

APPENDIX I

Traffic Design Group: Transport Assessment
and two Addenda



**Queenstown-Lakes District
Council**

Lakeview Plan Change

**Integrated Transportation
Assessment Report**

12 August 2014

Queenstown-Lakes District Council

Lakeview Plan Change

Integrated Transportation Assessment Report

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Appendix A

Traffic Modelling Data

Two-Hour Traffic Flows

1. Introduction

TDG has been appointed by Queenstown Lakes District Council (QLDC) to prepare an Integrated Transportation Assessment of a proposed Plan Change at the Lakeview site situated above the Queenstown Central Business District adjoining Man Street and Thompson Streets.

The subject land is located to the north of Thompson Street, Man Street and Isle Street, and is bounded by Glasgow Street to the west, Brecon Street to the east, and a recreation reserve to the north. The site has an area of approximately 10.7ha, and is currently zoned as High-Density Residential. Current activity within the subject land includes the Council's Lakeview camping ground and a number of short-stay cabins, and small areas of recreational reserve.

The Lakeview Plan Change seeks to rezone the subject land to facilitate a range of alternative uses including a hot pools commercial-recreation facility, permanent residential and visitor accommodation, retail and commercial uses, together with the retention of the existing Lakeview camping ground. Consideration has also been given to the inclusion of a convention centre.

The intended zoning for these activities will be a commercial mixed-use zone, a Lakeview Sub-Zone, within the Queenstown Town Centre Zone.

It is proposed that the development at Lakeview would be such that it would meet future growth demands in this area and be developed in such a way as to build on the proximity of the site to the Queenstown Town Centre. The proposed Plan Change, necessary in respect of the District Plan, would enable the development to integrate with, and build upon, the existing network of multi-modal transport connections in central Queenstown. This assessment identifies the transportation considerations relevant to the Lakeview Plan Change and should be read in conjunction with the other documents which have been prepared for the proposed Plan Change.

This change in land use is in the first stage. This assessment will therefore identify areas where mitigation may be needed, whether it can practicably be provided, and the steps necessary to ensure the effects of the plan change development can avoided, remedied or mitigated.

At this stage of the planning process the precise detail of the development is yet to be determined. Any initial assumptions made in this report are done so as a means of assessing the site's potential and are not intended to limit or define the type and volume of activities which occur on-site.

The traffic and transportation planning issues associated with this proposal focus largely on:

- The ability of the site to accommodate appropriate access facilities on to 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 the development; and
- The ability to effectively integrate traffic into both the internal and external road networks.

By way of summary, this assessment has found that the proposed development offers good connectivity with the wider network and appropriate facilities to promote a high level of walking, cycling and public transport access. 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 ultimate development activity that will be facilitated by the Plan Change, additions are necessary to both the roading network pattern (primarily the Isle Street Extension) and the walking network (via improvements to the Hay Street and Thompson / Brunswick steps). There are otherwise no identifiable transport related issues that would prevent the proposed plan change being adopted.

2. Existing Site Assessment

2.1 Location

The site, shown in Figure 1 and Figure 2, is located on the western edge of the Queenstown town centre and is currently zoned as *High Density Residential Sub-Zone A* in the QLDC District Plan.

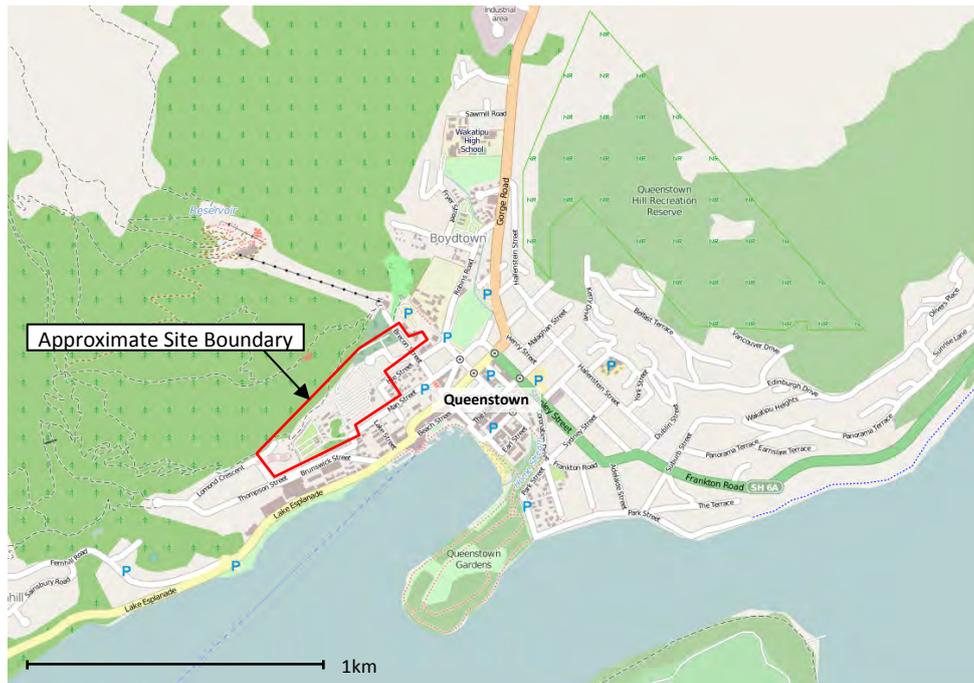


Figure 1: Proposed Lakeview Plan Change Location



Figure 2: Local Road Network

As can be seen the site is well located with respect to transport connectivity to the Queenstown Central Area. As will be discussed in greater detail later in this report, the topography of the landscape between the Lakeview site and the Central Area creates some challenges for transport movements from the Lake Esplanade / Shotover Street route along the edge of Lake Wakatipu and the Man Street / Thompson Street route forming one of the primary transport axes for movement to and from the subject land.

2.2 Road Network

2.2.1 Roading Hierarchy

Figure 3 shows the hierarchy of roads surrounding the subject land based on the classifications included in the District Plan. The key through-traffic routes through the Central Area include:

- the two section of State Highway 6A (SH6A) comprising Stanley Street and Shotover Street;
- Beach Street and Lake Esplanade towards the west from the end of the SH6A Stanley Street route ,
- Gorge Road to the north; and
- The short section of Memorial Street between the western end of Stanley Street connecting to the Man Street / Camp Street roundabout.

Both Thompson Street and Brunswick Street near the site (but not Man Street) are defined as collector routes, as are the Camp Street / Robins Road and Hallenstein Street routes, together with Ballarat and Beetham Streets between Stanley Street and Hallenstein Street.

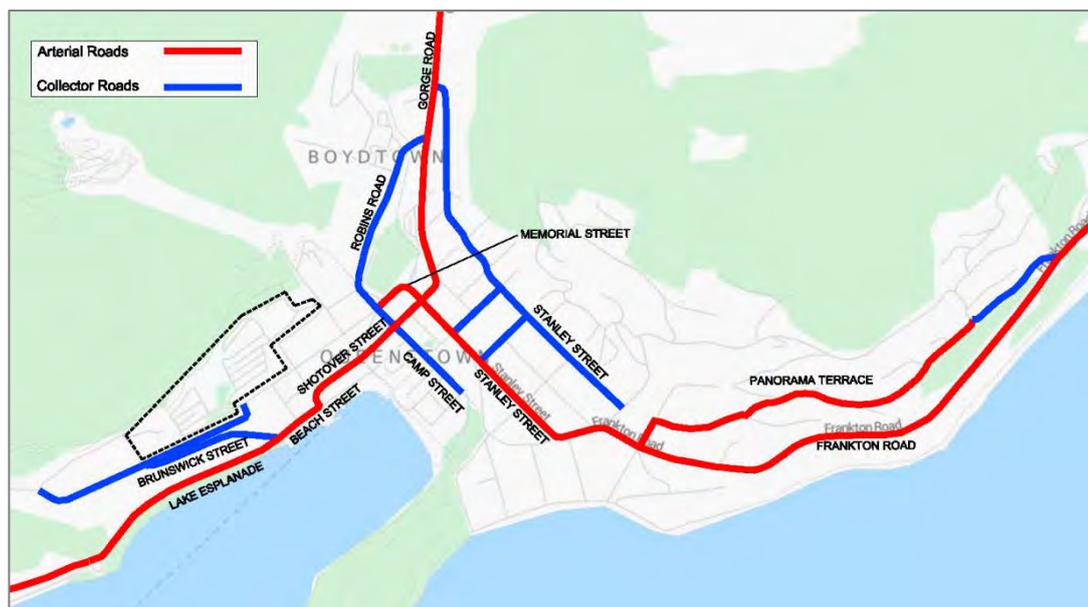


Figure 3: District Plan Road Hierarchy

Notably with respect to the Lakeview site, Man Street carries no classification in terms of either arterial or collector status, indicating that the Man Street route is expected to operate as a local access route providing for higher levels of property access and comparatively lesser levels of through movement.

2.2.2 Route and Carriageway Descriptions

The following photographs show typical sections and notable features of the roads surrounding the site. The intersection of Glasgow Street, Thompson Street and Brunswick Street is shown in Photograph 1 and Photograph 2.



Photograph 1: Glasgow St viewed from Thompson St



Photograph 2: Thompson St (centre) and Brunswick St (right) looking north-east



Photograph 3: Thompson St looking NE towards Man St



Photograph 4: curve at eastern end of Thompson St

The intersection of Thompson and Man Streets is currently a give-way controlled T-intersection, with priority on the route between Man Street and the western access into the Lakeview site, as shown in Photograph 6.



Photograph 5: Intersection of Man St and Thompson St, viewed from Thompson St



Photograph 6: Intersection of Man St and Thompson St, viewed from Man St (site access at right)



Photograph 7: Hay St viewed from Man St, looking north



Photograph 8: Intersection of Hay St and Isle St, viewed from Isle St (site access at right)



Photograph 9: Eastern end of Isle St



Photograph 10: Brecon St North, with intersection of Isle St and Cemetery Rd at left

Photograph 9 shows that the current Isle Street carriageway on its eastern approach to Brecon Street is somewhat narrow, with the carriageway width restricted to only 4.5m – effectively a single lane – as it curves around the northern side of the large Wellingtonia tree. Cemetery Road intersects with Brecon Street immediately north of Isle Street. The intersection of these three roads is shown in Photograph 10.

2.2.3 Traffic Volumes

Annual average daily traffic (AADT) volumes have been sourced from the national roading asset database (RAMM) for key roads around the site and in the CBD. Peak hour volume data for some roads is also shown, taken from a recent traffic count survey by Abley¹. This data is summarised in Table 1.

Road Name	AADT	AM Peak Hour Volume	PM Peak Hour Volume
Glasgow Street	780	-	-
Thompson Street	920	-	-
Brunswick Street	750	-	-
Man Street	3,600	351	453
Lake Street	910	-	-
Hay Street	470	-	-
Isle Street (west)	1,430	-	-
Isle Street (east)	1,710	-	-
Brecon Street	1,480	-	-
Shotover Street	14,820	713	911
Stanley Street	14,820	1,324	1,152
Robins Road	3,210	430	455

Table 1: Current daily and peak hour volumes

The combination of both actual counts and estimates included in the RAMM database (and other sources) gives a good indication of the traffic volumes carried within the town centre network. As a general summary, the traffic volumes carried by the above routes near the Lakeview site are broadly indicative of the roading hierarchy classifications presented in Section 2.2.1.

It is noted that the Man Street route (classified as a local access street) is carrying notable daily volumes at a level above those carried by other higher-classified hierarchy route such as Thompson Street and Brunswick Street. The popularity of this route as a location for commuter parking, including the Man Street car park, is anticipated as being the primary driver for the elevated daily and peak period volumes. The future operation of this route in catering for the Lakeview Plan Change activities is discussed in greater detail in subsequent sections of this report.

2.3 Public Transport

Three local bus routes serve Queenstown directly, these being out-and-back loops to

- Arthur’s Point,
- Fernhill / Sunshine Bay, and

¹ Abley Transportation Consultants on behalf of Inner Links project (December 2013).

■ Frankton.

From Frankton the network extends to the airport and Remarkables Park, Kelvin Heights, and Arrowtown.

Buses run between Queenstown and Frankton between three and four times per hour throughout much of the day. Other routes run with varying frequencies, often with increased frequency at commuter times.

The Airport Connection service also operates between Queenstown and the airport, stopping at most major hotels within the Town Central. This service runs at a service frequency of one service every fifteen minutes or thereabouts. The current route passes along Lake Esplanade approximately 150m from the site (via the Brunswick Street / Thompson Street steps).

2.4 Walking and Cycling

Being on the edge of the Queenstown Town Centre, the Lakeview site is well-located for pedestrian and cycle access to many of the facilities within Queenstown.

2.4.1 Walking

Figure 4 shows the approximate walk times for areas around the site. These are based on a standard pedestrian walking speed of 1.2m/s from the approximate centre of the subject site.



Figure 4: Approximate walk times to / from the centre of the site

The above figure shows that the majority of the Town Centre lies within an easy ten minute walk from the Lakeview site, incorporating most of Queenstown’s public transport connections, many visitor accommodation and hotels, and the Town Centre’s shopping, restaurants / bars and commercial functions. A 20-minute walk from the site takes pedestrians to a much larger proportion of the Town Centre including up Fernhill Road as far as the Heritage Hotel site, along Gorge Road to the high school and Frankton Road as far as the Copthorne Lakeview Hotel at Suburb Street.

There are a variety of walking connections between the site and the CBD. In addition to the footpath network running along the road corridors, steps at the southern ends of both Hay Street and Brecon Street provided additional route choices for pedestrians between the site and the Town Centre.

The Brecon Street steps already provide a high-standard connection between the Town Centre and the gondola at the northern end of Brecon Street. This well-established route passes the eastern end of the site. These are show in the following Photograph.



Photograph 11: Brecon Street Steps



Photograph 12: Brecon Street (at Isle Street intersection looking to Town Centre)

A private pedestrian route also exists between Man Street and Shotover Street via the Man Street car park. The access into the Man Street car park (from the Man Street frontage) is shown in the following Photograph.



Photograph 13: Man Street Carpark Access (private)

The current arrangement of the Hay Street facility is shown in the following Photograph. As can be seen, there are no footpaths currently present within the Hay Street carriageway which effectively reduces the current level of connectivity to this route serving the Lakeview site. However, with the presence of the steps themselves the route is adopted by reasonable numbers of pedestrians including those commuters who park within Man Street and walk to workplaces or other destinations within the Town Centre. This route is potentially the most direct route for the Lakeview site connecting with the Town Centre.



Photograph 14: Hay Street (access to steps from Hay Street)



Photograph 15: Access to Hay Street Steps from Shotover Street end.

Lying to the west of and forming part of the southern boundary edge of the Lakeview site, Thompson Street provides access to an existing path leading pedestrians down from Thompson Street connecting with Brunswick Street. Where the path connects to Brunswick Street there is no footpath along the northern side of the road, requiring pedestrians to cross the Brunswick Street carriageway and use the footpath along the southern side of the road down to Lake Esplanade.



Photograph 16: Brunswick Street path (from Thompson Street end)



Photograph 17: Brunswick Street path (lower end)

Figure 5 shows the location of these various pedestrian connections that would be expected to be used to serve the future development within the Lakeview site.

