

APPENDIX B

Assessment of Effects

Queenstown Lakes District Council

Plan Change 50

Queenstown Town Centre Zone Extension

Assessment of Environmental Effects

26 August 2014



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LIST OF AEE APPENDICES

AEE Appendix A	Lakes Environmental Ltd and Queenstown Lakes District Council: Queenstown Height Study: Landscape and Urban Design Assessment, 2009
AEE Appendix B	Fearon Hay Architects Ltd and Populous: Urban Design Framework
AEE Appendix C	Stephen Chiles Ltd: Noise Assessment
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AEE Appendix F:	Clinton Bird: Urban Design Peer Review

1. INTRODUCTION

This assessment is provided in accordance with the requirements of section 32 of the Resource Management Act 1991 ("**the Act**") and the First Schedule to the Act. This assessment of effects is provided to inform the section 32 analysis for the plan change made by the Queenstown Lakes District Council ("**the Applicant**") to re-zone the following sites:

- a) The former Queenstown Lakeview Holiday Park site at Thompson Street, Queenstown, being approximately 11 hectares in area, and a 6200m² (approximately) site located immediately adjacent to the Queenstown Lakeview Holiday Park, adjacent to Glasgow and Thompson Streets, Queenstown, herein referred to as the 'Lakeview' site;
- b) 34 Brecon Street, being approximately 3,900m² in area, to be part of the Lakeview sub-zone and herein referred to as the 'Lakeview' site;
- c) Two blocks bound by Camp Street, Isle Street, Man Street and Hay Street, being approximately 18,400m² in area, referred to herein as the 'Isle Street blocks';
- d) The block of land bound by Lake, Beach, Hay and Man Streets, referred to herein as the 'Beach Street site', being approximately 9,200m² in area.

Refer to Figure 1 below which shows the extent of the sites subject to the proposed plan change. The total area of the plan change is approximately 14.7 hectares.

A full description of the plan change is provided in the section 32 evaluation, of which this Assessment of Environmental Effects (**AEE**) forms a part. This AEE is structured as follows:

- 1. Introduction
- 2. Site Description and Baseline Effects
- 3. Assessment of Environmental Effects
 - 3.1 Visual Effects
 - 3.2 Noise Effects
 - 3.3 Transportation Effects
 - 3.4 Infrastructural Effects
 - 3.5 Cultural and Heritage Effects
 - 3.6 Economic Effects
 - 3.7 Social Effects
 - 3.8 Effects on Quality of the Environment
 - 3.9 Geotechnical Considerations
 - 3.10 Effects on Human Health
- 4 Conclusion

2. SITE DESCRIPTION AND BASELINE EFFECTS

2.1 SITE AND LOCALITY

The plan change subject site is situated at the base of the Ben Lomond Scenic Reserve, and establishes the north-western urban boundary of Queenstown township. The plan change subject site is currently zoned High Density Residential (Sub-zone A) in the Queenstown Lakes District Plan ("District Plan").

The Queenstown Lakeview Holiday Park remains on the north-eastern part of the Lakeview site, and the Queenstown Cemetery is immediately adjacent to the plan change subject site to the north. A mini golf activity is located at 34 Brecon Street, immediately adjacent to Cemetery Road. Along the southern side of Thompson/Brunswick Streets activities comprise large scale hotels (visitor accommodation). Finally, the Ben Lomond Recreational Reserve mountain bike trails pass through the Lakeview site at the rear (north). No change to these trails is proposed.

The Isle Street blocks are bounded by Camp Street, Isle Street, Man Street and Hay Street. This site predominately accommodates dwellings, along with some small scale commercial office activities and small scale visitor accommodation activities.

The Beach Street site accommodates the Crowne Plaza Hotel facing Beach Street, and residential dwellings adjacent to Man Street, Lake Street and Hay Street.

The plan below depicts the extent of the Lakeview, the Isle Street sites and the Beach Street site.

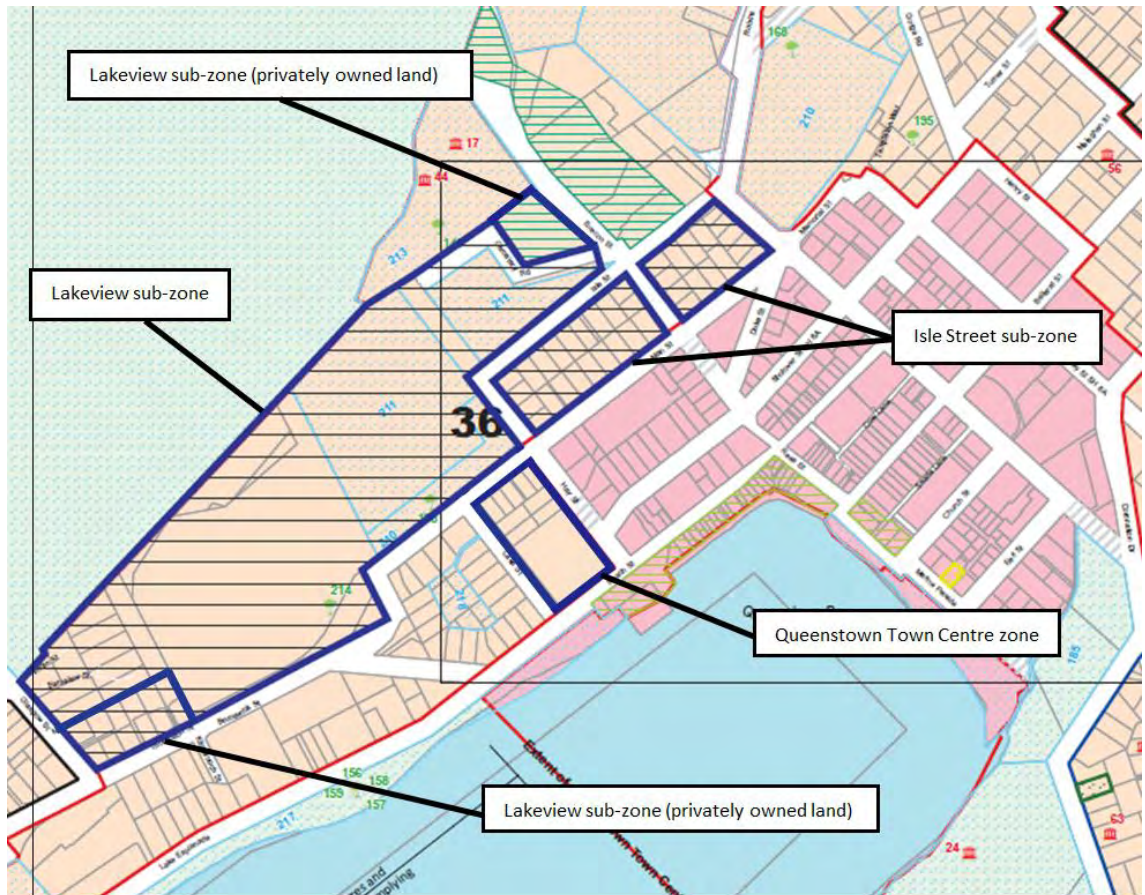


Figure 1: Plan depicting the extent of the proposed Lakeview site plan change. Source Queenstown Lakes District Plan

2.2 EXISTING ZONING - PERMITTED BASELINE ASSESSMENT

Identifying the environmental, economic, social and cultural effects of a plan change require firstly identifying the baseline and its effects, and secondly identifying and describing the effects of the provisions. The plan change subject site is zoned High Density Residential, sub-zone A¹. Permitted activities at the plan change subject site comprise:

- Residential activities;
- Multi-unit residential activities with up to three units per site;
- Any building with a footprint of up to 500m²;
- Minimum site size of 450m²;
- Non-residential activities where no more than 40m² of the gross floor area of all the buildings on a site shall be used for activities, other than residential activities (site standards for non-residential activities, does not apply to visitor accommodation which is a controlled activity);

¹ It is noted that 34 Brecon Street is within the High Density Residential Zone and also contained within a Commercial Overlay and has rules that differ from those outlined below.

- Non-residential activities where no goods shall be displayed, sold or offered for sale from a site other than: handicrafts; goods grown, reared or produced on the site; or retail sales which are ancillary to visitor accommodation located on the site.
- Non-residential activities where hours of operation (aside from those occupying only 40m² and visitor accommodation are 0730 hours to 2000 hours (subject to some exceptions); and
- Noise, specifically:
 - (a) Sound from non-residential activities measured in accordance with NZS 6801:2008 and assessed in accordance with NZS 6802:2008 shall not exceed the following noise limits at any point within any other site in this zone:
 - (i) daytime (0800 to 2000 hrs) 50 dB LAeq(15 min)
 - (ii) night-time (2000 to 0800 hrs) 40 dB LAeq(15 min)
 - (iii) night-time (2000 to 0800 hrs) 70 dB LAFmax
 - (b) Sound from non-residential activities which is received in another zone shall comply with the noise limits set in the zone standards for that zone.

In terms of bulk and scale of buildings permitted at the plan change sites the following is provided for under the current zoning:

Height Limit	Flat sites: 8m (subject to conditions). Sloping sites: 7m (subject to conditions).
Site Coverage	65%.
Recession Plane	25° and commencing at 2.5m above ground level on the boundary (for flat sites). 25° and commencing at 2.5m above ground level at any given point along each internal boundary (for sloping sites).
Setbacks	Roads – 4.5m. Rear and side yards – one yard at 4.5m and two yards at 2m.
Outdoor living space for residential activities	20m ² contained in one area with a minimum dimension of 3m at the ground floor level and 8m ² contained in one area with a minimum dimension of 2m at any above ground floor level.

In describing the baseline effects of the current zoning at the plan change subject site, it is necessary to consider the site fully developed for high density residential purposes. The Lakeview site is currently under-developed (having being used for the Queenstown Lakeview Holiday Park in the past). Given the relatively high level of development in the immediate surrounding area, the development of the Lakeview site with residential units, up to 8m in height is entirely feasible.

It is noted however that the land tenure at the Lakeview site is relatively complex. The site comprises a mix of reserve land and free-hold land parcels. Further, the land parcels are large, a factor that would preclude traditional single lot residential development currently. Development of the site to its full potential under the current zoning would require subdivision in the first instance or larger scale multi-unit developments, authorised by resource consent.

Based on the land parcel of freehold land, and retaining the current camping ground) (56,997m²), and assuming subdivision to the minimum lot size of 450m² in the High Density Residential Zone, it is likely that the site could be developed with 186 dwellings (being two units per lot) based on the following (as a controlled activity):

Freehold block 42,867m ²	(less 25%= 32,151m ²) <i>71 lots</i>	142 units
Freehold 'Lynch' block 11,828m ²	(less 25% =8,871m ²) <i>19 lots</i>	38 units
TOTAL	92 lots	186 residential units

For the privately owned block of land proposed to be included in the Lakeview sub-zone (located at the corner of Glasgow and Thompson Streets), this land currently accommodates three dwellings, and has for some time. However, this site is divided into 12 residential lots, so could accommodate at least 12 residential units under the current zoning.

Existing land uses within the Isle Street site are already established and varied. There are predominantly residential activities on Man Street, opposite the James Clouston Recreation Reserve, and on the opposite side of Glasgow Street. Further up Man Street (within the blocks contained by Man-Hay-Isle and Camp Streets) there are predominantly low or medium density type residential activities, interspersed with smaller visitor accommodation activities.

The effects associated with the baseline activities provided for under the current zoning are taken into consideration (where required) in the AEE below (Section 3).

There will be no changes to the holiday park activity provided for via this designation as part of the subject plan change.

A designation (designation number 240) provides for the James Clouston Recreation Reserve. The reserve is 'L' shaped and is located immediately adjacent to Man Street and Hay Street. A playground is established at this reserve and no changes to this reserve are proposed as part of this plan change.

Protected Heritage Trees at the Site

Two groups of protected heritage trees located on the plan change subject site are scheduled in the District Plan. The proposed plan change will not affect the protected status of these trees in the District Plan.

There is one protected *Wellingtonia* tree immediately adjacent to the Isle Street site, situated at the corner of Isle Street and Brecon Street. The tree will similarly remain protected as part of the plan change.

Heritage Building on Isle Street Site

A protected heritage feature is identified on the District Plan Map 36 within the proposed Isle Street sub-zone:

Inventory of Protected Features – Buildings - Dwellings

*Item 68: Glenarm Cottage, 50 Camp Street, Queenstown Section 1
Block XII Town of Queenstown*

This building is classified as ‘Category 2’ by the Queenstown Lakes District Council (“QLDC”). No changes to this annotation are proposed as part of this plan change – the feature will retain the same level of protection as it currently does under the District Plan.

3. ASSESSMENT OF ENVIRONMENTAL EFFECTS

This section of the report provides an AEE arising from the proposed plan change. The AEE takes into consideration the current zoning and assesses the planning framework to be established via the plan change.

3.1 VISUAL EFFECTS

The High Density Residential Zone provides for 7-8m high buildings, with footprints up to 500m². Building articulation and appearance is managed by limiting the continuous building length of structures and managing roof colours. Finally, total site coverage of 65% is provided for under the current zoning.

Building Height - Lakeview and Isle Street

The proposed plan change seeks to provide an increased building envelope for the Lakeview site, and provide for increased site coverage. The proposed new height limits have been developed by Fearon Hay Architects Ltd and Populous, (refer **Appendix B** attached), along with the input from Mr Clinton Bird, (refer Urban Design Peer Review **Appendix F** attached) as part of the Urban Design Framework. The height limits proposed take into consideration the wider environment and how buildings at the site will fit in this context.

The range of building height limits proposed for the Lakeview site is depicted on the Lakeview sub-zone Height Limit Plan (contained in the Urban Design Framework, refer **Appendix B** attached).

The heights range from 4.5m to 12m (12m providing for three storeys) towards the front of the site and provides for maximum height limits, ranging through 15.5m (providing for four storeys) to 26m (providing for seven storeys) at the rear of the site. The higher buildings will be set against the backdrop of the Ben Lomond Recreational Reserve mountain face. This mountain range provides containment and scale to the taller buildings which will assist in absorbing their height when viewed from Queenstown Bay or the township. Also, due to the flat terrace of the Lakeview site, other buildings established in front of the taller buildings will partially obscure the taller buildings behind. Further, the tall (protected) trees at the site also provide scale which will assist the taller buildings to integrate well in this setting.

In addition to the maximum height limits, the proposed plan change seeks to include a 'roof bonus' rule. This rule will provide an additional 2m in building height for roof structures only. This purpose of this rule is to improve the quality of built form within the Lakeview site by providing additional height that can only be used for an interesting roof structure.

It is noted that the Ben Lomond Scenic Reserve to the rear (north-west) of the site is classified as an Outstanding Natural Landscape - Wakatipu Basin in the Queenstown Lakes District Plan. By providing for higher buildings than is currently provided for at the base of this scenic reserve some views of this landscape will be obscured.

This outstanding natural landscape is viewed in the context of urban development with Queenstown well established in the foreground, and various structures and activities accommodated on this reserve, including the Skyline Gondola and restaurant facilities, mountain bike trails and zip-line tourism activities. When viewed in the context of the township to the fore and the vast backdrop of the Ben Lomond scenic reserve and mountain range beyond, the proposed increase building height at the base of the reserve is considered to be appropriate. It is considered that providing for the intensification of use in this location is appropriate as it consolidates and defines the urban boundary of Queenstown.

For the Lynch block and the block immediately south, a smaller building height increase of 4m is proposed, reflecting the increased elevation of the Lynch block relative to the remainder of the Lakeview sub-zone, and the transition through to the High Density Residential zone. This block forms the boundary of the Town Centre zoning - on the adjacent side of Glasgow Street the land is zoned High Density Residential. Therefore, the reduced heights for the Lynch block and the adjacent block provide a transitioning of building height at this boundary to the residential zones to the west.

The potential adverse effects of shading resulting from the proposed increased building heights have been considered. Indicative shading diagrams are included in the Lakeview: Urban Design Framework. The shading diagrams depict the effects of shading during the summer and winter solstice at the following intervals:

- 6.00 am
- 8.00 am
- 12.00 midday
- 4.00 pm
- 6.00 pm

A considerable part of the methodology to develop building heights was to ensure that the buildings do not cause significant shading effects both within the Lakeview site, and also over properties outside of the site. In particular, the Lakeview site provides for public spaces. Care was exercised to ensure that the building built to the maximum heights would not unduly shade these public spaces, such as the Square. As demonstrated by the shading studies the shading effects some shading effects will occur beyond the Lakeview sub-zone boundary. During summer solstice, very limited shading will occur beyond the site after 4pm. The effects of this shading are very minor, and would not impact the properties on the adjacent site of the road to the Lakeview sub-zone.

During winter solstice, sunlight at the Lakeview site is limited. At midday shading from buildings at the Lakeview site will fall over Glasgow Street and Thompson Street and to a lesser extent over Isle Street, given the location of the James Clouston Memorial Reserve. Some degree of shading over Glasgow Street will occur around midday, and it is noted that the recession plane and yard setback applicable along this boundary will assist in managing shading effects along this boundary. The shading effects over this boundary will be minor, only reaching the far edge of Glasgow Street, and not onto the residential properties along the opposite side of the Street to the Lakeview site.

Further, where shading falls across Thompson Street, again, the shading is not expected to affect properties on the southern side of this road. This is due to the formation of Thompson Street, which runs parallel to Brunswick Street, however Brunswick Street is at a lower gradient which has the effects of reducing the reach of the shading.

Building Height and Form - Isle Street sub-zone

For the Isle Street sub-zone, the Queenstown height study undertaken in 2009 (refer **Appendix A** attached) supports some increased height in the Isle Street sub-zone area. This study concluded that this area has capacity to absorb limited increases in building height:

- The area is closely connected to the town centre and there is potential to step built height up gradually, following the land contour;
- There is one protected Wellingtonia tree in the vicinity (at the corner of Isle and Brecon Streets) and several other mature trees (gums and Douglas fir) that have the potential to provide scale and to integrate taller buildings;

- There is potential for Brecon Street to be rezoned to acknowledge and enable further commercial and recreation activities, reinforcing the link to the gondola;

The plan change for the Isle Street sub-zone provides for buildings up to 12m in height. In addition to the maximum height limits, the proposed plan change seeks to include a 'roof bonus' rule. This rule will provide an additional 2m in building height for roof structures only. The purpose of this roof bonus rule is to improve the quality of built form within the Isle Street site by providing additional height that can only be used for a visually interesting roof structure.

Further, where a site spans the block north-south (i.e. has boundaries facing both Isle Street and Man Street), and where the site is greater than 2000m² in area, additional height up to 15.5m is provided for as a discretionary activity. Any building in the Isle Street sub-zone that does not meet the criteria for the 15.5m height limit, and that is higher than 15.5m will comprise a non-complying activity.

The increase in height limits for the Isle Street sub-zone could give rise to a reduction in views for some sites surrounding the sub-zone, particularly those to the rear which may lose some views to the south and south-east. To the rear, the site adjoins the Lakeview sub-zone, where this sub-zone is occupied by the holiday park. Maximum height limits on this site (underlying the Queenstown Lakeview Holiday Park designation) have also increased to 12m. This, combined with a small increase in elevation of the Lakeview site from the rear of the Isle Street site adjoining the Lakeview site will ensure that some views from the Lakeview site, where it is adjacent to the Isle Street sub-zone, can be achieved.

Further east along the Isle Street sub-zone the site adjoins the Brecon Street Commercial Overlay and High Density Residential zoned land on Isle Street to the rear. This block is occupied by a medical centre and the Queenstown Volunteer Fire Brigade Fire Station. Maximum height limits for this zone are 7-8m². Reductions in views from these properties are considered acceptable.

