak flows have passed through Shotover Country.
- 106 The Deed will also need to provide for alternatives such as on-site soakage devices which can be installed at the time of dwellings being constructed. The packaged systems range in size from 3.5m³ - 10m³. If buildings are to be constructed comprehensively a shared system between adjoining dwellings might be more cost effective. This system also allows for the possible re-use of stormwater for irrigation.

- 107 The Housing Infrastructure Fund detailed business case report also considered installing a new stormwater main to the Shotover River. This pipe has been proposed to be installed in the State Highway Corridor and that discussions with NZTA be initiated. The rough order of costs for the construction of this pipe is in the order of \$259K.
- 108 The Laurel Hills development could also connect to the stormwater infrastructure if considered the best long-term solution. A contribution to the capital cost of this infrastructure would then be made by the applicant proportional to their demand on this asset. Either on-site stormwater or connection to a reticulated network are feasible options for this site.
- 109 The Deed will need to provide for any contingencies are addressed by the developer to ensure a sustainable stormwater system, and provide Council with the ability to compel the developer to prepare a different stormwater disposal method should further work indicate the underground gallery system is insufficient.

Potable water

- 110 Shotover Country is served by a new 300mm water bore adjoining the Shotover River. Upgrades to the existing Water Treatment Plant at Lake Hayes Estate have also been undertaken. Shotover Country and QLDC jointly constructed a new 1,000m³ water storage reservoir on Jones' Hill, commissioned in August 2014.
- 111 This water supply system is now capable of delivering 70l/s for 16 hours per day. This equates to 4,032m³ of potable water per day. The system is connected to the existing Lake Hayes water supply scheme which provides a level of redundancy and security of supply.
- 112 A 150mm water main was extended to the Stalker Road roundabout and across the highway in early 2016. This main exists in Stalker Road adjoining the subject site. QLDC are currently designing an upgrade to this water supply scheme which involves the construction of a bore field with several new bores capable of taking 395 l/s (subject to consent). This new "on-demand" system will also include a new water treatment plant that will treat the water at the source and be pumped to areas of future development including the Frankton Flats. Works on the first stage of the water upgrade a proposed to commence from October – December 2018.
- 113 To service the proposed development, treated water from the QLDC/Shotover Country scheme would be utilised. Given the elevation of the site is lower than the State Highway intersection and 150kPa is available at that location, the Laurel Hills site will have a static pressure of greater than the minimum required 100kPa and can therefore expect to have adequate firefighting pressures.
- 114 It is noted however that the elevations are too high to achieve minimum domestic pressures of 300kPa. Therefore, either a pressure booster pump station is needed or water to be pumped to a higher-level reservoir (anticipated on Slope Hill through the HIF DBC). Laurel Hills will have to cover the cost of the booster pump and this can be covered in the Stakeholder Deed.
- 115 The HIF DBC report includes a water supply concept consisting of 2 x 1,000m³ water reservoirs to be located at an elevation of 423m. These reservoirs will service the Ladies Mile Area. Reservoirs at this elevation will provide for between 570 – 710 kPa static pressures for the Laurel Hills site.

116 Design work is underway on the new storage reservoirs and conceptually the HIF DBC report illustrates that treated water will be pumped from the Shotover Country Bore Field to the new reservoir up Stalker Road. It is anticipated that the required fire fighting water pressures will be available.

117 Further design and modelling of the water infrastructure would need to be undertaken closely with the Council to confirm availability of supply. It is anticipated that further water modelling may be needed to carry out this modelling at the next phase of design.

118 Any effects on the Council's wider infrastructure being the Shotover Country Bore Field and Water Treatment Plant and new Ladies Mile infrastructure will be mitigated by the development contributions paid to recoup HIF monies and through the developer providing a booster pump station if the reservoir on Slope Hill is not functional.

Geotechnical

119 A geotechnical report has been submitted with the EOI (Appendix 7). The report concludes the site is suitable for residential development from a geotechnical perspective provided recommendations in the report are followed. Council's hazard register identifies the site as being possibly susceptible to liquefaction, however the report concludes "no liquefaction risks are present on the site". A range of recommendations are made including setbacks from slope crests that can be imposed through conditions on any subdivision consent.

Power, Gas, Telecommunications

120 These services are already present in the locality and it is not anticipated that there would be any difficulty providing these to the site.

121 Overall, it is feasible that the proposed development can be provided with the necessary infrastructure subject to various works being undertaken. These matters can be secured through a Stakeholder Deed, including contingencies to protect Council and require the developer to provide the necessary infrastructure if the assessments provided do not prove accurate.

Affordability (Point 3.4 of the Lead Policy)

122 The Lead Policy puts the onus on the developer to identify mechanisms to ensure that housing developed in a special housing area addresses the district's housing affordability issues.

123 The EOI would help to address housing affordability generally by increasing supply in the district by providing for up to 156 smaller and more affordable additional sections / units. The EOI focuses on "affordability by design". The EOI states that this notion hinges on a number of design and locational attributes:

- Compact section sizes
- Compact, but well designed, houses;
- Houses that, as far as possible, utilise passive solar heating approaches to minimise winter heating bills;
- Location near centres and places of employment, in order to reduce travel-related expenses.

124 The developer has advised that property speculation would be “minimised⁶” because:

- much of the development will be delivered by the developer and marketed to owner occupiers as house and land packages.
- a legal restriction on the use of the property for visitor accommodation, meaning purchasers will not be able to build and use the property for visitor accommodation.
- lot sales will have robust development controls that will facilitate timely completion of the entire subdivision.

125 An agenda item on preventing speculation was presented to Full Council in August 2018 when Council was considering adding Ladies Mile into the Lead Policy. As Council is aware from the Bridesdale SHA, and from its deliberations regarding whether to add Ladies Mile into the Lead Policy, it is very difficult to completely prevent speculation of bare sections and /or land and building packages. The developer may deliver them to the market at a relatively affordable rate as occurred at Bridesdale, however the on-selling can quickly escalate prices.

126 There is no easy solution to preventing speculation, although it is accepted that providing land and house packages reduces it due to the greater capital outlay required compared to just a section.

127 SHAs are a mechanism to create housing, not visitor accommodation. The developer has agreed clauses can be added to the Draft Deed to restrict short term rental/visitor accommodation to the level permitted under the future Proposed District Plan, consistent with section 3.4 of the Lead Policy.

128 The focus on affordability is through the design of the dwellings. No particular price points are specified, as was the case in other EOIs such as Hawea which went further than other SHAs on that point. However overall the affordability criteria of the Lead Policy are considered to be satisfied by the EOI.

Affordable Housing Contribution (Point 3.5 of the Lead Policy)

129 At the time of agenda cut off, the developer has made an offer to the QLCHT that comprises 4,453m² of land, subdivided and serviced with necessary earthworks completed for 15 titled lots. The lots are designed for ten 3-bed villas, and five 2-bed townhouses.

130 This offer is 8.1% of the developed land area and therefore does not quite meet the required 10% in the Lead Policy, however carrying out the earthworks for each lot so they are ready to build on is at a significant cost to the applicant. This matter will be verbally updated at the meeting. If the EOI is accepted in principle, the details of this would be negotiated and form part of the Deed that would be reported back at a Full Council meeting.

Community Feedback (Point 3.6 of the Lead Policy)

131 HASHAA does not set any statutory responsibilities in terms of consultation on the establishment of SHAs. However, the Council has sought public feedback / comment on all SHA proposals. Should the SHA be established, the subsequent

⁶ p.26 of EOI

resource consent can be served on adjoining land owners if they are deemed to be affected. Full public notification is not provided for.

132 The EOI was placed on the Council's website on 31 January 2019, which is consistent with how other SHAs were considered. Feedback closed on 1 March 2019 and will be collated and provided to Councillors and made public prior to the Council meeting.

Quality and Design Outcomes (Point 3.7 of the Lead Policy)

133 'High Quality Residential Development' is defined in Attachment C to the Lead Policy. Four facets are highlighted that are commented on below. The proposal includes a full urban design assessment that covers the criteria set out in the Lead Policy, as part of Appendix 4 to the EOI.

a. Integrating into the neighbourhood:

The proposal is directly adjacent to the Shotover Country development and the scheme seeks to connect at Stalker Road. Footpaths will connect to the existing network. The development has proposed its own public reserve which is centrally located within the Laurel Hills development, but could also be used by other Shotover Country residents. The development provides for connection through to the Kelly land (on the corner of Stalker Road and SH6), as well as the terrace below and this could potentially connect through to Old School Road.

b. Creating a place

The site is distinctive due to the two main terraces. The style of housing will be noticeably different to Shotover Country which is almost exclusively detached dwellings. The colours and materials of future buildings will be important to ensure appropriate building designs and materiality.

c. Street and Home

The 'Architectural Briefing' (Appendix 8 to the EOI) contains details of the type of dwellings, and the landscape assessment includes cross sections of the proposed streets (Appendix 3 to the EOI) that illustrate the future street design and integration of carriageway, on-street parking, street trees and footpaths. The use of indented parking bays will also assist to visually narrow the street.

The proposed cross section of the 'Neighbourhood Street' does not include footpaths and has 90 degree parking. This shared space type arrangement will need to be carefully considered at the detailed design phase.

d. Environmental Responsibility

Most of the site has very good access to sun throughout the year which will assist with ensuring buildings are dry and easier to keep warm with opportunities for solar gain. Individual lots are capable of having on-site gardens. This aspect is not a particular focus of the EOI.

134 Overall the EOI is based on an 'affordability by design' approach. The design is deliberately 'permeable' which assists with facilitating walking and cycling and

reducing car dependence. The design positively responds to the urban design principles set out in the Urban Design Protocol and the design outcomes specified in Attachment C of the Lead Policy.

Parks and Reserves

135 As a greenfield development, the development will need to comply with the Council’s Parks and Open Space Strategy 2017 (**POSS**). A ‘local park’ is proposed (formerly known as a neighbourhood reserve) shown in Figure 10 below and includes a playground, half basketball court, barbecue area and grassed open space:



Figure 10: Schematic of Proposed Local Park

136 The POSS states for Local Parks:

TYPE	PROVISION GUIDANCE
Local Park	<p>Each local park requires a minimum of 0.3ha of open space in greenfield developments. This should be of a configuration that provides transition / buffer space from adjacent roads and housing and contains a flat kick-around space of approximately 30 by 30m.</p> <p>Residents should have access to a local park within a 600m walk (approximately 5 to 10 minutes)</p> <p>A local park is required for every 400 household units in greenfield developments.</p>

137 Council’s Parks and Reserves team have reviewed the EOI and note the reserve is consistent with the ‘Local Park’ definition under the POSS. The reserve is centrally located and meets the overall size and dimension (30m by 30m) requirements for an informal ‘kick around’ space. The feedback notes:

Over all the reserve does take on a linear form and bound by roads, therefore it is important that the design details as submitted are retained as if the reserve area is

reduced in width it may be too narrow to provide for quality passive recreation. If a bus stop is located directly adjacent this may also impact the usability of the reserve.

138 The detailed design of open space can be considered further at the subdivision stage, should the area be made a SHA. This requirement can also be included in a draft Deed. The exact location of the proposed central bus stops is also a detailed design matter that can be worked through at the detailed design stage.

Timely Development (Point 3.8 of the Lead Policy)

139 The developer has confirmed that they are motivated and willing to develop as soon as possible. The requirement to proceed in a timely manner would form part of the Stakeholder Deed.

140 As the HASHAA is a resource consent only, and not a rezoning, they are a 'use it or lose it' type system, as evidenced by almost every other approved SHA currently being under construction.

Agency Responses

Ministry of Education (MoE)

141 The MoE feedback notes that the Shotover Primary School has experienced rapid growth and is approaching its capacity of 900 students (construction is underway to enlarge the school for this number at present). The Laurel Hills EOI could generate 45-50 students, which is not an insignificant number in terms of the school roll. Laurel Hills will result in an increase in the school role which is already under pressure. The cumulative effect of Laurel Hills and other EOIs is of concern.

142 The Ministry notes that it is now needing to, in conjunction with Council, develop a clear plan for provision of new primary schooling on the Ladies Mile. This will involve the need for the Ministry to bring forward anticipated funding for a new school site.

143 Officers are aware of discussions around locations for new schools. The Indicative Master Plan did not attempt to 'pick the school' site (as this is a matter for MOE) but Attachment B to the Lead Policy notes that relevant infrastructure includes 'education'. The MOE have not stated that the Shotover Primary School is unable to cope with the Laurel Hills EOI, but have clearly signalled work is underway on a plan to acquire land for a future primary school.

New Zealand Transport Agency (NZTA)

144 NZTA has provided feedback (**Attachment C**), noting that the Queenstown Integrated Transport Programme Business Case provided a recommended programme that is expected to improve the transport system through improved transport choice and level of service for all modes. An agreed set of interventions has been agreed through the HIF business case. The staged infrastructure improvements are to specifically ensure the potential traffic effects of residential development are mitigated.

145 It is acknowledged that the NZTA continue to have concerns about the longer term operational capacity of the transport system in this part of the Wakatipu Basin, particularly given the growing volume of residential development on the eastern side of the Shotover River. The 'Wakatipu Way to Go' initiative and the MOU to

be signed between the three agencies to deliver much of the HIF programme of works means that NZTA will play a key role in ensuring the transport system is fit for purpose.

146 The NZTA request that the following should be included as part of the proposed development:

- a. The development design should include a potential State Highway bus only access for both the inbound and outbound movement of buses;
- b. The roading layout shall be of sufficient width to safely and efficiently accommodate buses through the development
- c. The new footpath connection proposed on the eastern side of Stalker road should be replicated on the western side of Stalker Road.
- d. Shared paths do not currently connect (noting that a later plan was submitted showing the required connections to the existing trail network).

Otago Regional Council (ORC)

147 The ORC has provided initial feedback for this proposal. The ORC has no concerns regarding hazards and suggests further discussions regarding public transport use of the proposed bus stops / possible bus priority route. The key concern for ORC is the level of stormwater treatment proposed, noting no treatment for hydrocarbons or heavy metals is proposed, and the Low Impact Design measures are deemed too costly to be implemented.

148 The ORC acknowledge the level of detail provided at the EOI stage makes it difficult to provide specific comment and suggest an assessment of environmental effects of stormwater, which covers whether the proposed protection (20 year annual return interval as primary protection; 100 year ARI as secondary protection) is adequate in the context of that area, and what would be the effectiveness of their proposed treatment to the quality of stormwater, including at first flush. For a new greenfield development, ORC would encourage the best forward thinking design is utilised as once the infrastructure is installed, it is very difficult to retrofit any improvements.

Wakatipu Trails Trust (WTT)

149 Feedback has been received that the WTT would prefer a grade separated Stalker Road roundabout that would provide access from Laurel Hills to the Shotover River trail via Spence Road, rather than the steeper and more direct option put forward in the EOI down the State Highway embankment. This grade separated roundabout would also substitute for the pedestrian underpasses to be funded through the HIF DBC. This feedback is accepted however creating a grade separated roundabout at Stalker Road is not something Laurel Hills can be required to do and the direct routes proposed (while steep) in places are consistent with the Indicative Master Plan which sought to provide direct commuter routes as well as more recreational routes.

Aukaha (formerly Kai Tahu Ki Otago) and Te Ao Marama Inc. (TAMI)

150 Aukaha have written confirming they do and have no opposition to the proposal. They note that the development is in the vicinity of Ara Tawhito, an ancient trail, and an accidental discovery protocol should be adhered to by earthworks and civil contractors. Degradation of waterways is a further concern and the margins of Kimi-aka (Shotover river) should be protected from contamination. A stormwater management plan and monitoring regime is requested by both contractors and QLDC staff to ensure the waterway is not compromised. It is requested that consideration be given to an indigenous planting regime, which already forms part of the EOI.

151 TAMI comments have not been received at the agenda deadline and will be reported to Council at the meeting.

Planning Considerations

152 When the Minister considers a recommendation from a local authority to establish a particular area as an SHA, the Minister is required to consider whether:

- *adequate infrastructure to service qualifying developments in the proposed special housing area either exists or is likely to exist, having regard to relevant local planning documents, strategies, and policies, and any other relevant information; and*
- *there is evidence of demand to create qualifying developments in specific areas of the scheduled region or district; and*
- *there will be demand for residential housing in the proposed special housing area.*

153 Other than considering these matters for the Minister, HASHAA provides no guidance by way of specified criteria on what other matters local authorities may consider when deciding whether or not to make a recommendation to the Minister on potential SHAs. In particular, it does not indicate whether it is appropriate to consider 'planning issues', such as landscape, District Plan provisions, and previous Environment Court decisions.

154 However, the High Court in *Ayrburn Farm Developments Ltd v Queenstown Lakes District Council* [2016] NZHC 693 confirmed that:

"...the HASHAA gave both the Minister and a local authority a discretion and, clearly, the actual location of areas of land to be recommended (and to that extent what could be described as planning or RMA matters) were always appropriate considerations in any such recommendation".⁷

155 While these considerations are relevant, Council's decision-making should remain focussed on the purpose and requirements of HASHAA and how to best achieve the targets in the Accord⁸. While the weight to be afforded to any consideration – including the local planning context – is at the Council's discretion, HASHAA considerations are generally considered to carry more weight. The purpose of HASHAA has been set out in paragraph 6 of this report.

⁷ Paragraph 56

⁸ The target for 2019 is 1300-1400 approved sections and building consents

156 In theory, all or most proposed SHAs are likely to be contrary to an ODP / PDP provision – an EOI would not be made for a permitted or a controlled activity. In this case the proposal is contrary to the ODP and PDP zoning but as the assessment above has indicated, is not contrary to the key Strategic Direction policy for urban development being directly adjacent to an existing urban area and on its merits is considered to be a logical urban extension to Shotover Country.

157 The proposal will provide for additional housing on land that is considered suitable for residential development. Council’s Housing Affordability Taskforce report also agreed that *“unless we dramatically change the scale of the approaches used, it will be difficult to realise the vision and achieve the goals; we will miss the mark if we have simply doubled the last 10 years affordable delivery in the next ten years”*.

158 The proposal is considered to be at the scale necessary to make a meaningful difference to housing supply and a meaningful contribution to the QLCHT.

RMA Plan Change vs SHA process

159 The HASHAA legislation was specifically introduced to help create additional housing supply, recognising that the planning system is one of the many causes of New Zealand’s housing crisis which is being experienced most acutely in the Queenstown Lakes district.

160 The HASHAA is a lawful means of providing for additional housing supply. However if the HASHAA was not available, the applicant would have to seek resource consent or seek a private plan change (the Shotover Country Special Zone is not part of Stage 3 of the PDP). The table below summarises the timeframes and extent of public involvement in the three different processes (seeking a resource consent is not a realistic option):

	HASHAA Consent process	RMA plan change process
Estimated timeframes for paperwork & process from start	6-9 months	12-18 months (if no appeals) 2 – 2.5 years if appeals
Estimated minimum timeframe for occupation of first houses from today	12-18 months	24 – 36 months
Steps if approved	<ul style="list-style-type: none"> - Council recommends to Minister, - Minister approves and then Gazettal as a SHA. - Resource consents then lodged. - May be limited notified to neighbours - Decision made 	<ul style="list-style-type: none"> - Prepare variation & s.32 cost benefit analysis, - Report to Council - Notify for submissions - Notify for further submissions - Public hearing - Appeals - Decision made - Lodgement of resource consents

Conclusion

- 161 In recommending the SHA to the Minister, the Council has to be satisfied that the proposal is consistent with the principles espoused in the Lead Policy. Like virtually every SHA recommended to date, the proposal is contrary to the Operative and Proposed District Plans as the land is zoned Rural General / Large Lot Residential A, but is now within the Urban Growth Boundary.
- 162 The proposal is focused on providing housing that falls into the more affordable category within the Queenstown Lakes district (1 to 3 + bedrooms).
- 163 The district is facing a severe housing crisis in terms of rental costs and house prices being the highest in New Zealand, and the EOI would provide additional supply in a timely fashion. The proposal is considered to be consistent with the Lead Policy and Indicative Master Plan.
- 164 The proposal can be serviced subject to HIF upgrades or through requirements in the Stakeholder Deed.
- 165 The proposal will add further vehicles to a roading network that already experiences congestion at peak times. An ambitious programme of work has been agreed to try and address the high level of single occupancy vehicles and increase capacity of the State Highway network.
- 166 As noted above, the Council will have to reconcile putting further residential development into an area that is currently congested at peak times, with the HIF programme of transport work which seeks to improve the transport system through improved transport choice and level of service for all modes.
- 167 The recommendation is that the Council approve the EOI in principle subject to a Stakeholder Deed being negotiated.