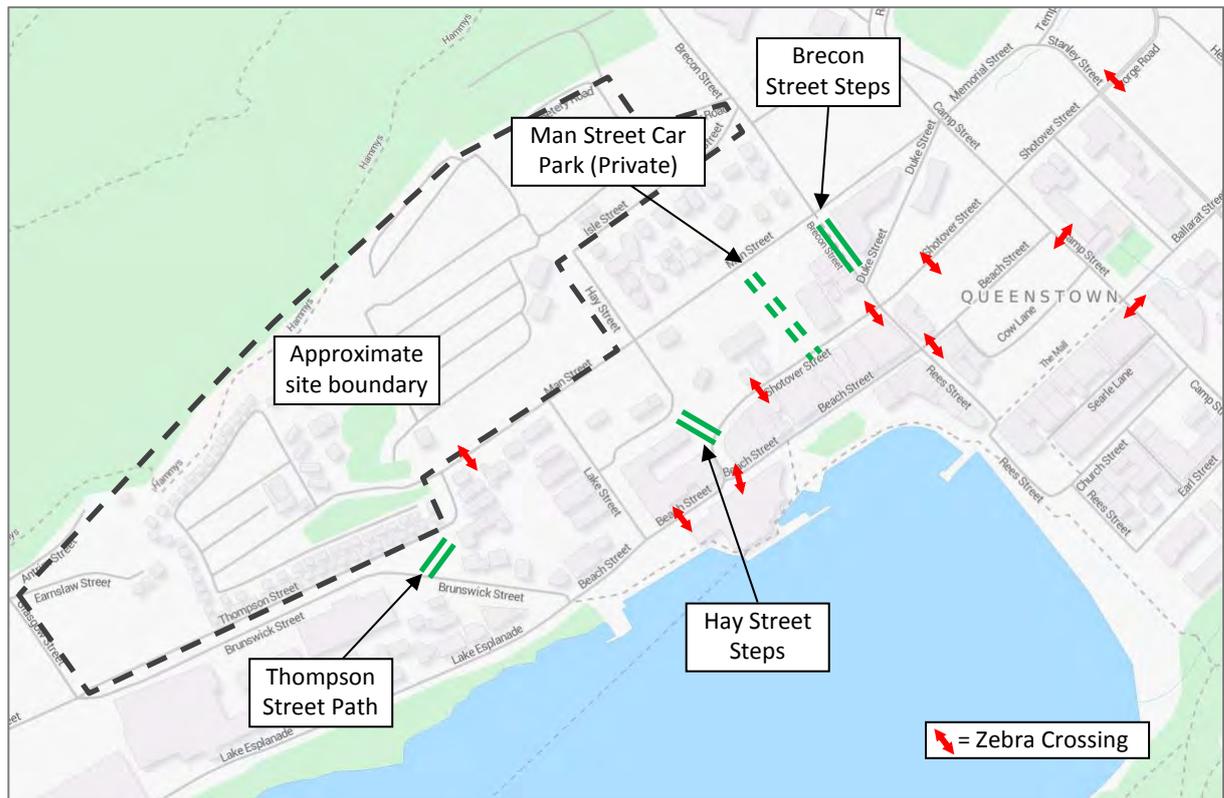


Figure 5: Pedestrian connections between Hay St / Man St and the CBD

Roadside footpaths are present on one or both sides of most roads around the site. It is noted however that the Hay Street route between Isle Street and Man Street, and Isle Street between Hay Street and Brecon Street, have no footpath on either side. Similarly there is no footpath on the northern side of Thompson Street from the Man Street / Thompson Street intersection through to Glasgow Street.

The primary routes between the site and the town centre are via Man Street and Hay Street. The route via Man Street and the Brecon Street steps is slightly longer, in terms of access from the majority of the site to the lakefront and town centre, however is currently a more desirable route. East of Hay Street, Man Street has a 1.7m to 2m wide footpath on both sides, and on its southern side between Hay Street and Thompson Street. The Brecon Street steps are well-lit and lead through a high-quality, open, landscaped area.

After crossing (there being no formal pedestrian crossing) over Man Street, the Brecon Street walking route continues via the eastern footpath of Brecon Street towards the gondola. This is a well-established route catered for by the existing Brecon Street footpath.

At the southern end of these connections, there are pedestrian crossings on Beach Street and Shotover Street which extend the connectivity into the Town Centre.

2.4.2 Cycling

The current District cycle network defined within the QLDC’s “On Foot, By Cycle Strategy” defines key cycle routes close to the Lakeview site as being along Gorge Road and Robins Road. There is no targeted promotion of cycling along Man Street, with no cycle-specific facilities in the vicinity of the site.

Figure 6 shows the typical cycle times to and from the centre of the site, based on a modest 15km/h. All of central Queenstown lies within a 10-minute cycle ride of the Lakeview area, and the majority of outer suburbs along the lake shore are within 15 to 20 minutes’ ride.



Figure 6: Approximate cycling times (15km/h)

Given the nature of the expected activities on the site it is assessed that cycling will have only a small modal share of the trips generated from the future Lakeview development facilitated by the Plan Change.

The Man Street corridor is expected to be the principal cycling route between the site and the wider network. Its current width makes the provision of cycle-specific infrastructure impractical, as kerbside parking reduces the traffic lane widths to around 3m in each direction. It is noted that the removal of parking along one side (i.e. Without the need for civil works) could allow the provision of wider lanes which would be more amenable to cyclists.

3. Proposed Sub-Zone and Transport Accessibility

3.1 Sub-Zone Transport Objectives

The Lakeview sub-zone provides an extension to the Queenstown town centre not only physically but from a transport accessibility perspective.

Geographically, the Lakeview sub-zone will form the north-western boundary of the Queenstown Town Centre. The broad layout for the Lakeview sub-zone includes provision for public reserve areas and a “market square” which will together contribute to a high quality urban form supported also by a range of transport linkages catering for private and passenger transport modes as well as facilitating walking between the sub-zone and the main Town Centre to the south and east.

The development of activities and buildings within the sub-zone will be carefully managed through the District Plan to accommodate a convention centre integrated with a high quality mixed use-commercial environment.

The existing Lakeview Campground at the north-east end of the site will be retained. A block of land to the west of the subject land referred to as the Lynch Block is expected to provide for higher density residential development.

The objectives set for the Lakeview sub-zone anticipate a range of new business, tourist, community and high density residential activities, with the range of activities provided for including:

- commercial recreational activities, offices and small-medium scale retail activities;
- hot pools recreational complex;
- high quality visitor accommodation;
- well-designed, high density residential activities; and
- A convention centre.

From a transportation perspective the Lakeview sub-zone transport philosophy anticipates providing an integrated, people movement-focussed transport outcome. It is anticipated that with the combination of such design features as the market square and a range of walking connections through and beyond the site, no single transport mode should dominate the site development. In the same way as the existing Town Centre incorporates a combination of roads and lanes, the sub-zone transport outcome will enable multiple options for visitors, locals, employees and residents to access the site and move around / within the site.

The site development philosophy is not to fully satisfy all parking demands generated by the activities enabled within the sub-zone by wholesale provision of off-street parking within the site, but to facilitate a “hierarchy of value” response to parking provision both within the sub-zone itself as well as in the public parking resources surrounding the sub-zone. The higher need and higher value parking provided on-site and in the surrounding areas will be expected to incorporate a range of time-restricted and paid parking areas, then supported by ready walking access to a range of other lower value parking options (e.g. All day commuter employee parking) shared with the wider Town Centre.

In this way it is intended to maximise the integration of the site's activities and transport demands with the surrounding parts of the Town Centre zone, encouraging a range of transport modes within, and connecting to, the subject land. It is identified that the sub-zone's transport and parking response to providing a multi-modal and managed transport response will be developed closely alongside that emerging for the Town Centre's parking strategy. The Council's 2007 Queenstown Parking Strategy developed a range of parking strategy responses across the whole of Queenstown and for the Town Centre focussed on the following:

- improvements to 'legibility' of parking;
- management of short day parking for visitors;
- introduction of limited 'park n ride' facilities; and
- Possible future introduction of parking constraints for long stay (commuter) parking.

Alongside the further development of those Town Centre parking and multi-modal transport strategy responses, the Lakeview Plan Change offers the opportunity for Queenstown to develop the sort of pedestrian-focussed central area successfully created within other major centres elsewhere in New Zealand. The further development of the Town Centre transport and parking strategies over the coming planning period as part of and aligned with the Council's Inner Links programme will help to positively align the Town Centre's parking and transport management philosophies with the demand managed approach that is being adopted within the Lakeview sub-zone.

This approach envisages, for example, that the more significant elements of the sub-zone such as a convention centre will be subject to an integrated transport assessment. This would provide the rationale and strategic support for the specific parking levels those developments intend to provide, and the roles played by other means of access to the sub-zone sites.

3.2 Scale of Possible Development

For the purposes of this assessment of the transportation implications of the likely development the Lakeview Plan Change would give rise to and the anticipated traffic impacts, a range of expected sub-zone elements has been developed:

- Hot pools : capacity of approximately 250 people
- Hotel : 150 rooms
- High density residential : 185 units
- Commercial / Retail: 6500m²
- Convention Centre : six meeting rooms plus a main conference hall catering for up to 750 delegates / guests)

Access to the site is expected to be as follows:

- Access to the central part of the site (hotel, hot pools, retail / commercial, and convention centre) will be provided for from the intersection of Thompson and Man Street, and a proposed extension of Isle Street into the site from the current termination of that route at Hay Street.

- Vehicle access to and from the Lynch Block will be via a driveway connection to Glasgow Street.
- The Lakeview Holiday Park will retain its current access off Brecon Street / Cemetery Road.

3.3 Roothing Upgrades

The Lakeview Plan Change will maximise the use of existing transport and roading provisions currently in place adjoining and surrounding the subject land. Additional provisions are to be made to the current network within the site and the immediate environs so as to accommodate the future travel patterns and demands of visitors to and residents within the Plan Change area. The key upgrades and extension to the current road network recommended to be included within the Lakeview Plan Change include:

- A new public road reserve (20m) extending Thompson Street into the site from the western end of Man Street (aligned at right angles to the Man Street carriageway) into the subject land; and
- An extension of Isle Street (20m road reserve with) westwards into the site to connect with the above extension of Thompson Street.
- Furthermore, the following elements have been identified as likely future roading upgrades. While the development of the Lakeview site does not require these elements to be implemented, it is recognised that failing to accommodate them at this early stage may prevent them from being adequately developed in the future.
 - A 4m wide road widening along the northern edge of the Thompson Street road frontage from the western site boundary to the corner splay.

A corner splay to allow for a minor curve easing of the alignment of the Thompson – Man “s-curve” by allowing a 20m x 5m corner triangle around the inside of the Thompson Street curve (northern side of the road). The realignment of Thompson Street at its eastern end, to reduce the severity of the right-angle curve and / or to allow additional pedestrian amenity, has been a point of discussion for some time. For many years the concept of a Man Street bypass has been discussed and debated – taken to the point that a more significant curve easing alignment was established via subdivision during 2006. It is understood that QLDC do not currently wish to advance the Man Street Bypass in the form that was previously advanced and that a more modest future curve easing that will be facilitated by the 20m x 5m corner splay is appropriate.

As will be described in detail in subsequent sections of this report, the proposed Plan Change does not warrant the provision for this more significant “bypass realignment”, as the effects of the development can be accommodated within the current form and scale of the roading provisions – albeit with the addition of the Thompson Street and Isle Street extensions. Notwithstanding this, however, in recognition of a possible change in aspiration for a future Man Street / Thompson Street realignment and the expected outcomes of future stages of the QLDC Inner Links transportation study, the Lakeview Plan Change structure and concept design does not preclude such alternative realignment that may be considered by Council in future.

The proposed designation is shown on Figure 7.

The dimensions of the corner triangle have been established based on the swept path requirements of four coaches passing through the curves, allowing 1m of clearance between the swept path of the vehicle body and the opposing lane. This concept also allows for a 2m path on the north-west side, which is sufficient to allow a shared-use facility at a future date.



Figure 7: Proposed roading designation for inclusion in the Plan Change to allow for future realignment

4. Vehicle Trip Generation and Distribution

4.1 Vehicle Trip Generation

A preliminary trip generation model for the combination of activities proposed within the sub-zone has been developed. A spreadsheet model of the proposed activities uses a combination of ‘first principles’ and parametric assessments. Due to the complementary nature of the activities being proposed, consideration of the way in which the activities interact has been necessary. By way of example, the convention centre trip generation estimate incorporates estimates of the types of activities that would overlap or occur simultaneously (e.g. The departing attendees from a convention event with the arrival activity of an evening banquet).

The trip generation model incorporates a range of sensitivity parameters including the proportion of attendees using passenger transport modes, the relative proportion of out of town attendees. It is estimated that a somewhat smaller event attracting a larger proportion of district or Queenstown attendees (e.g. A local sporting club end of year gala) could lead to a greater overall volume of traffic and parking demand than an international professional conference where there is a larger component of conference delegates staying at local hotels, including a possible hotel on the Lakeview site.

Activity	Morning Peak Hour (vph)	Evening Peak Hour (vph)
Hotel	25	26
Residential	78	78
Hot Pools	50	71
Retail / commercial	30	64
Convention Centre	210	549
TOTAL	393	788

Table 2: Expected Peak Hour Trip Generation

At this stage, the current “worst case” trip generation scenario is the combination of the departure activity from a daytime convention (with a high proportion of local district-resident attendees) overlapping with the arrival period for an evening banquet event (again with high proportion of Queenstown-resident attendees), together with a mix of traffic associated with the hotel, accommodation, retail and hot pool activities.

This overlapping of vehicle based activity leads to a total of up to approximately 790 vehicle movements per hour (inbound + outbound) to and from the sub-zone once fully developed during a busy weekday afternoon peak period.

The assessed trip generation described above has been used as the basis for modelling the effects of the site-generated traffic. The results of this modelling are described in later sections of this report. Following the modelling and reporting a decision was made to include a small block of land at the corner of Glasgow and Thompson Streets within the plan change area. This 0.6ha parcel of land currently comprises twelve residential lots, of

which three have been developed with one dwelling per lot. This corner block is included in the zone boundaries indicated on the Figures in this report.

It is expected that this part of the Lakeview site will be developed as residential or visitor accommodation activities, and the additional parcel of land has been assessed accordingly. A previous consent for this parcel of land proposed a hotel with 124 rooms. Using this as a basis for comparison with the potential development of the site under the High Density Residential zoning, it is assessed that the inclusion of this site within the plan change area could potentially increase the traffic generation by around 20 vehicle movements per hour at peak times.

Looking at existing and potential traffic generation within the wider development area contained within the sub-zone, a credible development could potentially include the subdivision of the 42,867m² Freehold Block and 11,828m² Lynch Block to high density residential activity.

Allowing for 25% of the site area to be set aside for access and amenity, around 183 residential units could potentially be developed, generating up to 146 vehicle movements at peak times.

Notwithstanding this, current trip generation from the Holiday Park has been maintained within the modelled traffic volumes incorporating an allowance for the range of both Holiday Park and gondola / visitor attracting activities within this upper portion of Brecon Street.

4.2 Vehicle Trip Distribution

Vehicle trips to and from the Lynch Block at the south-west end of the site will be via Glasgow Street. There are two primary routes from Glasgow Street to the town centre: Brunswick Street and Beach Street / Shotover Street; and Thompson Street / Man Street. These routes will also provide access to the land parcel on the corner of Glasgow and Thompson Streets.

Traffic from the Lakeview Holiday Park will continue to have access via Cemetery Road / Brecon Street. Traffic to and from Camp Street will likely be distributed between Isle Street and Man Street.

Vehicles from a possible convention centre and ancillary activities in the central part of the site will have two principal routes to and from the town centre area. Two access points are proposed from this central block onto the network; at the corner of Thompson and Man Streets, and at the corner of Hay and Isle Streets. From the former, the expected principal traffic route will be along Man Street to Camp Street or Memorial Street. An alternative, shorter route to the town centre (as opposed to the state highway) is via Lake Street and Beach Street.

From the Hay Street / Isle Street access a number of route configurations are possible. It is desirable to discourage the use of the route along Isle Street to Brecon and / or Camp Street, as the intersection of Isle and Brecon is complicated by narrow carriageway widths, the proximity of Cemetery Road and the off-set configuration of the two Isle Street approaches. It is preferable that site traffic (especially the departure movement) be

encouraged to travel south on Hay Street and onto Man Street, as this offers a more coherent and practical route.