The increase in height limits for the Isle Street sub-zone will change the amenity values of the Isle Street properties within the sub-zone. This change could result in increased density of built form and some increased shading. It is considered that these effects are acceptable, given all properties within the subzone will enjoy the same increase in height – that is, all properties have the opportunity to increase the height of buildings or re-develop sites to take advantage of the increased maximum height limit. No shading effects are anticipated on any residential zoned land as most boundaries to the block are zoned (or being zoned via this plan change) to Town Centre.

It is acknowledged that some properties have been more recently developed in accordance with, and relying on, the current height limits for the zone. This is

² Rule Zone Standard 7.5.5.3(v) establishes the maximum height limit for the High Density Residential Zone based on the gradient of the site.

not considered to be a sufficient reason for limiting height limits across the sub-zone. Again, these properties have the opportunity to take advantage of the increased height limits.

The proposed height limits for the Isle Street sub-zone have been assessed as appropriate for this location. The proposed maximum height limits are consistent with the overall intent of the plan change which is to expand the Queenstown Town Centre Zone and intensify land-use in this area of the township. This will result in some change to amenity values associated with increased built scale, and this change is considered to be appropriate.

Building Heights for the Beach Street Site

No changes are proposed to the current height limits applicable to the Beach Street site, and therefore, no change in effects will result.

Controls to Manage the Appearance of Buildings

Coupled with the increase in building size provided for by the plan change, increased controls to manage building appearance and site layout are proposed. The existing Town Centre rules require controlled activity resource consents for all buildings, and additional provisions are proposed for the Lakeview and Isle Street sub-zones. These controls will facilitate a high quality, unified urban form of development at the plan change sites.

Although an increase in height is provided for, the Lake View sub-zone Structure Plan ("Structure Plan") will ensure that the scale of the overall built development of the plan change subject site will not dominate the surrounding landscape, and will contribute to the sense of place and belonging within the District. This is consistent with the Urban Design Framework that has been established for the development of the site (refer **Appendix B** attached).

Given the Lakeview site is largely undeveloped, the Structure Plan will also ensure that the site is developed appropriately, and that roads and public spaces are well located to contribute to the visual cohesion of the site. The proposed plan change framework of provisions emphasises the need to protect the character, urban and landscape quality of the surrounding area while providing a high quality public space with new residential, commercial and tourism opportunities catering for anticipated regional growth.

Further, a hot pools activity is currently being considered for the parcel of reserve land located at the corner of the site fronting Thompson Street. Consideration has been given to the appearance and scape of any buildings situated on this reserve. A 4.5m building height limit is proposed, and buildings here will be controlled activities up to this height. Additional control of built form for buildings at this site can be exercised by the Council under the Reserves Act, through the licensing process to ensure buildings on this site maintain the visual relationship between the taller buildings on the site, the Square and views out to the mountains beyond.

Beach Street Site

No changes to the maximum building height limits are proposed for the Beach Street site.

It is concluded that the visual effects likely to result from the proposed plan change provisions will be positive. The plan change will enable the sites to be developed in a comprehensive manner, driven largely to ensure that development visually complements the immediate areas and the wider vistas.

3.2 NOISE EFFECTS

Lakeview and Isle Street Sites

Potential noise issues associated with the plan change have been assessed and the proposed noise rules subject to this plan change have been developed by Chiles Ltd (refer **Appendix C** attached). The plan change seeks to change the noise requirements applicable to the plan change sites from those contained in the operative District Plan. The proposed noise rules will increase the permitted noise levels at the site in order to enable those activities permitted in this zone to operate, and to this end the current Queenstown Town Centre noise limits are proposed for the Lakeview and Isle Street sites.

The existing District Plan noise rules for the Queenstown Town Centre zone are considered to be appropriate to enable most activities envisaged in the plan change area, subject to reasonable design and standard noise control measures. However, the existing Town Centre noise rules do not allow for bars and restaurants to operate after 2200h with outdoor areas, which as a minimum are required for smokers, but are also desired for vibrancy. Therefore, Chiles Ltd (refer **Appendix C** attached) has recommended that provision be made for bars operating after 2200h to be assessed on a case-by-case basis via the resource consent process in order to provide for this activity whilst enabling the management of noise effects.

Residential and visitor accommodation in the plan change area will be subject to sound insulation (and ventilation) requirements to provide protection from sleep disturbance and for amenity. Therefore, management the potential for reverse sensitivity effects is appropriately addressed.

The plan change area will border the high density residential zone on several sides. The proposed noise rules require the more stringent limits of the High Density Residential zone to be achieved at the zone boundary. With these limits, noise effects in the High Density Residential zone arising from the plan change area are no different to the existing situation and are considered acceptable.

There is the possibility of some noise disturbance from night-time pedestrian traffic generated from the plan change area, emanating from the gateway area at the corner of Man and Thompson Streets. The extent of any disturbance in neighbouring buildings will depend on the building layouts and constructions. If the effect does eventuate, it could be mitigated by affected property owners in the high density residential zone treating their own buildings, such as through

the installation of enhanced glazing and ventilation systems (so that windows can be kept closed).

Notably, the designation over the James Clouston Memorial Recreation Reserve will remain (designation number 240). Therefore, the James Clouston Memorial Recreation Reserve will provide some buffer between that part of the Lakeview site and the adjoining land on the opposite side of Man Street, which includes the Beach Street site.

It is noted that the noise conditions that apply to the Queenstown Lakeview Holiday Park (via designation condition) requires lower noise levels than the rule that applies across the remainder of the site.

Beach Street Site

No change to the current noise provisions are proposed for the Beach Street site as part of this plan change.

The proposed noise rules provide for a considered and fit for purpose rule regime designed to manage noise specific to the range of uses provided for in the plan change area.

3.3 TRANSPORTATION EFFECTS

The Integrated Transportation Assessment for the plan change prepared by Traffic Design Group has assessed the transportation requirements relevant to the plan change at Lakeview (refer **Appendix I** attached to the s32 report). This assessment has identified where areas of mitigation may be needed, whether it can be practicably provided, and the steps necessary to ensure the effects of the future development of the plan change subject site can be suitably avoided, remedied or mitigated.

Lakeview

For the Lakeview site, the traffic and transportation issues have been identified as follows:

- The ability of the site to accommodate appropriate access facilities onto the local road network with appropriate levels of safety and amenity;
- The ability of the local roads adjacent to the site to accommodate expected traffic volumes with appropriate levels of safety and amenity;
- The ability to accommodate pedestrians and cyclists both internally and externally to the site with appropriate levels of safety and amenity;
- The ability of the site to accommodate internal parking demands;
- The trip generating potential of development under the new provisions; and
- The ability to effectively integrate traffic into both the internal and external road networks.

The assessment has determined that the proposed plan change offers good connectivity with the wider transportation and traffic network and appropriate facilities to promote public transport access and a high level of walking and cycling.

The impact of development under the plan change on the surrounding road network has been modelled. Using an indicative development scenario, the changes to the operational performance of key local routes are expected to be acceptable. The modelling shows that during the weekday morning peak period little change is expected in the overall level of service on the road network within Queenstown. The roads that will experience increases in traffic volumes are those that are currently operating with some degree of spare capacity, and which can accommodate additional traffic arising from the development of the site. During the afternoon/evening peak period there is expected to be a reduction in the level of service currently provided by the road network. This is however not considered to be a significant adverse effect as Traffic Design Group has determined an acceptable level of service will remain. Traffic Design Group has concluded that the plan change can be implemented without significant adverse effects on the Queenstown road network.

The majority of the necessary infrastructure to accommodate the expected level of vehicle trip generation is already in place. However, in order to provide for the development activity that may be facilitated by the plan change additions to both the roading network pattern (primarily the Isle Street extension into the site) and the pedestrian/walking network are recommended. The assessment concludes that there are otherwise no identifiable transport related issues that would prevent the proposed plan change being adopted.

The Structure Plan will also ensure that the site is developed appropriately, and that roads, including the extension of Isle Street into the Lakeview site, and accesses are located so as to minimise adverse effects on adjoining uses and the wider transportation network.

Traffic Design Group have prepared an addendum to the Integrated Transportation Assessment to assess the effects of the plan change for the Isle Street blocks (refer **Appendix I** attached to the s32 report). They have determined that the change from High Density Residential to Town Centre zoning will increase traffic generation from these blocks during the AM peak by around 31%, or 37 vehicle movements per hour above current flows. During the PM peak it is anticipated that traffic generation will increase by around 52%, or approximately 62 vehicle movements per hour.

Similarly, a second addendum has been prepared by Traffic Design Group to assess the transportation related effects of including 34 Brecon Street site in the plan change (refer **Appendix I** attached to the s32 report). With the site being developed under a mixed use scenario (being the worst case scenario assessed) they have determined that the change from the potential development of High Density Residential to Town Centre zoning will have a negligible increase in traffic generation during the AM peak, of around 50%, or 13 vehicle movements per hour. During the PM peak it is anticipated that traffic

generation could increase by around 77%, which is still a modest level of approximately 20 additional vehicle movements per hour. While some lower Levels of Service are expected on relatively short sections of the major routes through the town, these broadly reflect an existing pattern of use and the effects of the Lakeview Plan Change have been assessed as being acceptable. Traffic Design Group conclude that the additional traffic which can be expected due to the inclusion of 34 Brecon Street within the Lakeview sub-zone is expected to be negligible compared with an equivalent permitted development under the High Density Residential zone rules, and therefore is not expected to significantly change the nature or scale of these outcomes.

Car Parking Effects

The Town Centre zone car parking philosophy is not to fully satisfy the unrestricted parking demand, rather to promote the shared use of existing transportation / parking facilities alongside complementary strategies to promote other travel modes and to reduce overall demand for travel.

Traffic Design Group has considered the effects of the proposed plan change on parking requirements. With respect to specific activities Traffic Design Group has made the following parking requirement recommendations:

- Convention Centre – 1 car park per 10 persons or 10m² of public floor area and dedicated coach parking requirements;
- Residential Activity within the Lakeview sub-zone – 1 resident parking space per residential unit;
- Visitor Accommodation within the Lakeview sub-zone – unit type construction - a maximum of 1 per unit up to 15 units, and a maximum of 1 per 2 units thereafter, for guests. In addition, a maximum of 1 per 10 units for staff, and a minimum of 1 coach park is provided per 30 units;
- Visitor Accommodation within the Lakeview sub-zone – guest room type construction - a maximum of 1 per unit up to 3 guest rooms units up to 60, and a maximum of 1 per 5 units thereafter, for guests. In addition a minimum of 1 coach park is provided per 50 units;
- For commercial recreational developments within the Lakeview sub-zone, a minimum park on-site parking supply rate of 1 space per 5 people;
- Retail and Commercial Activity – consistent with current Queenstown Town Centre District Plan requirements for such activities, no minimum car parking requirements.
- A wide-ranging parking strategy consistent with the 2005 Future Link parking strategy is prepared to look at parking supply for the Queenstown Town Centre zone, including the Lakeview sub-zone and the Isle Street sub-zone.

There is no minimum car parking requirements applicable to the Isle Street subzone or the Beach Street site, which is in line with the current provisions for the Queenstown Town Centre zone. For the Lakeview sub-zone (including 34

Brecon Street), a balanced approach to on-site car parking provision whereby convention centre, hot pools activity (being defined as a commercial recreational activity) and residential activities require on-site car parking. For other activities, there is no minimum car parking requirements. These recommendations have been incorporated into the proposal via appropriate rules and standards.

3.4 INFRASTRUCTURAL EFFECTS

Lakeview

An assessment of the infrastructure services in place to service the Lakeview site has been undertaken by Holmes Consulting Group to inform this plan change (refer **Appendix D** attached). In terms of water supply, the water infrastructure in the area of the plan change is considered adequate to support future development under the plan change, with no major infrastructure upgrades required. The domestic water demand generated on the site is not likely to be the governing factor when considering the impact on the water supply infrastructure.

Firefighting water supply demand is far greater than domestic water demand and the infrastructure assessment has stated that to service individual development at the site a new water ring main will be required, including two new fire hydrants. A bypass device to provide security of supply is recommended if the ring main cannot be connected to an alternative supply pathway at the Isle Street end of the site.

QLDC's wastewater infrastructure provides a number of potential connection points below the site, and these have been assessed to determine the potential capacity available for use by the development of the Lakeview site in accordance with the proposed zoning. Of these, two mains were found to be at the right depth and in an appropriate location for use by any future development. The flows from the development will logically split to use approximately half of the spare capacity in each of those lines.

Whilst this high level analysis suggests no required upgrades to the QLDC infrastructure outside of the site, gravity sewer lines will be required within the site to transport the wastewater to the local infrastructure.

In terms of stormwater, the infrastructure assessment has noted that site development will significantly increase the stormwater run-off over the baseline situation.

A high level analysis of the existing stormwater network identified no spare capacity within the local infrastructure. It is therefore determined that in order to accommodate new development at the site, the stormwater pipe within Thompson Street/Brunswick Street will be required to be upgraded to convey stormwater to Lake Wakatipu (at the same location as the existing outfall). A proprietary stormwater treatment device is also recommended to treat the stormwater prior to it entering the Lake.

Gravity stormwater infrastructure within the site will also be required to accommodate the future development of the site, to deliver the stormwater run-off from the site to the new external trunk main.

The portion of the site draining via the stormwater mains that passes from Glasgow Street through to Kilmarnock Street will utilise all of the remaining capacity in this line. Therefore attenuation of stormwater within this area to reduce the peak run-off rates is recommended.

In terms of power and telecommunications, internal lines will be required to service new developments at the site.

Therefore, while infrastructure upgrades will be required to service new development at the Lakeview site, for the most part these upgrades will form part of the normal process for new developments. However in addition to the infrastructure required as part of any development, upgrades to the stormwater pipe network outside for the site will be required in order to accommodate the scale of development provided for as part of the plan change.

As the final requirements for the stormwater upgrade will not be known until the development of the site is certain, upgrades required to the stormwater system will be determined at a later date, and will be staged via subdivision resource consent for the Lakeview site.

Isle Street

To determine the feasibility of the plan change including the Isle Street site, an investigation has been undertaken to assess the infrastructure effects of development provided for by the plan change within this area.

QLDC's wastewater infrastructure provides a number of potential connection points adjacent to the blocks in question, and these have been assessed to determine the potential capacity available for use by future development in the zones in question.

The sewer lines closest to each of the proposed blocks have been found to have capacity for the types of development provided for in the proposed Town Centre zone. Whilst this high level analysis suggests no required upgrades to the QLDC infrastructure outside of the site, the earthenware and asbestos cement pipes draining the two Man Street blocks may require replacement due to the age of the pipes and the location within the blocks.

The water infrastructure in the area of the plan change is considered adequate to support the future development, with no major infrastructure upgrades required. Holmes Consulting Group state that the domestic water demand generated on the site is not likely to be the governing factor when considering the impact on the water supply infrastructure. Rather, firefighting water supply demand is far greater, and this therefore has formed the basis of this analysis.

As with the proposed Lakeview plan change, development of the Isle Street site is likely to increase the stormwater run-off from the land. The two Isle Street

blocks are drained by a 225 mm diameter main, passing to a 450 mm diameter main through to the culverted section of Horne Creek. Both of these lines have insufficient capacity for additional run-off, and an upgrade of both of these pipes would be required, or attenuation. Due to the location of the 450 mm main (under commercial buildings), a new pipe within the road reserves may be more feasible. Assessment of servicing will be addressed through the resource consent process upon development.

Alternatively, various stormwater attenuation devices such as tanks or green roofs may be able to be used to reduce the peak stormwater run-off by a minimum of 20% to maintain flow rates less than the capacity of the existing pipes.

In terms of gas supply, power and telecommunications, the two Isle Street blocks are located directly adjacent to the Queenstown Central Business District ("CBD") and as such are in close proximity to hotels and other facilities currently utilising LPG gas for hot water, cooking and heating. This LPG gas, power and telecommunications infrastructure external to the site is adequate to support future development provided for by way of the proposed plan change, although individual upgrades may be required at the time new developments establish at the sites, depending on the nature and scale of development.

While a report has not been prepared for the Beach Street block, early assessments indicate that existing infrastructure can support the rezoning of this site to the Town Centre zone. Water supply infrastructure is sufficient to provide for the worst case scenario development (being high density residential units) at this site. Waste water and stormwater infrastructure also has sufficient capacity to accommodate any change of use resulting from the re-zoning of this site. No issues are anticipated in terms of the provision of telecommunications and reticulated gas supply in this urban environment.

3.5 CULTURAL AND HERITAGE EFFECTS

Development, if not managed appropriately could adversely impact upon cultural and heritage values currently existing within the plan change area.

Lakeview Site

New Zealand Heritage Properties Ltd has prepared an assessment of the proposed rezoning of the Lakeview site which is largely undeveloped, on the likely heritage impacts arising (refer **Appendix G** attached to the s32 report).

The assessment concludes that historically the majority of the Lakeview site has been used for recreational purposes. There is low risk therefore that significant archaeological material will be discovered during the redevelopment of the majority of the site. The report does however note that there are protected trees which contribute to the heritage value of the site.

The heritage assessment identifies that a number of cabins (holiday houses) along Thompson Street have a medium to high heritage value. They are recognised as a visual memento of the first period of development of the site

and symbolic of the major transformation of Queenstown from a small mining town into a tourist destination in the early twentieth century. The report recommends that these cabins should be retained, or at least documented before any removal from the site. The documentation of the cabins is now underway.

The assessment identifies that there is some evidence of pre-1900 structures on a portion of the site (Lynch Block). The report recommends obtaining an appropriate archaeological authority prior to any works proceeding in this area.

Effects on cultural values could potentially arise from the change in use of the land, and also from the discharge of stormwater and wastewater from any future development. Stormwater discharges will be appropriately managed. Given the permitted baseline, being the current residential zoning and various land uses already established at the sites, the effects on iwi values arising from the change in use of the land are anticipated to be minor. Initial pre-notification consultation with Kai Tahu ki Otago and Te Ao Marama has not raised any issues in relation to the proposed plan change. Kai Tahu ki Otago has requested that an accidental discovery protocol be enforceable within the plan change area. The existing earthworks provisions in the District Plan contain rules standards and assessment matters which address effects on cultural heritage values. Further, Plan Change 49 to the District Plan has been notified. The provisions notified in this plan change include proposed policy 22.2.6.6 '*To include accidental discovery protocol as a condition of earthworks resource consents*'. In addition, plan change 49 includes assessment matters to address impacts on sites of cultural heritage value³.

Effects on water quality and corresponding effects on iwi values arising from wastewater or stormwater discharges will be managed via appropriate upgrades to existing infrastructure (refer to Holmes Consulting Group report, **Appendix D** attached).

Isle Street and 34 Brecon Street Sites

New Zealand Heritage Properties Ltd (**Appendix G** attached to the s32 report) has also undertaken an addendum report to assess the heritage values assessment of the Isle Street land and the 34 Brecon Street site that is subject to the plan change. They have concluded that the block bounded by Isle, Hay, Man and Brecon Streets will not be negatively impacted by a zone change. There is evidence that at least one pre-1900 structure once existed in this block.

³ Plan Change 49 to the Queenstown Lakes District Plan includes assessment matters within the earthworks provisions (Proposed Assessment Matter 22.4 (vii) Impacts on Sites of Cultural Heritage Value:

- (a) The extent to which the activity modifies or damages Waahi Tapu or Waahi Taonga, and whether tangata whenua have been notified.
- (b) The extent to which the activity affects Ngai Tahu's cultural and traditional association with the Statutory Acknowledgment Area.
- (c) Whether the subject land contains a recorded archaeological site, and if so the extent to which the proposal would affect any such site and whether any necessary archaeological authority has been obtained from the NZ Historic Places Trust.

Any subsurface disturbance relating to development within certain parts of this block will require an archaeological authority prior to any works commencing.