Options

- 168 Option 1: Approve in principle the establishment of the Laurel Hills SHA subject to the negotiation of a Stakeholder Deed.

Advantages:

- 169 Helps contribute to achieving the purpose of the HASHAA, advancing the principles and priority actions in the Housing Accord, and helps the Council to achieve the housing targets in the Housing Accord by enabling much needed new housing supply to be constructed.
- 170 Generates a number of social and economic benefits (both short term and long term) such as the creation of jobs during the construction phase and long term benefits relating to the increased provision of the supply of a range of houses, particularly in the affordable bracket;
- 171 Provides the opportunity for a Stakeholder Deed to be negotiated ensuring that the proposal is consistent with the Lead Policy and can be appropriately serviced, thus reducing the overall risks to Council;

172 Would help create competition in the housing market for sections between Hanley's Farm, Shotover Country and other SHAs, potentially driving section prices down.

173 The proposal has been assessed as being consistent with the specific policy for urban development in Council's Strategic Directions chapter for both the PDP as notified, and the recently released decisions version.

174 Recognises a programme of work is in place to address traffic congestion.

Disadvantages:

175 Will increase traffic movements onto Stalker Road and State Highway 6 which already experiences congestion at peak times, resulting on longer average delays.

176 Less public participation (submissions and appeals) under a HASHAA consent than a RMA consent or RMA plan change.

177 Not consistent with the ODP or PDP, including the recent recommendations of the Hearings Panel.

178 Option 2: Not recommend the proposed Special Housing Area to the Minister

Advantages:

179 Will not increase traffic movements onto Stalker Road and State Highway 6 which already experiences congestion at peak times. Average delays will not increase.

180 Would require the developer to seek consent or a plan change under the RMA rather than HASHAA, with the RMA having greater opportunities for public submission and appeal.

181 Would be consistent with the ODP and PDP which zone the land as rural and would maintain the land in its current state as open pasture.

Disadvantages:

182 Would mean the HIF loan facility for infrastructure and some transport upgrades is not available as no new housing would be provided.

183 Would forgo the opportunity provide a housing option for the Queenstown area aimed at the more affordable end of the market, and potentially impact on Council's ability to meet its commitments under the Accord.

184 Would forgo the short term and long term social and economic benefits offered by the proposed (outlined above) including a bus priority option and enhanced walking and cycling facilities.

185 Would not result in a 10% contribution (15 lots) to the QLCHT.

186 This report recommends **Option 1** for addressing the matter.

Significance and Engagement

187 This matter is of high significance, as determined by reference to the Council's Significance and Engagement Policy because:

- Importance: the matter is of high importance to the District. Housing supply and affordability is a critical issue for the District;
- Community interest: the matter is of considerable interest to the community
- Existing policy and strategy: The proposal is considered consistent with the Housing Accord, HAT report and consistent with the Council's Lead Policy. The proposal is not consistent with the ODP and PDP.
- Capability and Capacity: In principle it is accepted that the site can be serviced by existing infrastructure but upgrades are required in terms of water supply, wastewater and stormwater.

Risk

188 This matter relates to the strategic risk SR1 'Current and future development needs of the community (including environmental protection)' as documented in the Council's risk register. The risk is classed as high. This is because of economic, social, environmental and reputational risks if the current and future development needs of the community (including environmental protection) are not met.

189 The recommendation mitigates the risk because the supply of housing is critical to the current and future development needs of the community. The provision of more affordable house and land packages (including those specifically targeted at first home buyers) mitigates the risk. The subsequent resource consent assessment process under the HASHAA also provides the opportunity for further mitigation of the risk, particularly with regard to environmental protection.

Financial Implications

190 Under the HASHAA, developers are required to provide the necessary infrastructure to service their developments. Council negotiates Stakeholder Deeds to ensure the necessary infrastructure is provided.

Council Policies, Strategies and Bylaws

191 The following Council policies, strategies and bylaws were considered:

- Lead Policy for SHAs;
- The Operative District Plan;
- The Proposed District Plan (Stage 1 decisions version);
- Recommendations of the Hearings Panel for Stage 2
- Mayoral Housing Affordability Taskforce Report.
- Growth Management Strategy 2007;
- Housing Our People in our Environment Strategy;
- 2017/2018 Annual Plan and the draft Long Term Plan; and

192 This matter is included in the 10-Year Plan/Annual Plan. The three Housing Infrastructure Fund projects are fully budgeted for in the LTP.

Local Government Act 2002 Purpose Provisions

193 The proposed resolution accords with Section 10 of the Local Government Act 2002, in that it fulfils the need for good-quality performance of regulatory functions. The recommended option:

- a. Will help meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses by utilising the HASHAA to enable increased levels of residential development on the proposal site;
- b. The three HIF projects are fully budgeted for under the 10-Year Plan and Annual Plan;
- c. Is not consistent with the Council's Operative or Proposed District Plans but is consistent with other policies such as the Housing Accord, Lead Policy and HAT report; and
- d. Would not alter the intended level of infrastructural service provision undertaken by or on behalf of the Council.

194 Section 80 of the Local Government Act covers situations where a decision is significantly inconsistent with a policy or plan:

80 Identification of inconsistent decisions

(1) If a decision of a local authority is significantly inconsistent with, or is anticipated to have consequences that will be significantly inconsistent with, any policy adopted by the local authority or any plan required by this Act or any other enactment, the local authority must, when making the decision, clearly identify—

- (a) the inconsistency; and
- (b) the reasons for the inconsistency; and
- (c) any intention of the local authority to amend the policy or plan to accommodate the decision.

195 With regard to (a), the inconsistency is between the Operative and Proposed District Plans which zone the land Rural and Large Lot Residential A, and the recommended decision which is that the area be recommended to the Minister, and would result in the land being developed for housing.

196 With regard to (b), the reasons for the inconsistency is the recommendation of officers to adopt the recommendations of its Hearings Panel, for Stage 2 of the PDP.

197 With regard to (c), the Shotover Country Special zone will be looked at comprehensively when it is due for review on its ten year anniversary.

Consultation: Community Views and Preferences

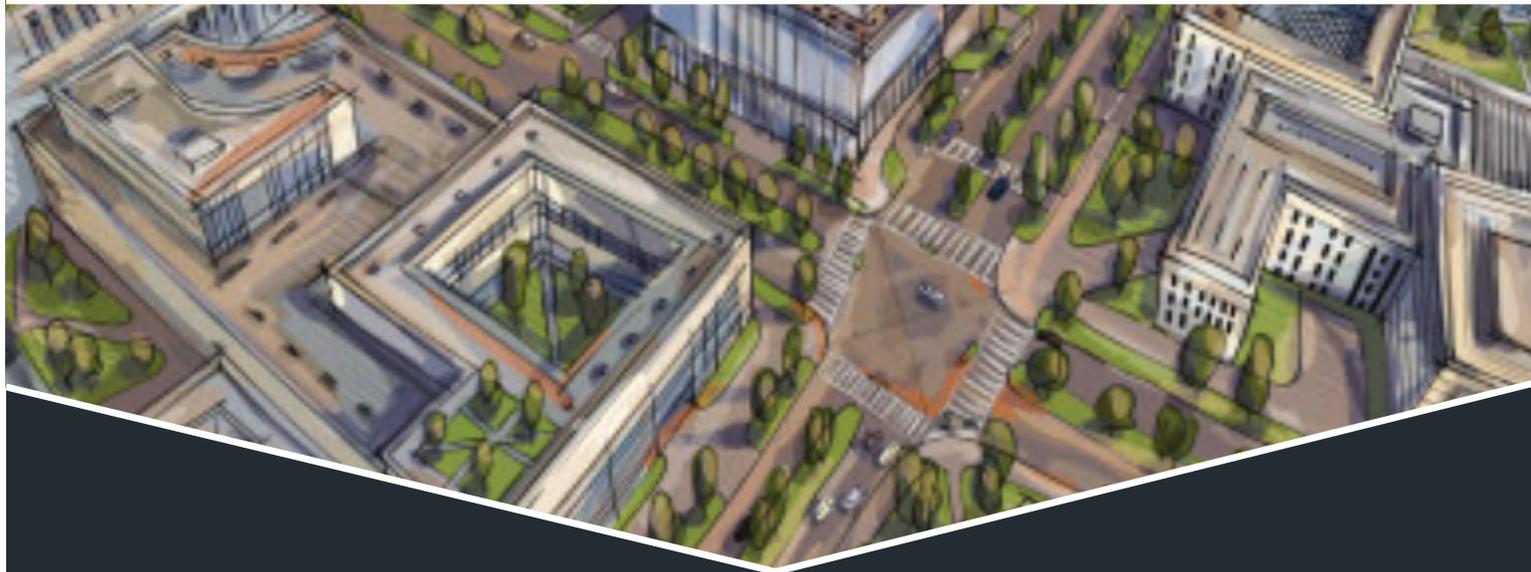
198 The Council has sought public feedback / comment regarding the proposed SHA, which it has done for all SHA proposals. In addition, should the SHA be established, the subsequent resource consent may be limited notified to neighbouring parties. The developer has consulted with directly adjoining neighbours who utilise Maxs Way.

Legal Considerations and Statutory Responsibilities

- 199 The purpose of the HASHAA is detailed in paragraph 6 of this report. HASHAA provides limited guidance as to the assessment of potential SHAs, beyond housing demand and infrastructure concerns. HASHAA is silent on the relevance of planning considerations; however the Council's legal advice is that these are relevant considerations and this has been confirmed by the High Court. The weight to be given to these matters is at the Council's discretion, having regard to the overall purpose of HASHAA. These matters have been considered in this report.
- 200 The Council will need to consider the consistency of any decision to recommend this SHA to the Minister and the recommendations of its Commissioners on the PDP (also being considered on 7 March 2019 agenda) which include the Laurel Hills site within the urban growth boundary but zone it for Large Lot Residential A purposes rather than urban.
- 201 The proposal is considered to be consistent with the Lead Policy and its Indicative Master Plan, the Housing Accord and the purpose of the HASHAA. Allowing development on the EOI sites would inevitably change the rural character of this area and result in additional traffic utilising Stalker Road and the State Highway which experiences congestion at peak times. A programme of transportation improvement work is in place for the Ladies Mile, and this is one of the key issues that Council needs to consider in recommending the proposal to the Minister.

Attachments

- A** Laurel Hills SHA Expression of Interest & Appendix 2 (Scheme Plan) and Appendix 8 (Architectural briefing) - all other appendices available here:
<https://www.qldc.govt.nz/your-council/your-views/laurel-hills-special-housing-area/>
- B** Addendum to Integrated Transport Assessment specifically considering vehicle occupancy for 1100 houses
- C** NZTA feedback



Attachment A: Laurel Hills SHA Expression of Interest

SPECIAL HOUSING AREA:

EXPRESSION OF INTEREST

Laurel Hills

Ladies Mile, Queenstown



LAUREL HILLS

Queenstown, New Zealand

December 2018 (Updated 15 January 2019)

Includes:

**Appendix 2 (Scheme Plan);
Appendix 8 (Architectural briefing)**

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APPENDICIES

Appendix 1	Record of Titles and Registered Documents	
Appendix 2	Scheme Plan	DCM Urban
Appendix 3	Landscape Concepts and Assessment	DCM Urban
Appendix 4	Urban Design Assessment	The Property Group
Appendix 5	3 Waters Preliminary Assessment	Clark Fortune McDonald & Associates
Appendix 6	Transport Assessment	Bartlett Consulting
Appendix 7	Geotechnical Report	GeoSolve
Appendix 8	Architectural Brief	The Property Group
Appendix 9	A3 Plan Set	The Property Group

EXECUTIVE SUMMARY

Laurel Hills Limited (“LHL”) submits this Expression of Interest (EOI) for its land in Ladies Mile, for consideration as a Special Housing Area (SHA).

The EOI comprises a master-planned residential development scheme of at least 156 dwellings. The scheme comprises a mix of housing types and section sizes and is based on an approach of affordability-by design. This notion hinges on a number of design and locational attributes:

- Compact section sizes;
- Compact, but well designed, houses;
- Houses that, as far as possible, utilise passive solar heating approaches to minimise winter heating bills;
- Location near centres and places of employment, in order to reduce travel-related expenses.

The proposed LHL SHA has been designed to fit within its context and connect well to adjoining land and wider Ladies Mile Special Housing Area. It is consistent with Council’s Implementation Policy on Special Housing Areas, and the statutory considerations under the Housing Accords and Special Housing Areas Act 2013.

As discussed further below and in the Appending documents, the the Laurel Hill Special Housing Area (SHA) consists of the following components¹:

- Development of at least 156 residential lots allowing for the construction of a mix of residential dwelling typologies. The dwellings are restricted to 5.5m in height above the existing (original) ground level. The size of the lots ranges from 110m² - 834m² with an density of 17.8 households/Ha;
- The creation of a local street network with access from Stalker Road, immediately to the north of the existing entrance to Maxs Way. Streets range in width from 6m lanes to 15m local streets. Two small pocket parks less than 100m² in area are included in the street network providing informal gathering/seating spaces
- The creation of a neighbourhood reserve approximately 4,000m² in area located centrally within the development. The exact components of the reserve is subject to approval by QLDC but will contain a 30x30m flat area which is available for passive play;
- A landscape bund running parallel to SH6 to provide a visual screen between the SHA and the state highway;
- A shared path, 2.5m - 3.0m wide which will eventually link the development to the Twin Rivers Trail. The trail runs through the centre of the development, down Layton Lane to run parallel to Maxs Way and to connect to Stalker Road;

¹ Extracted from Landscape Assessment – Appendix 3.

- Landscape planting of the existing escarpment running parallel to Maxs Way and planting of the landscape bund running parallel to SH6.

Laurel Hills Limited commit to the 10% Community Housing contribution as specified in Council's Implementation Policy on Special Housing Areas.

1. THE LAUREL HILLS PROPOSAL

1.1 Laurel Hills Limited Team

The Directors of Laurel Hills Limited ('LHL') bring significant residential development experience to the project. Summaries of the Directors' experience are outlined below:

Tim Allan

Tim Allan is involved in several property developments and is a Director of David Reid Homes (NZ) Limited which has a family of 20 residential building construction companies throughout New Zealand. He is proud to be acting as Project Director for Laurel Hills Limited.

For 12 years up until 2016, Tim was a Director of Southern Hemisphere Proving Grounds Limited, a specialised product testing company that continues to make a significant contribution to the Queenstown Lakes District. During that time historical environmental compliance issues on the Pisa range were rectified and more sustainable practices were implemented. Over the years the Proving Grounds has supported many community activities on the Pisa range including maintaining access to the Pisa conservation estate and sponsored numerous events in and around Wanaka.

Working for Housing New Zealand he developed the renewal strategy, consenting and business cases for significant social housing assets in Auckland, Hamilton and Wellington totalling over 650 new homes. The Upper Greys Avenue, Auckland development comprising approximately 280 homes was publicly announced recently.

Tim led the recovery of Christchurch's replacement social housing portfolio following the 2011 earthquakes. This cumulated in the planning, design and construction of 850 new homes over a 4 year period.

Tim has expertise in resource and building consents, construction, irrigation and tunnelling that was acquired via a track record in sustainable development and he has led substantial infrastructure and renewable energy projects.

Wayne Foley

Wayne Foley has been a Queenstown resident for over 25 years. He is the owner of Trinity Projects and Construction, and award-winning builders constructing in the \$2m - \$12m residential market. Wayne is a successful local developer having completed subdivisions (Northridge, Bendemeer Estate, Porpoise Bay) and villa developments including award winning Commonage development, Queenstown Hill. He was also the Development Manager for the restoration of Eichardts Hotel.

Wayne's contributions to the community over the years include, ex BOT Wakatipu High School, Sponsor and President Wakatipu Rowing Club, Member Urban Design Council, Chairman NZ Historic Places Trust – local branch, only local member of 4 person advisory panel for review and strategy for the delivery of RMA services to the community (replacing Civicorp with inhouse model).

Fraser Mackenzie

Fraser Mackenzie has been in the building industry for over 20 years. He has lived in Queenstown for 12

years and has been the owner and director of David Reid Homes Queenstown for 8 years. Fraser is a builder by trade and his focus is high end energy efficient homes that are beautifully crafted. To date Fraser's team have built over 80 homes in the Queenstown region.

He is also a Director in Maxraft who provide thermally broken insulated slab systems for homes keeping them warmer and drier while allowing movement in an earthquake. He believes, a home should work for you.

Fraser's philosophy as a company is, giving back to the community, and they sponsor the Jacks Point Trail Run & the Kingston Family Day. He also donates to many charities including Cure Kids, Breast Cancer Awareness, Victim Support and the Cancer Society. *Our clients and community mean the world to us.*

The Laurel Hills Development Proposal - Approach

Laurel Hills Limited ("LHL") have assembled a team of professional industry experts to advance a masterplan scheme for the land.

Tim Allan, Wayne Foley and Fraser Mackenzie have project managed the development of the concept, with their approach underpinned by their decades of experience in the development and house building sectors. The project has been strongly underpinned by their expert understanding of the Queenstown community, site and development conditions and the local real estate market.

A workshop between members of the design team and Blair Devlin, of Vivian+Espie on behalf of Queenstown Lakes District Council was held in October 2018 and subsequent communication with Council Parks on 6 November 2018.

The project team includes the following team members in addition to Tim, Wayne, and Fraser:

- Bruce Weir: Principal Urban Planner, The Property Group Limited
- Chris Hansen: Engineer, Clark Fortune McDonald & Associates
- David Compton-Moen: Landscape Architecture
- Natasha Rivai: Senior Planner, The Property Group Limited

Preliminary dialogues with Council staff informed the development concept options, which were subsequently tested and refined in a collaborative and transparent manner. This process not only sought to optimised urban design qualities, but also the feasibility of buildability and ramification on final market cost.

Preliminary discussions between LHL and the Queenstown Lakes Community Housing Trust have also been part of this process.

1.2 The Laurel Hills SHA site

The proposed Laurel Hills SHA comprises a total area of land of 9.38 hectare site legally described as Lot 1 DP 431492 and Lot 2 DP 325561. This land is owned by Laurel Hills Limited which was formally known as Ladies Mile Property Limited.

The current titles for the sites are attached as [Appendix 1](#). Summary of the enclosed registered documents are as follows:

Registered Document Reference	Summary
Lot 1 DP 431492	
Gazette Notice 474208	Limited Access Road – SH6
Land Covenant 834400.3	Water supply scheme installed, comprising a bore, pump, storage tank, and network (pipes lines and easements)
Land Covenant 838259.3	As above (Deed of Covenant – Water Supply Scheme)
Land Covenant 850246.4	As above (Deed of Covenant – Water Supply Scheme)
Land Covenant 850246.7	As above (Deed of Covenant – Water Supply Scheme)
Land Covenant 5226852.1	Restrictive Covenant to Queenstown Airport Corporation Limited
Consent Notice 5820735.2	Subdivision conditions in relation to disposal of effluent, building platform, water storage for fire fighting purposes.
Land Covenant 5907860.3	Building control restrictions, specifically, restriction of building height to 5.5m above ground level (at 2004). Applicable to site.
Encumbrance 6500292.3	Restriction on sale/transfer of ownership of land at the time (2005)
Encumbrance 8481955.4	Exclusion of identified wetland areas from development, effluent disposal, building platform, water storage for fire fighting purposes.
Consent Notice 8481955.2	Continuation of Covenants and Conditions (2010)
Lot 2 DP 325561	
Same as above; and	
Encumbrance 5907860.5	Restriction on raising any opposition to ongoing development to subdivide, develop or use of subject land.

The proposed development site of the SHA is shown in the Scheme Plan attached as [Appendix 2](#).

The site is currently vacant with the exception of a dwelling located on Lot 1 DP 431492, accessed off Max's Way. It is proposed that the dwelling is retained, at least in the interim. Over the length of the site, there

is a moderate slope downwards to the south from Ladies Mile Highway.

The surrounding land west, south and east of the site is residential in character, with the south eastern part being zoned Shotover Country Special Zone.

The site is zoned Rural General under both the Operative and Proposed Queenstown Lakes District Plans (refer to **Figure 1**).



Figure 1: Proposed District Plan Zone Map Extract

Following acceptance of the EOI and subsequent resource consent process, it would be expected that through the current District Plan Review process, that the site will be rezoned to an appropriate residential zone which aligns with adjacent properties (i.e. Shotover Country Special Zone).