It is recommended that the design of the access point at Hay Street / Isle Street, and its integration into the road network, be given careful consideration to achieve this. This will involve careful consideration of the alignment of the Isle St extension in relation to Hay Street and Isle Street proper, as well as the use of clear signage both on the approach and at the intersection. This should be done at the time the site is subdivided.

Consideration should also be given by the Council to the possible reduction in kerbside parking along one or other side of Man Street between Camp Street and Thompson Street so as to enable a satisfactory traffic width to be provided along this key access route to and from the site, as well as to enable the possible promotion of the Man Street route as a route that can provide for cyclists. Such initiatives should be considered and undertaken in a manner that is consistent with the Town Centre parking and transport strategy which should focus on the range of alternative parking demand management options within the wider Town Centre.

5. Network Assessment

A network analysis has been undertaken using outputs provided from consultants operating the QLDC's Inner Links transportation model. The analysis focusses on the year 2026, which has been agreed through discussion with QLDC to be an appropriate model horizon. The AM and PM peaks have been modelled, with traffic count outputs rendered in two-hour intervals. Two scenarios have been modelled: the expected baseline, or 'Do-Minimum' scenario²; and the 'with Lakeview Plan Change' scenario.

Outputs from the modelling showing the expected two-hour traffic flows for both scenarios are included as Appendix A to this report, and are summarised and assessed below. The images in this section are model outputs produced by Council's transport modelling consultants Abley, with annotations by TDG.

5.1 Network Analysis – AM Peak

5.1.1 Traffic Volume

Figure 8 shows the change in expected traffic flows (two-hour volumes) between the baseline and proposed scenarios. This provides a summary of where changes to the network flows are expected. As noted above, should the full development potential of the existing zoning (under current High Density Residential zoning) then the proportional 'increase' in flows associated with the Plan Change would be less than those shown on the following diagrams.

In the diagrams below, red lines indicate increased flows contributed by the potential ultimate Plan Change development; green lines indicate decreased flows are expected. Grey lines indicate that zero or negligible change is expected. The plan change boundary is indicated with a dotted black line.

² The Do Minimum scenario incorporates allowance for some growth of employment and households within the wider Lakeview area but not to the full extent possible under the existing HDR zoning.

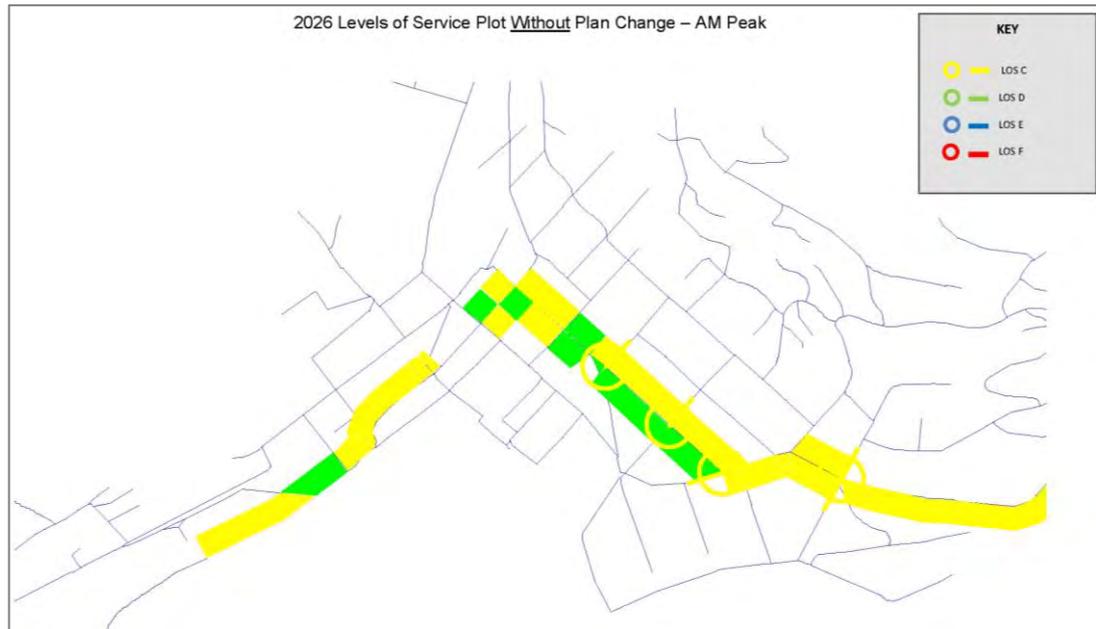


Figure 9: Expected Level of Service - baseline scenario, AM Peak, 2026

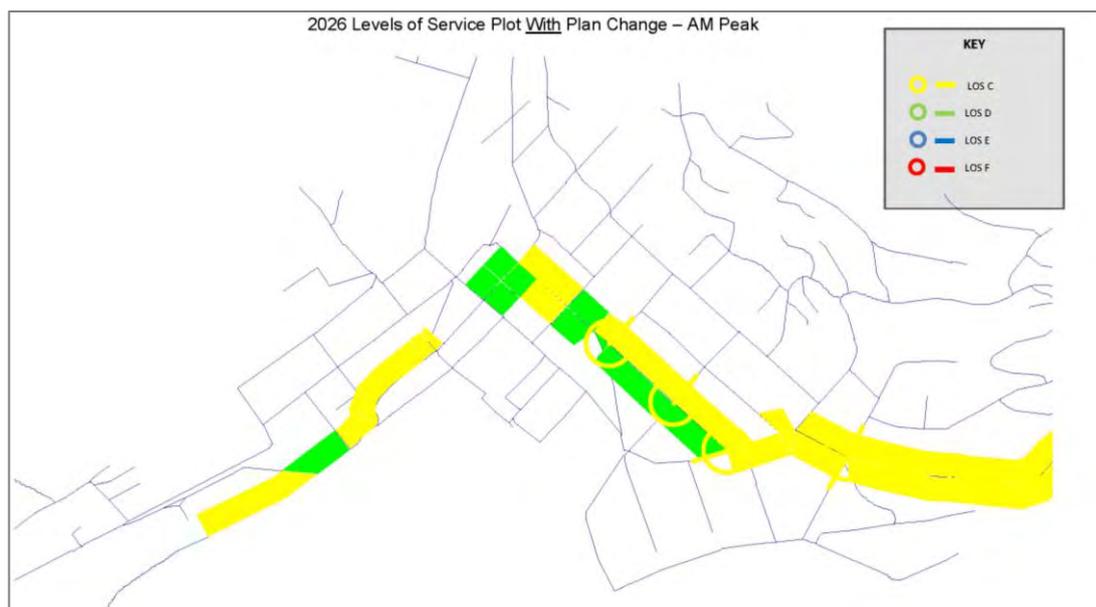


Figure 10: Expected Level of Service with Plan Change, AM Peak, 2026

It is clear that during the weekday AM peak period little change is expected in the overall level of service on the network within Queenstown, both in terms of mid-block and intersection performance. The roads with significant increases in traffic flow are those which are currently operating with some degree of spare capacity, and which can therefore readily accommodate the additional traffic.

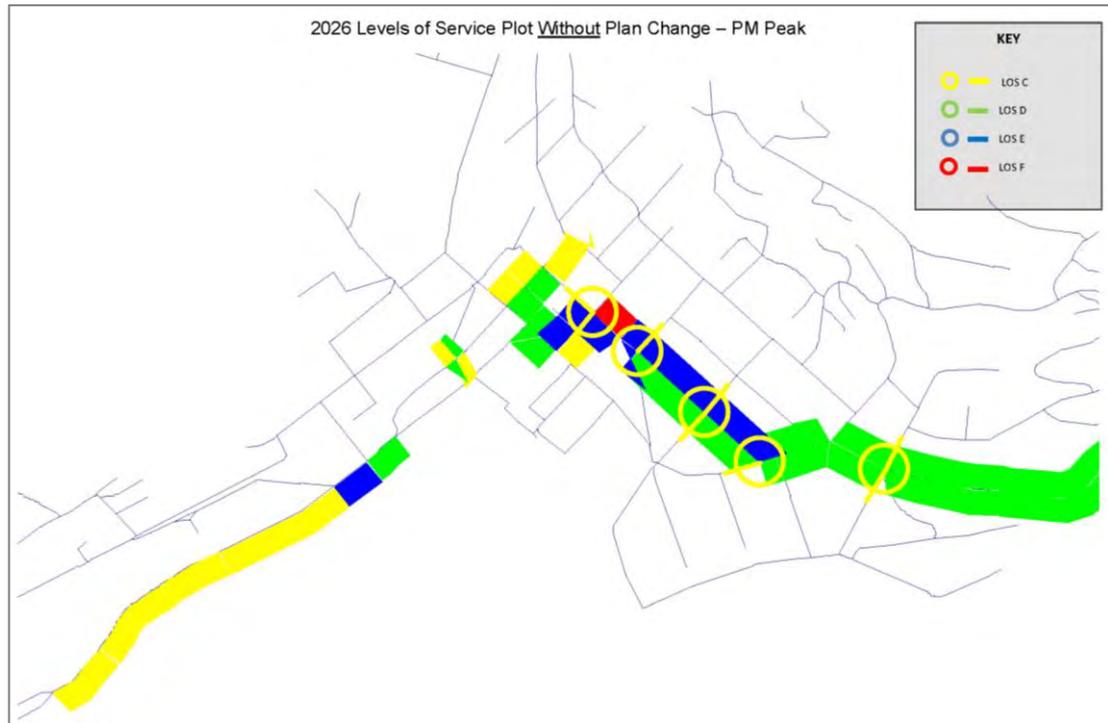


Figure 12: Expected Level of Service - baseline scenario, PM Peak, 2026

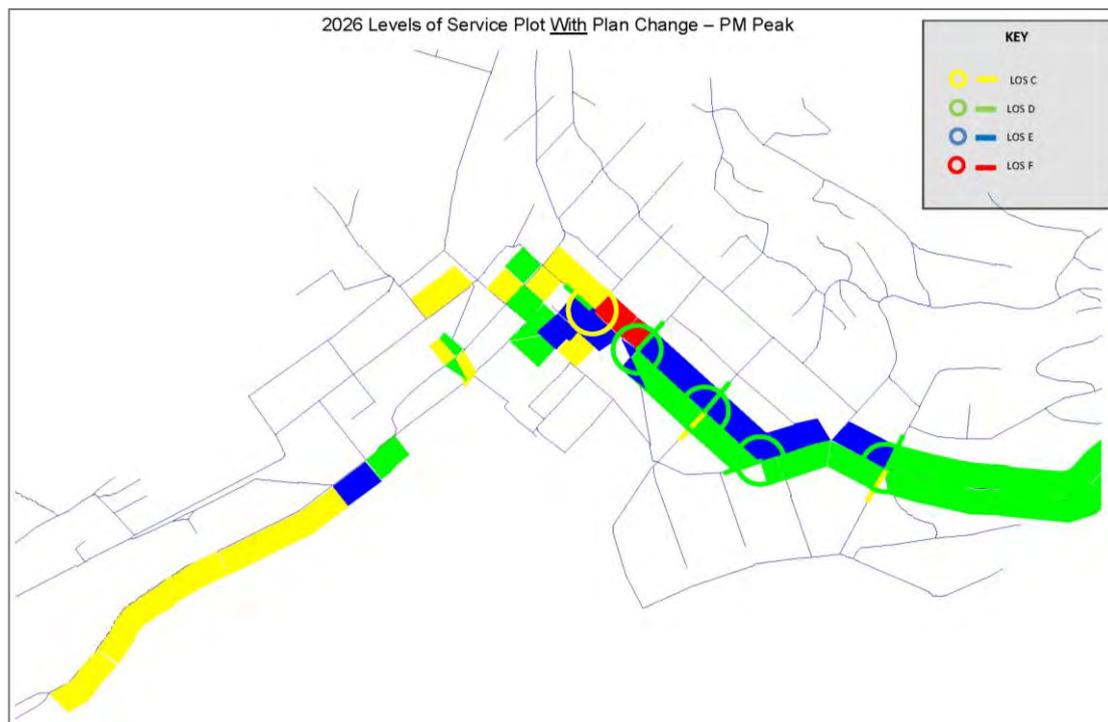


Figure 13: Expected Level of Service with Plan Change, PM Peak, 2026

It is apparent that even under the baseline Do Minimum scenario, the network will experience a lower overall level of service during the PM peak than the AM peak, which is consistent with the higher traffic flows carried during the busier PM peak. In particular Stanley St (SH6A) is expected to experience a range of performance levels ranging from LOS D to F (the latter being in the short section Ballarat and Beetham Streets). Such LOS levels indicate a higher operating flow and reduced performance during these peak periods.

It is also noted that the future performance of these routes will also be affected should development occur within the Lakeview under the current High Density residential zoning applying to the subject land.

The LOS pattern is not significantly changed with the addition of the Plan Change traffic. The model also indicates that the intersections on SH6A between Beetham Street and Dublin Street will operate at LOS D during the PM peak. LOS D is generally considered to be acceptable performance for an urban arterial intersection at peak times.

As previously described, the twelve residential lots at the corner of Glasgow and Thompson Streets were included in the plan change area after the completion of the modelling described above. The expected increase in traffic that could be expected due to the inclusion of these lots within the plan change area is small. Changes to the modelled outcomes described above resulting from this additional traffic are assessed as insignificant.

On the basis of the modelling undertaken by QLDC's Inner Link traffic modelling consultants based on traffic generation advice prepared in support of the Lakeview Plan Change (by TDG), it is concluded that the proposed plan change can be implemented without significant adverse traffic effects on the Queenstown road network.

5.3 Pedestrian Connections

To support and maximise pedestrian movement between the Town Centre and Lakeview, it is recommended that a pedestrian (and vehicle) way-finding strategy be included in the forward detailed design and planning for this site. It is recommended that inclusion of a consistent reference to "Lakeview" or other similar naming convention within the way-finding signage to be adopted in support of the Plan Change and future development within the site. This should potentially link into other existing tourist signage and way-finding facilities (e.g. That associated with the Gondola) and could be enhanced from the various current yellow and 'white on brown' finger boards. The way-finding strategy should also be embraced by site management, for instance including media distributed to guests prior to arrival.

6. Parking and Loading

6.1 Sub-zone Parking Philosophy

The approach taken for the Lakeview sub-zone with respect to parking and its close linkage to the accommodation of and provision of traffic and people movement, specifically anticipates an integration of parking provision and management between the Lakeview site and the Queenstown Town Centre. While there will be specific destination needs for visitors to, say, the convention centre activity, consistent with the existing provisions for the Town Centre, it is not anticipated that full, unconstrained parking will be available for all activities located within the sub-zone. The proposed combination of, for example, the market square at the heart of the sub-zone and the provision of multiple walking connections to and from the Town Centre, is proposed to minimise the requirement for activity specific on-site parking.

Adopting a “hierarchy of need and value” response to parking provision within the sub-zone, it is recognised that the sub-zone itself cannot address the parking preferences and patterns that have existed (and still exist) within the town centre. Characteristics of that behaviour include the adoption of the cheapest (free) parking option for commuter and long-stay parking stay which is displayed by the high utilisation of free kerbside parking along Man Street, Gorge Road, Lake Esplanade and Hallenstein Street to name just a few examples.

The Plan Change therefore looks not only to the parking responses that can be made within the proposed rules for activities within the sub-zone but also to help give effect to other parking strategies and methods that Council will be advancing in parallel across the wider Queenstown area. For example in the QLDC’s latest Transport Strategy³ parking priorities are listed as being:

- Put in place information to tell people where parking is available;
- Better management of short-stay parking; and
- Long stay or commuter parking.

As referenced within the current Town Centre zone it is necessary to consider development proposals within the wider street and transport network context inclusive of on-street and off-street parking locations, and not simply within the confines of a particular site.

The high value / need parking areas within the sub-zone will be expected to provide a minimum specific parking provision (such as for the convention centre and the residential accommodation activities), however it is expected that, as for the rest of the Town Centre zone, there would be no specified minimum parking requirement for the retail and commercial uses within the sub-zone.