Regarding the block bounded by Brecon, Isle, Camp and Man Streets, this block contains Glenarm Cottage, a saltbox cottage built in 1880. New Zealand Heritage Properties Ltd has recommended that the heritage and archaeological values in this block can be appropriately managed by:

- promoting a Level 1 protection of Glenarm Cottage in the District Plan;
- redevelopment occurring in some other parts of this block requiring subsurface works will need an archaeological authority.

While the re-classification of Glenarm Cottage has been suggested by New Zealand Heritage Properties Ltd, this amendment is not proposed via the subject plan change. Rather, a comprehensive assessment of the District's heritage features will be part of the District Plan review. Any changes to the classification of this cottage will be assessed and determined through this process.

For 34 Brecon Street, rezoning of this site would have the least impact on heritage features, as it was a recreational reserve until recently, and has been zoned high density residential with a designation as a commercial overlay.

Overall, it is concluded that the cultural and heritage effects arising from this plan change can be appropriately managed via existing District Plan provisions, including the current and proposed earthworks provisions to include accidental discovery protocols, the documentation of the cabins, and applications for any archaeological authorities that are required from New Zealand Historic Places Trust at the time of development.

3.6 ECONOMIC EFFECTS

McDermott Miller Ltd has undertaken a review of the District Plan's business zones (refer **Appendix A** attached to the s32 report). This review found that the Queenstown Lakes District, on the basis of a buoyant tourism-based economy, has been exposed to a number of plan changes which have resulted in an oversupply of commercial and retail zoned land, particularly in the Frankton area. They have concluded that this may threaten the vitality of the Queenstown town centre by competing for the type of top end activities which provide the underpinning for the District's economic wellbeing.

McDermott Miller Ltd has stated that there are real benefits in managing the District's centres, and primarily the Queenstown Town Centre, on the basis of a hierarchical planning framework. This framework would set in place a long-term direction for the management of the District's growth and change in business activities, including commercial, retail, cultural and main tourist service and accommodation activities.

McDermott Miller Ltd recommends that, to achieve this hierarchy, it is essential that central Queenstown is enabled to grow to maintain its position. This would involve the expansion of the Queenstown Town Centre zoned central commercial land. Accordingly, this report identified the resource management issue which this plan change addresses, and is discussed in detail in the section 32 evaluation.

Specific to this plan change, an assessment of economic effects arising from the proposed plan change has been undertaken by Insight Economics to inform the section 32 evaluation (refer to **Appendix H** attached to the section 32 report).

This report confirms that Queenstown's economy is heavily tourism-dependent. However, it notes that tourism growth has recently slowed. One reason for this is that the District's tourism hub, the current town centre, has reached capacity and is unable to expand, consistent with the report findings of McDermott Miller Ltd. The economic assessment notes that the plan change seeks to address this by expanding the supply of town centre zoned land and at the same time seeking to boost tourism more generally by enabling the development of an international convention centre. The economic effects arising from a convention centre and the wider plan change are summarised below.

Insight Economics considers the effects of the plan change with and out the development of a convention centre to determine the effects of the plan change under both of these scenarios.

Effects of a Convention Centre

One of the key economic effects will be to enable the development of an international convention centre (subject to obtaining a controlled activity resource consent). This would enable the district to compete for a share of the lucrative international conference market. The economic effects of a convention centre will comprise three main parts derived from the economic impacts of construction, its operations and the wider economic/strategic benefits.

The construction of a convention centre will stimulate the local economy by creating jobs, boosting household incomes and lifting Gross Domestic Product (GDP). The assessment determines that the construction of a convention centre could potentially boost regional GDP by \$10.2 million, and provide 118 full time jobs for 1 year.

Just like its construction, the daily operations of a convention centre will also stimulate the regional economy by boosting local GDP, incomes and employment. These impacts not only reflect local expenditure by a convention centre itself on marketing and catering etc, but also the impacts of out-of-town tourists that attend events there. The assessment determines that the daily operations of the centre could boost regional GDP by nearly \$31 million per annum and provide ongoing fulltime employment for 466 people⁴. The greatest

⁴ There are a number of reports that have looked at the economic impacts of a convention centre for Queenstown, and a variety of results.

operational impacts are considered to be the expenditure of delegates visiting the centre within the District. These are considered to be significant positive economic impacts.

Insight Economics' assessment also determines that a convention centre will likely have a range of other economic/strategic benefits for the District including:

- Assisting to smooth the highly seasonal nature of the District's current tourism activity by attracting more tourist during the "off season";
- Providing local business networking opportunities and investment by showcasing local businesses, products and services;
- Providing exposure to new skills, technologies, and techniques arising from the conferences and business events held at a convention centre;
- Increasing sector competition – creating an incentive for other facilities in the District to refine their offering and to sharpen their pricing;
- Providing international marketing and advertising opportunities.

Effects of the Wider Plan Change – Lakeview

In order to assess the potential economic impacts arising from the future development of the Lakeview site, the following land use scenario which can be reasonably achieved via the plan change, has been assessed. Note that this scenario has considered the development of the site without a convention centre, in its place a second hotel is considered:

- Hot pool facility;
- 150 room hotel and a 100 room hotel;
- 185 high density residential units and 6 medium density units;
- 124 room hotel (on the privately owned site, reflecting the resource consent held for this site);
- 6,500m² of commercial and retail uses.

It is noted that this assessment excludes a convention centre which is assessed separately⁵.

Insight Economics' assessment determines that economic impacts arising from the construction activities associated with the development of the site are likely to contribute to \$55.3 million of additional regional GDP, create 1063 full time jobs for 1 year and contribute to \$41.7 million household income across the District. Economic impacts resulting from the fully established development at the Lakeview site could potentially provide \$68.4 million of additional regional GDP, create 1,600 additional full time jobs and provide an additional \$45.8 million household income across the District.

⁵ The convention centre scenario is assessed separately given the final determination on whether or not the convention centre will be developed has not yet been made.

These figures compare with the likely economic effects of the status quo scenario for the Lakeview site, which have been analysed by Insight Economics as resulting in construction impacts of around \$33.9 million boost in GDP, 519 fulltime jobs for 1 year, and additional household income of \$26.1 million. Operational impacts would likely to be in the order of GDP of \$4.3 million, 197 permanent full time jobs, and additional household income of \$4.3 million resulting from the development of the site under the current planning regime.

The assessment also determines that the mix of development envisaged by the assumed development scenario will provide a valuable addition to the District's network of tourism attractions. Indeed, not only will a convention centre attract a new stream of high-value business tourists, but the hot pools, hotels, retailers and cafés/bars/restaurants will also provide a new opportunity to capture visitor expenditure from all types of tourists.

Insight Economics' assessment also considers the potential effects of the plan change on other centres, particularly the Queenstown CBD. To this end, it is noted that the plan change is explicitly intended to help expand the Queenstown CBD, not create a competing, stand-alone retail or town centre. The reasons for this include:

- Retail development is unlikely to occur at a scale that would undermine the health and vitality of other centres;
- Other centres are trading well, with few vacancies;
- Retail expenditure is predicted to grow rapidly, therefore any minor effects experienced would be short-lived.

The assessment concludes that the plan change is unlikely to generate any adverse effects on the existing town centre, including retail distribution effects, and that it is likely to support the existing centre by accommodating a range of complementary commercial activities.

Insight Economics acknowledges that the economic effects arising from a convention centre are likely to be significant. However the assessment concludes that the overall economic impacts of the plan change are not dependent on the impacts of a convention centre itself. It is likely that a number of valuable uses would occupy the site in any case, and each would make a meaningful contribution to the district's economic wellbeing. The report concludes therefore that regardless of the final land use scenario, the plan change is likely to be highly positive in economic terms.

An addendum report has been prepared by Insight Economic Ltd (refer to **Appendix H** attached to the s32 report) to assess the economic effects of 34 Brecon Street site being rezoned (to Queenstown Town Centre Lakeview sub-zone). This report has concluded that the proposed rezoning of this site will result in positive economic effects both through increased construction activity and ongoing operation economic benefits.

Effects of the Wider Plan Change – Isle Street and Beach Street

In order to assess the potential economic impacts arising from the change in use associated with the Isle Street proposed rezoning, the following land use scenario, which can be reasonably achieved via the plan change has been assessed:

- 75% of the site will be residential/visitor accommodation;
- 25% will comprise “boutique” offices and retail uses.

The assessment determines that economic impacts arising from the construction of the Isle Street site under the plan change are likely to contribute to \$23.2 million of additional GDP for the region. In addition to this, it is assessed that the construction will provide an additional 463 full jobs for 1 year, and contributes to \$17.7 million of household income across the District.

The economic impacts arising from the developed site are in the order of \$48.5 million in additional GDP, and will make provision for 406 full time jobs and contribute to \$33.4 million of household income across the District.

Given the site is generally fully developed; these economic benefits are set against very limited economic benefits for the District under the status quo zoning.

Due to the mixed use nature of the proposed plan change for the Isle Street site, the assessment does not consider that it will have any negative effect on the current retail and commercial viability of the existing town centre. As noted earlier in this report the intention of the plan change is to complement the existing town centre, rather than compete with or detract from it.

The rezoning of the Beach Street site will in large measure reflect the historic land use of the Crowne Plaza hotel which is established at this site. Some small changes of use to the residentially occupied land fronting Man Street and Hay Street may occur over time, and this is expected to have a relatively modest economic benefit.

Conclusion

Overall, the reports conclude that the plan change in its entirety is likely to deliver positive economic impacts for the District.

3.7 SOCIAL EFFECTS

Social effects include the effects of the plan change on people and communities. For the subject plan change, the potential social effects have been identified as:

- Opportunities for social interaction, recreation and employment; and
- Residential displacement.

Opportunities for Social Interaction, Recreation and Employment

The plan change provides for the development of a convention centre (as a controlled activity) and public spaces, including the Square. The economic benefits of a convention centre to the community, including opportunities for employment have been addressed above under economic effects. From a social effects perspective, the development of a convention centre would provide a place for social interaction. Similarly, the Square, which is part of the Structure Plan for the Lakeview site, will provide an open space for social interaction. If developed for residential activities under the current zoning the same opportunities would not arise.

The James Clouston Memorial Reserve and the mountain bike trails within the plan change subject site will not be impacted by the plan change. These public spaces will remain unchanged.

Other parts of the Lakeview site will also form Reserve⁶, thus a public resource for the recreational enjoyment of Queenstown residents and visitors.

As noted, increased opportunities for employment will result from the development of the plan change subject site. These effects are accounted for under the economic effects assessment above.

In conclusion, the plan change will result in positive effects in terms of providing new opportunities for social interaction, recreation and employment. For the Lakeview site, given the site is largely un-developed (the removal of the cabins is addressed below) no existing activities on the site will be affected, the campground would remain. The development of the site in accordance with the Structure Plan will increase opportunities for social interaction and provide areas for public open space which will likely result in positive social effects.

Residential Displacement

The plan change will result in residential displacement with the removal of 169 small leasehold cabins from the Lakeview site. The cabins provide low-cost accommodation for residents. It is noted that the cabins were originally intended for holiday use, and now some are used for permanent accommodation. Through the pre-lodgement consultation process, several feedback forms identified the loss of this affordable accommodation as an adverse effect of the proposed plan change. The effects of this displacement are mitigated by the fact that the cabins are all providing accommodation for a limited term – licenses expire in 2015 regardless of the plan change.

In addition to the direct effect resulting from the removal of the cabins from the site, the plan change seeks to rezone High Density Residential land to the Queenstown Town Centre zone. This appears to result in the loss of residential opportunities for the subject sites. However, in practical terms, the rezoning continues to provide for residential uses, and in fact fewer planning restrictions will apply to residential activities under the proposed zoning than is presently the case, with the existing large lots.

⁶ Refer Structure Plan.

Under the current zone, the Lakeview site could be developed to accommodate approximately 198 residential units⁷ (taking account of the freehold land currently available and the camping ground occupying part of the site). Under the proposed plan change, there would not be a reduction in the number of residential units that could be developed at the site. With the increased building heights provided for, and no restriction on the number of residential units permitted per site, it is anticipated that the proposed plan change will result a greater number of residential units at the Lakeview sub-zone, and will also result in increased density within the Isle Street sub-zone, albeit within a mixed use zone.

Residential uses within the Isle Street site will remain until such time as existing sites are redeveloped in accordance with the proposed District Plan provisions. As discussed elsewhere in this report, the proposed rezoning seeks to promote a mixed use development. The proposed mixed use development will enable a higher level of residential density to be achieved. This coupled with good building design requirements (i.e. recession plane, setbacks, noise insulation requirements) will ensure that, while the character of the area may change as a result of the plan change, to a commercial mixed-use character, an appropriate level of amenity will be maintained for those residing in the Isle Street area.

Overall, any effects of residential displacement are considered to be minor. It is clear that in the short term the residents of the cabins will be displaced. However, the cabins are there via a leasehold arrangement which expires in 2015 so this displacement could occur regardless of the plan change. Further, the plan change will provide fewer restrictions for the development of high density residential activities, which is expected to result in a greater variety of accommodation options within the Queenstown Town Centre. That new development will be of accommodation that better provides warm and dry environments that help to achieve the health and wellbeing of residents.

3.8 EFFECTS ON THE QUALITY OF THE ENVIRONMENT

The Urban Design Framework for the Lakeview site⁸ (refer to **Appendix B** attached) establishes key principles that will be used to guide the future development of the site. The key attributes of the framework include:

- Opportunity for place;
- Frontages and street edges;
- Vehicular connectivity;
- Pedestrian and cycle connectivity; and
- Parking and servicing.

⁷ This is based on 186 residential units being developed on the Council owned part of the Lakeview site and 12 units being developed on the privately owned portion of the site at the corner of Thompson and Glasgow Streets, as a controlled activity.

⁸ The Urban Design framework relates to the Lakeview site. It does not include the Isle Street site or the Beach Street site due to the fact that the urban framework for these blocks is established.

It is noted that the Urban Design Framework is aligned with the Urban Design Goals for the District contained in the QLDC Urban Design Strategy (2009), as well as the principles outlined within the New Zealand Urban Design Protocol published by the Ministry for the Environment (2005).

The proposed Structure Plan coupled with proposed District Plan provisions will ensure that the future development of the plan change subject site adheres to the urban design framework that has been established. Public and open space facilities are a strong feature of the framework. Building design and street frontages will be sympathetic to the surrounding area and landscape features that dominate Queenstown.

The plan change also promotes good connections through the Lakeview site, achieving internal connections and links to the existing town centre.

The Lakeview site is located within walking distance to the Lake edge of Queenstown Bay and the edge of the current Queenstown Town Centre Zone. There are visual connections to the town centre and other commercial activities from the site, with the proximity of commercial activities including large hotels. These connections will allow for the continued and coherent expansion of the existing town centre.

The Structure Plan establishes the logical extension of the existing road network to ensure vehicular access is maintained and enhanced. The proposed roading layout will support social cohesion by facilitating movement between the existing town centre and the site.

The Structure Plan also provides for pedestrian linkages to be created both internally and externally. The urban design principles recognise that pedestrian access is a strong feature of the current Queenstown streetscape. The site is a 10 – 15 minute walk from the centre of town and access to the site will be enhanced via a “way finding” strategy. It is noted that some parts of the site are relatively steep however pedestrian access issues can be mitigated via pedestrian walkway steps.

Consideration is also given to parking requirements to ensure sufficient capacity, while encouraging pedestrian access and efficiency.

Overall it is considered that the proposed plan change will result in positive effects on the quality of the urban environment.

3.9 GEOTECHNICAL CONSIDERATIONS

A geotechnical assessment of the plan change area has been carried out to determine whether or not the Lakeview site, including 34 Brecon Street can support the nature and scale of development provided for by the proposed plan change (refer **Appendix E** attached), being relatively un-developed sites. This assessment has reviewed development limitations of the plan change area and possible effects of development affecting stability on adjoining and nearby sites.

The assessment has determined that the underlying ground conditions are suitable for all likely building development. There are no major risks arising from hazards that have been identified. It will be necessary to undertake further site specific evaluation to confirm and detail the necessary design measures for each type of development/building, but that is consistent with best practice construction and building development requirements.

3.10 EFFECTS ON HUMAN HEALTH

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 (“NES”) provides clear direction for the management of contaminated sites when changing the use of land and undertaking development. In this regard, a comprehensive assessment of the sites has been carried out to determine whether or not the sites are likely to be contaminated, and if so, what implications the plan change will have at the sites (refer **Appendix J** attached to the s32 report).

Based on this assessment it is concluded that the Lakeview site may have had some exposure to historical contaminants (due to the presence of the holiday park activities). The assessment determines however that the risk to human health arising from the development of the Lakeview site is low. This is due to the low quantities of the contaminants likely to be present and the form of development that is proposed. It is noted however that the provisions of the NES will provide sufficient direction to manage any potential effects of site contamination.

4. CONCLUSIONS

Overall the proposed use and development of the plan change sites will enable a high quality mixed use development that will be significant for Queenstown and the region. The plan change, including the Beach Street site, will provide for the continued and coherent expansion of the existing town centre and tourist activities which will in turn provide significant positive effects to the district and region.

Given that the plan change subject sites are not highly sensitive and the permitted baseline already provides for relatively intensive development to occur, the adverse effects (if any) arising from this proposed plan change are not significant and will be appropriately managed via the Structure Plan and District Plan provisions.

AEE
APPENDIX A

Lakes Environmental Ltd and Queenstown Lakes District Council:
Queenstown Height Study: Landscape and Urban
Design Assessment, 2009

Queenstown Height Study

LANDSCAPE & URBAN DESIGN ASSESSMENT



Prepared for Queenstown Lakes District Council

November 2009

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1.0 Executive Summary

Queenstown Lakes District Council (QLDC) is investigating the implications of increasing maximum allowable building heights in high density residential-zoned land adjoining Bob's Peak/Ben Lomond. This landscape and urban design assessment has been commissioned as part of this work. It evaluates the existing urban landscape character and the potential outcomes of allowing additional height.

The methodology for the assessment involved site visits to the study area and to significant vantage points and view shafts in vicinity, followed by assessment of the landscape character using a modified version of the 'Pigeon Bay' criteria set out in Part 5 of the District Plan. A three-dimensional GIS model was used to confirm appropriate viewpoints and to help evaluate the visual and landscape effects of increased building height.

The key characteristic of central Queenstown is its location at the confluence of mountains and lake. These features visually dominate the town, making the urban form subservient to the wider natural environment. The underlying topography of the township is clearly legible, as a result of relatively consistent low rise built form and large areas of open space.

The study area along the base of Bob's Peak/Ben Lomond can be divided into five distinct subareas: Thompson Street/Lomond Crescent; Lakeview Park; Brecon Street surrounds; Hamilton Road/Huff Street; and Bowen Street. Of these areas, it is considered that Lakeview Park has the greatest potential to absorb taller buildings without adverse effects on the urban or landscape character. Opportunity for increased height is also recognized in the Brecon Street area, but the potential increase is limited by the presence of Queenstown cemetery and the prominence of the area in important view shafts and vistas. In other parts of the study area, it is considered that any increase in height should be limited to one or in places two additional storeys.

It is recommended that any increase in building heights within the study areas should follow the broad form of the surrounding mountains, stepping gradually up to the base of Ben Lomond with differences in the height of adjacent buildings being no more than one or two storeys. A tall isolated 'landmark' building is likely to compete with rather than complement the surrounding landscape character.

Shading and dominance issues have not been fully addressed in this study.

2.0 Introduction

Queenstown Lakes District Council (QLDC) is undertaking a study to assess the implications of increasing maximum building height in high density residential-zoned areas of the town adjoining the base of Bob's Peak/Ben Lomond (subsequently referred to as Ben Lomond). As part of this study, QLDC has commissioned a landscape and urban design assessment of the Height Study Area (see Figure 1 below). This study is to evaluate the landscape and urban design implications of allowing buildings of greater height than the current 8-metre height limit (for sites with less than 6 degree gradients) and the current 7-metre height limit (for sites with more than 6 degree gradients). The brief for the landscape and urban design assessment involves consideration of the existing landscape character and urban form and assessment of the landscape and urban design outcomes of allowing additional height in various areas. This includes consideration of effects on important vantage points and view shafts in the surrounding visual catchment.