Of particular relevance is the Council adopted Indicative Ladies Mile Master Plan below (**Figure 2**) shows the site as being included within Category 2 of the Council’s Lead Policy for Special Housing Areas and forming part of a larger integrated development area catering for up to 3,000 dwellings.

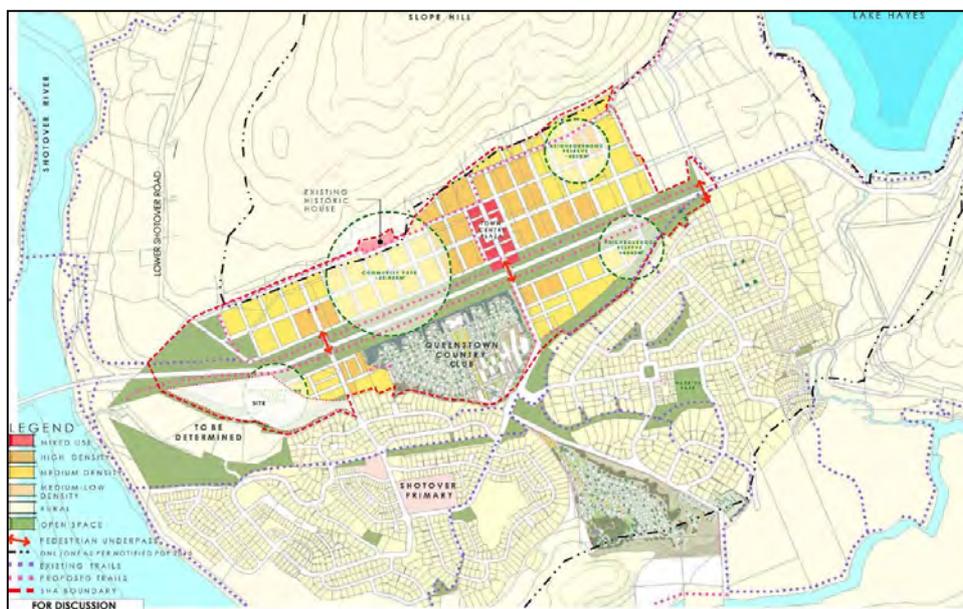


Figure 2: Indicative Ladies Mile Master Plan

In fulfilling the intent of the above Master Plan, the following Special Housing Areas have been successfully established (via resource consent), as shown in **Figure 3**:

- Shotover Country (May 2017)
- Queenstown Country Club and Onslow Road (April 2017)
- Bridesdale (March 2016)

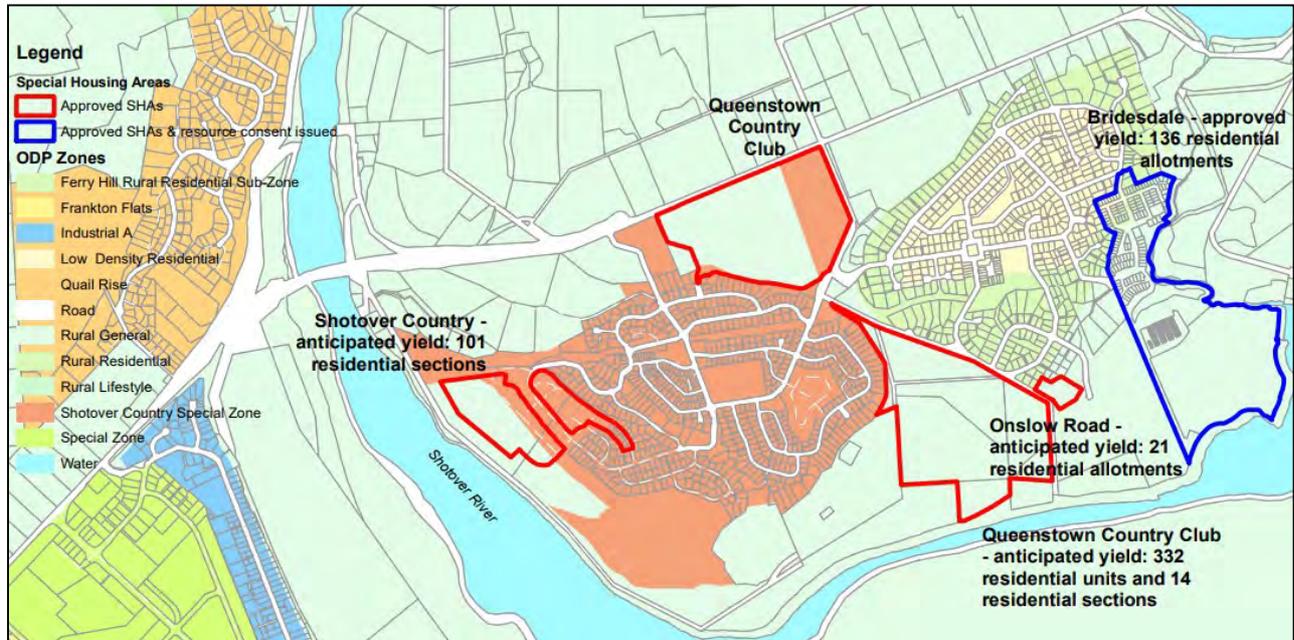


Figure 3: Approved/Established Special Housing Areas

1.3 Urban Design Approach

The preparation of the Laurel Hills SHA concept has been undertaken in an open and transparent manner from the earliest stages. An objective sought by all parties was a development that is integrated with surrounding neighbourhoods, but also had its sense of place. The Laurel Hills concept provides a positive transition to the neighbouring residential areas to the south east with road connections in appropriate locations and a legible network of pedestrian and cycle paths. It establishes affordability-by design both through the ability to deliver compact housing options, and by reducing reliance on the private motor vehicle. This will help establish a distinct neighbourhood character and identity, and in doing so, create a sense of community.

A variety of entry options to the site were explored as part of early framework planning exercises, however it was quickly established that the primary road entry would be from Stalker Road. While future connections further up Stalker Road or down to the property below to the west would be possible (and desirable), neither land owner is ready for development at this time, and hence the concept could only future-proof these in time. The roading and block layout successively incorporates these requirements while providing a robust and legible framework to support successful development within the site.

The primary structuring element is the open space framework. This is formed by a landscaped buffer along the entire SH6 edge, along with a lineal park space that links from this, down to a Neighbourhood reserve to the south. These spaces feel more generous than a plan view belies as they are bordered by roads and open to distant views. This high level of amenity provided supports the increased residential density sought.

(Subsequent **Figures** below are reproduced at A3 size in Appendix 9.)



Figure 4: Proposed Scheme Plan

A number of specific site constraints and built-form requirements to respond to, have informed the development of the Scheme Plan above (in **Figure 4**). Buildings have been set back from the edge of the southern embankment and are generally single level – necessitating larger sites. Where the site naturally terraces or has an embankment edge, a proven typology approach featuring (largely) internalised retaining was adopted and was critical to achieving yield and quality urban design objectives. These two principle-driven typologies are supported by a range of compact 2-level dwellings which have been utilised where earthworks design could facilitate 2-level dwellings within the 5.5m building height encumbrance.

Collectively, the open space and typologies have informed the block pattern and roading layout by requiring ‘wider and shorter’ lots. The simple hierarchy of road types that incorporates lanes, resulted in a simple ‘Y-shaped’ primary 15m road pattern with future linkages to the west and east protected (refer to **Figure 5**). Below this is a hierarchy of lanes which reflect the length of run, proximity to amenity and the intended character of the neighbourhood within which it sits. Collectively it facilitates a fine-grained, yet highly legible development pattern.

While the traffic report explains the technical aspects of the critical part of this road network, the Urban Design Report and the Landscape and Visual Impact Assessment outlines how the network has been set up to ensure:

- Easy wayfinding and route legibility;
- Natural delineation of spaces to reduce the need for signage and other streetscape ‘clutter’;
- Intrinsic vehicle speed control – using visual markers and other design techniques.

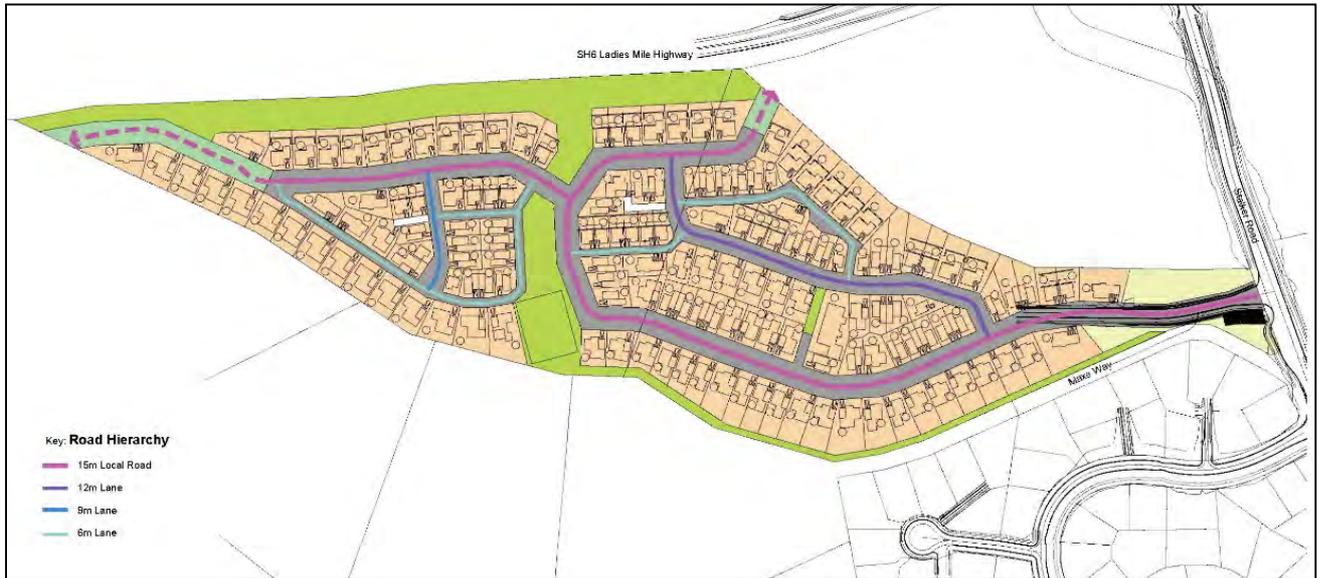


Figure 5: Road Hierarchy

As illustrated in **Figure 6**, the walkway and cycle path connections within the open space network also play an pivotal role with the network of smaller, lower-speed road types in supporting modal shift objectives. These routes provide quick, convenient and safe routes for all residents to local amenities. These will become increasingly important as the wider area develops and intensifies.



Figure 6: Pedestrian and Cyclepaths

By integrating the designated landscape bund/buffer on the northern boundary (maintaining a building setback of 30m from the SH), over 1.2ha of open space has been created to deliver a generous (over 4,000m²), well-sited and aspected Neighbourhood Reserve which has been designed to be consistent with the Council's Parks and Open Space Strategy 2017. The park and non-vehicular connections are instrumental in enabling connected recreational network for both the evolving Ladies Mile area and the wider town.

The landscaped bund as illustrated in Figure 7 below, runs along the SH boundary to soften and screen views into the site, maintaining a natural visual landscape. At the same time, the bund offers privacy screening from the public realm and reduce road traffic noise for the proposed dwellings within the development.

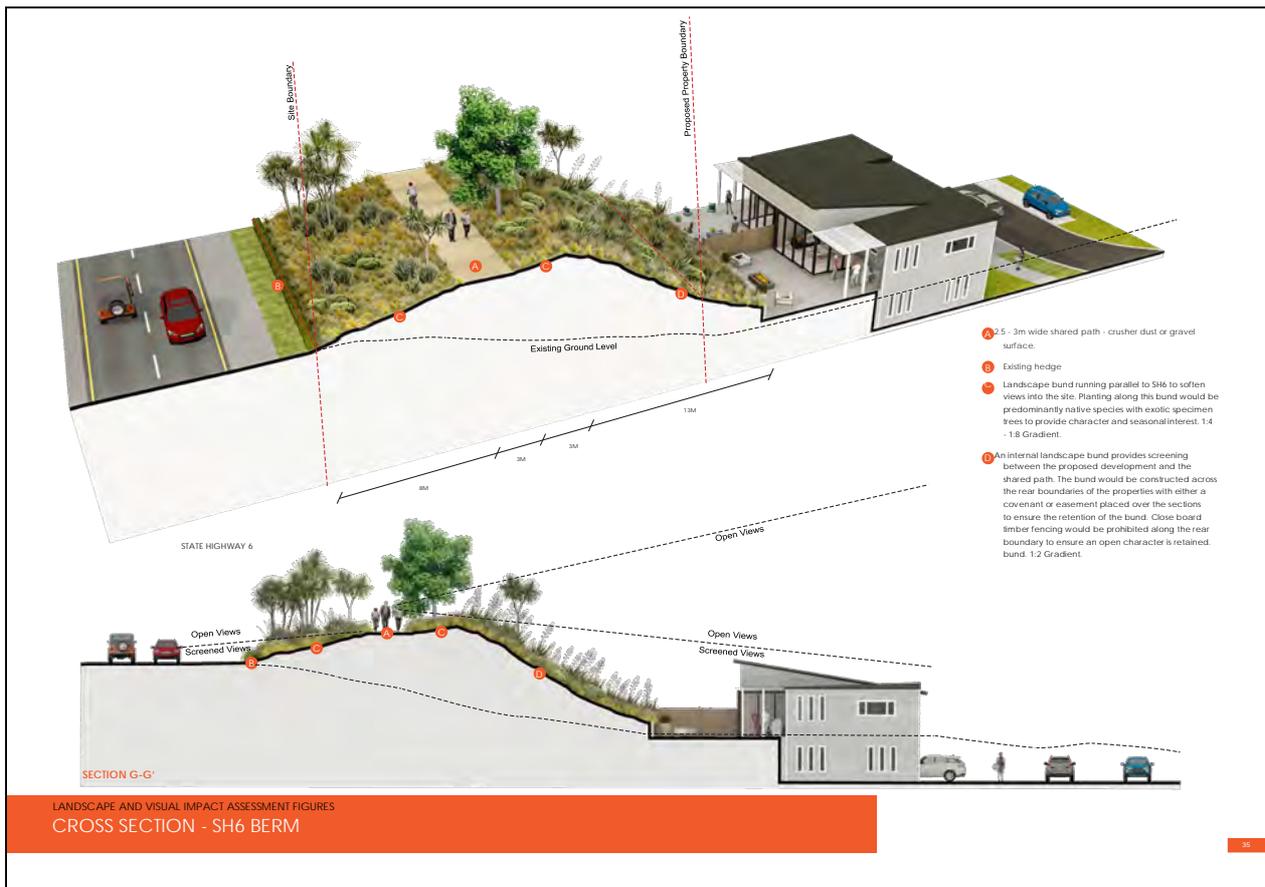


Figure 7: Landscaped Bund

Laurel Hills delivers at least 156 dwellings over approximately 8.9ha, equating to a gross² development density of 17.8 dph (dwellings per hectare). There is a relatively even spread of density across the development although, there has been a focus on providing more intensity in close proximity to the buffer and lineal park amenity corridor. This density also extends down the main road towards the Stalker Road intersection, as these houses are close to both the bus stop and school.

² Gross development density includes all roads and open space in the land area.



Figure 8: Development Density

Overall, the Laurel Hills concept delivers a development framework that quickly and efficiently removes vehicles from the streets, enabling more intensive low-scale built-form responses and creating pedestrian friendly environments. These are central components of ‘affordability-by design’.

Summary of Responses to Urban Design Principles³

Design Principle	Responses
Context	<p>The site is an integral part of the Ladies Mile SHA and is immediately adjacent the existing Shotover Country neighbourhood, providing it immediate access to existing amenity and the ability to integrate easily with developing amenity.</p> <p>The development preserves key landscape attributes to reinforce the character of the area.</p>
Connectivity	<p>The site is within walking distance to a regular bus route to Queenstown Town Centre in one direction, and Arrowtown associated amenities in the other. It can be connected to all infrastructure with little difficulty.</p> <p>The site integrates to existing pedestrian and cycle networks providing residents with multiple mode and route choices.</p>

³ Extracted from the Urban Design Assessment – Appendix 4

Permeability	The design is permeable and provides a safe and inclusive pedestrian environment. Both vehicle and pedestrian routes can be extended through neighbouring properties when development on these sites occur.
Concentration	There are sufficient households to create community and a sense of place. The more intensive built forms are generally located on the upper part of the site close to the buffer landscape pathways network and amenities of the lineal park.
Regeneration and Restoration	Development along the southern boundary and embankment is lower density and buildings are setback from the edge. Where sites incorporate steeper banks these are larger, left untouched to allow for appropriate revegetation planting. Within the site area, the landscaped street network radiates out from the lineal park to all edges enabling low-impact design. The use of compact high-performance housing reduces demands on network systems and infrastructure.
Vitality	Critical mass and variety of housing types will encourage diversity among residents. The nature of the development and the amenity provision within it will encourage people from outside to walk to it.
Adaptability	The design is safe, adaptable and resilient in the face of change – including energy efficient housing. It has alternative modes of transport available which supports a diverse community. It enables other amenity development in the future. The proposal provides a robust framework to support developed design of both public realm and architecture
Identity	There is an intent to establish a distinct identity by respecting both the land form and heritage of the area. This will be reinforced through appropriate building designs and materiality. There is a sense of place and identity created through the landscape setting, the design and layout of the public realm and distinctive New Zealand architecture.
Quality Public Realm	The public realm is made up of public spaces and routes that are attractive, safe and inclusive that effectively function for all in society, including the disabled and elderly. The proposal integrates the state highway buffer zone as a functioning part of the public realm.

1.4 Architectural Approach

The overall Architectural approach seeks to create a development that is inclusive by providing a broad range of house types to match age, ability and circumstance – the key elements of creating community. The design of the dwellings encourages both social and physical connection through permeability and pedestrian focus with outward facing dwellings responding to the road layouts and the provision of public amenity.

At this stage, the proposal has focussed on shaping the right brief for quality, cost-effective architectural design responses. Dwellings have been located and scaled in a response to the proposed topography of the site and to ensure key access points and viewing lines are retained to the open space features or external vistas. Each dwelling typology has been planned to maximise solar access into living spaces and ensure outdoor courts can be located immediately adjacent at-grade.

Another key driver is to ensure a positive interaction and passive surveillance over vehicle and pedestrian movement around the site. This is enabled where possible by 2-level frontages, and/or generally with the ability to have porches, veranda's, balconies or decks.

The architecture consists of 5 basic typologies ranging from compact 'apartment-alternative' types with tight footplates (circa 50m²) through to larger family homes of approximately 220m² – with all optimising site efficiency. These typologies have been selected and defined based on minimising site works, flexibility and adaptability of design, efficiency of construction methodologies and the ability to personalise. The variation of scale and nature of the typologies will not only appeal to a wide range of potential occupants, but also help ensure varied and interesting streetscapes.

Proposed dwelling forms and materiality have been directly influenced by the region and have contemporary lines based around the traditional Queenstown vernacular. Pitched roof forms are varied and stepped to help articulate the facades and announce individuality, while at the same time minimise the requirements for internal gutters. The high proportion of detached dwellings throughout the development is reflective of this approach.

Modern glazing elements and feature walls will be off-set with natural claddings such as timber and stone, both to soften the overall character of the development but also allow seamless integration with landscaping of sites – and by extension, with surrounding public realm. This will help deliver a cohesive architectural and landscape vision.

To provide certainty of design outcome, LHL intends to develop the residential development with the following approaches:

- a. sections with template design purchasers may use on certain lots,
- b. as house and land packages,
- c. as bare sections where people can design their own homes.

Given the range of lot sizes, variation in aspect and positioning relative to amenity, all approaches will be utilised in the development. While there will be a concerted effort to standardise solutions and offer turn-key house and land packages, a relatively high number of larger lots (greater than 400m²) enables customised house design.

Conceptual architectural images are contained within [Appendix 8](#).

2. STATUTORY AND COUNCIL POLICY CONSIDERATIONS FOR THE ASSESSMENT OF POTENTIAL SPECIAL HOUSING AREAS

2.1 Housing Accords and Special Housing Areas Act

In terms of establishing Special Housing Areas (as distinguished from assessing Qualifying Development applications within established SHA's) the key statutory matters are set out in **Section 16(3)** of HASHAA:

The Minister must not recommend the making of an Order in Council under this section unless the Minister is satisfied that—

- (a) adequate infrastructure to service qualifying developments in the proposed special housing area either exists or is likely to exist, having regard to relevant local planning documents, strategies, and policies, and any other relevant information; and*
- (b) there is evidence of demand to create qualifying developments in specific areas of the scheduled region or district; and*
- (c) there will be demand for residential housing in the proposed special housing area.*

While the matters relate to the Minister of Housing's decision-making functions, it follows that Council must be satisfied as to these matters in order to recommend a SHA to the Minister.