³ QLDC Wakatipu Transportation Strategy, November 2007

6.2 Recommended Parking Provision

6.2.1 Residential

It is recommended that for the residential activities within the sub-zone the use of the High Density Residential Subzone A parking rate for residential accommodation of 1 resident parking space per residential unit in the Lakeview sub-zone is appropriate. A change is proposed to Chapter 14 of the District Plan to reflect this.

6.2.2 Visitor Accommodation

Having a close association with the remainder of the Town Centre zone as well as the surrounding areas of High Density Residential zoning around the periphery of the Town Centre, it is recommended that visitor accommodation activities within the Lakeview sub-zone reflect partly the on-site parking standards expected of visitor accommodation within the High Density Residential Subzone A zone for both unit-type accommodation and room-type accommodation as well as partly the 'no minimum' requirements applying to the current Town Centre zone.

For unit-type accommodation within the sub-zone this would then require no minimum car parking to be provided, and a maximum of 1 per unit up to 15 units, and a maximum 1 per 2 units thereafter, for guests, plus a maximum of 1 per 10 units for staff. Whereas car parking would not be expected to provide a minimum parking level, it is recommended that a minimum of 1 coach park is provided per 30 units.

For room-type accommodation, again it is recommended that there be no minimum on-site car parking requirement and a maximum of 1 car park per 3 guest rooms up to 60 guest rooms, and a maximum of 1 per 5 guest rooms thereafter. It is recommended that for these room-type accommodation facilities, a minimum of 1 coach park per 50 guest rooms is required. These rates mirror the unit-type and room-type requirements set in the current District Plan. It is expected that current interpretation of these different styles of accommodation will continue to be followed, unless different interpretations emerge through the wider District Plan review process currently underway.

A change is proposed to Chapter 14 of the District Plan to reflect this.

6.2.3 Retail / Commercial

As referred to previously, the highly integrated nature of the proposed sub-zone, and its range of anticipated activities, support a strong shared parking strategy whereby primary activity parking (say associated with the convention centre) is able to be shared with the complementary activities within the sub-zone, e.g. tourism operators, cafés and restaurants.

In this regard, and reflecting on the desire for the sub-zone to complement and reflect the activity of the Queenstown Town Centre zone, it is recommended that a similar approach to parking is adopted for these supporting retail and commercial activities as is adopted in the Town Centre zone. For these other retail and commercial activities that could develop

at the Lakeview sub-zone, it is recommended that there be no minimum parking requirement (i.e. as per the Town Centre zone).

Again, a change is proposed to Chapter 14 of the District Plan to reflect this.

6.2.4 Hot Pools

As previously noted, it has been assessed that a possible hot pools complex at the site will have a capacity in the region of 500 visitors. In 2007 TDG undertook a survey at Mt Maunganui hot pools (with a peak capacity of around 250 people). The survey found that during the school holidays occupancy was generally less than 100 people, although peaked at about 220 people for a short period on one day. Outside of the school holidays occupancy was generally less than 50 people, but did peak at about 110 people for short periods on some days. Private car travel accounted for almost 90% modal share, with an average occupancy of approximately 2 people per vehicle. On a non-school-holiday weekday, the parking demand was generally less than 20 spaces, while during the weekends the peak parking demand increased to between 50 and 60 spaces. During the school holidays, however, the peak parking demand was generally between 40 and 60 spaces, with a peak of over 100 spaces on a Saturday afternoon.

Data from Hanmer Springs Thermal Reserve indicates a parking demand of 1 space per 4.7 people on site – where effectively the entire parking demand is provided for within the public kerbside parking areas of the Hanmer Township. This demand level equates to a demand of up to 106 spaces for a 500-person facility.

Reflecting the highly integrated nature of the proposed sub-zone, and the range of anticipated visitor attracting activities such as the proposed hot pools, it is anticipated that a significant proportion of hot pools custom could be generated from the immediate vicinity of the site, both within the Lakeview sub-zone and the wider local residential and visitor accommodation catchment. With reference to the site location and good pedestrian access, there is potential for a significant proportion of hot pools customers to arrive on foot. However in order for the hot pools to potentially establish in advance of the rest of the Lakeview site, a good quality, reasonably sized parking facility would need to be established from 'day one'.

In the Lakeview context, it is considered appropriate to expect a significant sharing of parking both out into the wider Queenstown parking environment (kerbside, plus say Man Street car park) and with other facilities / attractions within the Lakeview site (e.g. convention centre). Taking account of the higher levels of complementary, multi-use activity within the Lakeview sub-zone and the wider Town Centre parking facilities (both public kerbside and private, off-street facilities) it is recommended that a parking supply rate of 1 space per 5 people be applied to the hot pools activity.

Should the hot pools be developed in isolation or earlier than other Lakeview activities, but still take benefit from the close association with wider Town Centre parking, then a lesser component of 'sharing' would be appropriate and a rate of 1 car park per 4 people would be more appropriate.

Again, a change is proposed to Chapter 14 of the District Plan to reflect this.

6.2.5 Convention Centre Activity

The current QLDC District Plan⁴ includes a minimum parking provision rate for “*meeting places and places of entertainment*” of 1 visitor parking space for every 1 per 10m² of public floor area or 1 space per 10 seats, whichever is greater.

Consideration of other District Plans from around the major urban centres of New Zealand and the associated visitor parking requirements show that within major urban areas such as Christchurch, Wellington and Auckland, with much larger local catchments, much higher visitor car parking needs are generated with rates of 1 space per 3.5 – 4 people. It is noted, however, that the trend of the past several years (if not longer) is that for the vast majority of conventions and conferences held within the town the local catchment (within driving distance) is minimal. It is anticipated that a convention centre within the Lakeview sub-zone would continue this trend, and the adoption of the 1 per 10 persons or 1 per 10m² of public floor area is considered appropriate.

It is recommended that there be a specific provision for dedicated coach parking and pick up / drop off area associated with the convention centre activity, equivalent to the visitor accommodation coach parking requirements of the District Plan⁴ for room-type accommodation (hotels). It is recommended that there be a requirement for one coach parking space per 50 people the site is designed to accommodate.

6.3 Parking Demand and Management

Based on the indicative parking demands calculated from the trip generation tables presented earlier in this report, and using the early assumptions of activity operating capacity especially for the convention centre and hotel, mode share and vehicle occupancy preferences, the total Lakeview sub-zone parking demand could be up to a total of some 300 – 350 spaces. It is anticipated that there will be a defined and strategic need to share the supply of parking spaces to meet this demand across the site, the surrounding sections of kerbside parking within public streets and nearby parking facilities (e.g. Man Street car park) as well as the active promotion of alternative travel modes and dedicated visitor accommodation close to the Lakeview site to reduce and manage the demand for private car-based travel.

It is also recommended that consent applications associated with the major activities proposed such the convention centre be subject to the preparation of an Integrated Transport Assessment (ITA) report. The ITA would set out the expected range of visitor transport demands and the ability for the wider transport network (inclusive of non-private transport especially) to accommodate these demands. It is expected that in accommodating these demands the developer of the facility would look to an integrated, multi-modal and demand-managed transport outcome utilising walking, cycling and passenger transport options as alternatives to providing for car parking and vehicle movements into and out of the sub-zone.

At this stage of assessment, the precise volume of servicing and employee travel cannot be absolutely quantified. However there will clearly be a need for employee travel management, e.g. Staff shuttles, encouragement of cycle / walking routes, and provision of end-of-trip facilities for those who walk / cycle.

⁴ Table 1, Chapter 14 (Transportation)

These demand management measures are already signalled by the QLDC's own transport strategies (e.g. Travel Demand Management Programme, March 2009), and should be further reinforced through the shared parking provision strategies discussed above as well as Council's wider programme of strategic transport management (e.g. Parking information, enforcement of time restrictions, and progressive introduction of paid parking options).

This strategic approach is directed towards achieving a managed balance between satisfying the needs of individuals who may wish to see unlimited parking provision within the Lakeview site and the much higher shared objective of achieving value from development within the Lakeview site, and seeing an overall increase in the use of alternative travel modes (where appropriate) through a more informed road user decision making process involving valuing of travel choices and the costs to the wider community.

Further work will be required with respect to the way in which future development within the Lakeview site aligns with the transport strategy work of QLDC for the Town Centre including the on-going extension and updating of the Town Centre's parking management strategy necessarily incorporating consideration of the overall parking supply (on-site, kerbside, other public off-street facilities, private parking provision such as Man Street and even Earl Street facilities) and parking pricing strategies. It is recommended that Council's own parking strategies for the Queenstown Town Centre provide a specific focus on the management of parking demand across the Town Centre (including the Lakeview site) especially with regard to addressing the current, established long-stay commuter parking activity along access routes into and through the Town Centre.

Development of sustainable, practical alternatives to private car use is in large part driven by demand, and providing for private car use through the provision of generous on-site parking will simply increase this demand for private car use, to the detriment of the whole Town Centre.

By adopting an integrated and demand-managed policy of parking provision and transport facility provision, land within the sub-zone is effectively released for uses other than parking. It is recognised that there is no such thing as 'free' parking – where end-user charges are absent – the costs are recouped through other methods, such as increased prices for goods and services. Removing the need to provide parking can increase the transparency of parking costs, with staff and visitors / customers more likely to be charged for parking. This in turn makes alternative travel modes more attractive, so it is important that these modes are available and are a practical alternative to car use.

The introduction of a combined no-minimum plus maximum parking rate associated with this policy also provides the Council with the potential to effectively control congestion within and surrounding the Town Centre sub-zone.

By contrast, the introduction of a maximum parking rate can encourage the development of activities which serve and provide amenity to the immediate locality. This approach (in part adopted for the Lakeview Plan Change) supports an integrated approach to parking demand management and sustainable urban growth for Queenstown.

It is important to note that regardless of the approach used, an appropriate level of accessible parking must be retained throughout the zone. With the minimum parking

requirements used historically, in conjunction with the Building Act, parking for disabled persons is required as standard.

By removing the need to provide parking, the requirement to provide parking for disabled persons is also removed. The provision of such spaces must therefore be given appropriate consideration when developing a wider parking strategy.

6.3.1 Coach Parking and Access

The nature and scale of activities proposed for the sub-zone will focus largely on the establishment of the 'anchor' activities including a convention centre, the proposed thermal reserve plus subsequent activity including residential, visitor accommodation and supporting retail commercial. The visitor attraction of the convention centre will drive a significant demand for tour coach access to and parking within the sub-zone. In this location with national and international air travel being a major travel mode for a majority of convention centre visitors, the provision of coach parking and access will be critical.

The initial estimates of parking prepared for the convention centre taking into account the overlapping typical demands of convention / meeting and banquet events is for up to approximately four tour coaches (with a corresponding expectation of shared passenger transport function with an on-site visitor accommodation facility). If however the provision of on-site (i.e. within the sub-zone) hotel accommodation is not delivered in parallel with the operation of the convention centre then demands for tour coach parking and pick-up/drop-off could be double or treble this level.

Additionally, the specific nature of conference events which may incorporate a range of event formats, would then potentially extend the tour coach demands catered for within the site beyond just the arrival and departure of guest / delegates at the start and end of the conference day. For example, a series of parallel field trips for a conference may generate a period of higher intensity of tour coaches waiting to take delegates away to venues around the region. It would not be uncommon at such times (during a major conference) for there to be a demand for up say 15 coaches at one time, hence the coach parking recommendation above for the convention centre. It is possible that such a peak demand could be mitigated to some extent through an appropriate traffic management plan to spread the arrival time of coaches as much as possible. It is noted that under the proposed plan change, the development of a convention centre would be a restricted discretionary activity, with transportation related matters being a key matter for discretion.

6.3.2 Loading

In terms of the scale of delivery and servicing activity, there cannot be any specific design requirements set in place at this stage. However based on the preliminary work that design and planning teams have been undertaking for the convention centre, it is expected that for major convention and conference events there could be a demand for up to 2-3 semi-trailer (17m) vehicles plus maybe 4 – 5 medium rigid trucks (8m) during event set-up. The on-site servicing dock facilities and back-of-house (BOH) areas of the convention centre will need to be of a sufficient scale so as to ensure an effective access from the street into the back-of-house area without adversely affecting the visitor / public areas.

It is currently proposed that access to the BOH area for the convention centre be subject to the specific loading provisions as per the existing Chapter 14 rules of the District Plan and as a minimum provision of one separate articulated truck service dock access and associated manoeuvring area to ensure that all service / delivery movements are able to be undertaken in a forward direction.

7. Planning and Policy Framework

The policy and planning documents that guide development of this nature are discussed below with reference to how the proposed development aligns with the established policies.

7.1 Otago Regional Policy Statement (RPS)

One of the objectives identified in the Otago RPS is:

Roading and rail networks, power generation and transmission systems, water and sewage reticulation and telecommunication systems are all important in ensuring that the needs of Otago's communities are able to be met. They provide an infrastructure for urban development and settlement, economic activity and for the distribution of goods and services within the region. Their sustainable management is required to ensure that they will continue to meet the needs of Otago's communities.

One of the policies which support this objective is:

To promote and encourage the sustainable management of Otago's transport network through:

- (a) Promoting the use of fuel efficient modes of transport; and*
- (b) Encouraging a reduction in the use of fuels which produce emissions harmful to the environment; and*
- (c) Promoting a safer transport system; and*
- (d) Promoting the protection of transport infrastructure from the adverse effects of land use activities and natural hazards.*

On reviewing the methods for implementing this policy, it is apparent that they rely on actions contained within the Otago Regional Land Transport Strategy (RLTS), which is addressed in the subsequent section.

7.2 Otago Regional Land Transport Strategy (RLTS)

7.2.1 Public Transport

The Otago RLTS aims to ensure adequate access to goods and services can be maintained at all times in accordance with the following policy goals:

Urban areas:

- Supporting the movement of people and freight in urban areas;
- Choice of travel modes, with easy connections between modes in urban areas;
- Acceptable, predictable travel times for routine journeys, including commuting in urban areas;

- Urban community and economic well-being; and
- Social participation and inclusion in urban areas.

The RLTS also notes that in busy areas such as SH6A between Queenstown and Frankton, public transport will play an important role in easing the increased congestion projected.

In the Wakatipu Basin, and outside Dunedin, existing public transport is largely orientated to the visitor market (both domestic and international), and priced accordingly. The services on arterial routes across / through Otago are principally shuttle services. The strategy envisages these visitor-oriented services continuing to be an important mode of travel in coming decades. The strategy also envisages steady but gradual improvements to the two public transport networks operating in Dunedin and the Wakatipu Basin. These improvements are intended to gradually build patronage while maintaining the viability of these networks.

7.2.2 Walking

The strategy seeks greater provision for active modes of travel and greater use of these modes – principally walking and cycling – for local trips. An essential component of a sustainable, accessible land transport system, walking is currently considered a suitable mode of transport for short trips (under 2 km) and for connecting different modes (e.g. Walking to a bus stop or from a car park to work). Walking also has an important recreational role and contributes to improvements in public health, the minimisation of environmental effects and reduced oil dependency.

The strategy envisages people walking longer distances and more often. It seeks to encourage and support higher levels of pedestrian activity through land-use planning that enables people to live within walking distance of local services, including transport services, and through improved pedestrian facilities.

7.2.3 Cycling

Cycling is currently considered a suitable mode of travel for those covering short to medium distances (under 10 km). Cycling contributes positively towards a sustainable and accessible transport network, because it is energy efficient, has minimal environmental impacts, is affordable and has associated health and fitness benefits.

The strategy seeks to encourage and enable higher levels of cycling; envisaging that reallocating roading space to cycling during new roading projects will help increase recognition of the rights of cyclists to safe road space. Provision of good quality cycle facilities, within the roading corridor and where affordable as separate facilities, will play an important role in increasing the levels of cycling within Otago. Improved land-use planning practices will also assist in greater levels of cycling activity in Otago because local services as well as transport services will be more accessible by bicycle.