The study area is based on the premise that the impact of exceeding the current maximum height limits along the toe of Ben Lomond may:

- not impact adversely on the built character of Queenstown in relation to its landscape setting;
- not impact adversely on neighbouring sites in terms of impeding key views from those sites
- not impact adversely on neighbouring sites in terms of shading over and above existing shading from Ben Lomond.

The study is to test the validity of the first two premises and to facilitate answers to a number of other questions, including:

- Should there only be one area that has higher buildings, or multiple areas?
- Where are the preferred locations for additional height?
- How can height in appropriate locations be a positive contributor to Goal 1 of the Urban Design Strategy: “distinctive built form creating neighbourhoods that reflect our people, culture and character”.

- What locations could be appropriate for iconic buildings where extra height contributes towards a positive outcome for Queenstown?



Figure 1: Queenstown height study area.

3.0 Methodology

The landscape assessment methodology involved site visits to the study areas and to significant vantage points and view shafts identified from desktop study. Other less significant representative viewpoints were also visited and photographs taken. A three-dimensional GIS model of Queenstown and the surrounding landscape was used to confirm appropriate viewpoints and to evaluate the visual and landscape effects of two previously proposed developments: the QLDC Lakeview Development on Thompson

Street and the Chamonix development on the corner of Brecon Street and Cemetery Road. Controlled development possible under the District Plan (as modified by Plan Change 10) in the Bowen Street area was also modelled within the GIS terrain, as well as increased building heights in this area.

The landscape character was assessed using a modified version of the 'Pigeon Bay' landscape assessment criteria set out in Part 5 of the District Plan: geomorphology and topography; vegetation and ecological components; urban form and character; aesthetic values (including expressiveness and legibility); and historical associations.

4.0 Landscape and urban character analysis

4.1 *Landform – geomorphology & topography*

The central area of urban Queenstown (Queenstown Bay) is predominantly located on alluvial floodplain and beach deposits associated with Horne Creek and Lake Wakatipu, respectively. Elevated terrace areas in Lakeview Holiday Park and around Brecon Street are remnants of benches cut by the lake when it was at a higher level, while alluvial fans intrude into the Horne Creek floodplain in the Hamilton/Huff Street area and in the Bowen Street area. To the west and east, the central township is enclosed by the steep schist mountains of Ben Lomond and Queenstown Hill. On the western side of the town, within the study area, the current urban zone boundaries largely follow the change in gradient between the schist mountainside and the easier slopes of beach, moraine and alluvial fan deposits.

4.2 *Vegetation and significant trees*

Mature wilding conifer forests on Ben Lomond and Queenstown Hill form the dominant vegetation features within the landscape. For visitors to the area, particularly international tourists, these forests are likely to contribute to the perceived naturalness and visual amenity of the urban setting. For locals and New Zealanders perceptions of the forest will vary depending on their knowledge about wildling conifer spread and their attitudes towards plantation forestry. Whatever its influence on perceived natural character, the forest on Ben Lomond provides a vegetative backdrop to urban development and a strong visual emphasis to edge of the town.

There are a number of significant mature trees within the study area, some of which are scheduled heritage trees protected under the District Plan:

Heritage trees

- A sweet chestnut at 93 Thompson Street;
- Two Wellingtonias, six oaks and four cedars within Lakeview Holiday Park on Thompson Street;
- Four cedars within Lakeview Holiday Park on Mann Street;
- Wellingtonias in the Queenstown cemetery;
- A Wellingtonia on the corner of Brecon and Isle Streets;

Other significant trees

- Mature Douglas fir and larches within Lakeview Holiday Park;
- Two mature gums on the corner of Brecon Street and Cemetery Road;
- A mature Douglas fir on Isle Street next to the medical centre;
- A gum on lower Hamilton Street;
- Mature Lombardy poplars, pines and Douglas fir on the 'Q-box' site at the end of Bowen Street.

4.3 Existing urban form and permitted baseline development

Intense built development in Queenstown is currently focused on the town centre and the strip of visitor accommodation that extends along Lake Esplanade. There is a relatively consistent height of development in the town centre (permitted height limit of 12 metres), which is bounded to the west by the vertical step up to the higher alluvial terrace along Man Street. An entertainment activity arm extends from the town centre along Brecon Street up to the Gondola base building. This area is zoned for high density residential, but has a Commercial Precinct zoning overlay.

Less dense residential development spreads out from centre. Within the study area, this consists of predominantly single-storey or two-storey detached dwellings. The relatively flat overall urban form reflects the town's location on floodplains or gently sloping beach terraces (with exception of the alluvial fans at Huff and Bowen Streets and development on a ridge in the Thompson St/Lomond Cres area).

Large areas of open space break up the urban form along the base of Ben Lomond: Lakeview Holiday Park; Queenstown Primary school and Kiwi Birdlife Park, Wakatipu High School. These open spaces could be described as 'green fingers' extending from the forested form of Ben Lomond into the townscape.

The study area is zoned High Density Residential, Sub-Zone A, B or C (pursuant to Plan Change 10). Development within the parameters of District Plan rules for the zone is likely to result in higher density urban form in the future, with less interstitial open space and vegetation. The zoning allows greater site coverage (between 45 and 65% depending on the sub-zone) while limiting the length of continuous façades. It is likely to encourage greater continuity of development addressing the street edge and on large sites, perimeter block development, where buildings front the street directly and enclose internal open space in mid block.

There is consequently likely to be significant progressive change in the character of the study area, even without additional building height. As sites are redeveloped, a high-density but low rise urban form is likely to emerge, with two-storey buildings defining and enclosing the streets.

4.4 *Urban character/aesthetic values*

Essential to the experience of Queenstown is the perception of encountering settlement at the confluence of mountains and lake. This is emphasized by the confinement of settlement to the flats and terraces near the lake edge, the more gentle slopes of Queenstown Hill below the tree line, and the Horne Creek gorge leading away from the lake between Queenstown Hill and Ben Lomond.

The mountains and the lake visually dominate the town, which is subservient to the wider natural environment. The effect is of a consolidated zone of settlement nestled into a dramatic natural landscape setting. The confinement of the settlement and predominance of the natural setting is further emphasized by the current height restrictions that result in the built form cumulatively reflecting the underlying topography.

From within the town, the prevailing experience is the distinct contrast between the built foreground and the natural backdrop.

Although the scale of buildings within the town centre and in the residential areas is relatively consistent, there is little consistency in building form, style or colour. This

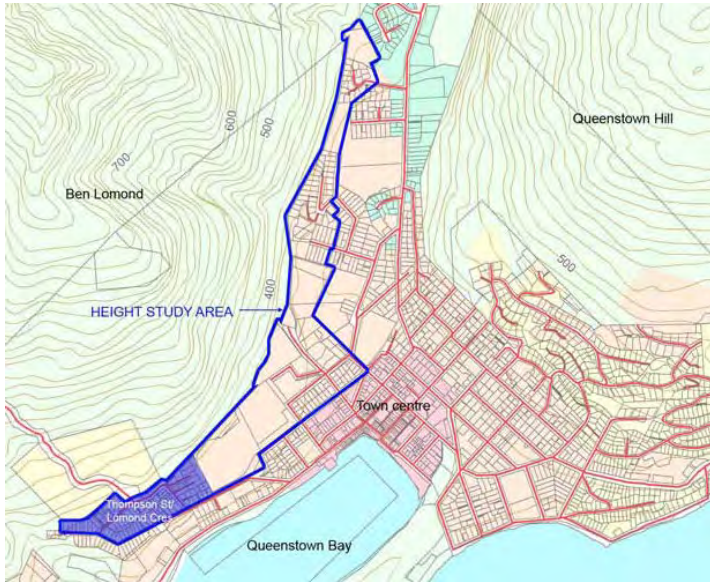
contrasts with comparable mountain resort towns in Canada and Europe (eg. Whistler, Zermatt and Lake Como), which have greater control over building design.

4.5 *Heritage values*

Scheduled heritage features within the study area include the protected trees identified in Section 4.2, the Brecon Street Cemetery and Glenarm Cottage on the corner of Camp Street and Man Street. Crucial to this study are the heritage values of the cemetery, which include the gravestones and monuments and the stories they have to tell about the history of the town, but also the physical setting high on the lake beach terrace with views out to the mountains and the town.

5.0 Visual & landscape effects of increased building height

5.1 *Thompson Street/Lomond Crescent*



This is an area of detached residential dwellings abutting the steep forested slopes of Ben Lomond. Houses extend further up the mountain than elsewhere in the study area.

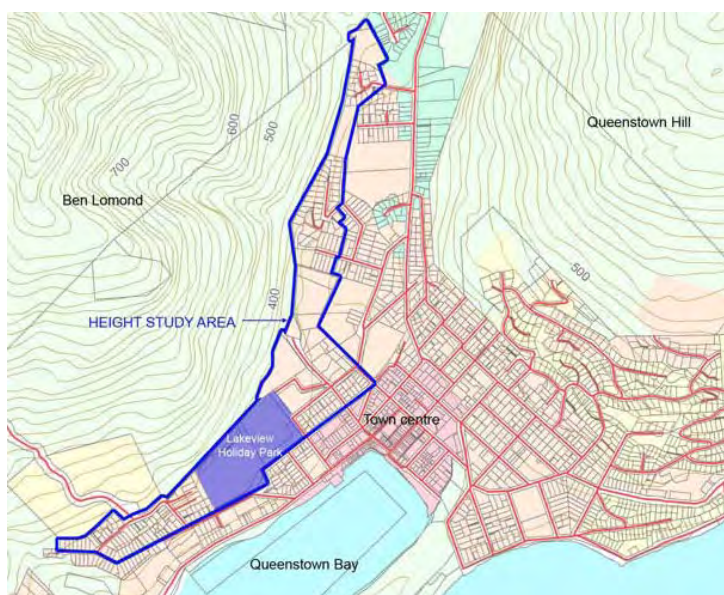
It is considered that this area has potential to absorb a limited increase in building height, especially near the upper zone boundary. This is because:

- The steep forested slopes would provide a visual backdrop to development;
- The area is not highly visible from the town centre and higher development would therefore not compromise any significant views from the town;
- Where the area is more visible (from Queenstown Gardens, the lake and St Omer Park/Lake Esplanade), it is viewed behind the visitor accommodation and hotels on the esplanade. There is potential for buildings to step up the slope, echoing the broad form of Ben Lomond.

The orientation of streets and lots within the area does mean there is potential for taller buildings to shade adjacent development, particularly in the summer months when the rising and setting sun are oriented further from north. These potential shading effects are beyond the scope of this study and require further investigation. There is also little

existing tall vegetation in the area that would integrate and provide scale for taller buildings and uneven development of the small lots could result in currently available views out over the lake and mountains being obscured. Consequently, it is considered that any increased height should be limited to one or two storeys above that currently permitted, with increases of two storeys being restricted to those lots on the upper edge of the residential zone. There are no particular public views that would be obscured by taller development.

5.2 Lakeview Park



This area comprises the Queenstown Lakeview Holiday Park and James Clouston Memorial Recreation Reserve, adjoining Thompson Street and Man Street. The remnant beach terrace is currently predominantly open space, with significant mature trees and scattered single storey cribs and holiday park facilities.

It is considered that this part of the study area has the greatest potential to absorb additional building height:

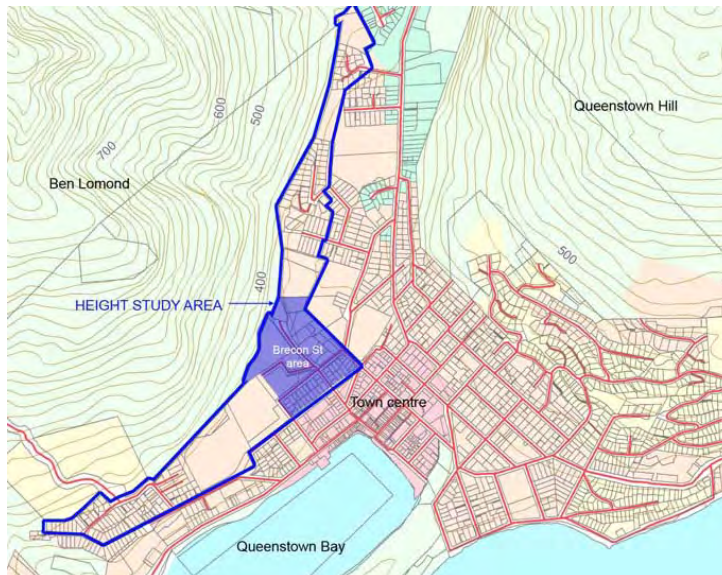
- The steeply sloping land and cliffs behind the beach terrace provide containment and scale for taller buildings;
- The gently sloping former lake beach allows buildings on the front of terrace to obscure taller buildings behind;

- The mature trees (some of which are protected) provide opportunities to screen and integrate taller buildings and provide scale to the built form;
- The area is not highly visible from town centre and taller development would not compromise significant views from the retail/commercial area or esplanade;
- Where the area is more visible (from Queenstown beach, the lake and Queenstown Gardens), it would be viewed behind visitor accommodation and hotels lower on slope. There is opportunity for buildings to gradually step up, echoing the broad form of Ben Lomond.
- The site is in single ownership and is large enough to be developed comprehensively, allowing buildings that are in scale with those surrounding them and an incremental increase in height towards the base of Ben Lomond.

Potential shading and dominance effects on adjacent areas would need to be taken into account and any increased height would need to be achieved gradually across the lake beach terrace so that built form mimicked the gradient of the surrounding landform. Although this pattern of built form would compromise the legibility of the former lake beach, it is unlikely to adversely affect the visual balance between the town and its mountain context.

To ensure that buildings remain in scale with the built fabric of Queenstown, it is recommended that the tallest buildings adjacent to the cliffs should not exceed 6 (???) stories above ground level.

5.3 Brecon Street surrounds



This area includes Queenstown Cemetery, Queenstown Motor Park, commercial recreation activities, community facilities (including the fire station and kindergarten) and low density residential development between Isle and Man Streets.

It is considered that this area has capacity to absorb limited increases in building height:

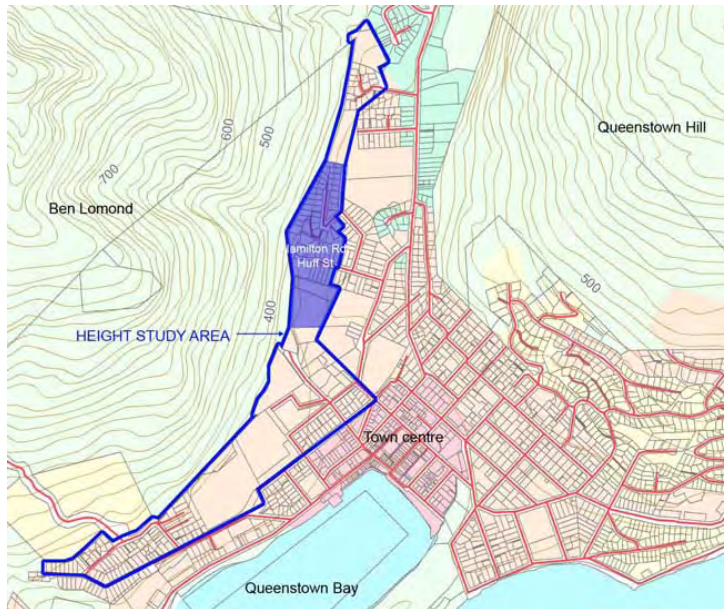
- The area is closely connected to the town centre and there is potential to step built height up gradually, following the land contour;
- There is one protected Wellingtonia tree and several other significant mature trees (gums and Douglas fir) that have the potential to provide scale and to integrate taller buildings;
- There is potential for Brecon St to be rezoned to acknowledge and enable further commercial and recreation activities, reinforcing the link to the gondola;
- There is potential for a group of taller buildings (up to a maximum of 5 storeys), rather than a single landmark building, to emphasize the edge of the remnant terrace.

- There are some advantages in being able to see a landmark building or buildings from the Shotover St/Brecon St intersection to draw people up the Brecon steps and make the connection to the gondola more legible. Such a building would need to be located near the corner of Man and Brecon Streets.

The area has less potential to absorb significant building height increases than the adjacent Lakeview Park area, as it is separated from the steeply sloping land of Ben Lomond by the cemetery open space. Building heights over three or four stories could have significant adverse effects on landscape and heritage values:

- By dominating and shadowing the cemetery and potentially blocking views out from this important public space to the Remarkables, Cecil Peak, Queenstown Hill and the town;
- Visually dominating views from Queenstown Recreation Grounds, Queenstown Primary School playing fields and parts of the town centre;
- Potentially obscuring vistas up Brecon St and Camp St to the gondola and Ben Lomond.

5.4 *Hamilton Road/Huff Street*



This area includes the Reavers Lodge site and low density residential development on the upper part of an alluvial fan. This fan has been formed by a steep stream catchment on the face of Ben Lomond and has been identified as a potentially active composite fan in the Otago Regional Council's Otago Alluvial Fans Project (Opus International Consultants Limited 2009). Queenstown Primary School and the Queenstown Birdlife Park have been included in this area but are unlikely to be developed, as they are owned by the Education Ministry and QLDC, respectively.

From a landscape and urban design perspective, ignoring the potential effect of land stability hazards, this area is considered to have only very limited capability to absorb additional height (one additional storey):

- Significantly greater height would not be consistent with the urban form on the floodplain below and would result in a more exaggerated 'wavy' edge to urban development along the base of Ben Lomond, as the schools on either side of this area are likely to remain undeveloped. Because the elevated land is an alluvial fan built up into the floodplain rather than a ridge descending from the mountain, considerable additional height in this location would detract from the legibility of the landscape setting. It would also compromise one of the aesthetic characteristics of urban Queenstown: nestling at the base of Ben Lomond.

- There is limited existing vegetation to integrate taller buildings.
- There is potential for shading and dominance of adjacent residential dwellings within the area.

On the positive side, greater building height (for example, two additional storeys) against the steeply sloping hill has potential to obscure the cleared track and power lines in the QLDC reserve behind, resulting in a more consistent and aesthetically coherent urban edge. For the remainder of the study area, the dense vegetation the wilding conifers forms the immediate backdrop to the town.



Figure 2: View to Hamilton/Huff Street area from Hallenstein Street.

5.5 **Bowen Street**



This area includes the upper residential development served by Bowen Street and Kiely Lane and the 'Q-Box Ltd' site on Bush Creek. The upper part of the Wakatipu High School site is included in the study area, as it is possible that this land could be redeveloped for residential or commercial use in the future. Like the Hamilton Road/Huff Street area, existing residential development is located on an alluvial fan, in this case formed by Bush Creek. It has also been identified as a potentially active composite fan in the ORC study.

From a landscape perspective, the area is considered to have potential to absorb buildings of greater height than that currently permitted, especially on the 'Q-Box Ltd' site. This is because:

- The corner Q-Box Ltd site is screened by industrial development to the north-east and has significant mature vegetation (if retained) that could screen and integrate taller buildings;
- The area is not highly visible from the town centre, Queenstown Hill or Gorge Road. Visibility is limited to parts of Hallenstein Street, the intersection of Gorge Road and Bowen Street, and possibly the gondola.

- There is potential to step built height up gradually from the industrial development closer to Gorge Road, following the land contour.