Infrastructure

With regard to the question of 'adequate infrastructure', Engineers Clark Fortune McDonald & Associates (CFMA), 3 Waters Preliminary Assessment (refer to [Appendix 4](#)) assesses the capacity for the proposed development of 156 units to be serviced by existing public reticulation. The current QLDC infrastructure services Lake Hayes Estate, Shotover Country and the Queenstown Country Club developments.

The capacity assessment for the existing reticulated waste water system has been undertaken by CFMA and detailed in their Report. It is concluded that a new gravity sewer reticulation needs to be constructed internally to service the proposed development, which will connect to the existing network in Stalker Road.

There are a number of stormwater management solutions for the proposed development to manage pre-development runoff through use of grass swales, kerbs, pipework and detention areas.

Water supply to the Laurel Hills SHA can be supplied via a 150mm pipe from Stalker Road. There is adequate water pressure for firefighting purposes, however a pressure booster pump station is required to achieve minimum domestic pressure. The Arrow Irrigation network will be used to provide irrigation to establish streetscape, reserves and open spaces.

Power, telecommunication and gas utilities underground are available and/or can be made available.

Traffic and Transportation

Traffic Engineers Bartlett Consulting have prepared a traffic engineering assessment of the proposed development, which is attached as [Appendix 5](#). The proposed Laurel Hills SHA forms part of the NZTA approved initial development of 1,100 residential dwellings within the Ladies Mile Master Plan. The

proposed development can provide an appropriate access intersection from Stalker Road and comply with current traffic guidance, which would minimise any potential effects on the operation and safety of the local road network. The roading layout proposed support alternative transport modes i.e. bus stops, walking and cycling; And the internal roading layout provides opportunities for future connections through adjoining properties. Transportation assessment beyond the subject sites have been undertaken by WSP Opus for the Council and is relied on.

Further, part of QLDC’s Housing Infrastructure Fund report (dated 12 July 2018), details the requirement to provide the following water and transportation infrastructure in a staged manner to support the residential development of 1,100 lots within parts of the Ladies Mile Masterplan area, which includes the proposed SHA site (pages 8-9, Housing Infrastructure Fund). The following table shows the staged infrastructure improvements intended as housing develops, which specifically provides improvements to the external roading environment and will mitigate any potential traffic effects of residential development.

Sequence	Action / Intervention	Trigger	Control Mechanism	Funding	
1	Prior to first lots	Construct access Roundabout at Howards Drive	DA for Development	DA	HIF
2	Prior to first lots	Construct Bus Stops and Underpass on SH	DA for Development	DA	HIF
3	Prior to first lots	Improve PT Level of Service - Target 20%	DA for Development	MOU	ORC
4	By end of 450th lot	Construct Park & Ride East of Ladies Mile	Design @150. Construct @300.	MOU	NZTA
5	Park & Ride	Complete Improve PT Level of Service - Target 25%	Park & Ride Complete	MOU	ORC
6	By end of 750th lot	Construct Bus Priority Lane (Park & Ride to Shotover Bridge)	Design @450. Construct @600.	MOU	QLDC / NZTA
7	Priority Lane	Complete Improve PT Level of Service - Target 27%	Priority Lane Complete	MOU	ORC
8	By end of 900th lot	Implement Diversion Improvements	Design @750. Construct @825.	MOU	QLDC / NZTA
9	By end of 1,100th lot	Improve PT Level of Service - Target 29%	900 Lots	MOU	ORC
10	Prior to 1,101st lot	Future PT Infrastructure / Modal Shift	900 Lots	MOU	QLDC / NZTA / ORC

Figure 9: Extract from QLDC, **Housing Infrastructure Fund**, Detailed Business Case – Ladies Mile, 12 July 2018

With regard to the matters of demand ((b) and (c) above), sales data over the past two years shows strong ongoing demand for housing in Queenstown. Information provided by the Community Housing Trust shows that there is a significant waiting list of residents seeking to purchase dwellings at more affordable price points than are being provided at present by the market.

Section 15 of HASHAA sets out the criteria that may be prescribed for ‘Qualifying Developments’ in SHAs. The criteria include maximum building heights, maximum number of storeys, and minimum number of dwellings. With regard to these matters, the following criteria are proposed:

Maximum Building Height: 11m

Maximum Number of Storeys: 3

Minimum Number of Dwellings: 30

Notwithstanding this criterion, in this instance, because of 5.5m height covenant across the site, future dwellings will be limited to 1-2 storeys.

Section 14 of HASHAA sets out the meaning of ‘Qualifying Developments’. Central to this meaning is that Qualifying Developments must be ‘predominantly residential’. The proposed development will be entirely residential and will be consistent with this requirement.

2.2 Queenstown Lakes District Council’s ‘Housing Accords and Special Housing Areas Act 2013 Implementation Policy’ (28 June 2018)

Council’s Implementation Policy sets out 8 Objectives that frame Council’s overall approach to the Housing Accord and Special Housing Areas. The objectives are outlined below and commented on individually. The following is based on the site forming part of the Council endorsed Ladies Mile Special Housing Area.

1. Recommendation of special housing areas facilitates an increase in land for housing supply.

The Laurel Hills SHA facilitates an increase in land for housing supply. Under both the Operative and Proposed Queenstown Lakes District Plan, the land is zoned General Rural, which does not readily contemplate or provide for housing supply of any significance.

This however does not reflect the Council endorsed Ladies Mile Special Housing Area and Master Plan that contemplates a medium to medium-low density residential density for the sites.

2. Special housing areas are established in appropriate locations, where there is evidence of demand for residential housing.

While the land is zoned General Rural under both the Operative and Proposed District Plans, the Laurel Hills SHA is considered to be in an appropriate location (in terms of surrounding land use activities and access) and forms part of the Council endorsed Ladies Mile Special Housing Area and Master Plan, intended for medium density residential development.

Furthermore, the land has excellent access to the evolving master-planned community of Ladies Mile, with its commercial and employment potential, and it is also a short distance to the Frankton Town Centre (30-minute walk, 10 minute cycle – to Pak n Save Queenstown).

There has been sustained demand for housing in Queenstown since 2013 with commensurate increases in prices making it now one of the most expensive residential markets in New Zealand.

In terms of general growth, the Queenstown Lakes District has experienced **6.2%** growth in residential values over the last year (November 2017-November 2018, QV property statistics). This is contrasted with other recent high growth areas of Auckland – 0.2% decline, Tauranga city – 3.9% growth, Whangarei – 12% growth, Hamilton – 4.0% growth. Growth in residential property values within the Queenstown Lakes District appears to remain strong and according to property affordability measures appears to remain unaffordable.

- The average sale price for residential properties sold in Queenstown within the last 6 months is **\$1,114,128**. This is \$518,128 over the upper threshold of the affordable price threshold (set at between \$560,000 and \$660,000).
- The average sale price in the last 6 months for residential properties sold in the Lake Hayes area is **\$1,414,570**. This is \$754,570 over the upper threshold of the affordable price threshold of \$660,000.
- Of those properties analysed, **none** of the properties sold in the Lake Hayes area within the last 6 months were under the upper threshold of the affordable price threshold of \$660,000. By contrast, 30% of properties sold in Queenstown in the last 6 months sold for at or under the upper threshold of the affordable price threshold \$660,000.
- 31% of properties sold in the last 6 months in Queenstown were sold for over \$1m. In Lake Hayes, 43% of properties sold in the last 6 months were sold for over \$1m.

Recent reports⁴ have highlighted that the average asking price last month fell to \$857,011 - down almost 19 percent on October's average of \$1,057,019. However, this has been assessed as being the result of the foreign buyer (ban) policy which has impacted the high end (\$15m+) segment, and the average sale value accordingly.

While significant levels of housing is starting to be supplied, this is currently only being provided by a relatively small number of developers, and this constraint is a contributing factor to the high prices.

In addition, much of the supply response is pitched at the mid to high segments of the market, and very little housing is being delivered to the market at affordable (in a relativistic sense) price points.

It should be emphasised that in Queenstown a significant proportion of demand for housing is for second ('holiday') homes. One of the implications of this is that a greater supply of housing is required than would ordinarily be the case in most urban property markets.

Laurel Hills will be providing at least 156 new dwellings in a high-growth area. Of these, 10% will be provided to the Queenstown Lakes Community Housing Trust to help address affordability issues. In addition, the concept provides for a significant number of compact lots which are capable of being delivered at competitive sale values.

3. *The establishment of special housing areas accords with the Council's overall strategic direction for urban development in the District.*

As outlined above, the total SHA covers approximately 136 hectares and integrates with adjacent development in Shotover Country and Lake Hayes Estate development. It occupies one of the few undeveloped flat areas remaining in Queenstown which can also be connected to major infrastructure relatively easily.

⁴ realestate.co.nz, 3 December 2018 (see <https://www.newshub.co.nz/home/money/2018/12/prices-plummet-in-queenstown-after-foreign-buyer-ban-introduced.html>)

The establishment of the Laurel Hills SHA accords with the Council's overall strategic direction for urban development in the District. The development is consistent with the expectations for urban growth and form espoused in the Strategic Direction chapter of the Proposed Plan.

Overall, the proposed Laurel Hills SHA is consistent with and generally aligns with the Council adopted Ladies Mile Master Plan and consistent with the residential growth in the immediate area. The proposed SHA sits on a site that has long been anticipated for urban development.

4. *Adequate infrastructure exists or is likely to exist to service qualifying developments in special housing areas.*

The 3 Waters Preliminary Assessment by CFMA demonstrates that adequate infrastructure exists within the public network, and/or minor provision/addition can be made to existing network to service the proposed residential development for 156 dwellings.

Adequate access and roading layout is proposed to support the development and seamlessly integrate with the local roading network.

As outlined above, infrastructure and transport reports indicate that adequate infrastructure exists or is likely to exist to service a qualifying development in the proposed SHA.

5. *Qualifying developments within special housing areas take a proactive approach to improving housing affordability issues by providing an appropriate mix of housing options including housing for owner occupiers, first home buyers, accommodation for workers, and facilitating the provision of community housing.*

The Laurel Hills team have made a concerted and proactive effort to provide a high quality residential development that integrates with the established surrounding residential environment and achieves the intent of affordability-by design.

To be more specific, the proposed Scheme Plan provides for a wide mix of section and dwelling sizes, but a significant number of sections are within a 200m² - 350m² range which will help ensure compact, cost effective building forms. Even where larger lots are provided, often a high proportion is undevelopable due to slope.

Laurel Hills have consulted with the Queenstown Lakes Community Housing Trust. It has committed to providing 10% of the land area to the Trust and will be work through the specific area and form of housing in the Development Deed with them.

6. *There is community feedback as part of the establishment of proposed special housing areas.*

Council will manage a process of community feedback following submission of this Expression of Interest.

7. *The development of special housing areas will achieve high quality urban design outcomes.*

Laurel Hill's vision is underpinned by urban design. As outlined above, Urban Designer Bruce Weir (The Property Group) in association with the wider design and project team, has advanced an urban design structure for the site, which seeks to enhance community wellbeing through a design that:

- Fosters strong connectivity within the development and with adjacent developments and wider Frankton/Queenstown area;
- Provides for a future proofed and integrated transport network;
- Provides for diversity and housing choice by providing a wide range of section and dwelling sizes;
- Utilises green spaces and lanes to provide quality amenity for residents.

The proposal meets all of the Council urban design objectives and will be a positive contributor to the local urban landscape and economy.

More detail can be found in the Urban Design Report in [Appendix 4](#).

8. *Development of housing in special housing areas occurs as quickly as practicable.*

The Laurel Hills development is planned to be delivered promptly and anticipates completion of the development by December 2024 (within 5 years).

Council Criteria for Assessing Special Housing Area Proposals

Section 3 of the Council’s Lead Policy sets out the criteria that council will use to assess SHA proposals, in addition to the statutory considerations. The following is based on the site forming part of the Council endorsed Ladies Mile Special Housing Area.

The criteria are addressed under the headings below:

1. Location

This criterion relates to Council’s categorization of land in the District, into 3 categories:

a. Category 1 includes areas that are considered suitable for establishment as special housing areas. These areas have been identified or zoned in the Proposed District Plan for residential development or intensification and/or are located within the proposed urban growth boundary. Category 1 areas are listed in Attachment A.

b. Category 2 includes areas that may be suitable for establishment as special housing areas, subject to further assessment against this policy. Category 2 areas are listed in Attachment A.

c. Category 3 includes areas that are not considered suitable for establishment as special housing areas. Category 3 areas are listed in Attachment A.

The land encompassing the proposed Laurel Hills SHA is shown on the Indicative Ladies Mile Master Plan that is included within Category 2. An assessment against the key design principles of connectivity, Variation in built form and dwelling type, flexibility of use, and legibility is provided in the Urban Design Report.

2. Strategic Direction

The Lead Policy criterion states:

The Council will consider proposed special housing areas in light of its overall strategic direction for development in the District. This includes ensuring that urban development occurs in a logical manner:

- *to promote a compact, well designed and integrated urban form;*
- *to manage the cost of Council infrastructure; and*
- *to protect the District's rural landscapes from sporadic and sprawling development.*

This includes establishing special housing areas within existing urban areas, or proposed urban areas in the Proposed District Plan, including those that are anticipated to fall within urban growth boundaries.

The proposed Laurel Hills SHA is consistent with this criterion. Whilst currently zoned General Rural, the sites are located on land that is signalled through the Ladies Mile Master Plan for urban residential development.

The proposal is assessed against the Strategic Direction (Chapter 3) objectives and policies of the Proposed District Plan, and as outlined below, considered to be consistent with these.

1. Develop a prosperous, resilient and equitable economy.

The delivery of housing as proposed in accordance with the Ladies Mile Master Plan is central to the development of a prosperous, resilient and equitable economy. Furthermore, the proposal will contribute to the provision of affordable housing which will help achieve a vibrant and diverse community.

2. The strategic and integrated management of urban growth.

The proposed development is located within comfortable walking and cycling distance of Frankton and Ladies Mile centres and located immediately adjacent to a major transport corridor incorporating bus and cycle routes. The proposed SHA is consistent with Council's goals of integrated urban growth management, where infrastructure funding and provision is readily planned for and available.

3. A quality built environment taking into account the character of individual communities.

The Scheme Plan for the proposed development of the SHA ensures sound urban design principles will underpin the development. It has been advanced with regard to development plans for neighbouring sites, to ensure context and connectivity are taken into account.

Architecture will adopt a modern response but clearly rooted in the built form and materiality of the District.

4. The protection of our natural environment and ecosystems.

The site is not located on or adjacent to any sensitive natural environments. Accordingly, there are no adverse effects on the natural environment or on any known notable ecosystems.

5. *Our distinctive landscapes are protected from inappropriate development.*

The landscape within which the site sits is an unexceptional rural one, which is rapidly urbanising in accordance with the intended urban development under the Ladies Mile Master Plan. Specifically, the development is set back from embankment edges, provides a visual buffer to Ladies Mile and ensure view shafts from the southern rural residential properties are not compromised/ are maintained.

6. *Enable a safe and healthy community that is strong, diverse and inclusive for all people.*

The variety of dwelling typology provides for and accommodates a diverse community. The development intends to provide a variety of site and dwelling sizes, which creates an individual yet cohesive residential environment. The incorporation of affordable housing as part of the development also achieves this. Strong consideration and analysis of onsite amenity (i.e. providing parks, open spaces) of the development and private spaces of the dwelling ensures a safe and enjoyable environment for residents.

Overall, the proposal is consistent with these objectives and policies and therefore achieves the strategic direction of the Proposed District Plan.

3. Infrastructure

The Council must be satisfied that either:

a. Adequate infrastructure exists to service qualifying development in the area; or

b. Infrastructure can and will be provided and funded by the landowner or developer at no cost to, and without unforeseen or adverse financial or environmental costs on the Council or other relevant infrastructure providers.

The proposal has been assessed by civil and traffic engineers as outlined above and it is confirmed that adequate infrastructure exists or can be proposed to service the proposed SHA for 156 dwellings.

4. Affordability

The Lead Policy criterion states:

Housing affordability is a key issue for the Queenstown Lakes District. The Council is committed to ensuring that as development takes place across the District, the provision of affordable housing

is incorporated as part of each development. The Council is particularly interested in ensuring that affordability is retained overtime. The Council expects landowners and developers to identify appropriate mechanisms to ensure that housing developed in a special housing area addresses the district's housing affordability issues. The Council considers that an appropriate mix of housing is necessary in the district, including housing for owner-occupiers, first home buyers, and accommodation for workers. Examples of mechanisms to achieve affordability may include:

- *a range of appropriately sized sections (including smaller sized sections of 240-400m²);*
- *a mixture of housing typologies and sizes is also desirable;*
- *the nature of any covenants (or similar restrictions) imposed on sections;*
- *methods to reduce property speculation of vacant sections; and*
- *methods to retain affordability in the medium to long term. Housing developed in special housing areas will be expected not to be used solely for visitor accommodation and landowners and developers should identify an appropriate legal mechanism for securing this outcome.*

The advancement of the Laurel Hills SHA proposal has placed these matters at the centre of design considerations.

Affordability is fundamentally informed by the ability to reduce living costs. The Scheme Plan layout provides for high level of pedestrian and cycle connectivity, providing easy access to public transport and in doing so reducing the need (therefore costs) associated with a private motor vehicle.

As a result, the proposal delivers on an affordability-by design approach, with a large proportion of small sites (200m² - 350m²) and compact dwellings. Additionally, it provides housing plans which are aesthetically pleasing, efficient and compact, and cost effective with regard to construction methodology.

A further important factor for overall lifestyle affordability is the locational characteristics of the land. Both the Queenstown and Arrowtown Town Centres are 10km in opposite direction from Max's Way being on average a 12-minute drive. Queenstown International Airport is 5.6km or a 9-minute drive from the subject site. Closer to the site:

To (Proposed) Ladies Mile commercial core:

- By walking: 20 minutes
- By cycling: 10 minutes
- By driving: 2 minutes

To Frankton Town Centre (Pak n Save Queenstown):

- By walking: 30 minutes
- By cycling: 15 minutes
- By driving: 3 minutes

These factors mean that residents within the community should, on average, have low transport costs which assists with overall cost of living affordability.

In addition, the provision of a number of semi-detached dwellings will assist with minimising winter heating costs, by enhancing the thermal performance of the dwellings.

Property speculation of vacant sections will be minimised as much of the development will be delivered by the developer and marketed to owner occupiers. Furthermore, lot sales will have robust development controls that will facilitate timely completion of the entire sub-division.

5. Affordable housing contribution

The Council considers at least 10% of the residential component of the development by developed market value or by area (depending on the nature of the development) is identified for affordable housing, and Laurel Hills Limited have committed to delivering suitable land to the Community Housing Trust. In addition, LHL have adopted a strong affordability by design approach which underpin built form outcomes and the proposed master development scheme.

LHL confirms that it will satisfy the affordable housing requirements of the Lead Policy. The precise details of any agreement will be worked through carefully in the Development Deed with Council and the Community Housing Trust.

6. Community feedback

The Council will seek community feedback on all proposed special housing areas. This will include the Council seeking advice from the New Zealand Transport Agency, Ministry of Education, Otago Regional Council, Local Iwi and any other parties considered to be relevant to the consideration of a special housing area.

The Laurel Hill directors have contacted all the adjoining landowners and engaged with them on the proposed development to the level they have felt comfortable with. The outcomes of this consultation has informed the design of the development and many of the mitigation measures proposed.

7. Quality and design outcomes

The Council will expect all qualifying developments in special housing areas to achieve high quality urban design outcomes. The Council's development quality expectations are set out in Attachment C.

The Laurel Hills SHA proposal is considered to exceed Council's design expectations. The urban design rationale for the proposal has been outlined above under Section 1.3 Urban Design Approach, above.

8. Timely development

The Council wishes to see evidence that the special housing area proponent is motivated to obtain resource consent before the repeal of HASHAA and to implement the resource consent in a timely manner, such that

the development assists in addressing the District's housing supply and affordability issues.

Assuming the SHA is established early in 2019, Laurel Hills Limited is strongly motivated to obtain resource consent before the repeal of HASHAA. This is for LHL's own commercial reasons, but also reflects the fact that obtaining a SHA represents a 'Use it or Lose it' scenario of development rights, as the density and therefore yield of development contemplated in the SHA is significantly higher than that contemplated by the site's Rural General zone under both the Operative and Proposed District Plans.