7.3 Otago Regional Public Transport Plan (RTPT)

The Otago Regional Public Transport Plan (RPTP) sets out the overall goal and objectives for public passenger transport in Otago for the six years from 2012, along with the Otago-wide policies for public passenger transport.

Key objectives for the passenger transport network include that it:

- supports community wellbeing through mobility, building social integration and participation, and assisting economic development;
- provides an alternative to car travel in urban areas and along key corridors to benefit as a whole the communities in which those services operate;
- offers those in urban areas personal choice in travel mode, assisting the transport disadvantaged and people with disabilities; and
- Serves (through its existence) to encourage intensive residential development in areas where growth can be adequately supported, by providing opportunity for people to be less car-dependant if they so choose.

7.4 Wakatipu Transportation Strategy

The Wakatipu Transportation Strategy aims to provide:

... A fully integrated transportation system with destination enhancing passenger transport meeting the demands of travel growth. All elements of the transportation system need to be in keeping with the scenic character of Queenstown that makes it the premier, attractive international tourist destination in New Zealand.

This strategy identifies that achieving this aim requires implementation of a range of transportation measures that balance infrastructure and services with information and education.

This approach is supported by Council's approach to resource management. Plan changes such as that for Frankton Flats (Plan Change 19) and Three Parks highlight the role of travel demand management in resource management, while the two key town centre strategies (Queenstown Town Centre and Wanaka Town Centre) both address the need for town centre travel plans as an element to addressing their transport needs.

Travel Demand Management is the key component of the Wakatipu Transportation Strategy. The strategy incorporates a complementary mix of programmes that aim to shift the focus away from the current unsustainable road network demands towards a more sustainable mix of public transport, cycling and walking and multimodal transport:

- Passenger Transport infrastructure
- Cycling and Walking networks
- Road priority measures
- Travel Behaviour Change

7.5 Inner Links Decisions

QLDC's Inner Links project has analysed the need for new road links on the periphery of the town centre between Frankton Road and Henry St, and between Henry Street and Man Street. Key links include a realigned intersection at Frankton Rd / Melbourne Street, a new link between Melbourne Street and Henry Street, a signalised intersection at Henry and Shotover Streets, and a new, direct link between Henry and Man Streets.

Assessments have been made regarding the future growth in and around the town centre, and in the wider Wakatipu Basin area. Assessment of the incremental rise in traffic demands suggests a staged construction of these roading projects. Stage 1, comprising the Melbourne Street – Henry Street link plus associated intersection upgrades, is anticipated to start around 2018/19. The construction of stage 2 (Henry Street to Man St) would need to start around 2030.

The Inner Links proposal recognises that an approach that relies solely on road construction is unlikely to be successful in either the shorter or longer terms. In the short term there are funding issues as the NZ Transport Agency's policies now demand that a full range of potential transport solutions be explored before the case for implementation of a project will be considered. This points to the development of measures aimed at reducing projected traffic demands.

In the longer term, a narrow focus on increasing road capacity to meet projected traffic demands is likely to further cement the district's preference for the single occupant car and will only increase congestion issues over the next 20-30 years.

Traffic modelling undertaken for the project indicates that diverting roughly 20% of projected traffic into public transport, cycling and walking will be sufficient to maintain an acceptable level of service at peak times and put back the time when construction of the new roading is needed. It is indicated that construction of Stage 1 (Melbourne – Henry Street link) could be delayed by 15-20 years with construction of Stage 2 (Henry Street to Man Street link) commencing after 2040.

The project also noted that reliance on 'travel demand management', or encouraging alternative travel modes, has its risks. It also notes both that the district wide transport strategy has highlighted the lack of coordinated transport investment between the public and private, and the difficulty of getting even a small proportion of visitors and residents into 'alternative modes'. It recommends that Council continue its approach of protecting its ability to build the roads.

It concludes that a number of current and forthcoming policy reviews provide an opportunity for the Council, ORC and the NZ Transport Agency to develop a cohesive approach to managing traffic growth while resolving some of the uncertainties around protection of the route, the planning for the town centre and the convention centre.

7.6 Summary

The transport planning principles behind the proposed development are in keeping with the intentions of the local and regional planning framework documents. The infrastructure proposed in earlier sections of the report will ensure that the development is in general accordance with the objectives set in the respective documents.

A major element of the proposal is the promotion of sustainable transport modes through travel demand management. Key to this is the proximity of the site to the Queenstown Town Centre, with its established transport capabilities and visitor accommodation. The overall transport philosophy includes the heavy promotion of the site as a walkable destination. This will include the promotion of a way-finding strategy on the site, within the town centre, and along routes between the two, to promote walking as a viable option. This approach is consistent with the aims and policies in the region's strategic transport documents discussed above.

8. Summary and Conclusion

This ITA has been prepared to quantify and assess the traffic and transportation aspects of the proposed Lakeview plan change in Queenstown. The plan change application is for the rezoning of approximately 11ha of High Density Residential land to a Lakeview Sub-Zone, within the Queenstown Town Centre Zone. A subdivision application will establish the road layout through the site, and address intersection design. Subsequent resource consent applications for developments at the site will seek approval for individual land parcels with details such as intersection design and car parking provision included at that time.

The existing site is developed as a campground, recreational reserve and visitor accommodation, and is located on the western periphery of the Queenstown town centre. The proposed plan change will facilitate the development of a convention centre plus ancillary activities such as hot pools, visitor accommodation, and small or medium scale retail activity. The site's proximity to the town centre – an approximate 10-minute walk – will allow activities to gain maximum potential from sustainable transport modes. Upgrades to the existing road and footpath networks, some within the site and some outside of the site, will allow a high level of pedestrian amenity, and the public transport network has the potential to incorporate the site into existing routes. The plan change application recognises that the Man St – Thompson Street corridor may in future be upgraded to serve a higher strategic function. An allowance has been made for the future widening of the Thompson Street road reserve by 4m between Glasgow Street and the sharp curve just before Man St. To further assist vehicle movement through this curve, a triangle of land 20m by 5m has also been allowed on the inside of the curve. These elements are included for future-proofing purposes only, so as not to preclude future upgrades, and are not required as a result of the plan change itself.

The impact of the development on the surrounding road network has been tested by assuming a maximum development quantum of a 500 person capacity hot pool complex, 274 hotel rooms, 185 residential units and a 750 person convention centre. At this level of development, the changes to the operational performance of key local routes and are expected to be minimal. No significant changes to the local road network are assessed as being required to support the plan change. Notwithstanding this, a number of upgrades are recommended to increase non-car travel options, and these will be provided for via assessment matters for resource consents required for any development at the site.

The plan change supports established policy objectives by providing residential dwellings within walking distance of existing bus routes and ensuring pedestrians and cyclists have good facilities to encourage travel by non-car modes.

In conclusion, this ITA has reviewed the proposed Lakeview plan change and assessed the integration of the plan change area with surrounding transport networks, and found the proposals to be consistent with established best practice and guiding policy. There are no identifiable transport or traffic-related effects that would prevent the proposed plan change proceeding as planned.

TDG

Appendix A

Traffic Modelling Data

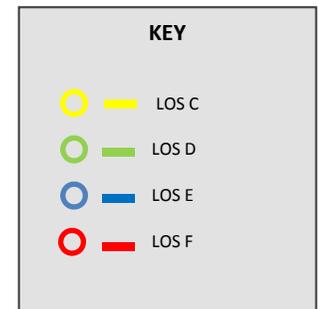
Two-Hour Traffic Flows

QUEENSTOWN INNER LINKS MODEL

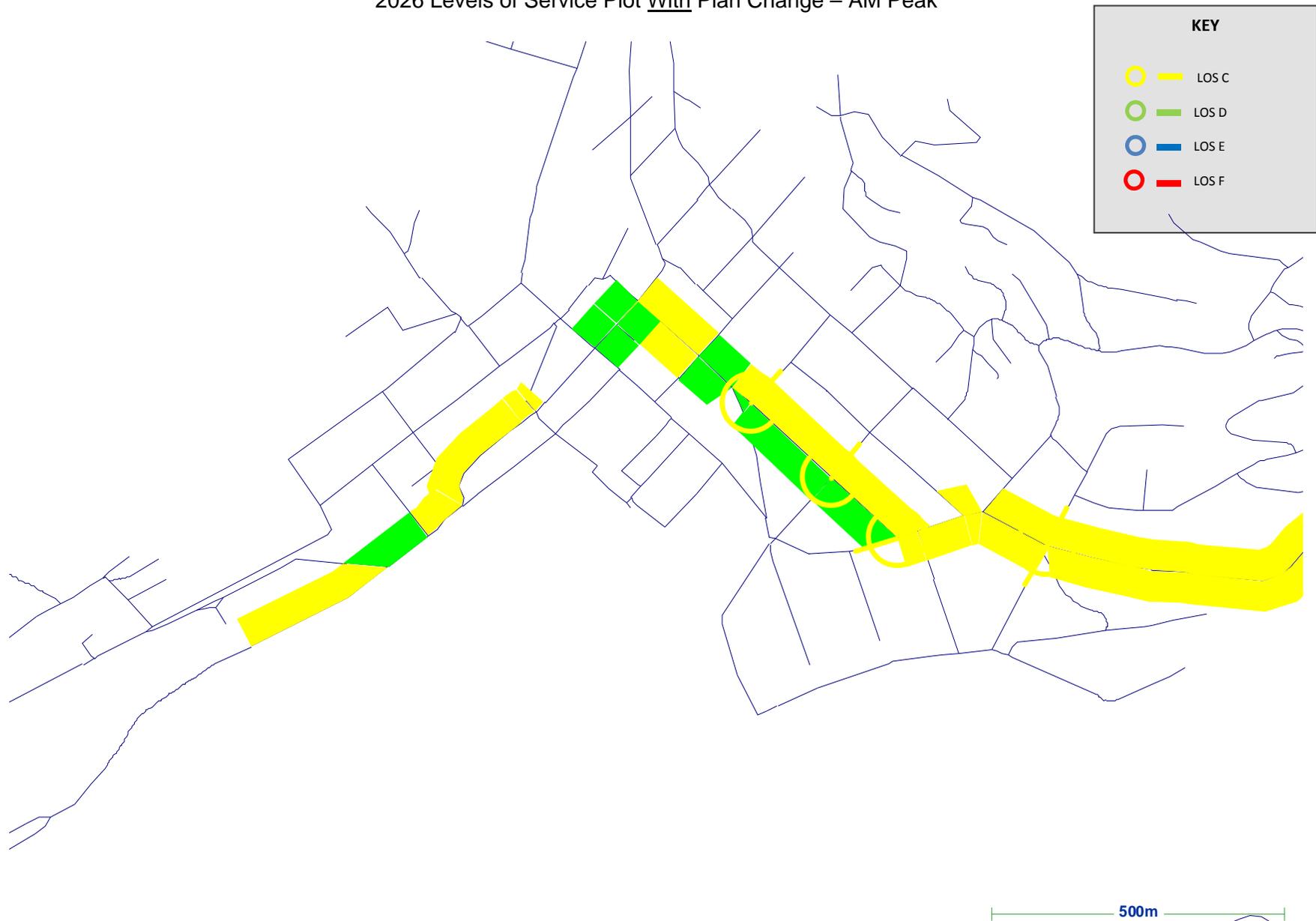
2026 Lakeview Plan Change Plots – May 2014



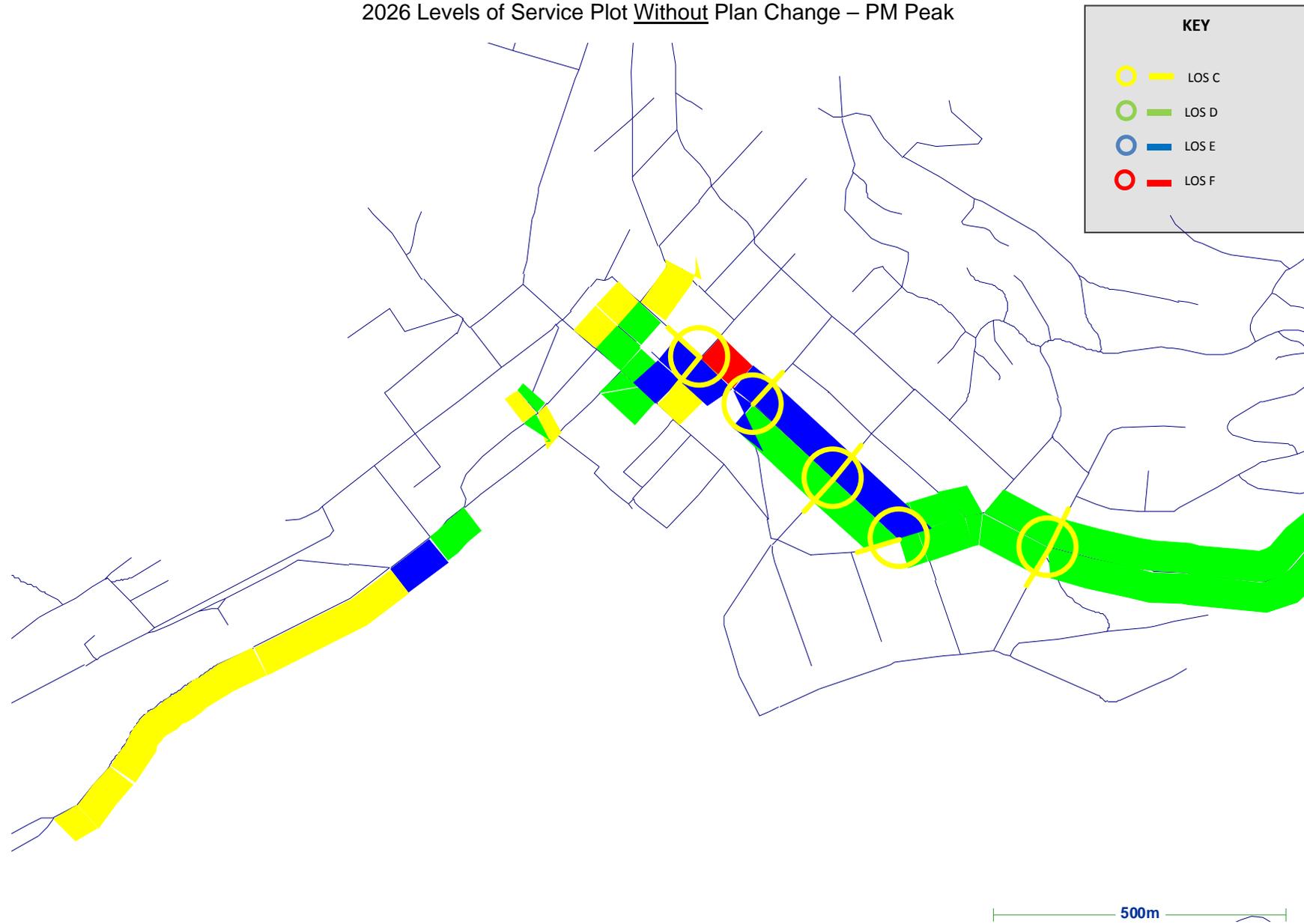
2026 Levels of Service Plot Without Plan Change – AM Peak