However, as with the Hamilton Road/Huff Street area, significantly greater height on Bowen Street would result in a more exaggerated 'wavy' edge to urban development, detracting from the legibility of the urban edge and the mountain slopes. There is also potential for shading and dominance effects on adjacent landowners if the small lots were redeveloped unevenly. It is therefore considered that any increase in height should be limited to one to two storeys (with the greater height increase restricted to lots adjoining the zone boundary), except in the larger corner site.

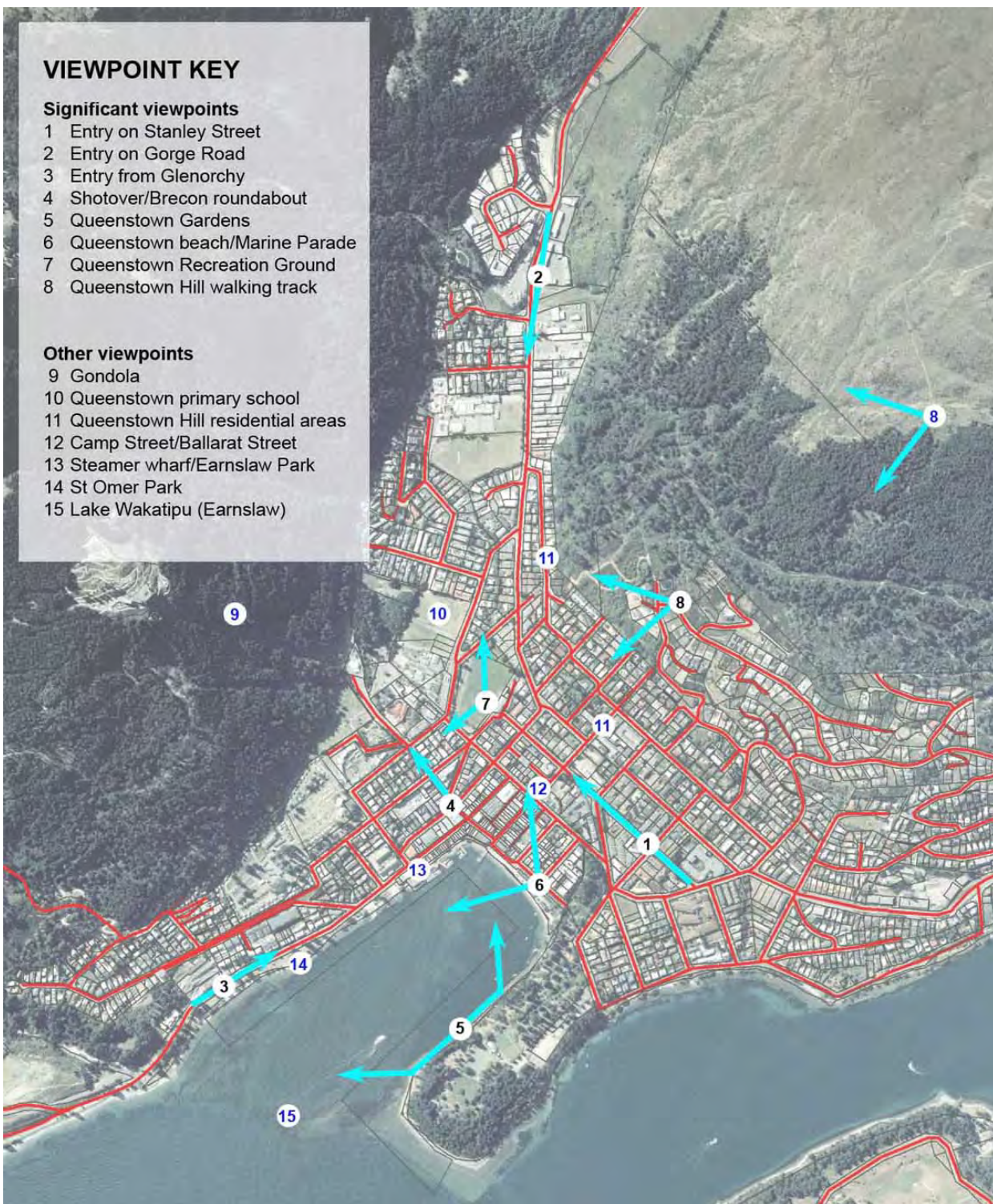


Figure 3: Viewpoint map

6.0 Effects on significant vantage points and viewshafts (*refer Figure 3*)

6.1 *Entering Queenstown on Stanley Street – viewpoint 1*

This is the first view of the town centre and study area for people arriving in Queenstown from the west. The vista from Stanley Street is dominated by Ben Lomond and the gondola/Skyline building and framed by mature Wellingtonias and Douglas firs on either side of the street. The town centre appears as low rise built form, subservient to the surrounding mountains. There is a visual connection to the open space of Brecon Street cemetery.

The Lakeview Park, Brecon Street and Hamilton Road/Huff Street study areas are visible as people enter the town. While increased building heights as recommended in Section 5 above would be consistent with existing urban character, structures taller than these recommendations are likely to detract from the legibility of Ben Lomond and disrupt the balance between urban and rural landscape.

Increases in height in the Hamilton Road/Huff Street study area would be particularly noticeable given the rising grade towards the toe of Ben Lomond.



Figure 4: View towards Ben Lomond from Stanley Street

6.2 *Entering Queenstown on Gorge Road – viewpoint 2*

For visitors and locals entering Queenstown on Gorge Road, the view is directed toward Cecil Peak rather than Ben Lomond and the study areas are only minimally visible. The urban character is industrial and commercial with the visual clutter of signage, car parking and varied building form and scale.

The Hamilton Road/Huff Street area is visible as people pass the Wakatipu High School playing fields, but is not the focus of the view. Increased height in the study area is therefore unlikely to affect the entry experience.

6.3 *Entering Queenstown from Glenorchy – viewpoint 3*

Approaching Queenstown from Glenorchy via the One Mile roundabout, the lake and St Omer Park are the dominant components of the view. Although taller buildings in the Thompson Street/Lomond Crescent and Lakeview Park areas could be visible from Lake Esplanade, they would be substantially screened by closer structures. Adverse effects on the visual amenity and character of the entry experience are unlikely.

6.4 *Up Brecon Street from Shotover Street – viewpoint 4*

The intersection of Brecon Street and Shotover Street is a key vista within the town centre, particularly for pedestrians. At this point, views open up to Eichardt's Hotel and the Remarkables (down Rees Street) and to Ben Lomond and the gondola (up Brecon Street steps). Towards Ben Lomond, only the mature trees on Brecon Street and the forested slopes are visible above the steps.

As discussed earlier, there would be advantages in being able to see buildings at the crest of the steps to make the connection to the gondola and other recreational activities more legible. Buildings considerably higher than currently permitted are likely to obscure views of the mountain within this vista and result in the built form dominating the rural landscape rather than vice versa.



Figure 5: Looking up Brecon Street steps from Shotover Street

6.5 *Queenstown Gardens towards Ben Lomond – viewpoint 5*

From the western side of Queenstown Gardens, including both the upper and lower walking tracks, intermittent views are available across the bay to Ben Lomond and the township. This is one of the few public vantage points where the entire urban edge from Lomond Crescent to Brecon Street is visible. The flat former beach terrace reads clearly at the base of Ben Lomond and the township is a relatively narrow strip between the lake and the massive form of the mountain.

With additional building height in the visible study areas stepping up from the lake, the upper beach terrace would no longer be legible and the currently flat urban edge would be more variable. While this would detract from the character of Ben Lomond to some extent, the mountain would remain dominant in the landscape.



Figure 6: View towards Ben Lomond from Queenstown Gardens

6.6 *Queenstown beach/Marine Parade towards Ben Lomond – viewpoint 6*

The character of views from the beach and Marine Parade Reserve towards Ben Lomond is similar to that from the gardens, discussed above. While taller buildings at the base of the mountain would reduce the legibility of the terrace, they would not detract from the urban character of Queenstown if built height steps gradually up the slope. Tall ‘landmark’ buildings considerably higher than surrounding structures would compete with the natural landform and reduce the visual coherence of the landscape. This is particularly the case for the vista down Marine Parade towards the memorial gates.



Figure 7: View towards study area from Queenstown Beach



Figure 8: View towards Ben Lomond from Marine Parade

6.7 *Queenstown Recreation Ground – viewpoint 7*

The recreation ground is within a hollow, visually enclosed by Ben Lomond, Memorial Hall and the escarpment leading up to the former beach terrace at Brecon Street.

Taller buildings in the Brecon Street sub-area would further enclose the playing fields but would not substantially obscure any views to Ben Lomond. Beyond a certain height increase, tall buildings around Brecon Street could block views to Walter and Cecil Peaks.

6.8 *Queenstown Hill walking track – viewpoint 8*

Expansive vistas are available from parts of the Queenstown Hill walking track over the lake, mountains and township. The lake and mountains are generally the focus of the view. Oblique views of the Lakeview Park and Brecon Street parts of the study area are available from the start of the track and from rest points on the ascent. Isolated taller buildings separated from the steep slopes of Ben Lomond would detract significantly from the visual coherence of the landscape. Conversely, a gradual increase in height towards the base of the mountain, with taller buildings set against the steeper gradient, would complement the natural landform.



Figure 9: View toward study area from base of Queenstown Hill track

7.0 Other viewpoints

A number of other less significant viewpoints were identified as part of the landscape assessment and the effects of increased building height in the study areas considered. These included the following:

- The gondola and Skyline building – viewpoint 9
- Queenstown primary school – viewpoint 10
- Queenstown Hill residential areas – viewpoint 11
- Camp Street/Ballarat Street intersection and the Village Green – viewpoint 12
- Earnslaw Park and the Steamer Wharf – viewpoint 13
- St Omer Park – viewpoint 14
- Lake Wakatipu (eg. from the Earnslaw) – viewpoint 15

From some key public places – Earnslaw Park/Steamer wharf and the Village Green – taller buildings in the study areas would be largely screened by closer structures and would have little effect on the landscape and urban character.

From the other identified vantage points, it is considered that increased heights as recommended in Section 5 would not significantly detract from the legibility, expressiveness or coherence of the visible landscape.

8.0 Conclusions & discussion

The principal conclusions of the landscape and urban assessment are as follows:

- Essential to the experience of Queenstown is the perception of encountering settlement at the confluence of mountains and lake. The central part of Queenstown is 'nestled' on the lakeside at the base of the surrounding mountains. The urban form is subservient to the wider natural environment.
- The flat overall form of the town reflects its location on floodplains or gently sloping beach terraces.

- Any increase in building heights within the study areas should follow the massive broad form of the surrounding mountains – Queenstown Hill, Ben Lomond, Cecil Peak. Buildings should step gradually up to the base of Ben Lomond with differences in the height of adjacent buildings being no more one or two storeys.
- There may be greater opportunity for additional height close to the town centre and to the existing visitor accommodation area.
- Existing mature trees can provide scale and context to taller buildings as well as partially screening buildings and integrating them with the conifer forest on the Ben Lomond backdrop.
- Within the study area, the Lakeview Park sub-area appears to have the greatest potential to absorb taller buildings without adverse effects on the urban or landscape character.
- Opportunity for increased height is also recognised in the Brecon Street area, but the potential increase is limited by Queenstown cemetery and the prominence of the area in important view shafts and vistas.
- In other parts of the study area, any increase in height should be limited to one or in places two additional storeys.
- Shading and dominance issues within the study area may further limit increased height. These issues have not been addressed in the study.
- A tall ‘landmark’ building would compete with rather than complement surrounding landscape character and reduce the visual coherence of the natural and urban landscape.
- The integrity of Bob’s Peak/Ben Lomond as a landscape feature would be best maintained by a relatively even line of built form along base of the mountain, with exceptions following ridgelines extending down from the mountain rather than alluvial fans built up into the floodplain. An even edge to the urban form is however interrupted by the large Council- or government-owned areas of land against Ben Lomond – Lakeside camping ground, Queenstown Primary School and Wakatipu College. These retained ‘green fingers’ of open space extending into the urban area prevent a continuous built edge to the town at Bob’s Peak.

It is recommended that any additional height allowances be expressed in terms of the number of storeys plus roof articulation, in addition to absolute height limits. This way of expressing building height is more transparent to the general public, in terms of visual effect, and also allows for variation of rooflines.

AEE
APPENDIX B

Fearon Hay Architects Ltd and Populous: Urban Design Framework

LAKEVIEW: URBAN DESIGN FRAMEWORK

Aug 2014

POPULOUS

fearonhay

CONTENTS

1.0	INTRODUCTION	4.0	DEVELOPMENT FRAMEWORK
1.1	Executive Summary	4.1	Structure Plan
1.2	Document Structure	4.2	Building Heights
		4.3	Shading Diagrams
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1.0 INTRODUCTION

1.1 Executive Summary

1.2 Document Structure

1.1 EXECUTIVE SUMMARY

INTRODUCTION

The Lakeview Subzone represents one of the largest underdeveloped areas of prime land in central Queenstown. It occupies a prominent terrace at the base of Scenic Reserve, and stretches between the city and the outer Queenstown region. Redevelopment of this area creates opportunities to extend the existing successes of the Queenstown's town centre, and to create a sequence of engaging public spaces which reinforce Queenstown sense of place. The Urban Design Framework emphasises the need to protect the character of the landscape of Queenstown while providing a high quality public realm with new quality residential, commercial and tourism development opportunities catering for anticipated regional growth.

The purpose of the Lakeview Subzone Area Urban Design Framework is to provide a clear, robust and flexible framework to guide and coordinate the progressive development of the Lakeview site in a manner which firmly connects it to and embeds it within an extended Queenstown Town Centre. It:

- Establishes a clear vision for the future of the Lakeview Site which supports and complements the vision for Queenstown Town Centre;
- Provides a design framework for the Lakeview public realm and community infrastructure;
- Defines urban design principles in order to guide future development propositions.

KEY ATTRIBUTES OF THE FRAMEWORK INCLUDE:

- **OPPORTUNITY FOR PLACE**
Shaping the public realm to maximise shared values including economical, environmental and social dimensions.
- **STREET EDGES**
Buildings and activities defining and activating public space
- **BUILDING TYPOLOGIES**
Creating a rich, mixed use urban environment which is responsive to its landscape setting
- **VEHICULAR CONNECTIVITY**
Allowing legible movement through the site
- **PEDESTRIAN & CYCLE CONNECTIVITY**
Connecting people and places through a highly permeable network of circulation routes
- **PARKING AND SERVICING**
Creating a sustainable, well resourced urban zone

1.2 DOCUMENT STRUCTURE

The report outlines the rationale and provides the supporting documentation upon which the Lakeview Subzone concept plan has been developed. The purpose of this document is to arrive at, to validate, and illuminate a development framework which will inform the District Plan provisions for the Lakeview Subzone - including Lakeview, Thompson/Glasgow & Man/Brecon subareas. This is achieved through a series of urban design principles and application of urban design strategies.

The principles and strategies illuminated are a combination of diagrams, illustrations, precedents, imagery and associated text. This framework does not offer specific design solutions.

The report develops sequentially through the following main sections:

- 1.0 Introduction
- 2.0 Existing Context and Site Analysis
- 3.0 Urban Design Principles
- 4.0 Urban Design Strategies
- 5.0 Development Framework

The primary focus of this document is on the layout of public space and the three dimensional spatial definition of that network by built form containing activities that will contribute to the character, vitality and/or amenity of the public realm. The footprints and form of buildings shown in plans, diagrams and illustrations in this document are indicative only. This framework is not a statutory document.

The Lakeview development vision, principles and strategies are aligned to existing Queenstown Lakes District Council guidelines. The framework acknowledges the successful implementation of design strategies in Queenstown Town Centre and takes the opportunity to extend these.

Documents that have informed the design process include:

- New Zealand Urban Design Protocol (November 2009).
- Queenstown Town Centre Strategy (December 2009).
- Queenstown Town Centre Character Guidelines (October 2007).
- Queenstown Height Study: 'Landscape and Urban Design Assessment' for Queenstown Lakes District Council (November 2009). (draft)
- QLDC Urban Design Strategy (Nov 2009).

2.0 CONTEXT & ANALYSIS

- 2.1 Local Context
- 2.2 Planning Context
- 2.3 Site Analysis

2.1 LOCAL CONTEXT

Queenstown is a largely tourism-based centre located on the shores at the head of Lake Wakatipu. Lower density housing extends away from the core along the shoreline and up into the lower alpine slopes which contain the town.

The existing, celebrated Queenstown Town Centre is an intimately scaled, small core oriented to the lake front. Historic buildings clustering around the lakefront establish the low built form and scale. The primary scale and form of the built environment is established by historic streets, lanes, parks and buildings.

The roofscape of the town centre, as viewed from higher vantage points, surrounding residential areas and tourist attractions such as the Skyline gondola, form a varied skyline image.

The grid layout of the streets provides view corridors to the mountains and lake. Within the town centre there is a variety of streetscapes, reflective of the scale of the pedestrian and traffic environments.

Balconies and verandahs overhanging street footpaths aid pedestrian comfort and weather protection. Street furniture, planting, and outdoor dining areas contribute to the attraction of, and comfort within, the town centre.

The small scale and size of the town centre with its many service lanes makes it a highly accessible environment for pedestrians. Pedestrian permeability has been historically achieved through small block and allotment sizes, together with mid-block service lanes. The historic pattern of pedestrian linkages has been retained and enhanced and forms an important means of promoting pedestrian permeability throughout the town centre. The pattern of arcades also contributes to the character of the town centre.

RELATIONSHIP TO QUEENSTOWN TOWN CENTRE:

The Lakeview Subzone is visible from the Town Centre. The centre of town, accommodation and Fernhill are all within a 10-15 minute walk. The steepness of a short portion of the walk could be mitigated by pedestrian walkway upgrades (steps).

The southern edge of the site along Thompson Street and down to the lake edge is defined by a range of high density, larger scale developments, many of which provide short-stay accommodation.

RELATIONSHIP TO GEOGRAPHIC AND CULTURAL LANDMARKS:

The overwhelming grandeur of the natural landscape provides a unique relationship between the mountains and Lake Wakatipu. While the Lakeview Subzone is elevated so as to obtain outstanding views across the lake, any development will be comparatively insignificant in terms of scale, bulk and spatial definition when contrasted against the scale and grandeur of the natural environment.

The subzone provides the 'iconic' views (of both lake and the mountains) which underpin the marketing of Queenstown as a destination. Through its unique setting, combined with innovative architecture, a highly legible, permeable and interconnected network of public spaces will be key to its success, to which the subzone areas provide ample opportunity for these to prosper.

2.1 LOCAL CONTEXT

SITE AND SURROUNDING LANDMARKS

Key

- 01 Skyline Gondola
- 02 Queenstown Memorial Hall
- 03 Brecon Street Stairs
- 04 Mall Street
- 05 Queenstown Waterfront
- 06 The Earnslaw Wharf
- 07 Queenstown Holiday Park
- 08 Queenstown Gardens
- 09 Queenstown Rugby Field
- 10 St. Omer Park
- 11 Hotel St. Moritz
- 12 The Ridges Hotel
- 13 Sofitel Hotel
- 14 Crowne Plaza Hotel
- 15 Novotel Hotel
- 16 Heritage Hotel
- 17 Mercure Resort
- 18 Copthorne Hotel



0.09

Site and Surrounding Landmarks
Scale 1:10,000



Queenstown Lakeview Development
Urban Design Framework
August 2014

POPULOUS

fearonhay

2.2 PLANNING CONTEXT

The vision for development outside the town centre had been established in Queenstown Lakes District Council Growth Management Strategy (April 2007).

The District Plan, as the key statutory instrument for promoting considered development in the Queenstown region, provides the Council with discretion to examine applications for new buildings and changes to the existing built fabric.

The QLDC currently zones the site as High Density Residential. As a result of this zoning, it is difficult for the site to develop as a single, integrated development. Careful consideration needs to be given to how the site may develop as the population and civic demands of Queenstown grow.