The LHL team comprises of professional and experienced land developers specifically in the residential sector, which provides confidence to QLDC in the delivery of the development.

3. DISTRICT PLAN CONSIDERATIONS AND ENVIRONMENTAL EFFECTS

While District Plan considerations are a specific statutory consideration when Council assesses Qualifying Development applications, HASHAA does not specifically outline them as considerations when considering SHA status for a given piece of land.

Nevertheless, despite the lack of explicit reference to such matters in the statute, many councils do give some consideration to District Plan matters when considering proposals to establish SHAs. Given this, we provide an assessment of these matters.

The zoning of the site is 'General Rural' under the Operative and Proposed Queenstown Lakes District Plans. This zoning does not contemplate residential development at the intensity proposed in this Expression of Interest. However, the proposed residential development is anticipated by and consistent with the Council adopted Ladies Mile Master Plan which provides for a significant uplift of urban development in the immediate area. This Master Plan has been incrementally delivered on by the residential developments of Shotover Country and Queenstown Country Club SHAs.

The proposal comprises a range of lots size and dwelling typologies. Given the further height restriction constraints across the sites (max. building height of 5.5m), dwellings are limited to a maximum of 2 storeys. Where possible the slope/topography of the site is used to assist in integrating the development with the natural land fall. Any potential visual or dominance impacts from surrounding residential viewshafts have been specifically considered in the development of the layout and considered to be nil to minimal.

High level infrastructure ([Appendix 5](#)) and traffic assessments ([Appendix 6](#)) are provided with this EOI to demonstrate that there are no fundamental infrastructure constraints to the proposed development. Engineering design and detailed assessments will be provided at Qualifying Development stage.

The topography of the site has meant that early geotechnical investigation has been undertaken by GeoSolve (refer to [Appendix 7](#)), which has determined that the land is suitable for development. There are no instability or land contamination issues that could hinder the proposed development. The proposal will require surface area and volume of earthworks, however the proposal is anticipated to work with the topography, as opposed to a major recontouring of the site. Volumes to be moved on site will be reused in the creation of bunds onsite acting as visual buffers (i.e. from Ladies Mile Highway). Effects associated with the development can be managed so as to be no more than minor. Details of construction management will be addressed at Qualifying Development application stage.

Overall, the proposed development is contemplated by the Council adopted Ladies Mile Master Plan and is generally consistent with the residential outcomes anticipated. The development meets the overall Strategic Direction objectives and policies of the Proposed District Plan for urban development, in enabling and providing a range of housing in an appropriate location that encourages affordability.

4. CONCLUSION

Laurel Hills Limited appreciates Queenstown Lakes District Council's consideration of this EOI.

The proposal is considered to satisfy the requirements of Council's Implementation Policy on Special Housing Areas and the statutory requirements of the HASHAA legislation.

We consider that the proposed SHA will contribute significantly to the social, economic and environmental wellbeing of the Queenstown community, and readily deliver urgently needed affordable housing to the community.

- A** Native planting with exotic specimen trees on a landscape bund to soften views from SH6.
- B** Existing embankment to be planted with native species
- C** Neighbourhood reserve
- D** Pocket Park



- Possible Bus priority route to Frankton / Queenstown
- Cycle route to Frankton / Remarkables Park
- Bus stop
- - - - Twin Rivers Trail

SHARED PATH CONNECTS TO TWIN RIVERS TRAIL

FRANKTON LADIES MILE HIGHWAY (STATE HIGHWAY 6)

LOWER SHOTOVER ROAD

BUS ONLY SLIP ROAD ONTO SH6

STALKER ROAD

MAXS WAY

BUS CLEARWAY IN MORNING PEAK TRAFFIC





LAUREL HILLS

Queenstown, New Zealand

architectural briefing

January 2019



Key Building Concepts

Laurel Hills aims to provide efficient compact building forms on small sites which have the appearance and spatial qualities of much larger dwellings.

Four essential approaches are adopted to achieve this objective:

1. Utilisation of natural contour where possible, and;
2. Wider and shorter
3. The value of the roof void
4. Embrace the porch and carport

These are covered in more details on the following pages.

Employing these techniques will help deliver:

- Appropriate built-form response for this site
- Greater site efficiency and utilisation
- Accommodate 2 habitable levels within the 5.5m encumbrance
- Help promote 'affordable by design' solutions generally
- Help facilitate variation and personalisation of standardised homes



Clare Road, Merivale, Christchurch
High quality compact building forms on a small site



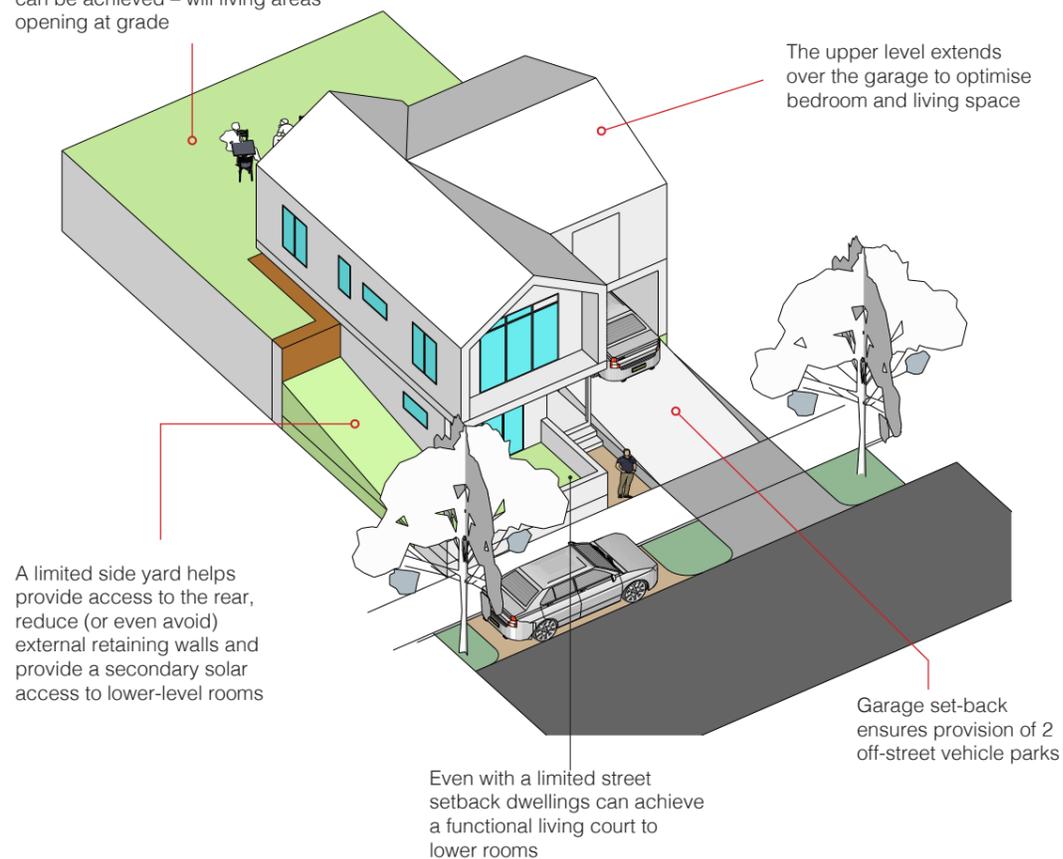
Utilising Contour

Utilising contour as an integral part of building design is an effective way of delivering a medium density, free-standing building form.

Using contour, particularly where a site slopes up to the north enables multi-level dwellings by using internal retaining to reduce the building footplate and site size.

This provides a 2 level appearance to the street while the north-facing living court can be accessed directly at-grade from living areas on the level above.

Even on extremely small sites (<200m²) a high level of private living space amenity can be achieved – will living areas opening at grade



The Bullendale development on Arthurs Point has utilised slope to effect to create quality, cost-effective compact dwellings



Wider & Shorter

Employing wider but shallower lots helps mitigate a number of issues encountered with modern suburban development. Wider buildings have numerous benefits to all stakeholders.

The 'wider and shorter' approach is premised on the ability to create 2 or more functional rooms facing either the street or rear living court. If a two-level building is being considered this equates to approximately 8m wide.

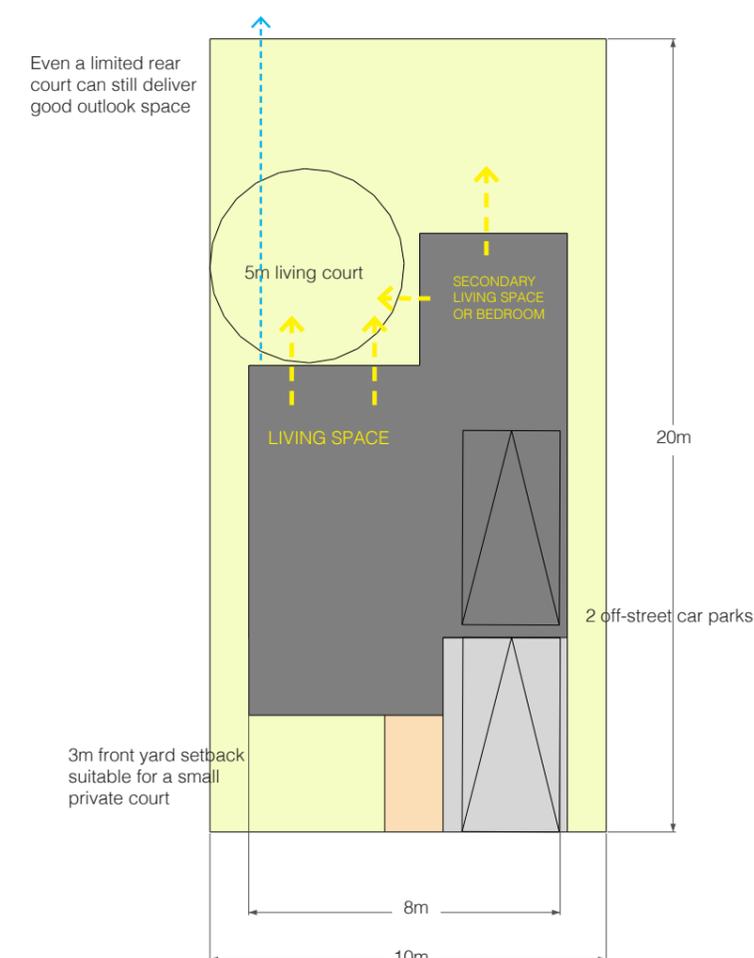
The advantages include:

For Council / Developer:

- Greater separation between driveway crossings:
 - › Reduces vehicle dominance of the street
 - › Reduces vehicle pedestrian crossing conflicts
 - › Improves the ability to provide on-street parking
 - › Increases streetscape landscaping = higher quality public realm
- Requires longer blocks, but is neutral in terms of development efficiency and roading required
- On sites sloping north-south, helps reduce the extent of cut and retaining required
- Helps facilitate better solar access into sites
- Ensures better north-facing living courts for south-facing sites
- Helps reduce front yard setbacks

For the Homeowner

- Houses appear larger (and therefore more valuable)
- Reduces over-looking by neighbouring properties – retaining privacy even in more-intensive residential environments.
- Ability to create habitable rooms with outdoor amenity on lower levels
- Helps facilitate porches and decks towards the street to improve sociability and surveillance to the street
- Improves the provision off-street parking
- Can easily accommodate reverse vehicle access from a rear lane (if available)



This example illustrates how a free-standing 2-level compact dwelling can function on a 200m² lot.

A 1.5 level dwelling (like the Bullendale example on the previous page) can provide a full 3 bedroom home.



Effective Use of the Roof Cavity

Many of Laurel Hill’s sites are impacted by the 5.5m maximum building height encumbrance. Even when this constraint can be overcome by earthworks design, the creation of additional habitable space in the roof void remains a design feature to embrace.

Ironically, the larger the footplate the harder it is to utilise the roof cavity (or attic) space. Therefore compact footplate dwellings are ideal to “borrow this” low-cost yet valuable space. Likewise larger dwellings can be broken down into smaller modules to achieve the same result.

This is a good approach to creating space which optimise the locations spectacular vistas.



Use of the roof cavity (or attic) can be a valuable space if considered early in the design process.



Trelawns Cottage (Arthurs Point) – using the roof void to create a habitable room within a constrained building envelope



Larger dwellings / sites can accommodate a series of smaller structure which in turn enable the attic utilisation



Utilising Building Appendages

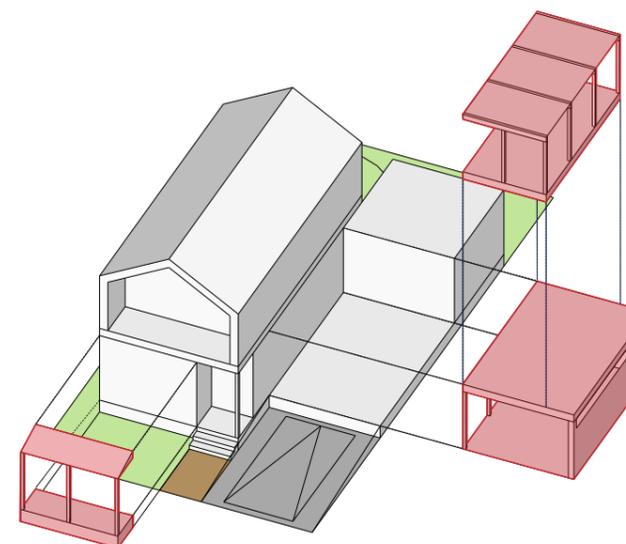
Non-enclosed building appendages such as verandas' and porches provide significant amenity advantages to both homeowners and the community at relatively low cost.

Benefits include:

- Increased functional space
- All weather outdoor amenity areas
- Improved interface with the street = increased surveillance
- Increased personalisation of homes.

This concept can be extended to include vehicle garaging – utilising carports in place of enclosed garages.

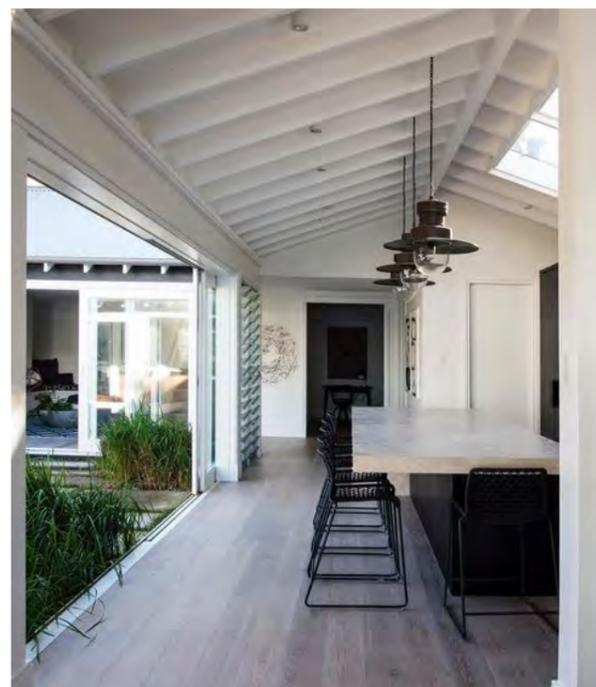
This approach is a further aspect of helping to reduce the footplate of dwellings and deliver a higher density without compromising amenity.



A simple front porch can add real value to a simple building.



Even a small level change allows front porches to get closer to the street while maintaining privacy



Verandahs can be used within a lot to help shape space and create privacy.

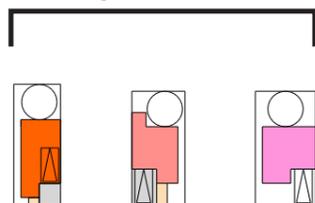


Canopied spaces can add considerable value to any dwelling



The Typologies

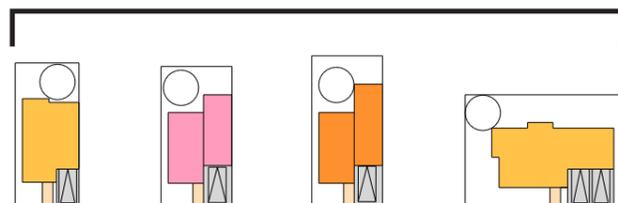
Compact Houses



The most compact typologies that utilise internal site works to deliver compact houses on small lots.

See page **7** for further details

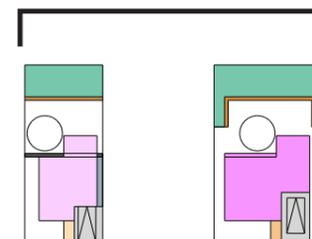
Townhouses



A range of types that utilise lofts/ roof cavities over part of the ground level footplate to deliver family-sized house types on smaller lots.

See page **8** for further details

Retain Houses

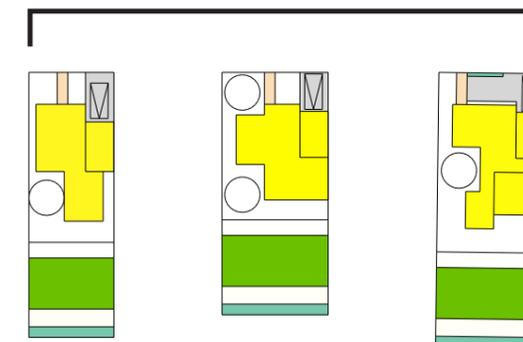


A typology that features internal retaining to create houses compact family-sized dwellings on sloping site areas. These present as two levels to the street but single level to rear living courts.

These are also utilised on the northern boundary (against Ladies Mile Highway - SH6) to help facilitate the landscaped bund area.

See page **9** for further details

Urban Houses

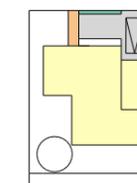


These are larger (generally) single level dwellings on smaller sites.

They are used extensively on the southern boundary against Maxs Way to help integrate with and minimise visual impacts on neighbours

See page **10** for further details

Villa



A more conventional responses for larger (450m²+), flatter sites which suit a personalised response within agreed design parameters.

These have not been illustrated.



Typology: Compact House

Compact house types provide a cost-effective alternative to apartment living by providing 2 level dwellings with small footplates on extremely compact sites (<150m²).

They are typically are utilised where earthworks within the site lowers building platform levels to facilitate the provision of 2 floors below the 5.5m height constraint allow. Whilst they can be developed as free-standing dwellings the best utilisation is as attached dwellings – either as duplexes or terraces, as desired.

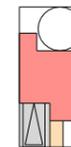
There are 3 variants of this type which can deliver 2–3 bedrooms with 1-2 off street car spaces dependent on configuration. To achieve this they have higher site coverages, limited street setbacks and constrained rear open space.

This typology is 'affordable by design' and provides a viable option for single or small family households (such as starter couples or empty-nesters).



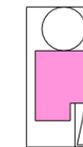
A
Minimum Lot
 Dimensions: 6.5m(w) x 17m(d)
 Size: 110m²

Dwelling:
 Site Coverage: <51%
 Footplate: 56m²
 GFA: circa 90m²
 Bedrooms: 2
 Off-Street Parking: 1 internal



B
Minimum Lot
 Dimensions: 7.5m(w) x 16m(d)
 Size: 120m²

Dwelling:
 Site Coverage: <45%
 Footplate: 50m²
 GFA: circa 100m²
 Bedrooms: 2 or 3
 Off-Street Parking: 1 or 2



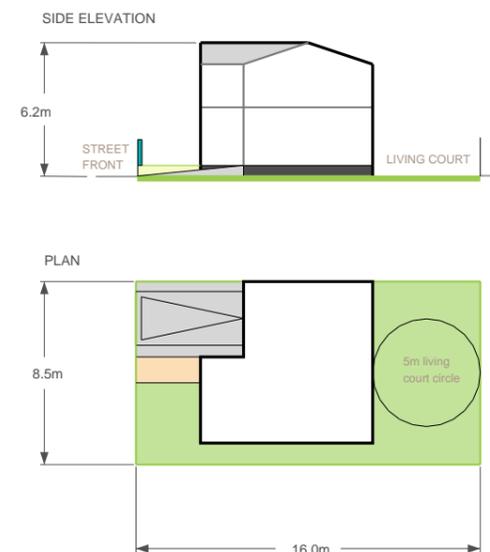
C
Minimum Lot
 Dimensions: 8.5m(w) x 16m(d)
 Size: 110m²

Dwelling:
 Site Coverage: <45%
 Footplate: 54m²
 GFA: circa 110m²
 Bedrooms: 2 or 3
 Off-Street Parking: 1 or 2

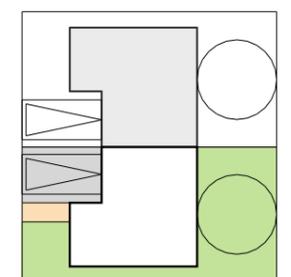


Compact house, Austin, USA

Even a limited elevation change from the street helps create a functional outdoor living space and improve privacy, even with a limited setback from the street.