2026 Levels of Service Plot With Plan Change – AM Peak



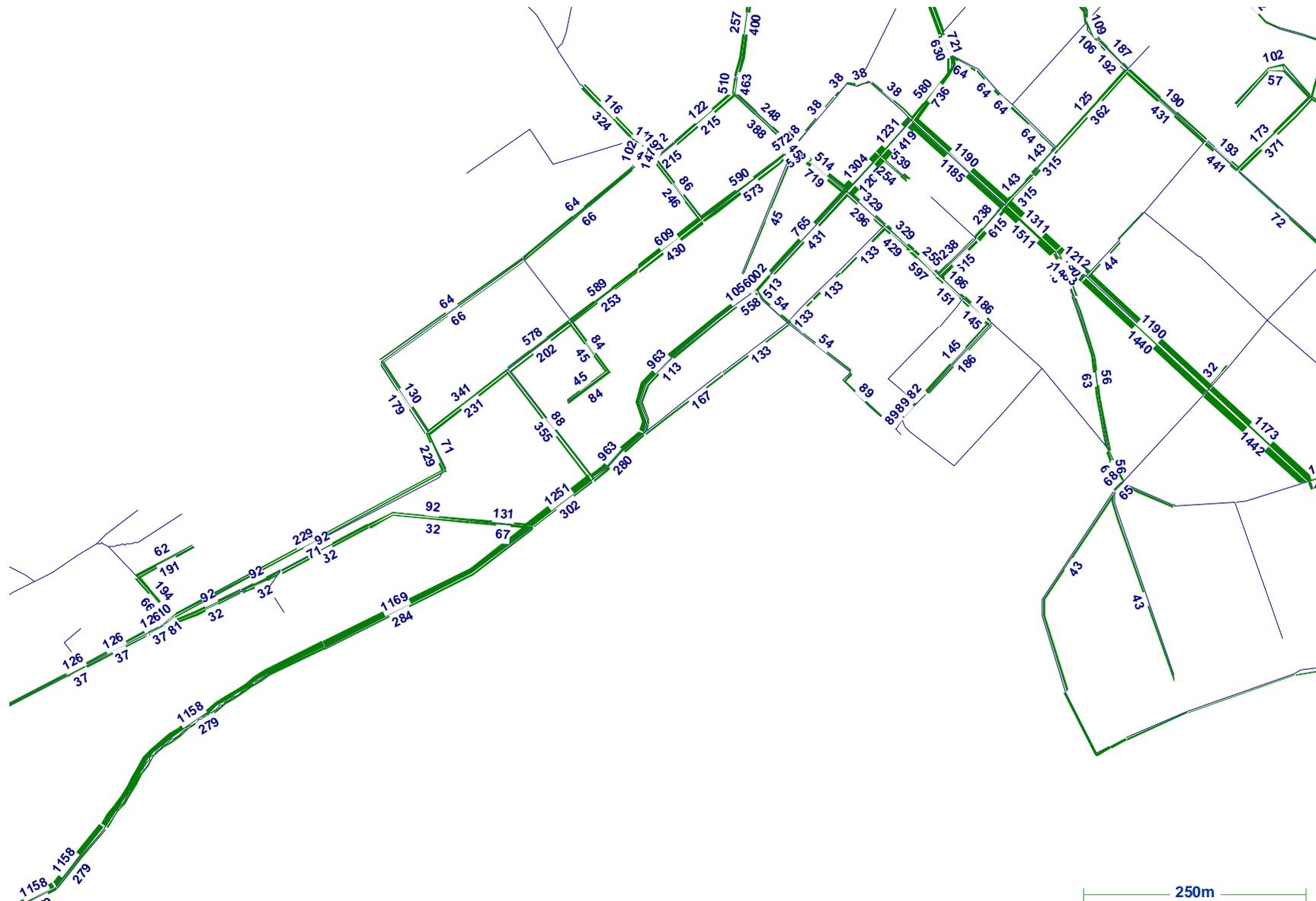
2026 Levels of Service Plot Without Plan Change – PM Peak



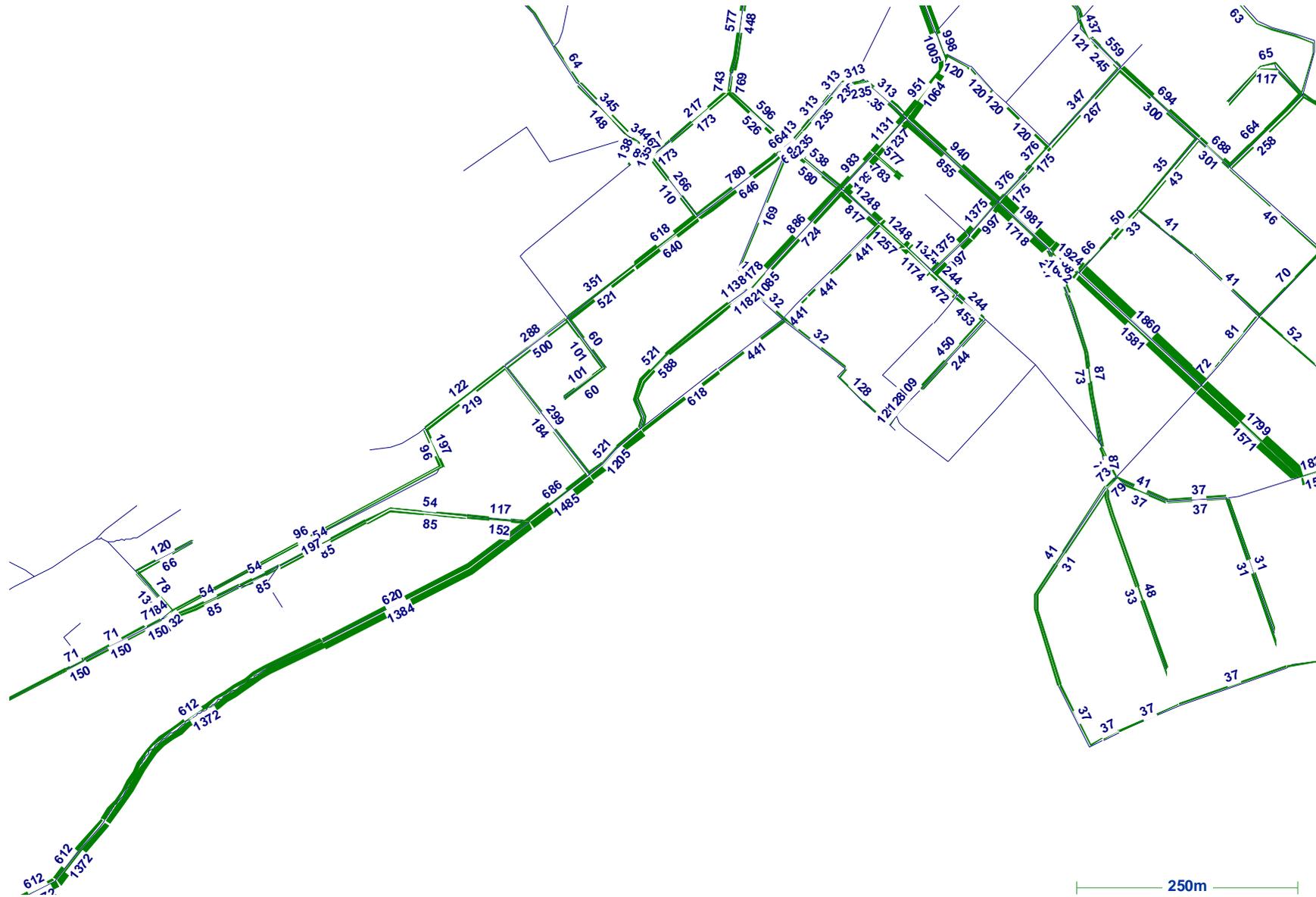
2026 Levels of Service Plot With Plan Change – PM Peak



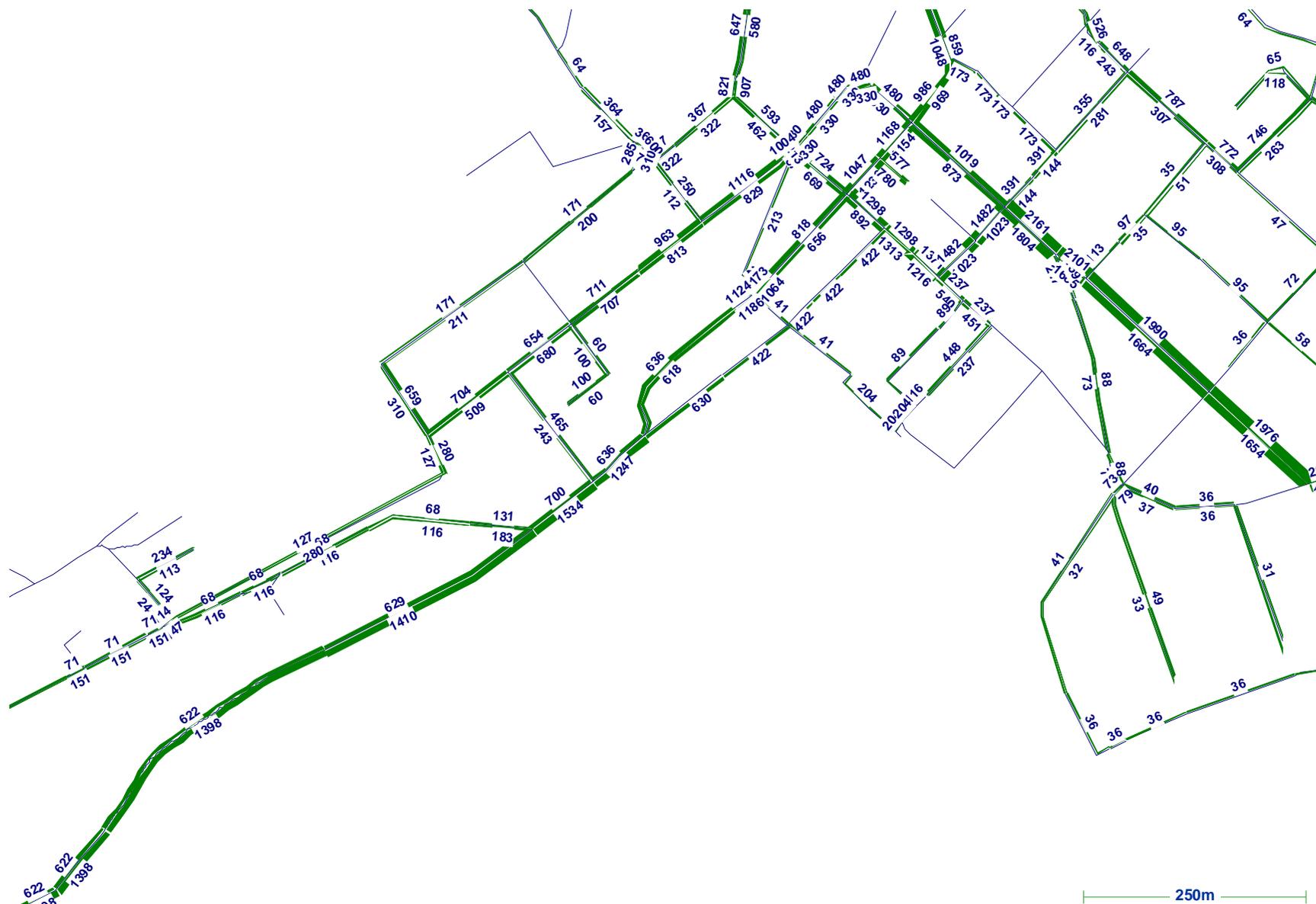
2026 Traffic Volume Plot With Plan Change – AM Peak



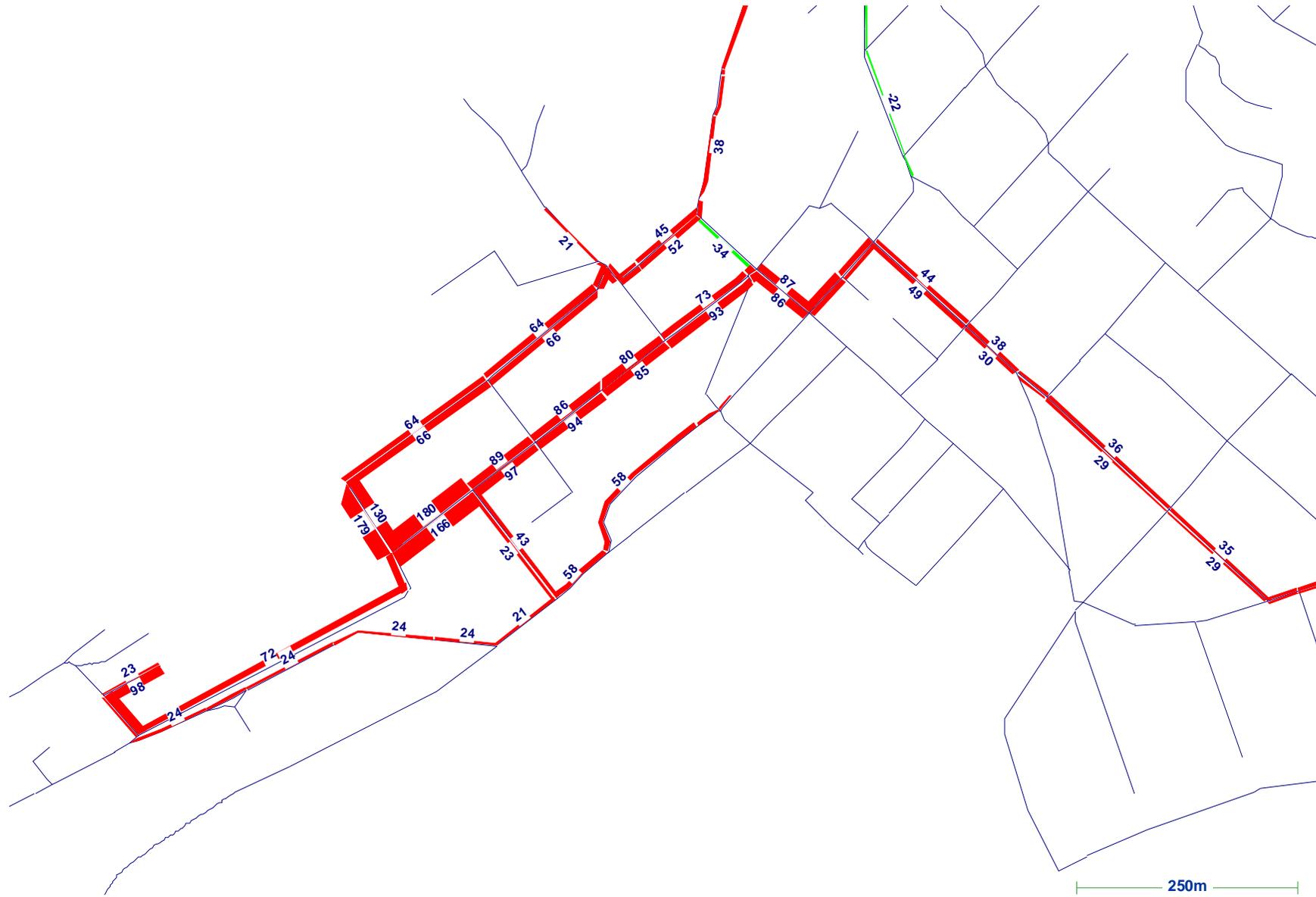
2026 Traffic Volume Plot Without Plan Change – PM Peak