The primary purpose for developing Lakeview is to ensure that the land parcels can deliver significant economic benefit to the District.

Having a long-term view of the development's effect on infrastructure is consistent with Council's obligation to develop infrastructure in a manner that is efficient and cost-effective.

Coordinated development will minimise disruption of the site and neighbouring areas, and is likely to maximise the level of developer interest.

This document will inform the District Plan provisions for the Lakeview Site.

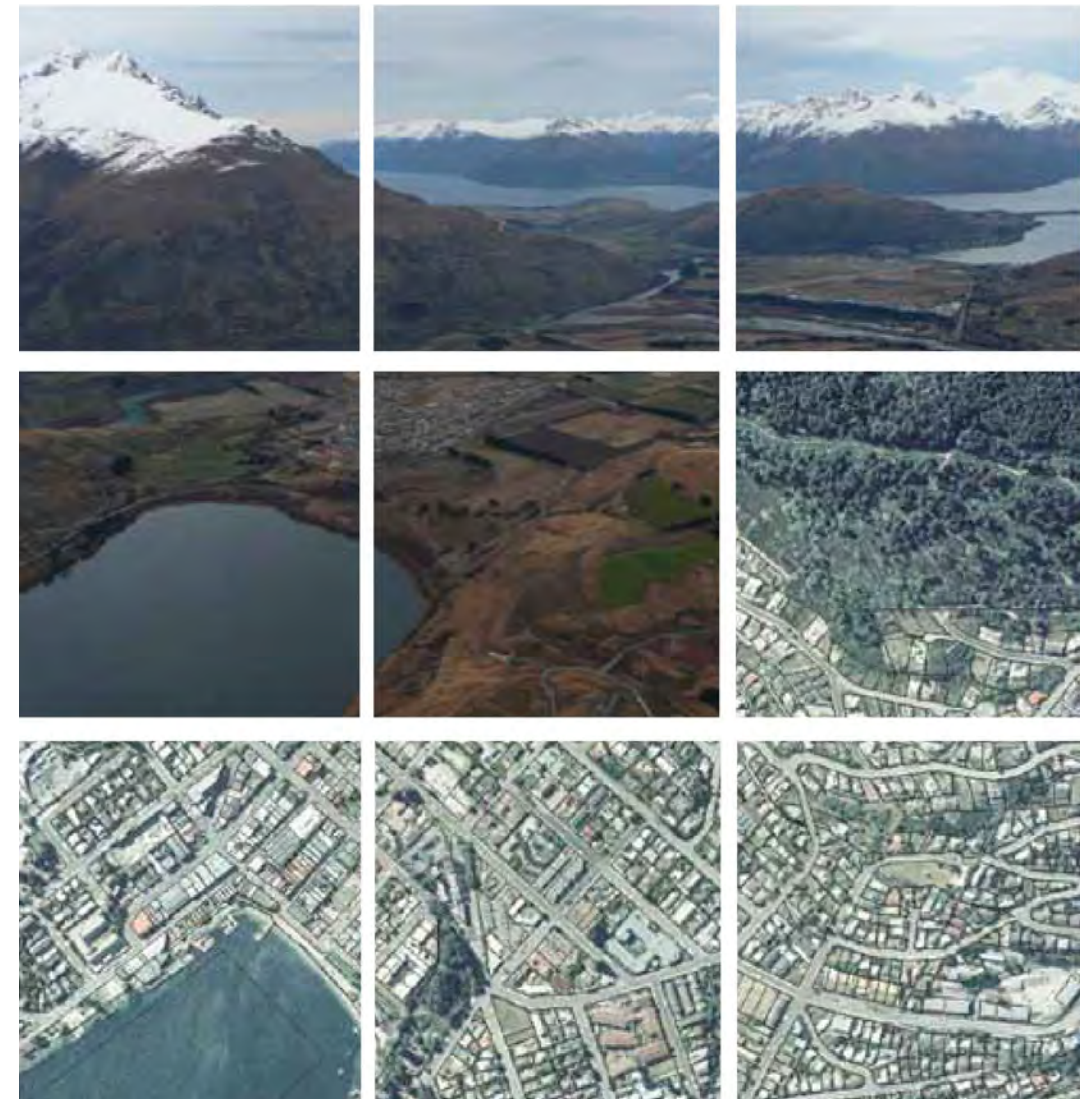


Figure 1: QLDC Queenstown Town Centre Character Guidelines, October 2007 (Pg... 15)

2.3 SITE ANALYSIS

KEY SITE ATTRIBUTES

- ADVANTAGES:** Excellent vistas of Queenstown and the surrounding landscape.
Visible from the city centre.
Multi-level and varied density development.
- OPPORTUNITY:** Unique opportunity for views.
Natural site contours advantage public space and building layouts.
Potential for future expansion on surrounding land.
- DISADVANTAGE:** Uphill walk from city.

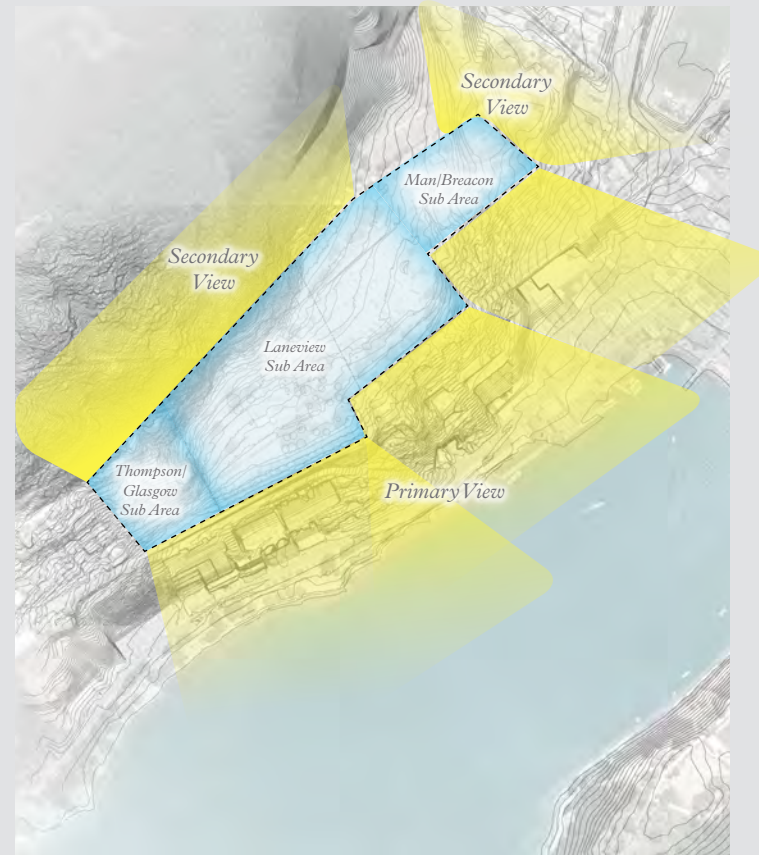
SITE APPRAISAL

- SITE FORM:** The site size and shape means an optimal layout and design can be achieved.
- SITE TOPOGRAPHY:** The way the land rises steeply behind the site means that built form will not dominate the landscape and will not break ridgelines or the skyline. The generally level topography of the site affords views across the site.
- ENVIRONMENT:** The site provides the 'iconic' views (lake and mountains) which underpin the marketing of Queenstown as a destination. A unique setting combined with a well defined and legible public space network defined by a innovative architecture is key.
The site provides the opportunity for all of these elements.
- PROXIMITY TO CBD:** Walking time to the centre of town is within the generally acceptable 10-15 minute time frame.
The steepness of a short portion of the walk could be mitigated by the introduction of stairs at some point along Man Street.
- ACCOMMODATION:** Walking time to a variety of accommodation towards the Town Centre and towards Fernhill is within the generally acceptable 10-15 minute timeframe.
- ORIENTATION:** The North-South direction of the site allows sunlight and good views to the East from much of the site.
- OVERALL APPEAL:** The Master Plan responds to and takes advantage of all of the features offered by the site.
The only slight drawback is the steepness of the walk to the city centre and visitor accommodation in the same direction.

2.3 SITE ANALYSIS

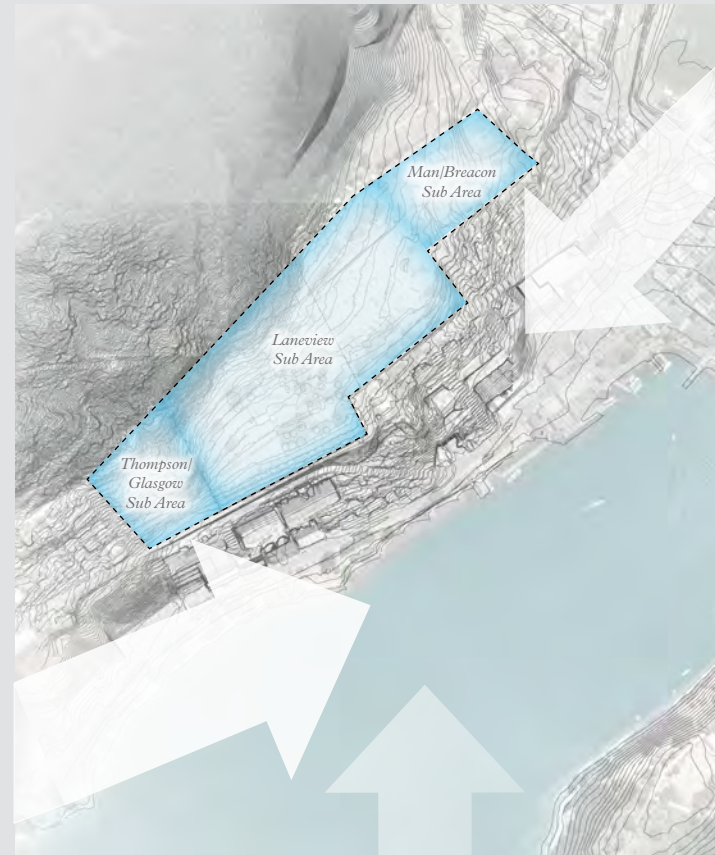
KEY SITE ATTRIBUTES

VANTAGE POINTS



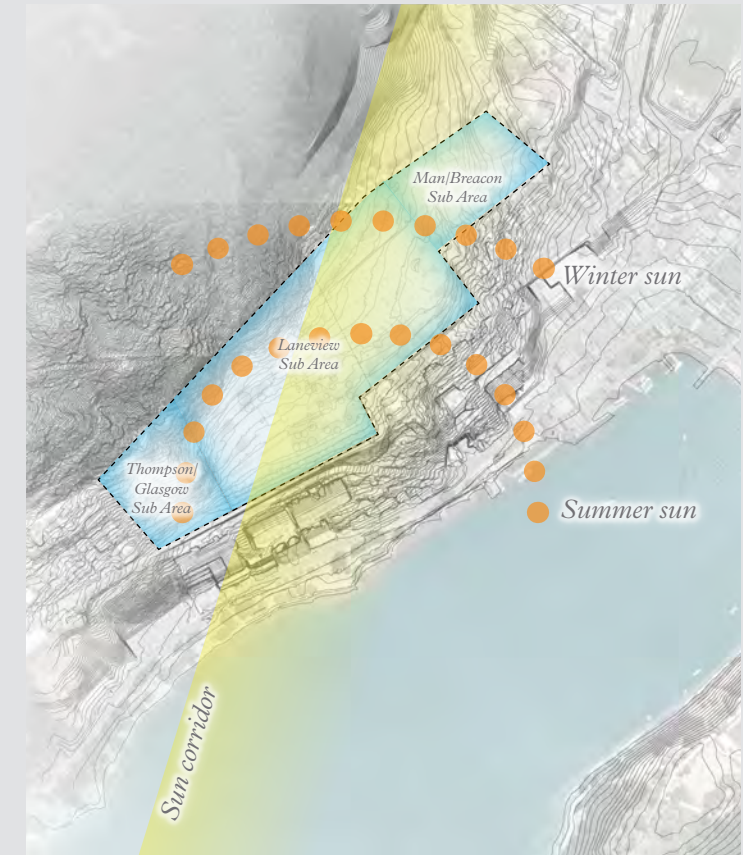
Indicative Views From Site

MAIN WIND DIRECTION ON SITE

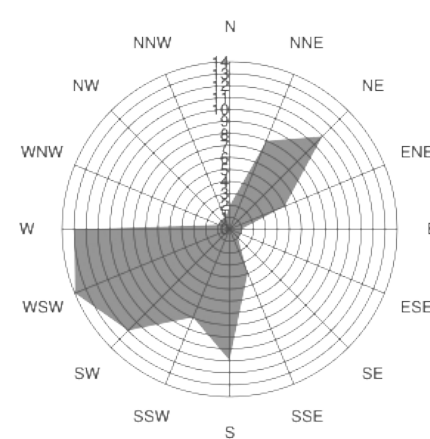
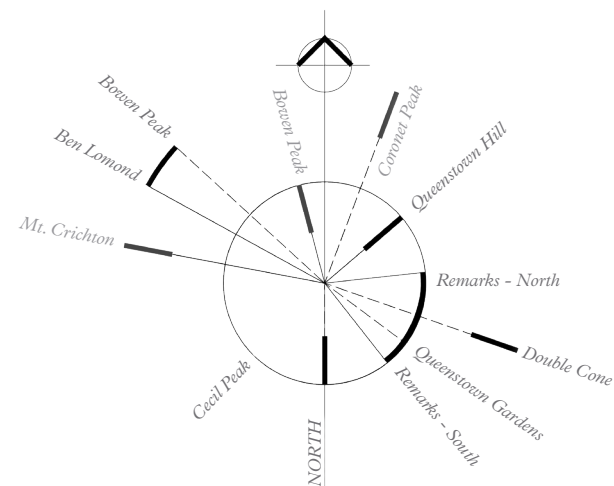


Yearly Wind Distribution Average (Regional Data)

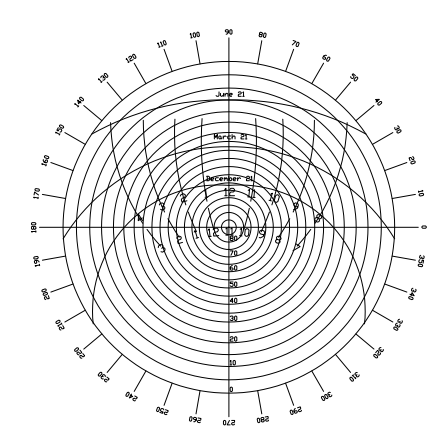
SUNLIGHT



Average Annual Sunshine Hours: 2180 (Regional Data)



Site Analysis



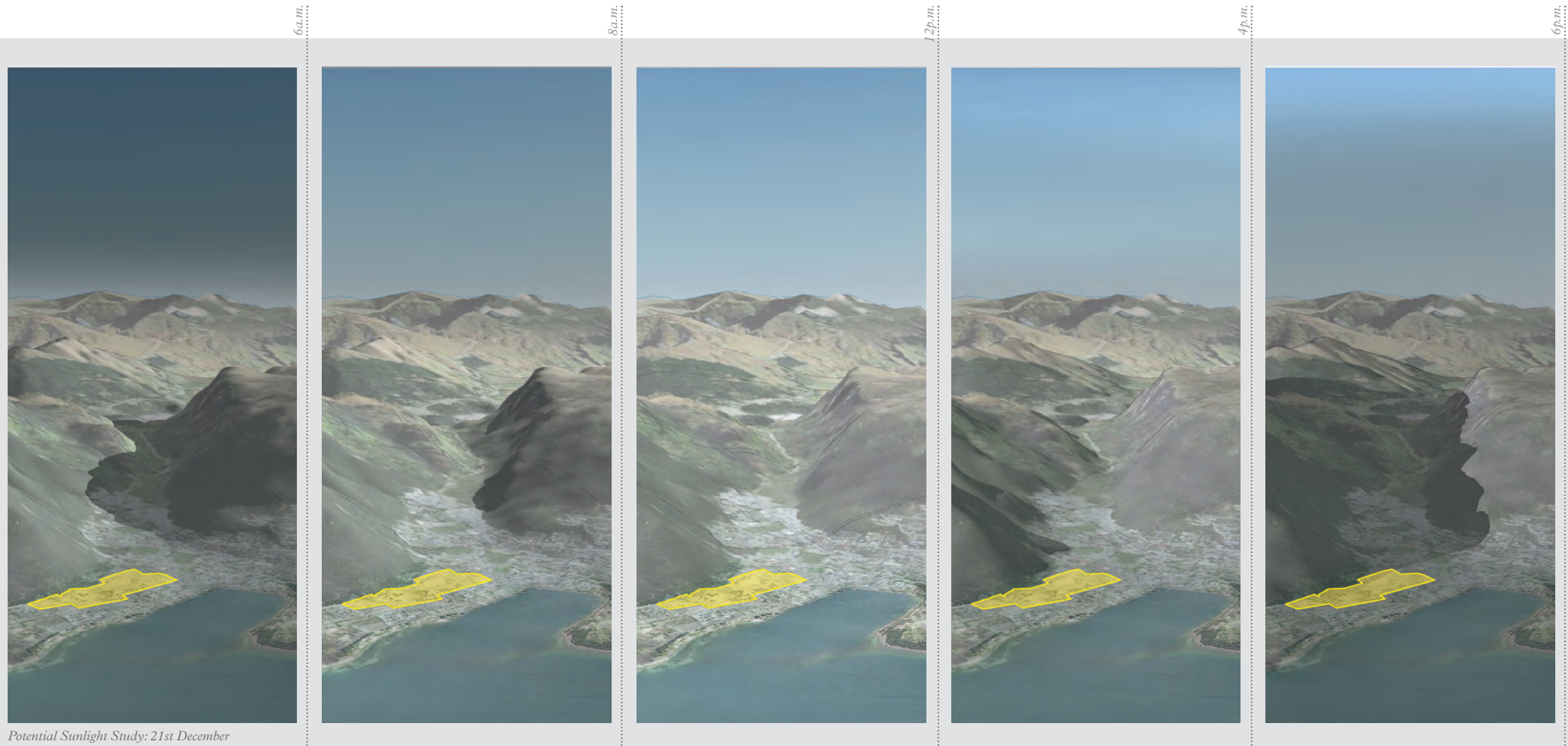
*Queenstown Lakeview Development
Urban Design Framework
August 2014*