ATTACHING TYPOLOGIES



When attaching typologies, driveways should be consolidated to reduce the number of vehicle crossings and improve on-street parking opportunities.



Typology: Townhouses

Townhouses are used extensively in the development, providing good family sized homes on small (150–350m²) lots.

Like the Compact House typology, Townhouses utilise internal site earthworks (but to a reduced extent) to lower building platforms to achieve two functional levels over part of the building footplate. This approach helps solar access between building and into both the public realm and private living courts, as well as optimise views.

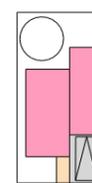
The upper level generally utilises an elevated roof cavity to create habitable lofts and functional ceiling heights. The 4 variants can deliver 3-4 bedrooms and up to 4 off-street car spaces.

They have higher site coverage and limited street setbacks but can still deliver generous internal areas and outdoor living spaces.



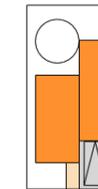
A
Minimum Lot
 Dimensions: 9m(w) x 20m(d)
 Size: 180m²

Dwelling:
 Site Coverage: <50%
 Footplate: 86m²
 GFA: <120m²
 Bedrooms: 3
 Off-Street Parking: 2 (tandem)



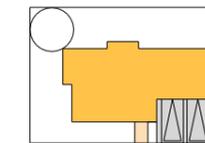
B
Minimum Lot
 Dimensions: 10m(w) x 19.5m(d)
 Size: 195m²

Dwelling:
 Site Coverage: <45%
 Footplate: 90m²
 GFA: <145m²
 Bedrooms: 3
 Off-Street Parking: 2 (tandem)



C
Minimum Lot
 Dimensions: 10m (w) x 21m(d)
 Size: 210m²

Dwelling:
 Site Coverage: <45%
 Footplate: 96m²
 GFA: circa 145m²
 Bedrooms: 3 or 4
 Off-Street Parking: 2 (tandem)

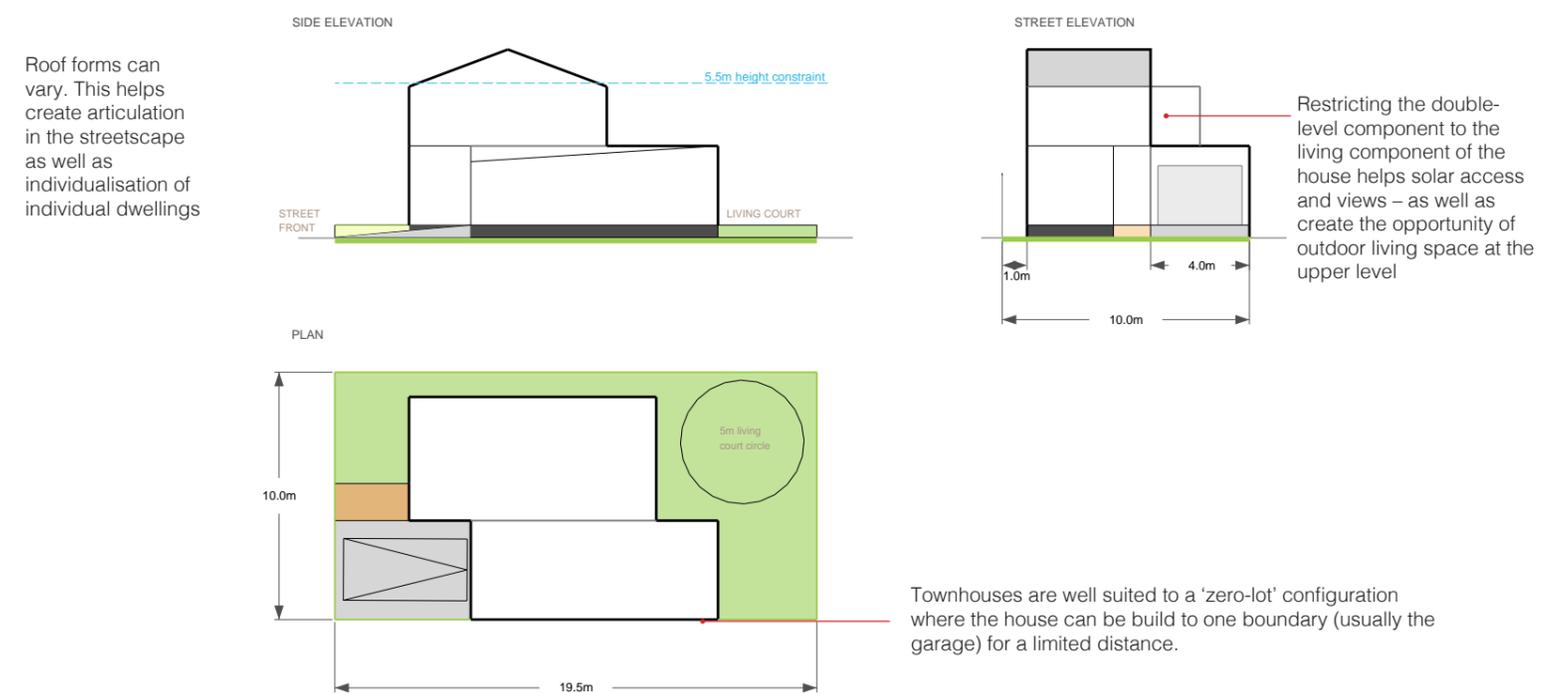


D
Minimum Lot
 Dimensions: 20m(w) x 15.5m(d)
 Size: 300m²

Dwelling:
 Site Coverage: <45%
 Footplate: 125m²
 GFA: circa 150m²
 Bedrooms: 3+
 Off-Street Parking: 4



Artist Impression - Bridesdale Farm





Typology: Retain Houses

Retain Houses utilise internal and external retaining to create compact, family-sized dwellings on areas of the site with more slope without requiring a significant engineered solution.

While the functional site size of lots is relatively small (230–350m²) the actually size may be far larger incorporating further upper slopes. These may be used for revegetation or integrate with landscape bunding in the public realm. As a result, while having a very compact house development area, they have a relatively low site coverage.

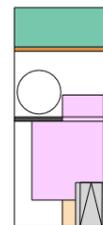
They provide quality outdoor living spaces by ensuring rear living courts have northern aspect and internal living areas opening directly to this at-grade on the upper level.

The approach frees the lower level to accommodate internal parking and additional living areas such as an office or bedroom.

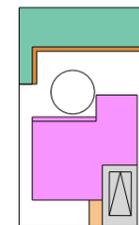
They present as two levels to the street and single level to the rear living court, while staying below the 5.5m height constraint.



Bullendale houses, Arthurs Point

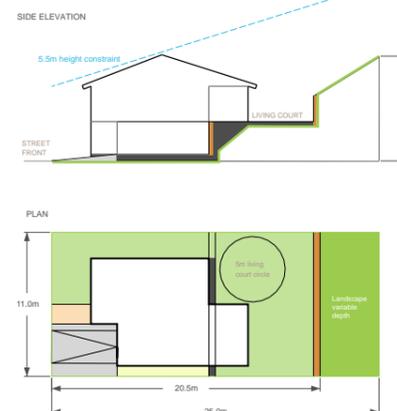


A
Minimum Lot
Dimensions: 11m(w) x 21m(d)
Size: 230m²
Dwelling:
Site Coverage: <35%
Typical GFA: <125m²
Bedrooms: 3
Off-Street Parking: 2 (tandem)

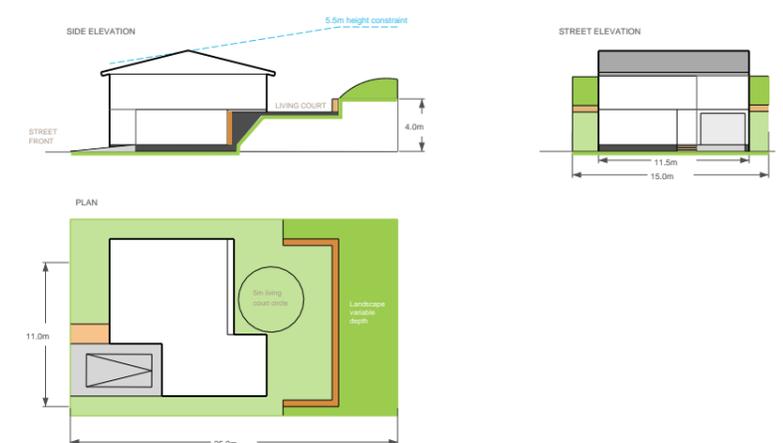


B
Minimum Lot
Dimensions: 15m(w) x 21m(d)
Size: 315m²
Dwelling:
Site Coverage: <35%
Typical GFA: <145m²
Bedrooms: 3 or 4
Off-Street Parking: 2 (tandem)

NARROW (A)



WIDE (B)



The Retain House model can be used on any area that slopes up to the north. By retaining within the house it can accommodate over 5m of level change in the section depth (circa 25m) net of further undevelopable landscape.



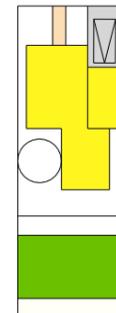
Typology: Urban Houses

Urban Houses are (generally) single level dwellings on smaller sites (300–450m²) lots. They represent a smaller version of the larger Villa House (not illustrated) with wider street frontages to help reduce the visual impact of cars and garages, and help shape a less car-dominated streetscape.

These types are used extensively on the southern boundary against Maxs, and like the Retain House typology, integrate with unbuildable slopes to create substantial larger lots. This also offers the opportunity to incorporate small components of two-levels within the house with little additional visual impact.

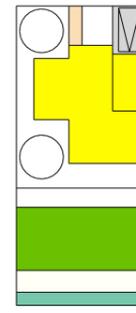
The types typically feature an 'L' shape to help create enclosed courtyard living areas to the rear along with porch/canopied areas to the street.

The type is well suited to utilise a 'zero lot' boundary treatment along one edge to optimise site efficiency.



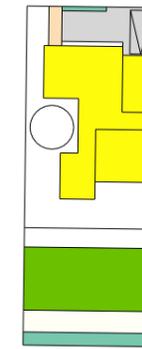
A
Minimum Lot
Dimensions: 12m(w) x 26m(d)
Size: 312m²

Dwelling:
Site Coverage: <45%
Typical GFA: 130m²+
Bedrooms: 3
Off-Street Parking: 2 (tandem)



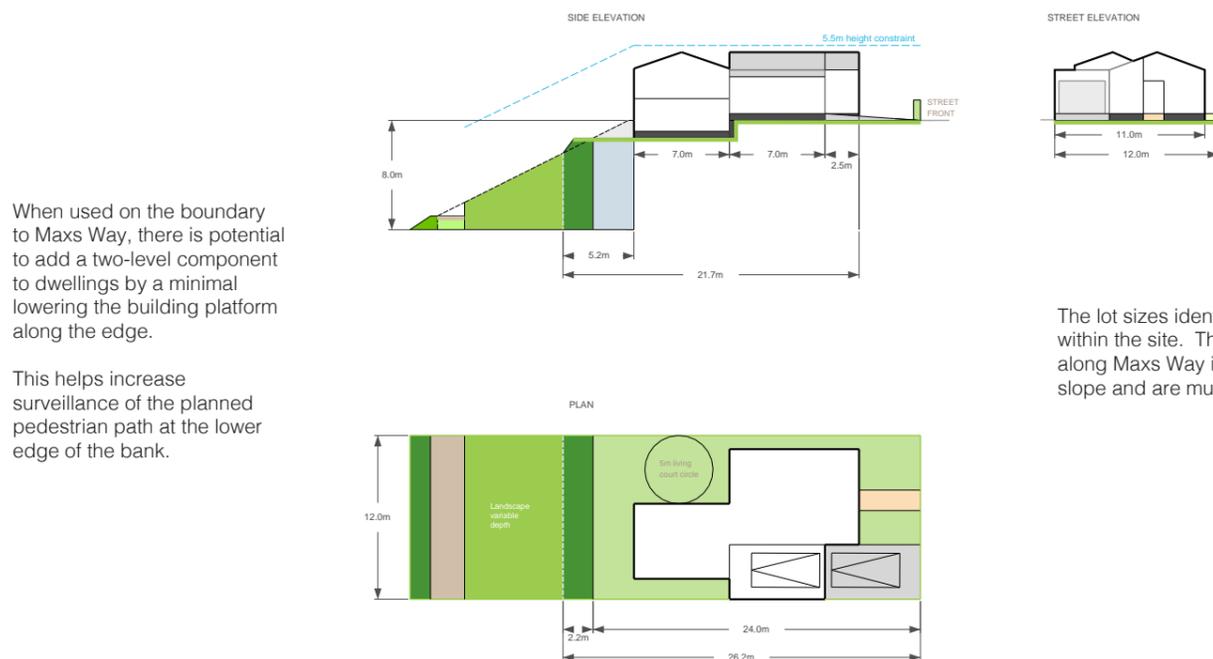
B
Minimum Lot
Dimensions: 15m(w) x 23m(d)
Size: 345m²

Dwelling:
Site Coverage: <45%
Typical GFA: 145m²+
Bedrooms: 3+
Off-Street Parking: 2 (tandem)



C
Minimum Lot
Dimensions: 15m(w) x 27m(d)
Size: 405m²

Dwelling:
Site Coverage: <45%
Typical GFA: 175m²+
Bedrooms: 4+
Off-Street Parking: 2 (tandem)



When used on the boundary to Maxs Way, there is potential to add a two-level component to dwellings by a minimal lowering the building platform along the edge.

This helps increase surveillance of the planned pedestrian path at the lower edge of the bank.

The lot sizes identified represent use within the site. The effective lot sizes along Maxs Way include unbuildable slope and are much larger.



Bringing It Together - Architectural Style and Materiality

The architectural language of Laurel Hills will integrate closely with landscape elements to provide a coordinated design aesthetic to create a cohesive streetscape and help shape a distinct neighbourhood identity.

Materials will include:

- Rendered walls
- Weatherboards
- Vertical board and batten
- Iron cladding

Feature elements will include:

- Stonework
- Modern features such as stacked block, feature materials (ie copper or corten steel panels – in appropriate locations)
- Feature glazing

Colours

A colour palette will be developed that encompasses the key element found in Arrowtown and other surrounding development.

Personalisation

As outlined on previous pages, even with a relatively limited number of typologies, the articulation of facade and variety of roof forms, inclusion of porches and verandahs, and the elements listed to the left will enable a high degree of personalisation without 'striving for effect'.



International example



Devon Street, Arrowtown

Memorandum

To	Warren Ladbrook
Copy	Simon Leary
From	Chris Baker
Office	Queenstown Office
Date	9 July 2018
File	6-XQ074.01
Subject	Ladies Mile HIF Integrated Transport Assessment Amendment A - Detailed Analysis of Programme 3

1 Introduction

This memorandum serves as an addendum to the Ladies Mile HIF Integrated Transport Assessment (issued 29 June 2018). The intention of this addendum is to provide additional detail regarding the traffic impact of construction of the preferred Programme 3 (1,100 houses) at the Ladies Mile Housing Infrastructure Fund (HIF) site. Section 3.2 discusses the interventions required to achieve the Programme without traffic demands exceeding the capacity of Shotover Bridge.

The ITA focussed on delivery of Programme 2 (750 houses), which through traffic forecasting, was determined to be the largest development feasible without a step-change in public transport provision or an increase in river crossing capacity, both of which would require significant investment.

This memo provides more detail on the demand expected to be generated by Programme 3, and the steps required to enable development, keeping demand below the capacity of the Shotover Bridge.

2 Traffic Modelling Results

Further to the sensitivity tests presented in the ITA, this addendum introduces a vehicle occupancy parameter that is used to test the effect of a higher average number of people per vehicle on the corridor. Existing occupancy of private vehicles on the corridor has been surveyed at approximately 1.3 people per vehicle.

The Reference Case discussed in this section is the same set of base assumptions used in the ITA, except for the number of dwellings increasing to Programme 3. The assumptions are summarised in Table 1.

Table 1 Reference Case Parameters

<p>Growth Rate</p>	<p>Low – SH6: 3.07%; Local: 1.15%</p> <p>Medium – SH6: 5.69%; Local: 1.72%</p> <p>High – SH6: 9.00%; Local: 2.30%</p> <p>Medium to Low – As Medium with SH6 growth tapering by 0.1% per year and local growth tapering by 0.05% per year</p>	<p>Growth rates for SH6 traffic were determined using data from counters on SH6.</p> <p>Growth rates for local traffic were determined from the 2018 build-out of Lake Hayes and Shotover Country and expected completion date.</p>
<p>Number of Dwellings</p>	<p>Programme 1: 450 lots</p> <p>Programme 2: 750 lots</p> <p>Programme 3: 1,100 lots</p> <p>Programme 4: 2,185 lots</p>	<p>Various proposals were put forward for different development sizes as part of the HIF DBC, ranging from realistic to more aspirational dwelling numbers. Road access to the site differs depending on the scale of development.</p>
<p>Construction Start</p>	<p>2020</p> <p>2022</p> <p>2024</p>	<p>Year in which construction begins – effect of background traffic by time of completion</p>
<p>Build Rate (dwellings/y)</p>	<p>75</p> <p>100</p> <p>125</p>	<p>Build rates were adopted based on observed rates at other local developments, cognisant that there is a finite supply of labour available locally.</p>
<p>Arthurs Point Diversion</p>	<p>0 – 20%</p>	<p>The effect of increasing the attractiveness of the route into Queenstown through Arthurs Point was examined as a way of reducing regional trips along Ladies Mile.</p>
<p>Trip Reduction Factor</p>	<p>0 – 20%</p>	<p>A trip reduction factor was used for a general sensitivity test of demands on the corridor.</p>

2.1 Future Unconstrained Volumes

Figure 1 provides forecast corridor demands under Programme 3 (without any transport interventions) for different growth rates, build rates and vehicle occupancy. The forecast shows that baseline demand would likely exceed the existing bridge capacity of 1,600 veh/hr in 2020-2024, before development completion (black boxes).

A low-growth, high-occupancy scenario would result in 2,000 veh/hr crossing the Shotover Bridge in 2028, indicating that a 20% alternative mode share would produce sufficiently low volumes. However, people willing to shift to high-occupancy vehicles are most likely to be those transferring to public transport. As such, a combined higher occupancy and public transport mode share is considered unlikely. A high-growth, existing-occupancy scenario with 20% alternative mode share would see capacity reached in 2023.

Growth Rate	Programme	Units/year	Occupancy	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Medium to Low	Programme 3	125	1.3	1451	1499	1604	1708	1811	1913	2014	2114	2214	2312	2399	2438	2477	2516	2553	2590	2627
Low	Programme 3	125	1.3	1451	1479	1566	1652	1738	1825	1911	1998	2074	2151	2216	2235	2253	2272	2291	2309	2328
High	Programme 3	125	1.3	1451	1525	1657	1789	1921	2054	2186	2318	2430	2543	2644	2699	2754	2808	2863	2918	2972
Medium to Low	Programme 3	75	1.3	1451	1499	1581	1662	1742	1821	1898	1975	2051	2127	2202	2276	2350	2423	2495	2567	2627
Medium to Low	Programme 3	100	1.3	1451	1499	1593	1685	1777	1867	1956	2045	2132	2220	2306	2392	2477	2516	2553	2590	2627
Medium to Low	Programme 3	125	1.4	1347	1392	1494	1595	1694	1793	1891	1988	2085	2180	2264	2301	2337	2372	2407	2442	2476
Low	Programme 3	125	1.4	1347	1374	1458	1542	1627	1711	1795	1880	1955	2030	2094	2111	2129	2146	2163	2181	2198
High	Programme 3	125	1.4	1347	1416	1543	1670	1797	1923	2050	2177	2286	2395	2492	2543	2593	2644	2695	2746	2796
Medium to Low	Programme 3	75	1.4	1347	1392	1471	1548	1625	1700	1775	1849	1922	1995	2067	2138	2209	2280	2349	2419	2476
Medium to Low	Programme 3	100	1.4	1347	1392	1482	1571	1660	1747	1833	1919	2003	2088	2171	2254	2337	2372	2407	2442	2476
Medium to Low	Programme 3	125	1.5	1258	1299	1398	1496	1593	1689	1785	1879	1973	2066	2159	2251	2343	2434	2525	2568	2600
Low	Programme 3	125	1.5	1257	1282	1365	1447	1530	1612	1695	1778	1852	1926	2000	2074	2149	2223	2297	2371	2445
High	Programme 3	125	1.5	1258	1322	1444	1566	1689	1811	1933	2055	2161	2266	2360	2407	2455	2502	2549	2597	2644
Medium to Low	Programme 3	75	1.5	1258	1299	1375	1450	1523	1596	1668	1740	1810	1880	1950	2019	2087	2155	2223	2290	2356
Medium to Low	Programme 3	100	1.5	1258	1299	1387	1473	1558	1643	1726	1809	1891	1973	2054	2135	2215	2295	2374	2452	2530

*black boxes signify development completion date

Figure 1 Forecast Baseline Westbound Demand at Shotover Bridge (Without Transport Interventions)

2.2 Mode Shift Required

In order to develop the site to Programme 3 without traffic demand exceeding existing capacity, traffic modelling indicates that 40% of trips from Ladies Mile and Shotover Country/Lake Hayes Estate would need to be by modes other than car and a Park and Ride on SH6 would need to capture 20% of westbound regional traffic (Table 2). Note that different proportions of mode shift could achieve the same reduction in demand; those shown are considered the most realistic.