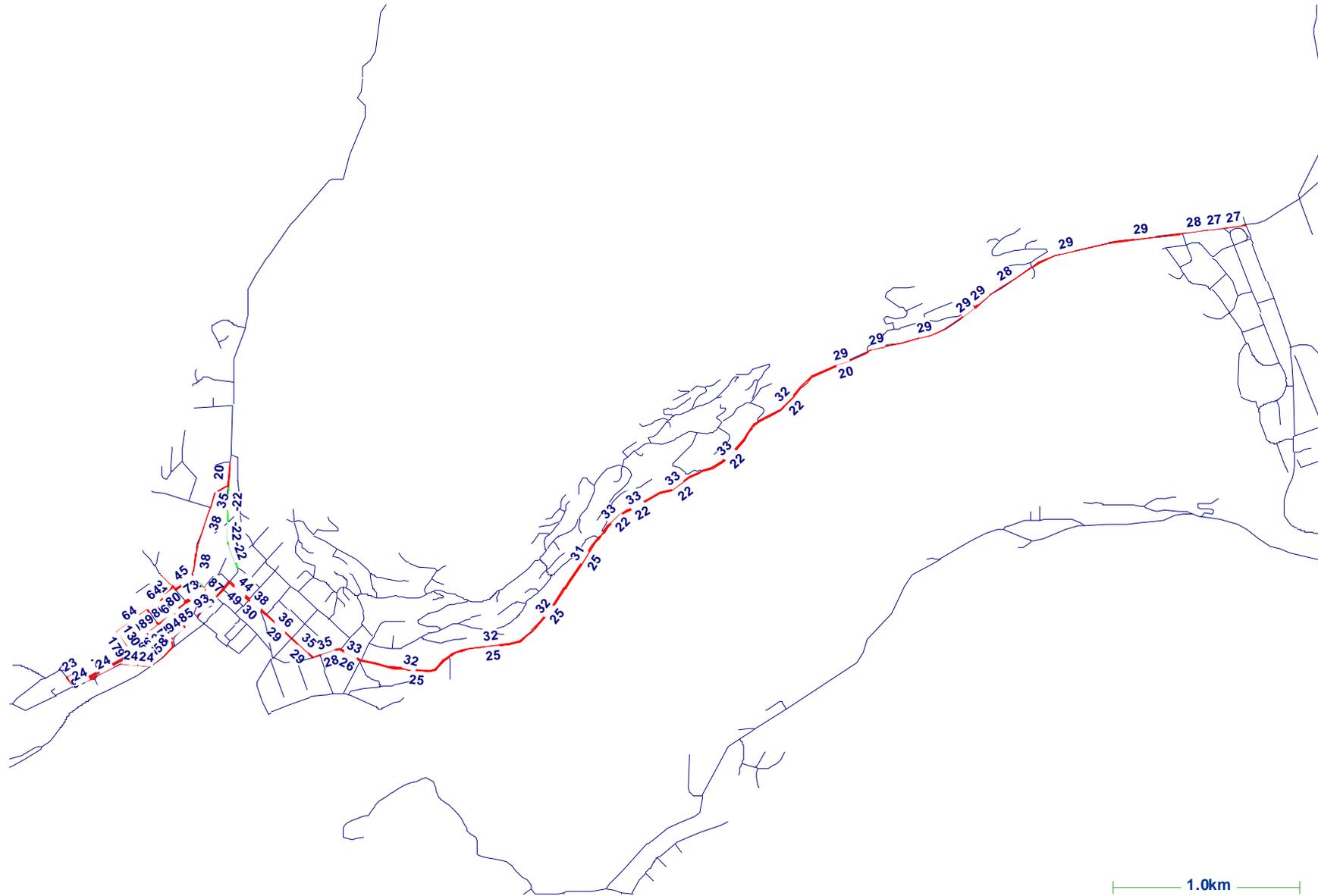
2026 Traffic Volume Plot With Plan Change – PM Peak



2026 Traffic Volume Change Plot – With vs Without Plan Change (CBD View) - AM Peak



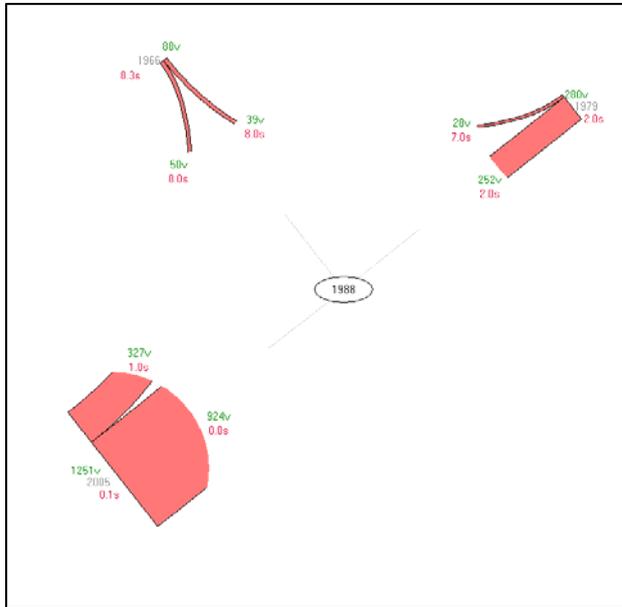
2026 Traffic Volume Change Plot – With vs Without Plan Change - AM Peak



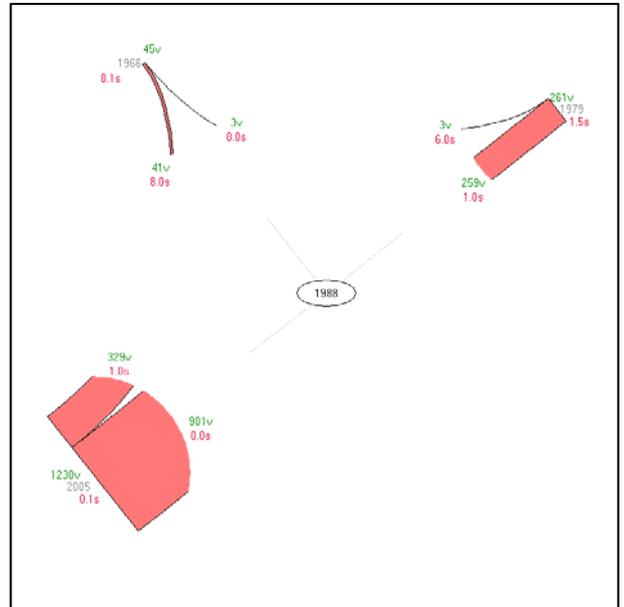
2026 Turning Movement Plots

Lake Street/Beach Street Intersection – AM Peak

With Plan Change

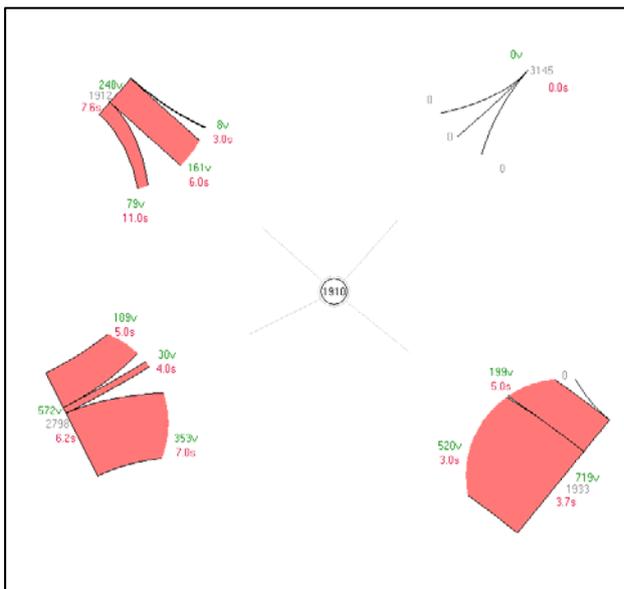


Without Plan Change

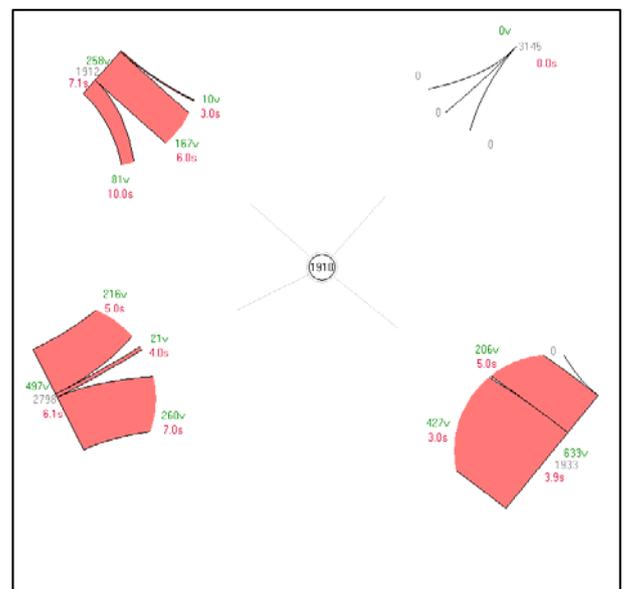


Camp Street/Man Street Intersection - AM Peak

With Plan Change

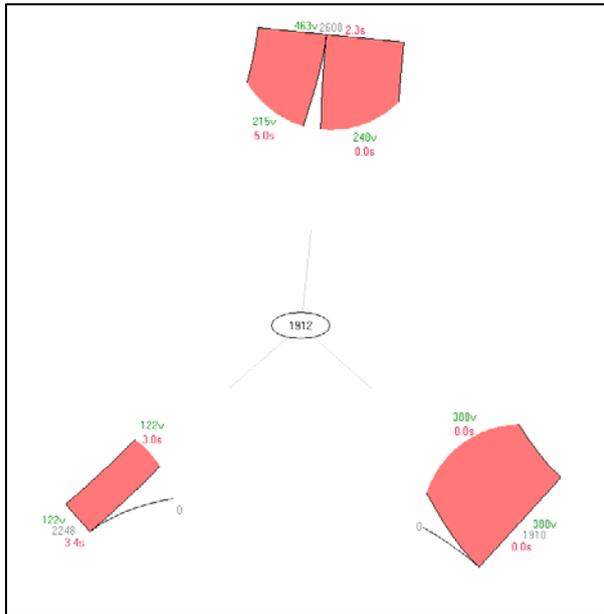


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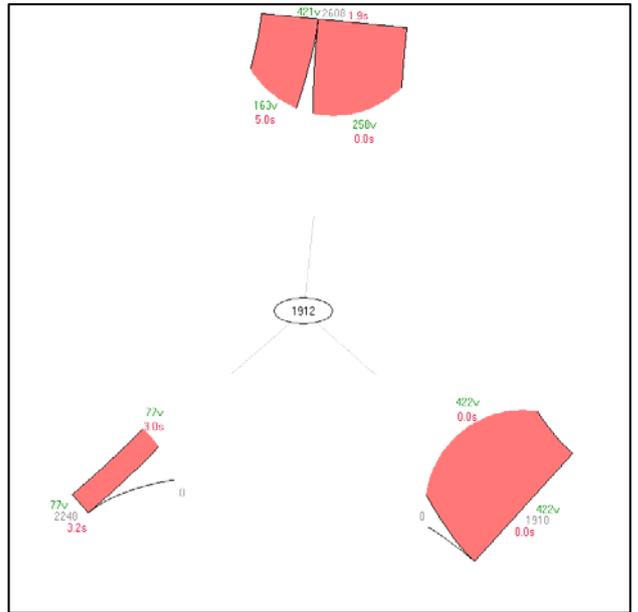


Camp Street/Isle Street/Robins Road Intersection - AM Peak

With Plan Change

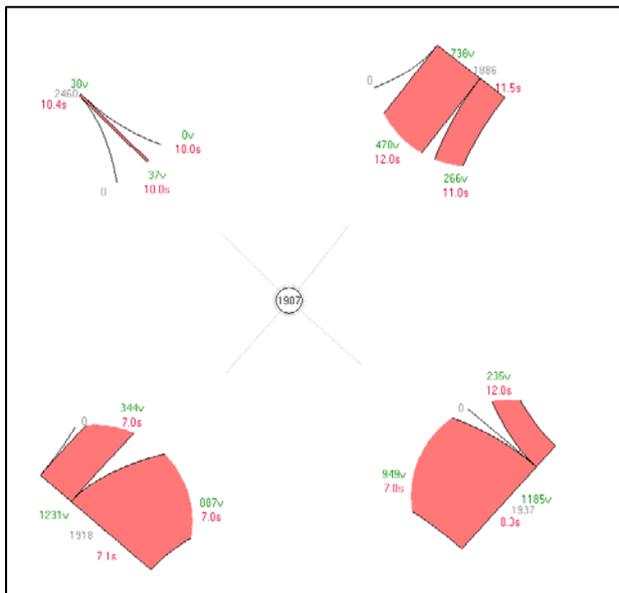


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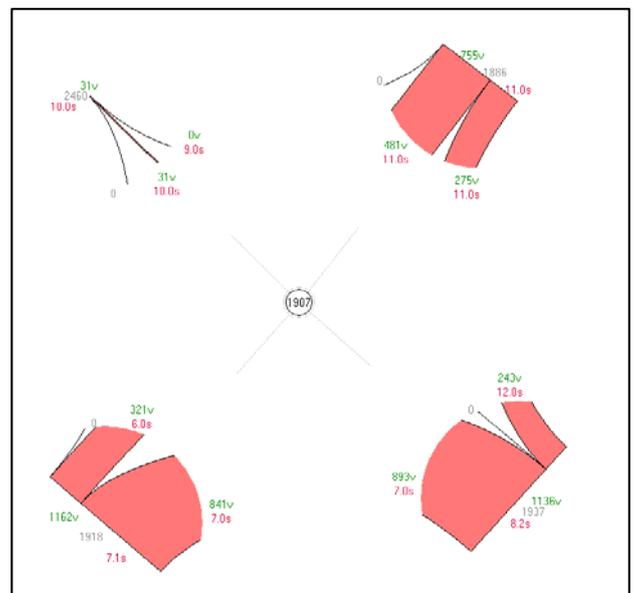


Stanley Street/Shotover Intersection - AM Peak

With Plan Change

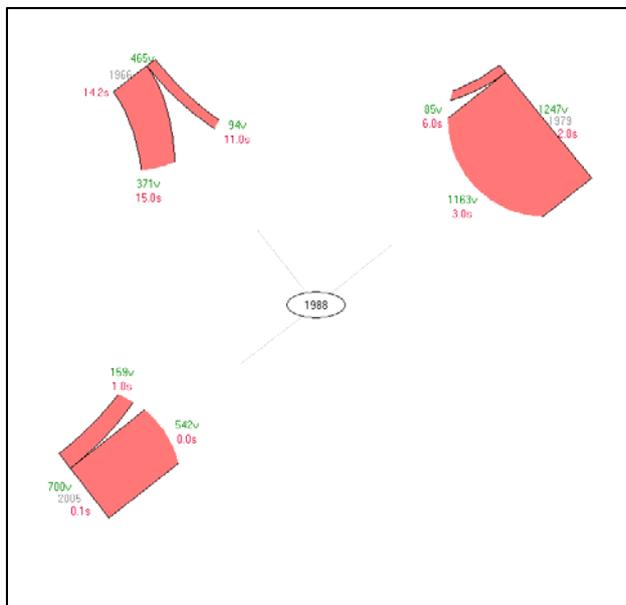


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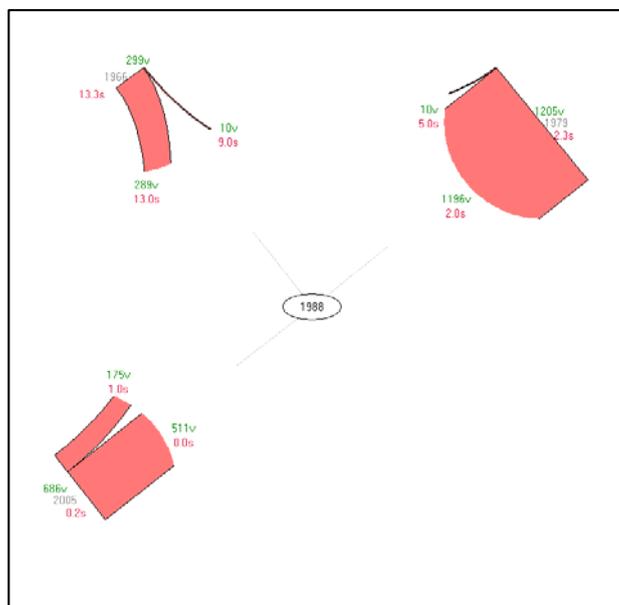