POPULOUS

fearonhay

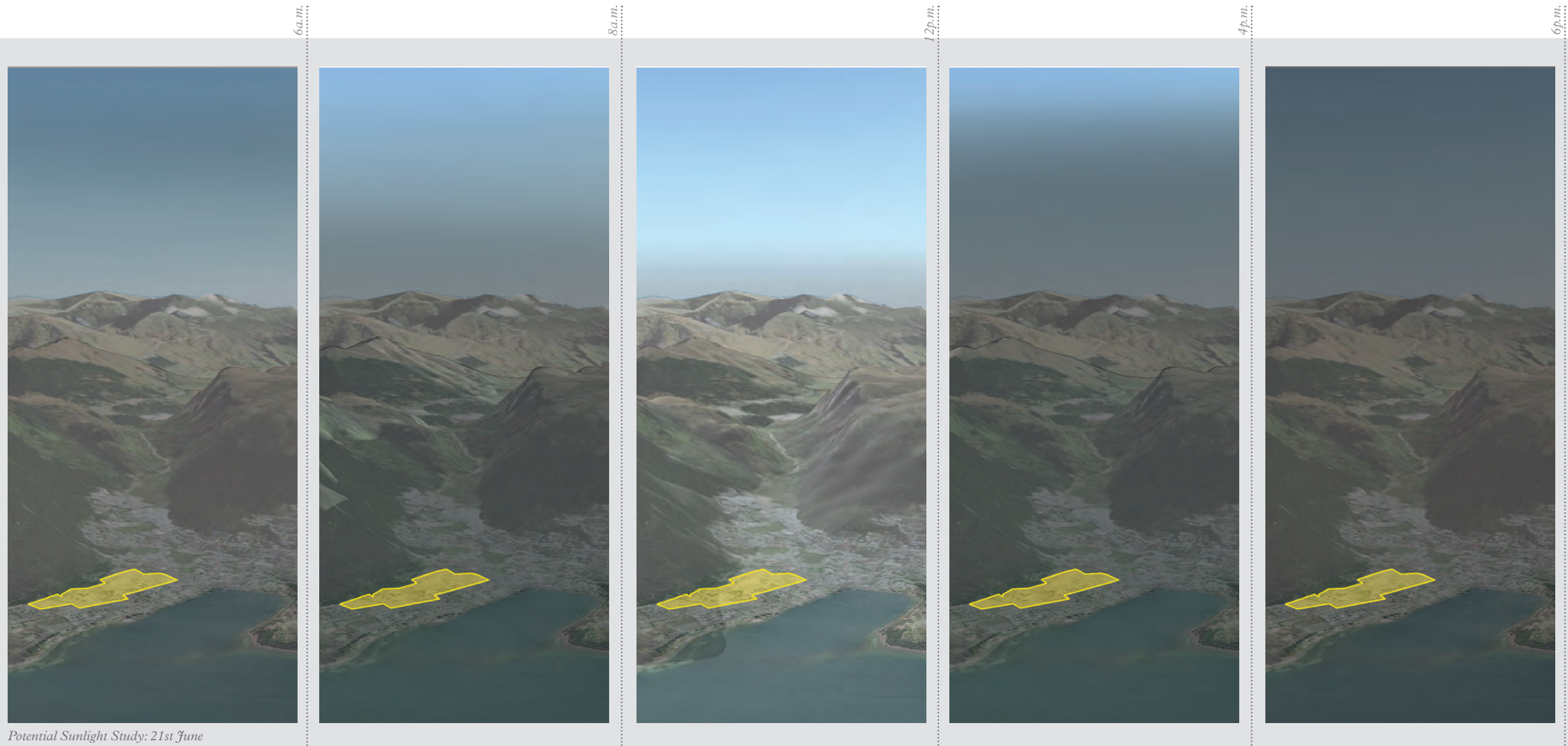
2.3 SITE ANALYSIS

SUNLIGHT STUDIES: SUMMER SOLSTICE



2.3 SITE ANALYSIS

SUNLIGHT STUDIES: WINTER SOLSTICE



3.0 URBAN DESIGN PRINCIPLES

- 3.1 Objectives
- 3.2 High Quality Public Spaces (Streets, Squares, Lanes & Parks)
- 3.3 Distinctive Built Form
- 3.4 Consolidated Growth and Interconnected Urban Structure

URBAN DESIGN PRINCIPLES

This section defines the Four Key Urban Design Principles for the Lakeview Urban Design Framework. The Design Principles are clearly aligned with the Urban Design Goals for the District outlined in the QLDC Urban Design Strategy (Nov. 2009).

The following Design Principles, and associated diagrams, convey a series of aspirations which are not design solutions or outcomes in and of themselves. These cover the high level thinking in the application of the urban design principles to the site and planning contexts. The following section, 4.0 Design Strategies, addresses the urban design applications which reinforce these principles.

3.1 OBJECTIVES

OBJECTIVES FOR THE TOWN CENTRE

QLDC Queenstown Town Centre Strategy (December 2009)

- Heritage and other elements that contribute to the unique identity of Queenstown will be identified and protected (Objective 1)
- The public realm within and connected to the town centre builds upon the elements that make Queenstown a special place (Objective 2)
- To strengthen Queenstown's town centre as a prosperous commercial centre (Objective 3)
- Diverse range of economic, social and cultural activities to promote a vibrant environment (Objective 4)
- The town centre retains key civic and community functions that underpin its relevance to the local community (Objective 5)
- Recognized as a mixed use environment where a diverse range of activities coexist (Objective 6)
- Create an urban environment that is safe and an attractive asset (Objective 7)
- Is easily accessible (Objective 8)
- Design of streets and management of traffic is prioritized towards pedestrians, creating more permeable and versatile spaces that balance vehicle & pedestrian movement, improved amenity and social spaces (Objective 10)

Urban Design Goals for the District

QLDC Urban Design Strategy (November 2009)

- Distinctive Built Form
- High Quality Public Spaces
- Consolidated Growth
- Connected Urban Form
- Sustainable Urban Environments
- Cohesive Communities



Figure 2: Image Gallery. [Queenstownnz.co.nz](http://www.queenstownnz.co.nz) (January 2014)
http://www.queenstownnz.co.nz/media/media-image-gallery_md/index.cfm/?subaction=category&categoryid=29

3.2 HIGH QUALITY PUBLIC SPACES (STREETS, SQUARES, LANES & PARKS)

WITHIN THE LAKEVIEW SUBZONE AREA:

High quality public spaces that complement the quality and visual character appeal of the natural setting and foster economic vitality & community well being are desired.

- Ensure public space and infrastructure works are designed to create and/or contribute to consistently outstanding urban design outcomes.
- Control the quality of design of buildings fronting public spaces.
- Integrate street and land use activities, to generate and active building edges.
- Minimise excessive visual clutter and impediments to pedestrian amenity and movement.

Place-making within the site is encouraged in order to:

- Provide a variety of public spaces which encourage a sense of community.
- Establish gateways that generate a sense of arrival/departure when entering & leaving the site.
- Enhance connections to the scenic reserve behind, through careful interface design.
- Respond to the natural features of the site and its surroundings.
- Provide a connectivity and open green space.
- Create a visual legibility and highly permeable site.
- Extend and apply the characteristics of the street grid within Queenstown Town Centre across the site.



Figure 4: QLDC. Photograph of a high quality public realm amenity. *Queenstown Town Centre Character Guidelines*, October 2007 (Pg. 22)

3.2 HIGH QUALITY PUBLIC SPACES (STREETS, SQUARES, LANES & PARKS)

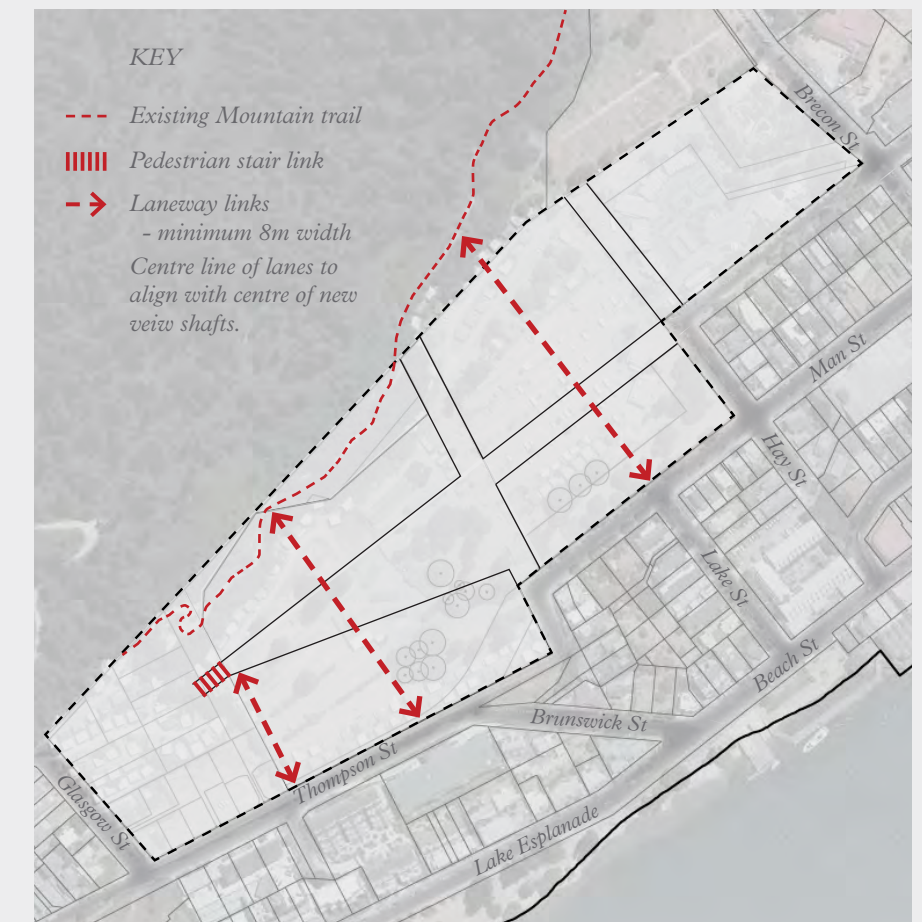
STREETS



THE SQUARE



LANES



3.2 HIGH QUALITY PUBLIC SPACES (STREETS, SQUARES, LANES & PARKS)

GREEN SPACES



VIEW SHAFTS



INDICATIVE SERVICE LANES



3.2 HIGH QUALITY PUBLIC SPACES (STREETS, SQUARES, LANES & PARKS)

PUBLIC SPACE EDGE CONDITIONS



KEY

- Active Frontage
- Active Building Corner



3.3 DISTINCTIVE BUILT FORM

WITHIN THE LAKEVIEW SUBZONE AREA:

- Ensure that new development respects and complements the natural setting. Consider the distinctive mountain backdrop, orientation to the lake front, key views to and from existing public spaces, existing heritage trees, and valued alpine vegetation systems.
- Ensure all development is sympathetic to its urban context and broader landscape. Consider scale, form, fit with existing character, values and future diversity of Queenstown.
- Avoid visually dominant built form.
- Develop creative, distinctive and vibrant urban neighborhoods.
- Ensure new buildings define positive public spaces within the Lakeview subzones and provide positive integration with their neighbouring surroundings and context.
- Support retail where it can be integrated into street based, pedestrian-scaled and pedestrian-friendly urban environments.
- Ensure that those parts of buildings that people experience at close range or low speed are a human scale.
- Accommodation diversity including permanent housing, long-stay and short-stay visitor accommodation.
- Commercial activity to support the creation of a lively community focal point and to support the role of the Market Square as a recreational hub.



Figure 3: QLDC. Photograph of Ballarat St., Queenstown Town Centre Character Guidelines, October 2007 (Pg. 23)

3.4 CONSOLIDATED GROWTH & INTERCONNECTED URBAN STRUCTURE

Within urban boundaries, walkable and mixed-use neighbourhoods help reduce travel time and urban sprawl.

CONSOLIDATED GROWTH

Within the Lakeview Subzone area:

- Consolidate growth within the agreed natural boundaries of the existing settlement.
- Deliver high quality streetscape amenity and provide communal open spaces in the form of small pocket parks and reserves in higher density areas.

INTERCONNECTED URBAN STRUCTURE

Within the Lakeview Subzone area:

- Ensure people have clear transport mode options that are convenient, **efficient and affordable**.
- Ensure that all new streets, squares, lanes, parks and buildings are designed with universal accessibility as a key factor.
- Provide high quality pedestrian amenity around community facilities.
- Minimise the quality of directional and parking signs.
- Ensure that an appropriate quantum of on-site parking is provided.
- Reduce travel distances through small development blocks surrounded by well-connected street networks.
- Provide safe, attractive, and practical routes for walking and cycling. Ensure these are well-linked to existing or proposed passenger transport, local facilities and amenities within the zone, as well as connected to other areas beyond the zone, particularly the Queenstown Town Centre.



Figure 5: Image gallery [Queenstownnz.co.nz](http://www.queenstownnz.co.nz/media/media-image-gallery_md/index.cfm?subaction=category&categoryid=29) January 2014.
(http://www.queenstownnz.co.nz/media/media-image-gallery_md/index.cfm?subaction=category&categoryid=29)