Implementing a Park and Ride would require significant investment and further investigation is needed to identify the optimum size and location for an appropriate facility. Based on international experience, a turn in rate of 1 in 5 vehicles (a mode shift of 20%) is likely to be achievable subject to the charging regime adopted and the level of priority afforded to the Park and Ride buses.

Achieving a mode shift of 40% for trips associated with the Ladies Mile is unlikely to be achievable without a step change in public transport provision (for example Mass Transit). The Reference Case is forecast to require a Mass Rapid Transit (MRT) scale solution by development completion. As explored in the ITA, due to the high costs involved and the complexity of construction, MRT solutions are typically only justifiable in dense urban areas where they serve significant populations. As such MRT solutions, including gondolas at Ladies Mile, were found to be uneconomical in the ITA.

Evidence from Europe and Australia indicates that the maximum mode shift achievable by coupling improvements to conventional public transport services with programmes of Travel Demand Management is around 15%.

Table 2 Traffic Demand Analysis Results for Proposed HIF Programmes

HIF Programme	Number of dwellings (year complete)	Forecast traffic above capacity at development completion	Mode Shift Required to Reduce Demand at Shotover Bridge to 1,600v/h		
			Ladies Mile	Shotover Country/Lake Hayes	SH6 Park and Ride
1	450 (2023)	285	15%	25%	0%
2	750 (2025)	508	15%	25%	20%
3	1,100 (2028)	770	40%	40%	20%
4	2,185 (2037)	1,570	50%	50%	40%

The capacity of the public transport network is unknown at this stage (this is expected to be an output of the Future Public Transport Demand Analysis project). However, significant improvements are likely to be required to achieve the figures above. Furthermore, a system with high capacity does not necessarily translate into high patronage; the service needs to provide an attractive alternative to private vehicles.

To summarise the analysis of Programme 3, it is anticipated that mode shift alone will be insufficient to prevent congestion on SH6 by the time the development is complete.

3 Outcomes

The modelling results above indicate that mode shift alone is unlikely to enable the development of 1,100 houses at Ladies Mile; capacity improvements are likely to be required. This section explores potential impacts and mitigations to enable the construction of Programme 3, cognisant of the corridor context insofar that capacity upgrades at the Shotover Bridge have the potential to migrate congestion downstream.

3.1 Potential Congestion

The assessment of the Ladies Mile HIF site is based on a capacity constraint of 1,600 veh/hr at the Shotover Bridge. The result of traffic flows exceeding capacity is delay and queueing. For the Programme 3 Reference Case (refer Table 1), average westbound delays are expected to reach 4 minutes with queues up to 1.5km in 2028 (development completion). In the absence of a detailed traffic model, delays have been approximated based on the volume in excess of 1,600 veh/hr, and as such refer to additional delay and queues rather than total delay and queue lengths.

It should be noted that a level of congestion can be consistent with encouraging uptake in more sustainable modes of transport; albeit this has to be managed carefully and weighed against the operational efficiency of the State Highway network. Key to improving alternative mode share is to provide a service that is more attractive than private vehicles. This typically results from a level of inconvenience for car travel (congestion, inconvenient parking, expensive fuel) as well as an efficient public transport service (fast, reliable, affordable).

The ITA focussed on the morning peak due to its higher volumes and the traffic impacts being centred on Ladies Mile. Morning peak congestion causes queueing on Ladies Mile itself, which provides storage without affecting key intersections on the network. In the evening peak, congestion is more likely to affect other intersections in Frankton with greater potential to create critical network issues. Recent surveys have indicated that the PM outbound peak hour traffic demand is similar to the inbound AM demand. It is therefore anticipated that similar levels of interventions to those indicated within the ITA would be required in the eastbound direction within Frankton Flats.

3.1.1 Peak Spreading

Peak spreading occurs when commuters change their behaviour to avoid driving at busy times. No detailed modelling of peak spreading has been undertaken in this analysis, but it could potentially enable levels of service be maintained across the Shotover Bridge through a longer peak period.

3.2 Capacity Improvements

Traffic forecasting has shown that demand is likely to exceed the capacity of the Shotover Bridge in 2025 as the development is built out (assuming transport interventions presented in the ITA). Improving transport choice through the strategy identified in the ITA will delay capacity being reached, but upgrades will be required at some stage.

High investment site-specific capacity upgrades, such as MRT, were dismissed in the ITA from an economics perspective. Broader highway capacity improvements are more likely to have an economic case as they provide benefits to more people.

It is acknowledged that the constraint at the Shotover River currently acts as a valve, metering traffic arriving in Frankton. Increasing capacity over the Shotover River will have a downstream impact, possibly negating investment by migrating congestion into Frankton.

A series of potential capacity improvements are discussed here. Any capacity improvements should be part of a wider network strategy.

3.2.1 High Occupancy Vehicle Lanes

Providing transit lanes or bus lanes on SH6 up to the Shotover Bridge would encourage a shift towards higher occupancy vehicles (HOV), thereby reducing traffic volumes. The solution would capitalise on existing congestion by creating a more attractive alternative to private vehicles. Extra lanes, or the conversion of existing traffic lanes for the use by high occupancy vehicles, could be provided in both directions on SH6, addressing both morning peak westbound and evening peak eastbound congestion. This solution avoids causing congestion downstream, which is likely to occur with general traffic capacity improvements.

High occupancy lanes are comparatively cheaper to other potential capacity improvements, and could be staged such that the lanes are extended across the Shotover River in a potential future bridge upgrade (Section 3.2.3). Any additional structure should provide active mode facilities to maximise the alternative mode share.

It should also be noted that increasing vehicle occupancy is a somewhat paradoxical solution in that a high-occupancy lane will itself become more congested as occupancy increases, thus reducing its effectiveness in managing demand.

3.2.2 Traffic Signals

Improvements to route capacity can be made without providing additional road space. Signals could tie in with the HOV lanes option to give priority to buses or high occupancy vehicles. Priority could be provided at intersections along the corridor and at a 'gate' at the Shotover Bridge.

Traffic signals also offer a method of metering the amount of traffic reaching the bottleneck or providing priority without the need for comparatively expensive capital works. Signalisation of intersections through Ladies Mile (on SH6) would provide control over traffic flows, spreading congestion across the corridor rather than it reaching unstable levels at a single bottleneck.

It is noted that NZ Transport Agency have indicated their disapproval of implementing signals on this relatively high-speed section of SH6. The area is planned to remain an 80km/h speed zone, within which traffic signals are less safe than the existing roundabouts. The Agency also has a duty to maintain efficiency on the highway and roundabouts have higher capacity in this speed environment.

3.2.3 Duplication of Shotover Bridge

A supplementary conventional river crossing would effectively double the general traffic capacity of the route. A new bridge would have the benefit of providing extra eastbound capacity, addressing concerns about congestion caused by the Shotover Bridge during the evening peak blocking key intersections.

However, there are capacity constraints to the west of the Shotover River that reduce the effectiveness of localised improvements. Single-lane sections of road to the east of Hawthorne Drive between Grant Road and SH6A, and within the road network within Frankton Flats, are medium-term constraints on corridor capacity, while Frankton Road is unlikely to have increased capacity in the long-term. Similarly, the destination of Frankton and its internal network does not have the capacity to cater to the resulting increase in demand.

Consequently, any duplication of the bridge would need to be focussed on increasing the capacity to move people (rather than vehicles), in the form of high-occupancy or public transport lanes (refer Section 3.2.1) and active mode provision.

Additionally, a new bridge is anticipated to be costly due to the long spans required across the width of the Shotover River, hilly terrain at potential landing sites and the presence of critical infrastructure.

3.2.4 New Route

Frankton is increasingly becoming the main regional destination for retail, commerce and services, while residential areas are increasingly being developed alongside SH6. As land use patterns around Queenstown change, the function of the state highway is becoming more access focussed. A new strategic route would increase overall network capacity and resilience by separating movement and access functions, allowing SH6 to cater to regional movement and another route to provide local access.

As with the other options requiring major investment, a new route is likely to be cost-prohibitive in the short term given the comparatively low traffic volumes currently present.

3.3 Arthur's Point Diversion

A Select Link Analysis indicates that the town centre is currently a destination for 30% of westbound traffic arriving at Arrow Junction, representing 155 veh/hr. Frankton is increasingly becoming the main destination for commuters. Similarly, the town centre is expected to be the destination for 30% of traffic generated by the Ladies Mile site, reducing to 17% by 2045.

Accounting for growth up to 2028, there is expected to be approximately 200 veh/hr travelling to the town centre from Arrow Junction. The number of trips from the Ladies Mile site to the town centre is expected to be approximately 130 veh/hr.

However, it is understood that a proportion of regional trips are already using this route (and therefore would not reduce demand at the Shotover Bridge) and that the additional distance will dissuade drivers from using the route. The diversion would be 37% longer than SH6 for regional traffic and 60% longer for Ladies Mile traffic. It is therefore expected that, in its existing condition (with safety and capacity issues), the route would not be used by Ladies Mile traffic and a maximum of 20% of regional traffic would use the route. The resulting reduction in volumes on SH6 would be negligible in relation to the capacity of the Shotover Bridge.

For the route to be a realistic option, travel time would have to be better than, or at least similar to, travel time experienced on SH6. Under existing conditions, there would need to be approximately 6 minutes average delay on SH6 (or corridor improvements to provide 6 minutes travel time savings) for the Malaghans Road option to be equitable. As congestion grows and travel times increase on SH6, an upgraded alternative route through Arthur's Point may become more practical. With Reference Case assumptions, this could reduce demand on SH6 by a maximum of 330 veh/hr (assuming all traffic into Queenstown uses the route), the equivalent of extending the capacity of Shotover Bridge by 3 years.

It should be noted that the existing alternative route would require significant upgrades to be suitable for higher traffic volumes and heavy vehicles. Additionally, the Edith Cavell bridge is currently a one-way bridge with minimal spare capacity in the peak hours.

4 Staging

Practical staging of the improvements required cannot be simplified to triggers based on completion of houses at Ladies Mile. The timing of upgrades is dependent on realisation of multiple variables, the most critical being background traffic growth. Staging is therefore presented in relation to years, based on stated assumptions.

Table 3 shows potential staging of interventions for the Reference Case, as well as sensitivities for higher background traffic growth and a lower Ladies Mile house build rate. Capacity improvements are expected to be required before completion of Programme 3 in all scenarios. If traffic growth continues at the observed 2-year rate (9%), all interventions are expected to be brought forward by 2 years, including capacity improvements by 2024. A slower build rate of Ladies Mile houses has negligible effect on the timing of improvements required as background traffic growth would continue at the same rate. The consequence of a slower build rate is higher traffic volumes by the time development is complete. The low background traffic growth rate is expected to enable improvements to be delayed by 2 years from the Reference Case.

Detailed staging of the required capacity improvements is not given as these will be influenced by wider network strategies outside the scope of this assessment. As discussed in Section 3.2, elements of capacity improvements could be staged and scaled according to demand, such as providing high occupancy lanes up to the Shotover Bridge before potential duplication of the bridge itself.

Table 3 Transport Intervention Triggers and Staging for Programme 3

	Timeframe	Reference Case - 125 houses/yr; 5.69% annual growth on SH	High Traffic Growth - 125 houses/yr; 9.00% annual growth on SH	Low Build Rate - 75 houses/yr; 5.69% annual growth on SH
Number of Dwellings (Year)	Prior to complete houses	Upgrade Howards Drive intersection to RAB	Upgrade Howards Drive intersection to RAB	Upgrade Howards Drive intersection to RAB
		Implement bus stops (detail in transport strategy)	Implement bus stops (detail in transport strategy)	Implement bus stops (detail in transport strategy)
		Build SH6 Underpass at Howards Drive	Build SH6 Underpass at Howards Drive	Build SH6 Underpass at Howards Drive
		Provide high quality walking and cycling connections	Provide high quality walking and cycling connections	Provide high quality walking and cycling connections
		Implement TDM Measures in Ladies Mile/Shotover Country	Implement TDM Measures in Ladies Mile/Shotover Country	Implement TDM Measures in Ladies Mile/Shotover Country
	2021	Provide frequent Ladies Mile bus service (60 minutes required for capacity; higher frequency required for satisfactory service)	Provide frequent Ladies Mile bus service (60 minutes required for capacity; higher frequency required for satisfactory service)	Provide frequent Ladies Mile bus service (60 minutes required for capacity; higher frequency required for satisfactory service)
		Provide Shotover Country/Lake Hayes bus at 30 minute frequency	Provide Shotover Country/Lake Hayes bus at 20 minute frequency	Provide Shotover Country/Lake Hayes bus at 30 minute frequency
		Provide bus priority on SH6	Provide bus priority on SH6	Provide bus priority on SH6
			Begin park and ride Begin westbound transit lanes on SH6	
	2022	Increase Shotover Country/Lake Hayes bus to 20 minute frequency	Park and Ride in place (100 spaces) with buses at 20 minute frequency	Increase Shotover Country/Lake Hayes bus to 20 minute frequency
			Westbound transit lanes in place on SH6	
	2023	Increase Ladies Mile bus to at least 30 minute frequency	Increase Ladies Mile bus to at least 30 minute frequency	Begin park and ride
		Begin park and ride	Increase Shotover Country/Lake Hayes bus to 10 minute frequency	Begin westbound transit lanes on SH6
		Begin westbound transit lanes on SH6	Park and Ride in place (200 spaces) with buses at 10 minute frequency	
	2024	Park and Ride in place (100 spaces) with buses at 20 minute frequency	Capacity improvements in place	Park and Ride in place (100 spaces) with buses at 20 minute frequency
		Westbound transit lanes in place on SH6		Westbound transit lanes in place on SH6
		Increase Shotover Country/Lake Hayes bus to 10 minute frequency		Increase Shotover Country/Lake Hayes bus to 10 minute frequency
	2025	Park and Ride in place (200 spaces) with buses at 10 minute frequency		Park and Ride in place (200 spaces) with buses at 10 minute frequency
	2026	Capacity improvements in place		Capacity improvements in place
	2027			Increase Ladies Mile bus to at least 30 minute frequency

5 Conclusions

Based on the further analysis provided in this addendum, the following conclusions can be made:

- Construction of Programme 3 at the Ladies Mile HIF site will result in traffic volumes exceeding the 1,600 veh/hr approximate capacity of the Shotover Bridge before the development is complete.
- By investing in public transport, Park and Ride and active mode improvements, significant mode shift away from single occupancy car travel can be achieved. However, this is expected to be insufficient to reduce demand to levels below available capacity. As such, capacity upgrades are also likely to be required to enable construction of Programme 3.
- There are multiple options available to increase capacity at existing bottlenecks. However, increasing general traffic capacity at the Shotover Bridge will potentially migrate congestion to critical downstream sections of the network. Constructing a new bridge or an entirely new route are also considered expensive, long-term solutions.
- Adding supplementary high-occupancy vehicle lanes across the Shotover Bridge is expected to present a more cost-effective solution without causing congestion downstream. The option is expected to reduce demand across the Shotover Bridge by increasing vehicle occupancy as well as increasing capacity. Construction could be staged to meet demand by preceding the bridge upgrade with transit lanes on SH6 up to the bridge approaches.
- Lower cost options include traffic signals on SH6, which could be used to meter demand arriving at the Shotover Bridge to distribute delay and queues across the corridor. Signals could also be used to provide bus priority at the Shotover Bridge merge. However, the implementation of traffic signals on SH6 is unlikely to be favourable to NZTA on the grounds of safety and efficiency.
- The consequence of traffic demand exceeding capacity is flow breakdown occurring, which ultimately results in longer average delays. NZ Transport Agency has indicated its objective is to minimise the increase in traffic demands from significantly exceeding the capacity of the Shotover Bridge (1,600 veh/hr), though the amount of acceptable delay on SH6 is not currently defined. Furthermore, the effect of peak spreading has not been assessed in detail and could lead to levels of service being maintained across the Shotover Bridge through a longer peak period.
- Staging of required improvements cannot be tied exclusively to the number of houses built at Ladies Mile as it is dependent on the realisation of background traffic growth rates and the rate of building achieved at the Ladies Mile site. Capacity improvements are highly likely to be required before the construction of Programme 3 is complete.

19 February 2019

Ian Bayliss
Queenstown Lakes District Council
Private Bag 50072
QUEENSTOWN 9348

Dear Ian

Laurel Hills – Proposed Special Housing Area – Comments

Thank you for providing details of the above proposal to the NZ Transport Agency (Transport Agency) for comment. We understand that the proposal relates to a development as follows:

- Approximately 156 residential units;
- Internal roading, trails, parking and footpaths; and
- Creation of a neighbourhood reserve approximately 4,000m² in area including a playground, half basketball court and open space.

The development will be located between State Highway 6 (SH6) and Shotover Country subdivisions. Access to the site will be from Stalker Road.

The Transport Agency supports the provision of the following elements of the proposed development:

- Connectivity of pedestrian and cycle paths;
- A roading layout that supports alternative transport modes, i.e. bus stops, walking and cycling;
- An internal roading layout that provides for future connections through adjoining properties;
- The footpath connection between the urban area of Shotover Country and the Stalker Road Roundabout with SH6 shown on the eastern side of Stalker Road.

However, the Transport Agency notes that the subject site is not a Category 1 area (an area that is considered suitable for establishment as a special housing area) of Councils Lead Policy, but rather a Category 2 area (an area that may be suitable for establishment as a special housing area). Further to this, the Transport Agency continues to have concerns around the longer term operational capability of the transport system in this part of the Wakatipu Basin, particularly given the growing volume of residential development on the eastern side of the Shotover River.

The Queenstown Integrated Transport Programme Business Case provided a recommended programme which is expected to improve the transport system through improved transport choice and level of service for all modes. As part of the assessment for Housing Infrastructure Funding for residential development in the Ladies Mile area an agreed set of interventions and triggers have been determined. This is to ensure water and transport infrastructure is provided in a staged manner. The staged infrastructure improvements are to specifically ensure the potential traffic effects of residential development are mitigated. One of the agreed interventions was to improve the public transport level of service to 20% prior to the first lots being built which will be captured through a memorandum of understanding. Consequently, the Transport Agency suggests, if Council are of a mind to accept this Expression of Interest as a Special Housing Area, that a mechanism ensuring the above mentioned

modal shift is implemented prior to any lots being built, should be included as an essential condition of this proposal.