4.0 DEVELOPMENT FRAMEWORK

- 4.1 Structure Plan
- 4.2 Height Limit Plan
- 4.3 Shading Diagrams

4.1 STRUCTURE PLAN

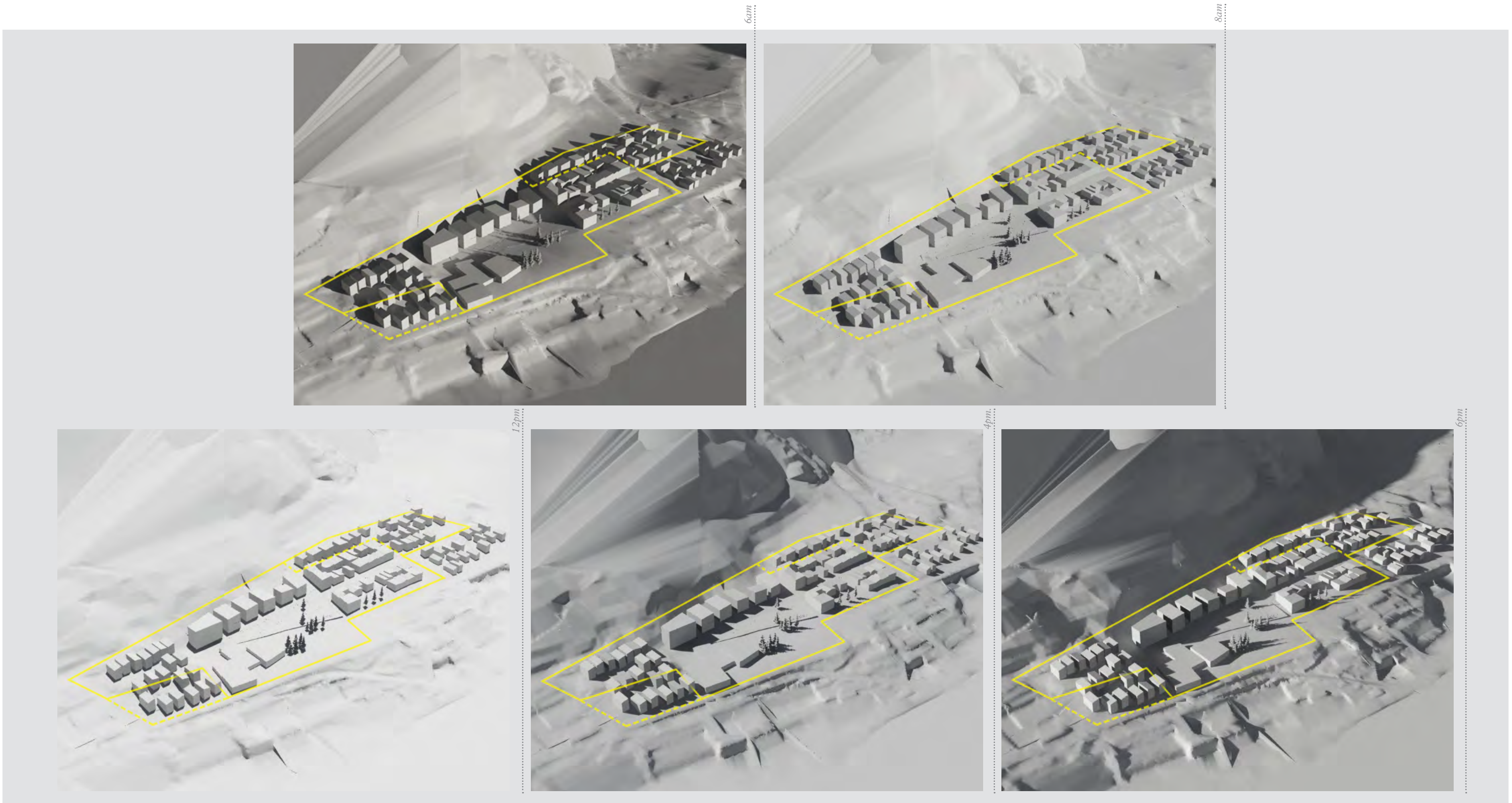


4.2 HEIGHT LIMIT PLAN



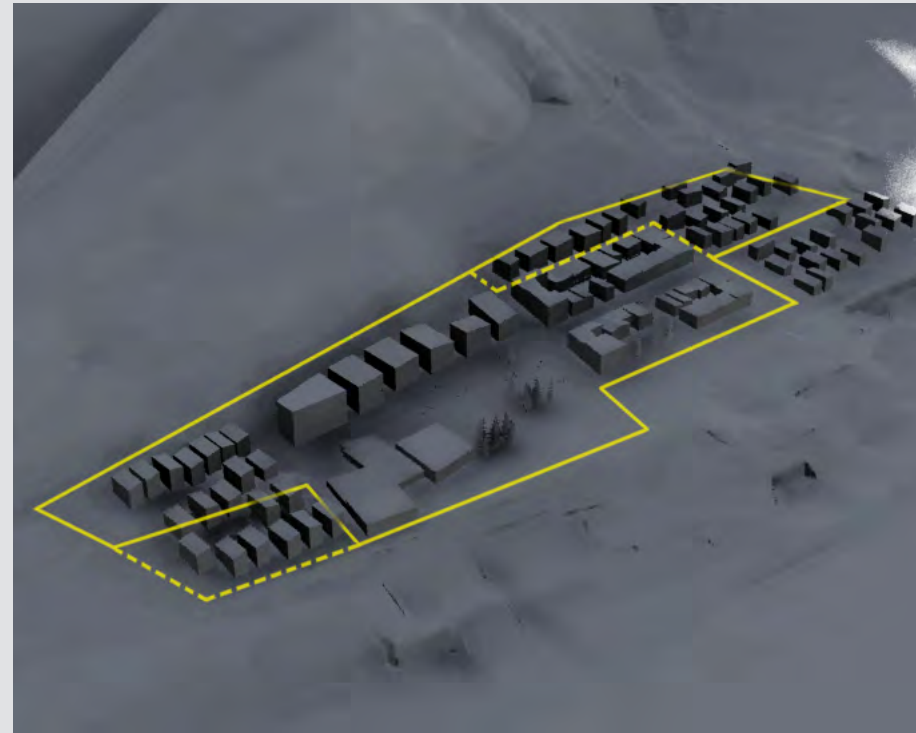
4.3 SHADING DIAGRAMS

SUNLIGHT STUDIES: SUMMER SOLSTICE

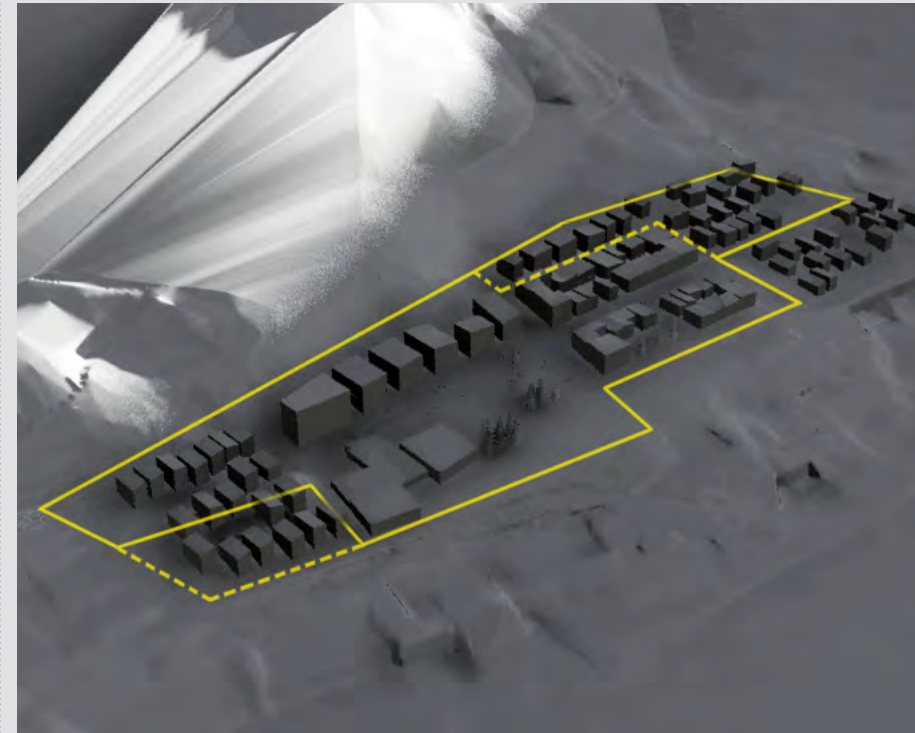


4.3 SHADING DIAGRAMS

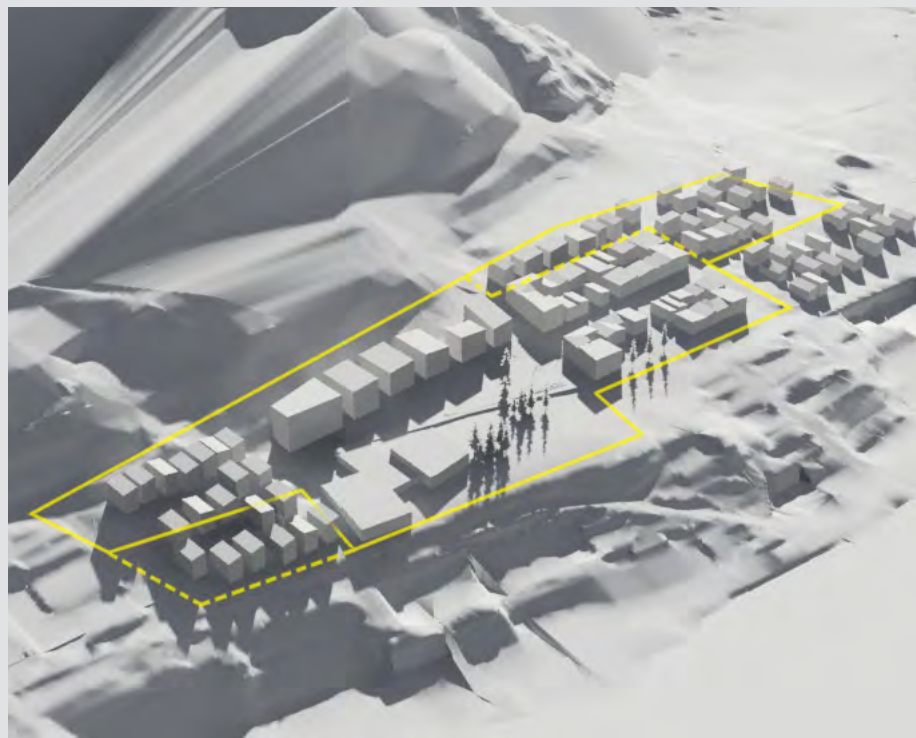
SUNLIGHT STUDIES: WINTER SOLSTICE



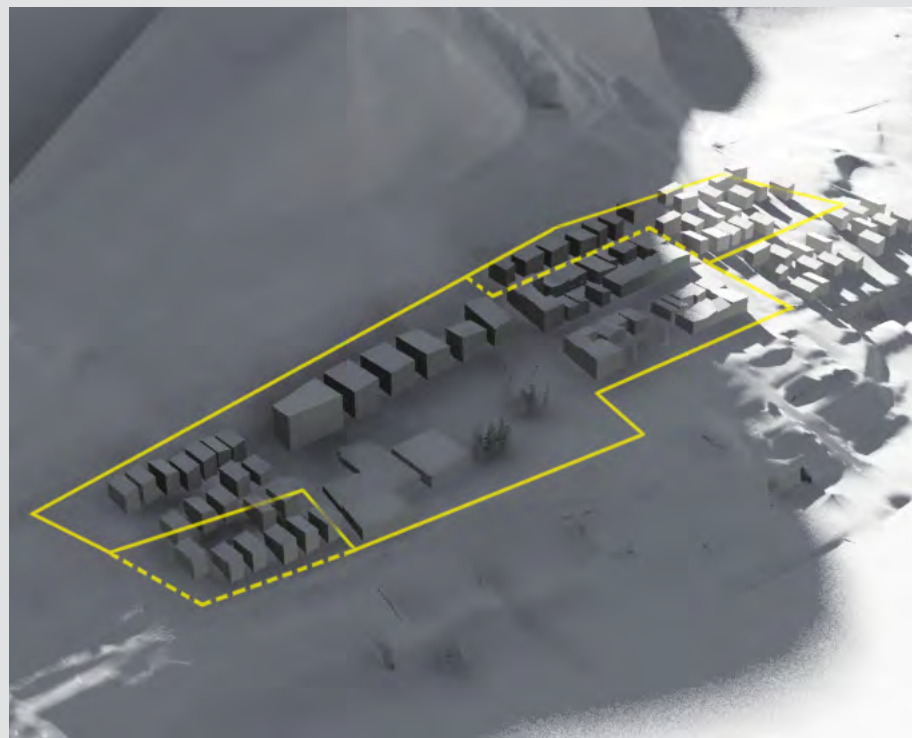
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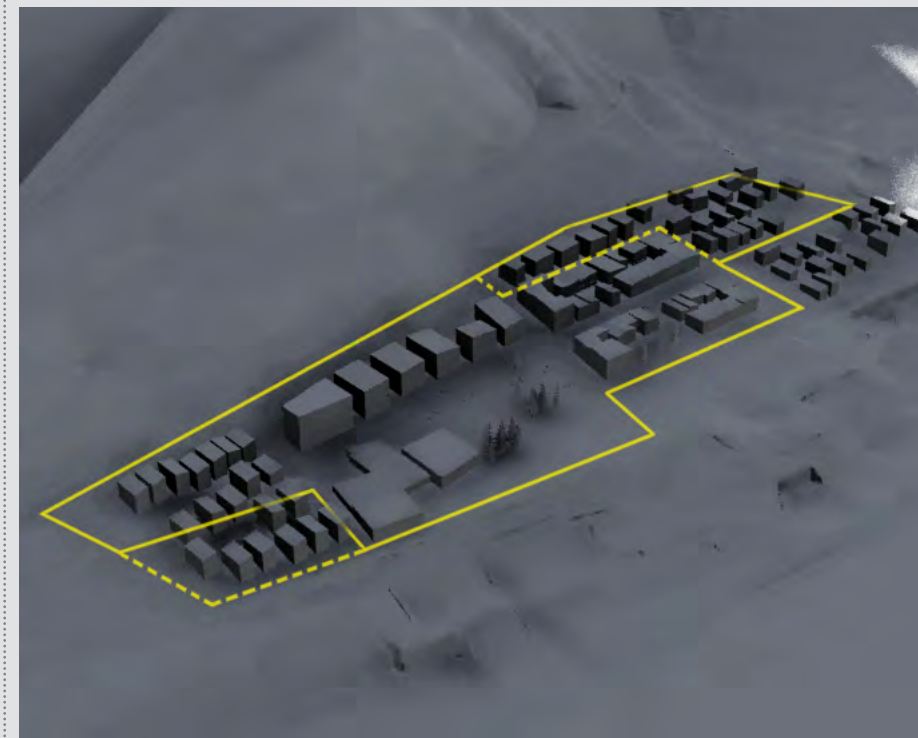
8am



12pm



4pm



6pm

AEE

APPENDIX C

Stephen Chiles Ltd : Noise Assessment

Chiles Ltd

Private Bag 55037, Christchurch 8154

21 August 2014

Ref: 140103

Mitchell Partnerships
PO Box 489
Dunedin

Attention: Louise Taylor

Dear Louise

Subject: Lakeview plan change - noise assessment

Introduction

Chiles Ltd has been engaged by the Queenstown Lakes District Council (QLDC), to make an assessment of noise issues associated with the proposed Lakeview plan change, including consideration of appropriate noise rules. The plan change seeks to rezone an area adjoining the existing Queenstown town centre from high density residential zone to town centre zone, thus expanding the town centre. This assessment has been made on a desk top basis from review of the:

- Lakeview urban design framework dated August 2014,
- Lakeview plan change draft fact sheet dated 14 July 2014,
- Lakeview draft structure plan dated August 2014,
- A draft plan change district plan map dated August 2014,
- Operative Queenstown Lakes District Plan (District Plan), and
- Lakeview integrated transportation assessment (and addenda) dated August 2014.

This assessment also draws on the authors' experience over 10 years making and reviewing noise assessments for various activities in and around the Queenstown town centre, and also assisting the QLDC with noise enforcement action, plan change 27A, proposed plan change 42 and the district plan review. Of relevance, the author was also involved in drafting the general environmental noise standards NZS 6801:2008 and NZS 6802:2008, and is currently an advisor to the Ministry of Business Innovation and Employment with respect to potential changes to Clause G6 of the Building Code.

Key issues

The plan change is described in detail in the documents reviewed, and of particular relevance it seeks to enable a range of commercial, community and residential activities. These are intended to include an international convention centre and visitor accommodation. In terms of noise the following key issues need to be considered:

- Rules to enable the range of activities desired in the plan change area,
- Effects from noise emissions from activities enabled in the plan change area to the surrounding residential high density zone,

- Noise effects in the residential high density zone from consequential activities resulting from the plan change (e.g. pedestrian and vehicular traffic on public roads),
- Effects from noise emissions from activities enabled in the plan change area on other activities in the new zone (e.g. effects of noise from commercial activities on residential and visitor accommodation).

District Plan

Rule 10.6.5.2.ii in the District Plan sets noise limits for activities in the town centre zone. The limits for most activities are 60 dB $L_{Aeq(15 \text{ min})}$ during the daytime (0800-2200h) and 50 dB $L_{Aeq(15 \text{ min})}$ at night. The $L_{Aeq(15 \text{ min})}$ is essentially an average noise level, and while there are also other parameters used in the District Plan, for simplicity all noise levels quoted in this letter will be in terms of the $L_{Aeq(15 \text{ min})}$ unless stated otherwise. The limits apply at any point within any other site.

The rule also specifies in part (c) that noise received in another zone must meet the limits of that other zone. The town centre zone is generally surrounded by a high density residential zone. This means that noise from activities in the town centre received in the high density residential zone has to comply with noise limits in rules 7.5.5.3.xii and 7.5.6.3.vii, which are 50 dB in the daytime (0800-2000h) and 40 dB at night.

The District Plan contains specific provisions for noise from construction, wind farms and airports, which are common in all zones. These provisions are considered appropriate where those specific activities occur in the plan change area.

Activities enabled

Becoming part of the town centre zone the plan change area would be subject to the existing District Plan provisions outlined above. However, the plan change would define a Lakeview sub-zone and an Isle Street sub-zone to allow for specific new rules to apply to the plan change area where necessary.

Daytime

The existing town centre daytime noise limit of 60 dB allows for a wide range of commercial activities. As set out in a report for the QLDC (URS, 42168107/R002 dated 29 April 2009), it is typical of noise limits in other commercial zones and town centres in New Zealand. Indoor activities and building services equipment can readily comply with a 60 dB limit using standard noise control measures. Activities such as those associated with loading docks might need to be screened to comply with the noise limit if close to a neighbouring property. For outdoor activity, or indoor activity with windows/doors open, a limit of 60 dB allows for quiet groups of people, such as sitting in the outdoor area of a café, but does not allow for music other than potentially at low background levels.

In summary, the existing town centre daytime noise limit of 60 dB would be appropriate to allow the range of activities envisaged in the plan change area.

In the surrounding high density residential zone a 50 dB daytime limit would apply to noise from the plan change area. For indoor activities this limit could be achieved through design of buildings using standard techniques. However, outdoor activities near the boundaries of the plan change area would

generally need to be screened from the adjacent high density residential zone. In some places, such as beside parts of Thompson Street, the terrain itself may provide sufficient screening, but in other areas the outdoor activity would need to be the other side of a building, or screened by a solid fence/wall. In the Urban design framework and draft structure plan, the active frontages in the plan change area are shown to be all internal. Therefore, it should be practical to provide screening of the main areas of outdoor activity, from the high density residential zone.

Night-time

The night-time noise limit of 50 dB within the town centre, applying after 2200h, is stringent for a town centre or commercial area. While indoor activity can comply with this limit with appropriate building design, most outside activities cannot comply with this limit without significant screening. For example, it is often not practical to operate an area outside a bar, as required for smokers, while complying with this limit. The effect of this rule is that bars and restaurants cannot use outdoor areas after 2200h and have to keep all doors and windows closed after this time. In the existing town centre, most bars and their patrons wish to maintain use of the outdoor areas after 2200h, particularly on summer evenings, and this noise limit has been a significant constraint.

In the adjacent high density residential zone a noise limit of 40 dB applies to noise from the town centre zone after 2000h (as opposed to 2200h within the town centre zone). This is a stringent limit that cannot be achieved for most outdoor activity near the boundary of the plan change area, even with moderate screening. Indoor activity in the plan change area can generally be designed to comply with a 40 dB noise limit, but non-standard constructions may be required for noisier internal activities located near the boundary with the high density residential zone. With appropriate building layout standard constructions should be possible.

Bars operating into the evening with outdoor areas are envisaged as a potential activity in the plan change area that will contribute to vibrancy. As set out above, the existing town centre noise limits do not adequately allow for this activity and therefore specific rules are recommended for the Lakeview and Isle Street sub-zones. In the existing town centre, proposed plan change 42 and now the District Plan review have explored options for allowing night-life. However, this would compromise residential and visitor accommodation. As residential and visitor accommodation are integral to the plan change area, a blanket allowance for night-life is not considered appropriate.

It is understood that it is not desired to limit night-life to a specific part of the plan change area, and therefore it is recommended that any proposal for a bar/restaurant operating after 2200h should be assessed on a case-by-case basis, rather being a permitted activity. While this can occur under the existing town centre zone rules each bar would be assessed as a non-complying activity.

There is an existing controlled activity rule (10.6.3.2.iii) for premises licensed for the sale of liquor in the town centre operating after 2300h, but it remains subject to the noise limits. It is recommended that for the Lakeview and Isle Street sub-zones a new rule should be introduced making bars/restaurants (or 'premises licensed for the sale of liquor') operating after 2200h a discretionary activity if they do not comply with the night-time noise limits. In terms of noise, discretion should include whether the noise effects are appropriately mitigated for nearby residential and visitor accommodation, and in the high density residential zone. Other activities not complying with the

noise limits should remain non-complying. The exception suggested here just for bars/restaurants is due to the need for them to contribute to vibrancy, but the impracticality of compliance with the night-time noise limits.

Surrounding zones

As set out above, under the existing rules, all activity in the town centre zone, and by default in the plan change area after re-zoning, has to comply with 50 dB daytime and 40 dB night-time noise limits when received in the high density residential zone. These limits are typical for residential zones, although at the lower end of the range, with some districts specifying 55 dB during the day and 45 dB at night, which are also the values recommended in NZS 6802. It is considered that the existing 50 dB and 40 dB limits provide for a good level of residential amenity and will provide protection from sleep disturbance.

The proposal could change the nature and likelihood of noise emissions from the plan change area to the adjacent high density residential zone. However, the noise limits would control noise to exactly the same levels that are currently permitted under the District Plan. Given that the noise limits are set at appropriate levels to protect health and amenity, the effect of noise from the plan change area subject to these noise limits, is considered to be acceptable in the high density residential zone.

In summary, it is recommended that the plan change area should remain subject to existing rule 10.6.5.2.ii(c), which results in noise limits in the high density residential zone from activity in the town centre zone of 50 dB during the day and 40 dB at night.

The plan change will also give rise to pedestrian and vehicular traffic on public streets, which is not subject to any District Plan or other noise limits. Noise from daytime pedestrian and vehicle movements is not expected to cause adverse effects as it would be consistent with normal usage of roads in the high density residential zone. However, as the plan change area develops there is the potential for evening and night-time pedestrian traffic that could cause disturbance, through noise from people's exuberant behaviour, as is common in the existing town centre.

From the Integrated transportation assessment it is understood the majority of pedestrian traffic will use links to the existing town centre through Hay Street and Brecon Street, passing mainly through the plan change area itself. However, the main node of activity/gateway to the plan change area is at the corner of Man Street and Thompson Street, which is expected to result in some pedestrian traffic immediately adjacent to the high density residential zone on Man Street between Thompson Street and Lake Street, and by the pedestrian link between Thompson Street and Brunswick Street.

There is currently residential and visitor accommodation adjacent to the potential pedestrian routes from the Man Street/Thompson Street node. The extent of any disturbance in these buildings will depend on the building layouts and constructions. Assuming standard constructions and bedrooms with windows not screened from the streets, it is anticipated there could be disturbance for residents and visitors, if there is moderate pedestrian traffic at night. This could cause an adverse effect of sleep disturbance and annoyance for those people. The main node at the corner of Man Street and Thompson Street is fundamental to the urban design framework, and it is therefore considered that there are no practical measures to avoid this effect. If the effect does eventuate, it could be mitigated by affected property owners in the high density residential zone treating their own buildings, such as

through the installation of enhanced glazing and ventilation systems (so that windows can be kept closed).

Sensitive activities

Residential and visitor accommodation are important activities in the plan change area. With external noise limits of 60 dB during the day (up to 2200h) and 50 dB at night, sound levels in bedrooms (and other habitable spaces) could exceed World Health Organisation recommendations and result in annoyance and sleep disturbance. Furthermore, there may be road-traffic or general activity on the streets, which can also cause disturbance. As set out previously, the external noise limits are required to facilitate the range of activities desired in the plan change area. Therefore, the only practical option is for residential and visitor accommodation to be designed to appropriately reduce external noise to result in acceptable internal conditions.

Sound insulation rules were proposed for the town centre zone in plan change 1, but this was withdrawn in 2004 based on the expectation that the Building Code would be revised to address this issue. However, a revision to the Building Code has still not happened.

On the basis of the analysis in a report for the QLDC (URS, 42168467/R001B dated 23 July 2011) the following requirements are recommended as a site standard in the Lakeview and Isle Street sub-zones:

A mechanical ventilation system shall be installed for all critical listening environments in accordance with Table 1 in Appendix 13.

All elements of the façade of any critical listening environment shall have an airborne sound insulation of at least 40 dB R_w+C_{tr} determined in accordance with ISO 10140 and ISO 717-1.

The requirement for a ventilation system is so that windows can be kept closed and maintain their sound insulation. The requirement for sound insulation of 40 dB R_w+C_{tr} is stringent and will result in non-standard glazing. In most instances secondary glazing will be required with a second window in the order of 100mm inside the main window, potentially doubling the cost of the glazing (one of the two windows may also need to be double-glazed for thermal reasons resulting in a total of three panes of glass). This high performance sound insulation is required because of the nature of external sound in the town centre.

Conclusions

Potential noise issues associated with the Lakeview plan change have been assessed.

The existing District Plan noise rules for the town centre zone are appropriate to enable most activities envisaged in the plan change area, subject to reasonable design and standard noise control measures. However, the existing town centre noise rules do not allow for bars and restaurants to operate after 2200h with outdoor areas, which as a minimum are required for smokers but are also desired for vibrancy. It is recommended that provision be made for bars operating after 2200h to be assessed on a case-by-case basis via the resource consent process.

The plan change area will border the high density residential zone on several sides. The existing noise rules for the town centre zone apply stringent limits on emissions to the high density residential zone.

With these limits, noise effects in the high density residential zone arising from the plan change area are considered acceptable.

There is the possibility of some disturbance in the high density residential zone from night-time pedestrian traffic generated from the plan change area, emanating from the gateway area at the corner of Man and Thompson Streets.

Residential and visitor accommodation in the plan change area should be subject to sound insulation (and ventilation) requirements to provide protection from sleep disturbance and for amenity.

Yours sincerely

Chiles Ltd

A handwritten signature in black ink, appearing to read 'Stephen Chiles', is written over a light blue horizontal line.

Dr Stephen Chiles

stephen@chiles.co.nz

03 318 8854