Furthermore, the Transport Agency requests that the following should also be included as part of the proposed development:

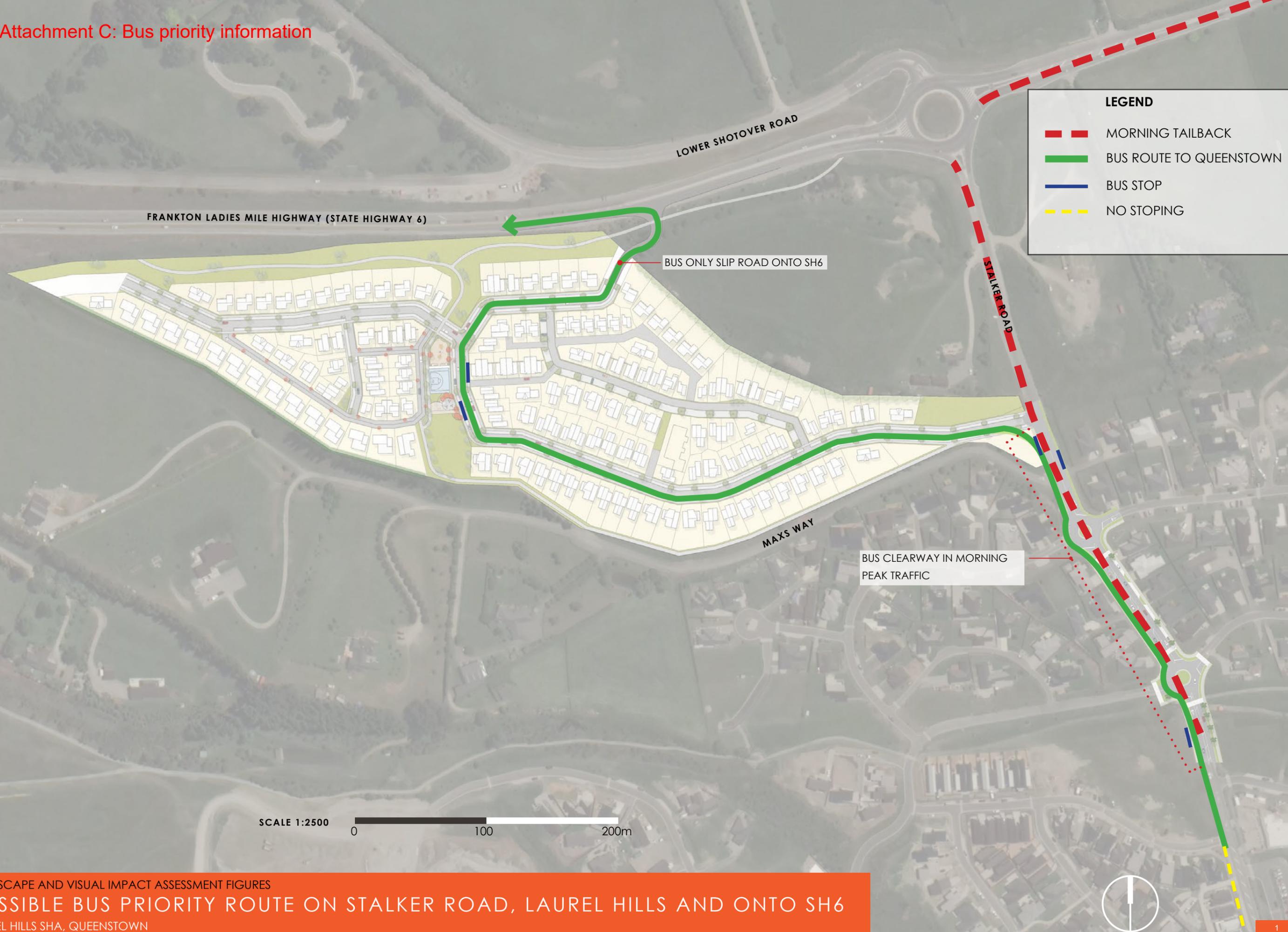
- The proposed development design should include a potential State highway bus only access for both the inbound and outbound movement of buses;
- The roading layout shall be of sufficient width to safely and efficiently accommodate buses through the development.
- The footpath connection that is proposed for the eastern side of Stalker Road should be replicated on the western side of Stalker Road;
- The proposed shared path as shown on the scheme plan stops at the property boundary. The application should demonstrate how the connections to the existing trails can be made and provide such connections as part of the application.

Please do not hesitate to contact me if you have any further queries or require further information.

Yours sincerely

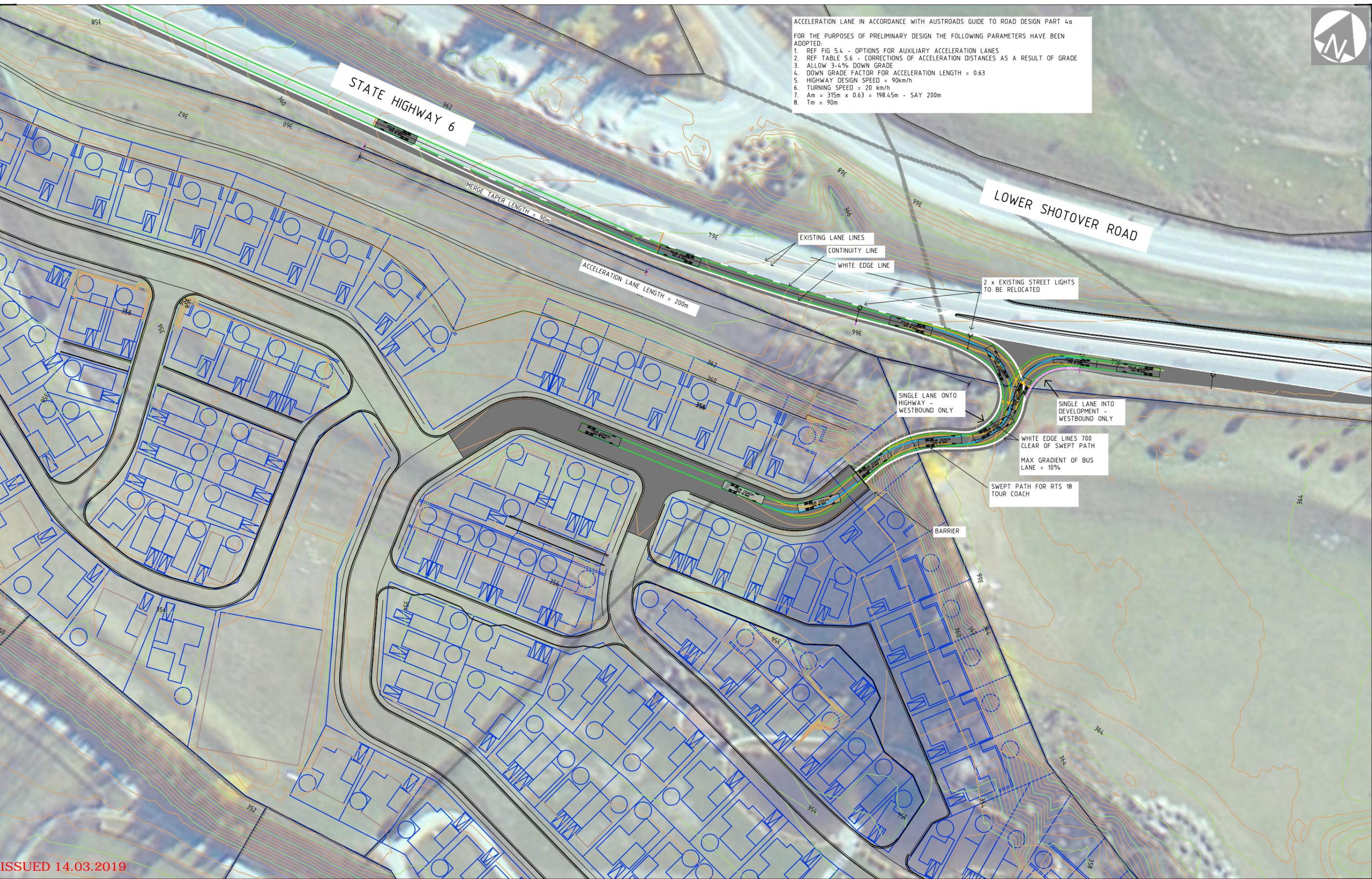
A handwritten signature in blue ink, appearing to read 'T MacColl', with a long horizontal stroke extending to the left.

Tony MacColl
Principal Planning Advisor





ACCELERATION LANE IN ACCORDANCE WITH AUSTRROADS GUIDE TO ROAD DESIGN PART 4a
 FOR THE PURPOSES OF PRELIMINARY DESIGN THE FOLLOWING PARAMETERS HAVE BEEN ADOPTED:
 1. REF FIG 5.4 - OPTIONS FOR AUXILIARY ACCELERATION LANES
 2. REF TABLE 5.6 - CORRECTIONS OF ACCELERATION DISTANCES AS A RESULT OF GRADE
 3. ALLOW 3-4% DOWN GRADE
 4. DOWN GRADE FACTOR FOR ACCELERATION LENGTH = 0.63
 5. HIGHWAY DESIGN SPEED = 90km/h
 6. TURNING SPEED = 20 km/h
 7. $A_m = 315m \times 0.63 = 198.45m$ - SAY 200m
 8. $T_m = 90m$



ISSUED 14.03.2019

Shotover Design Limited trading as
Clark Fortune McDonald & Associates
 Licensed Cadastral Surveyors - Land Development - Planning Consultants

LAUREL HILLS
Operehenua, New Zealand

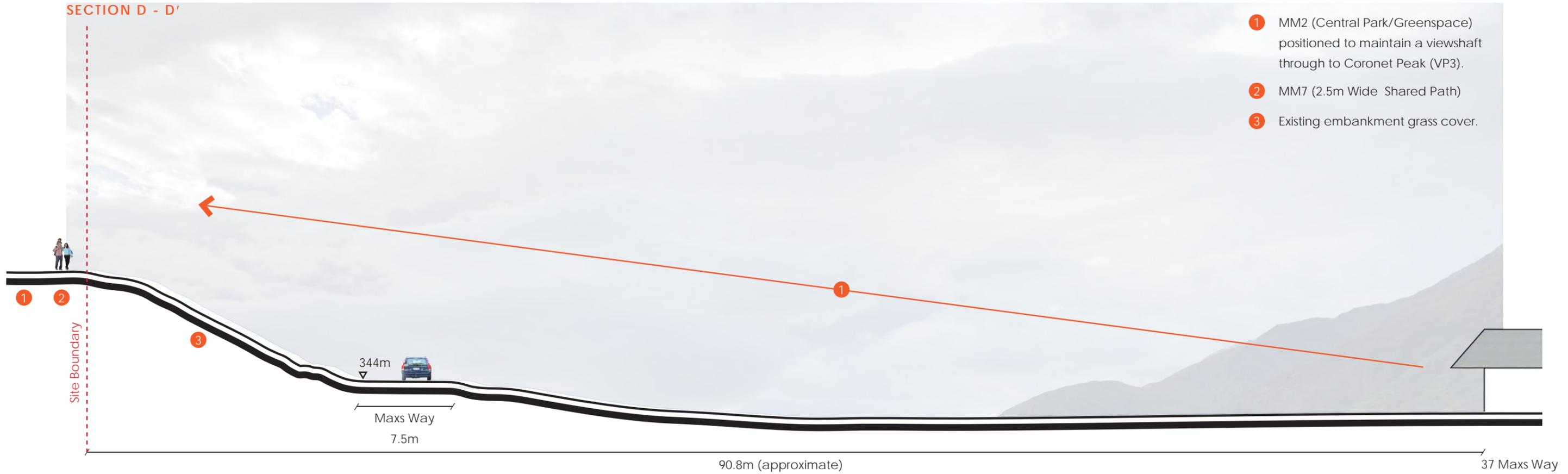
Rev.	Date	Revision Details	By
A	14.03.2019	ADD LEFT TURN BUS LANE IN	TS

**LAUREL HILLS LIMITED RESIDENTIAL DEVELOPMENT
 PRELIMINARY ROAD AND EARTHWORKS DESIGN
 PROPOSED BUS LANE ONTO STATE HIGHWAY 6**

Client	Surveyed	Signed	Date	Job No.	Drawing No.
LAUREL HILLS LIMITED				13496	E003 SHEET 001
Notes: All dimensions shown are in meters unless shown otherwise. Any person using Clark Fortune McDonald drawings and other data accepts the risk of: - Using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions. - Copywrite on this drawing is reserved.	Drawn TPS	Signed	Date 01.19	Scale 1:500 @ A1 1:1,000 @ A3	Rev. A
	Designed CH/TPS	Signed	Date 01.19	Datum & Level MS2	

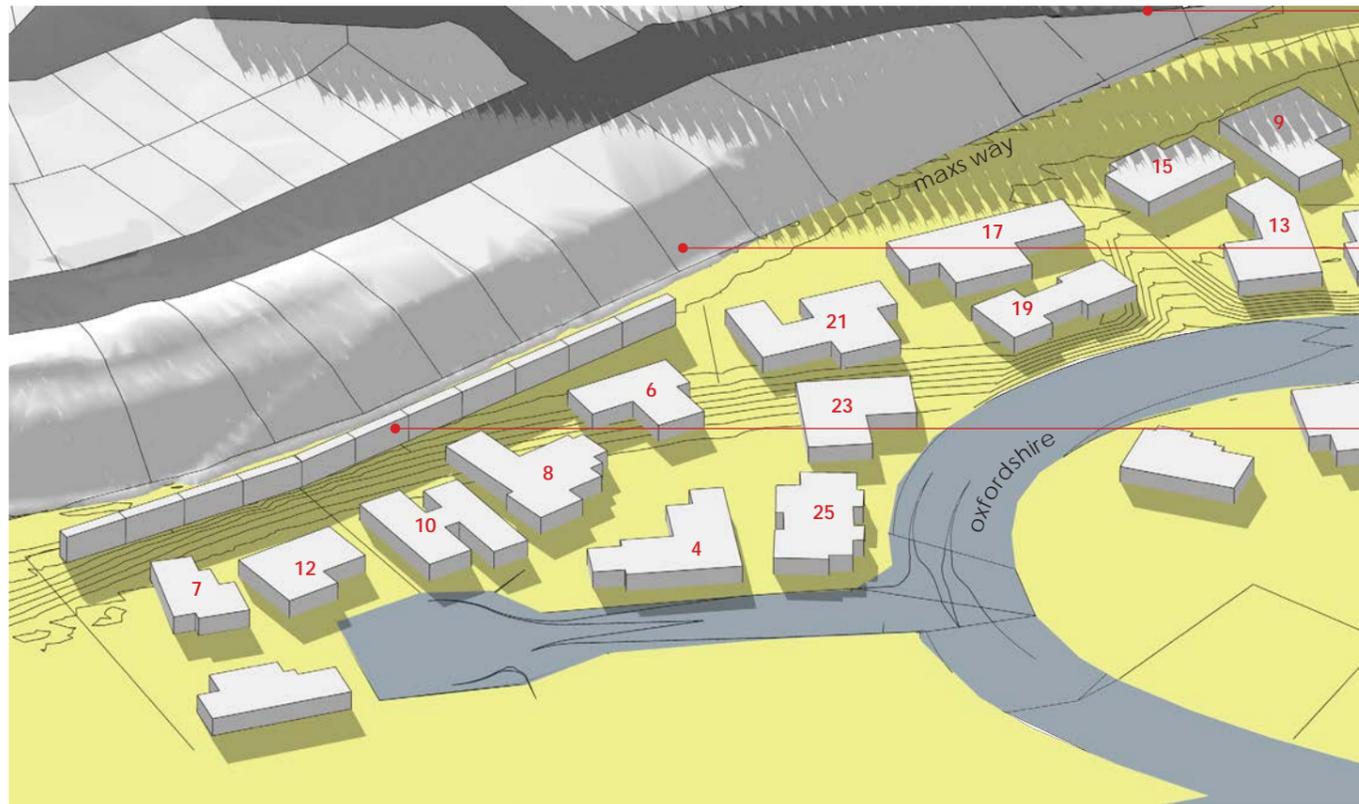
Attachment D: Shading information

SECTION D - D'



SECTION E - E'



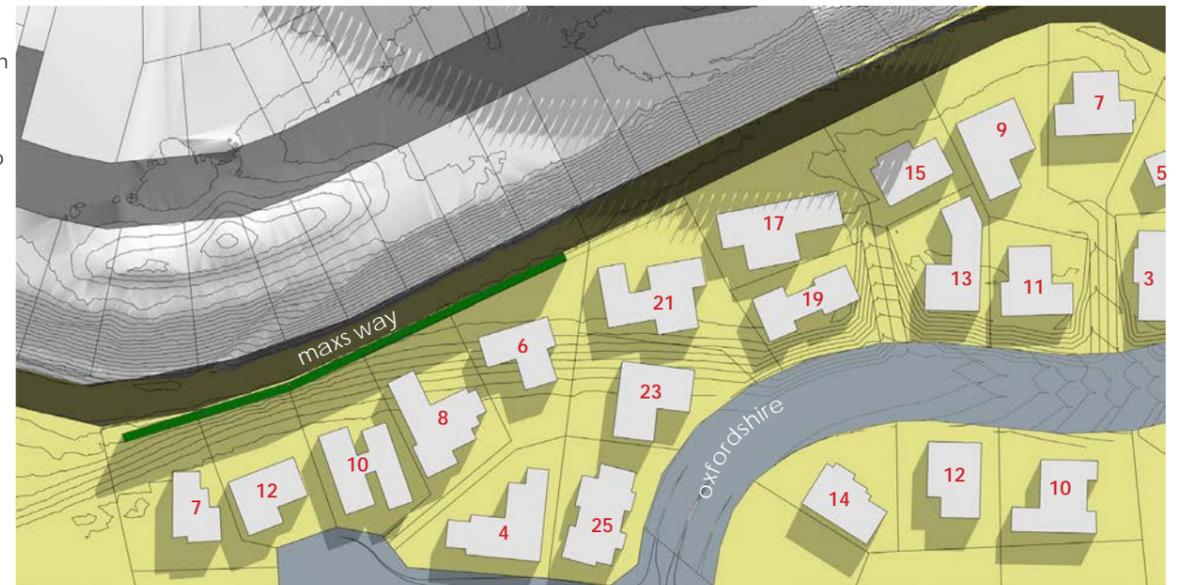


Existing pine trees at the top of the escarpment, within the project area, will be removed. These trees have been estimated to be 16m high.

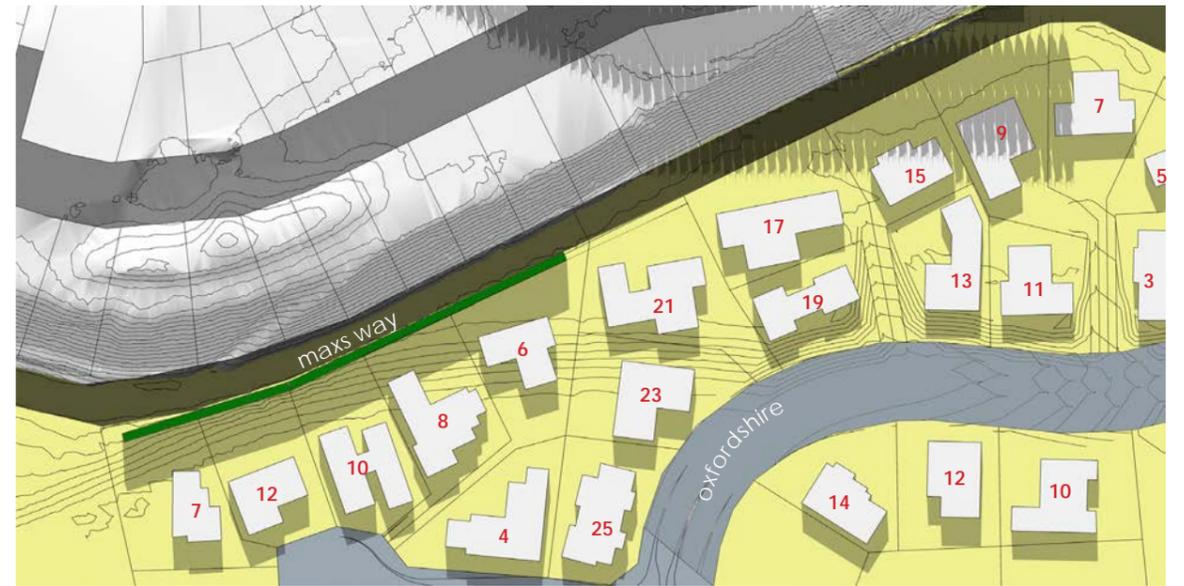
Existing escarpment above Maxs Way (within the project site)

Existing conifer hedge - estimated to be 4.5m high

1. VIEW LOOKING DOWN ON THE ESCARPMENT ABOVE MAXS WAY (21 June, 12pm)



10am, 21 June



12pm, 21 June



2pm, 21 June



Existing pine trees at the top of the escarpment, within the project area, will be removed. These trees have been estimated to be 16m high.

Existing escarpment above Maxs Way (within the project site)

Existing conifer hedge - estimated to be 4.5m high

1. VIEW LOOKING DOWN ON THE ESCARPMENT ABOVE MAXS WAY (21 June, 12pm)



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