Lake Street/Beach Street Intersection – PM Peak

With Plan Change

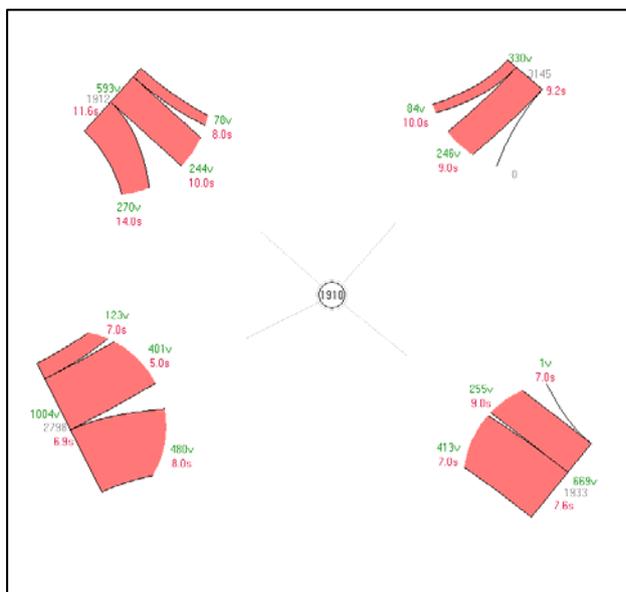


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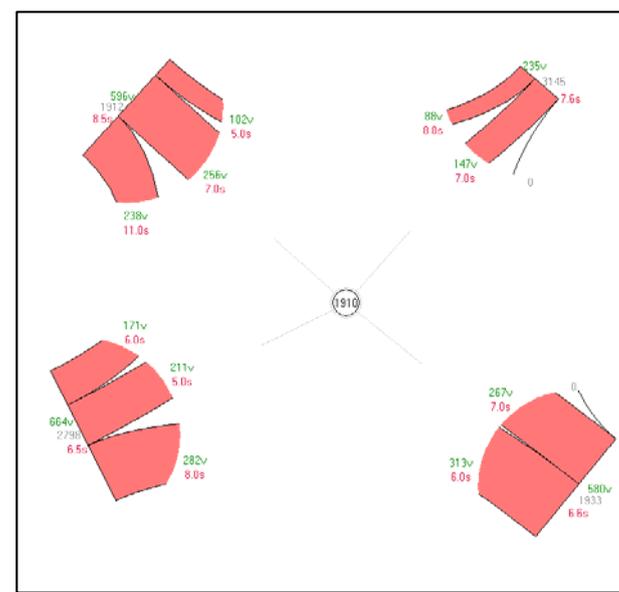


Camp Street/Man Street Intersection - PM Peak

With Plan Change

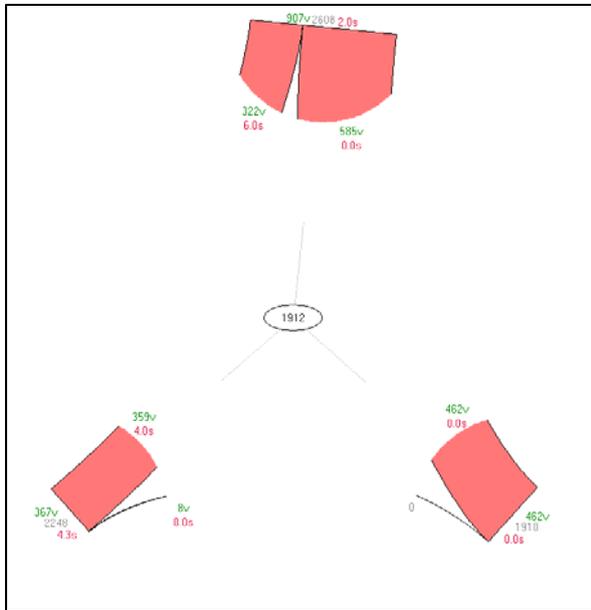


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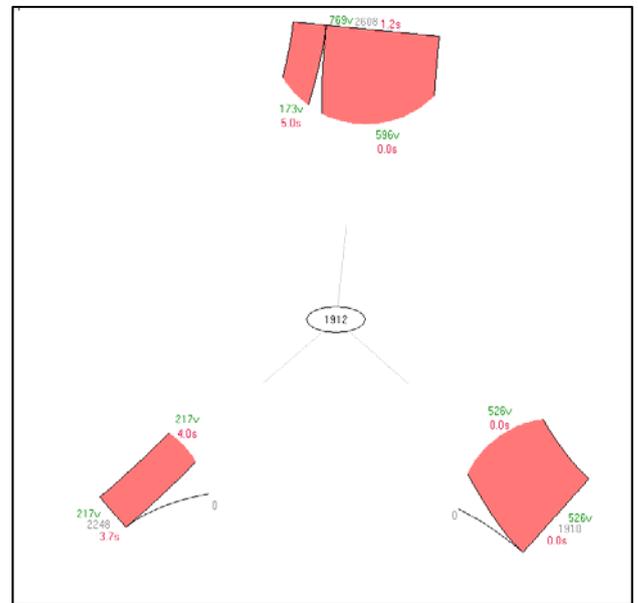


Camp Street/Isle Street/Robins Road Intersection - PM Peak

With Plan Change

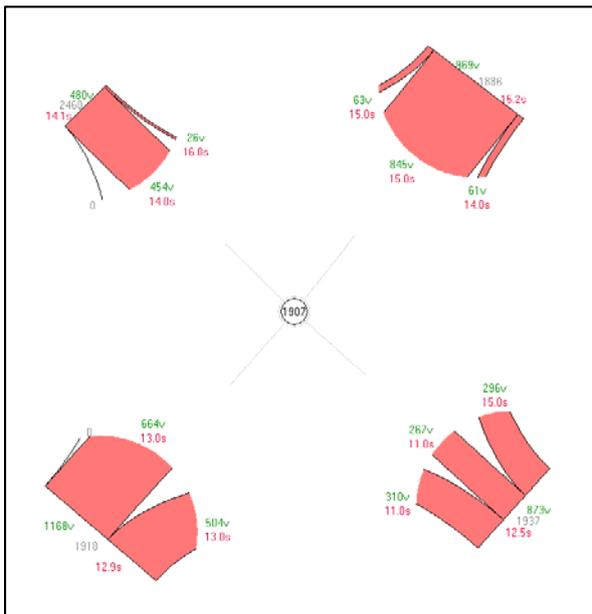


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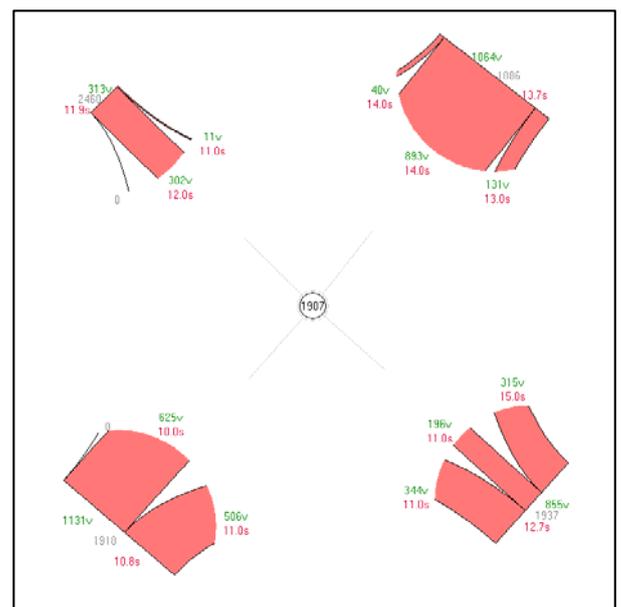


Stanley Street/Shotover Intersection - PM Peak

With Plan Change



Without Plan Change



		Zone 16			Zone 25			Zone 26		
		2012	2026 no PC	2026 with PC	2012	2026 no PC	2026 with PC	2012	2026 no PC	2026 with PC
	Total Households	12	12	12	3	3	80	139	139	239
	Total Jobs	203	203	219	3	3	200	5	5	5
AM	Modelled 2 Way (2 HR) Trips	420	406	433	7	15	435	133	132	253
	1 Hr converted (1.63 factor)	258	249	266	4	9	267	82	81	155
	Target Trips (1 Hour)	Not Given, keep as existing					267			110
PM	Modelled 2 Way (2 HR) Trips	447	429	455	8	52	1257	189	186	345
	1 Hr converted (1.88 factor)	238	228	242	4	28	669	101	99	184
	Target Trips (1 Hour)	Not Given, keep as existing					665			110
Please note that Zone 16 and 26 also include some additional landuse, as shown in the zone boundary map. To provide transparency, this table outlines the trips generated from each of the zones including both the trips generated by the Plan Change as well as the additional trips generated by the additional landuse.										



Queenstown Lakes District Council
Lakeview Plan Change

Addendum to ITA

7 August 2014

Queenstown Lakes District Council

Lakeview Plan Change

Addendum to ITA

Quality Assurance Statement

Prepared by:



Will Hyde

Senior Transportation Engineer

Reviewed by:



Don McKenzie

Technical Director/Auckland Branch
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Approved for Issue by:



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Status: Final

Date: 7 August 2014

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1. Introduction

TDG has recently completed an integrated transportation assessment (ITA) on behalf of Queenstown Lakes District Council (QLDC) for the proposed Lakeview Plan Change. QLDC has now requested that further parcels of land be included in the Lakeview Plan Change process, and this report supplements the ITA with an assessment of further effects from this additional re-zoning. This report is not intended to be read in isolation, but is an addendum to the Lakeview ITA.

The Lakeview Plan change has been proposed to allow the development of a number of possible activities on land west of the Queenstown town centre, including hot pools, residential and visitor accommodation, and retail activities, as well a potential conference centre. The proposed zoning would be a new sub-zone within the Queenstown Town Centre zone.

If the Lakeview plan change proceeds then the Queenstown Town Centre zone would encompass two distinct areas, separated by a number of blocks which would retain their current High Density Residential zoning. Consequently, QLDC is proposing, as part of the Lakeview plan change process, to re-zone two of these blocks as Queenstown Town Centre, thereby rationalising and integrating the Town Centre zone. This effectively brings forward the review of the Town Centre zone as part of the District Plan review process.

An excerpt from QLDC District Plan planning maps is shown in Figure 1, with the Lakeview and proposed plan change areas highlighted.

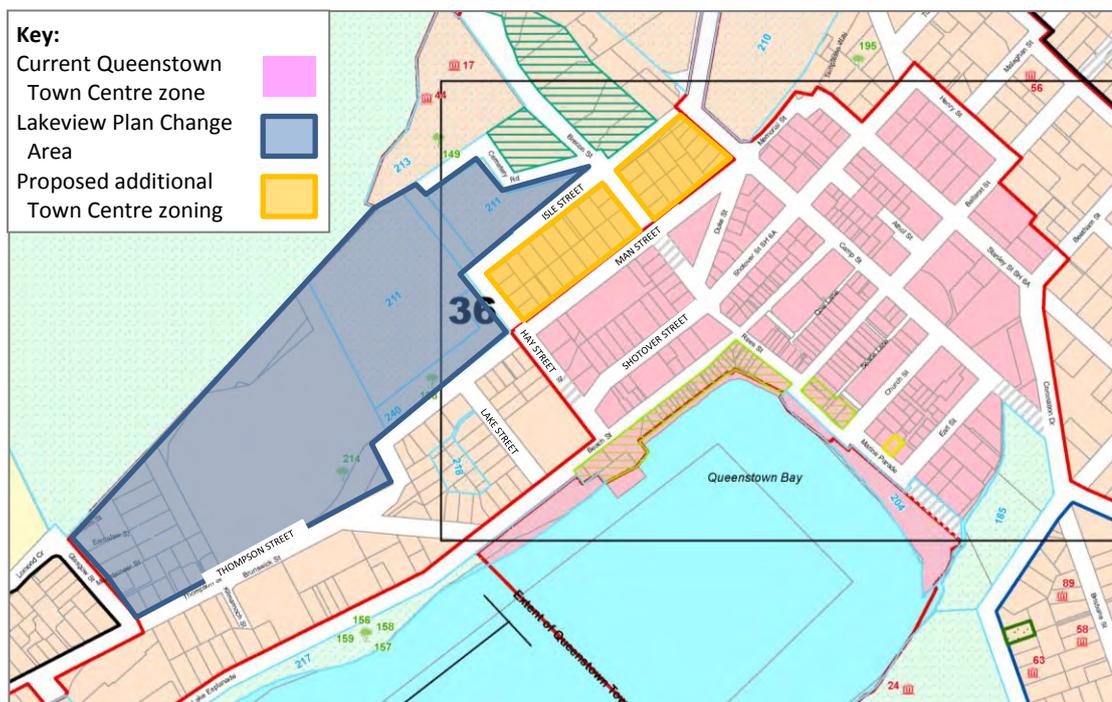


Figure 1: Existing Town Centre, proposed Lakeview Plan Change area and additional land parcels

This addendum to the Lakeview ITA provides an assessment of the traffic and transport effects which may be expected as a result of this additional re-zoning.

2. Land Parcels and Access

The two blocks are located between Isle Street and Man Street and comprise a number of lots currently occupied by low-density residential and visitor accommodation activities. The block to the west of Brecon Street has a gross area of approximately 11,000 m², while the block to the east is approximately 7,400 m² in total area.

The key access route to these sites will generally be Man Street, which has an uninterrupted flow to the roundabout at Camp Street. The Isle Street corridor, along the north side of these blocks, has narrower carriageways and requires drivers to give way more often, and should be considered a secondary access route in this respect.

3. Zoning Overview

3.1 High Density Residential

The two blocks are currently zoned High Density Residential. Chapter 14 Table 1 of the District Plan identifies the parking rates required for activities in the High Density Residential Subzone A as follows:

Accommodation Type	Visitors	Staff
Residential units	1 per unit	None
Unit-type visitor accommodation	1 per unit up to 15 units; thereafter 1 per 2 units. In addition 1 coach park per 30 units.	1 per 10 units
Room-type visitor accommodation (hotel)	1 per 3 guest rooms up to 60 guest rooms; thereafter 1 per 5 guest rooms. In addition 1 coach park per 50 guest rooms	1 per 20 beds
Room-type visitor accommodation (backpacker hostel)	1 per 5 guest beds. In addition 1 coach park per 50 guest rooms	1 per 20 beds

Table 1: District Plan parking requirements for High Density Residential zones

The parking rates in the HDR zone reflect the expectations of progressive higher density development within these blocks and appropriate provision of parking without necessarily reflecting the relative proximity of these lots to the town centre zone and the available public parking resources therein.

3.2 Town Centre Zoning

The current Town Centre zone rules do not require the provision of parking. The lack of minimum or maximum requirements allows the market to drive the provision of parking. On-street parking is provided on many of the town centre streets, with a number of both public and private off-street car parks providing further capacity. Parking related to town centre activities is also apparent on roads surrounding the town centre zone, where parking controls allow for all-day parking. These are often residential streets but also include the commercial areas along, for example Hallenstein Street and Lake Esplanade.

4. Scale of Possible Development

The development of activities and buildings within these two blocks will be carefully managed through the District Plan to accommodate a high quality mixed use-commercial environment. The anticipated activity changes are outlined as follows.

It is proposed that these two blocks will form a new subzone within the Queenstown Town Centre zone. With limits set on the scale and nature of activities, it is intended that this subzone will complement the existing town centre through the provision of an 'urban village' environment. It is anticipated that development on these blocks will be largely residential and visitor accommodation, with up to 25% of the developed floor area being retail and commercial. The nature of the retail and commercial is expected to be small-scale or boutique type operations, with an emphasis on providing local services to the immediately surrounding residential and visitor accommodation activities.

For the purposes of this assessment of the transportation implications of the likely development this plan change would give rise to, and the anticipated traffic impacts, a number of expected design and development outcomes has been developed:

- Town centre activities but with limitations on retail;
- Three-storey height limit;
- No requirement to provide parking onsite;
- Approximately 70% site coverage;
- Yard setbacks; and
- No minimum site size (as per the overlying Town Centre zone).

5. Network Assessment

5.1 Network Analysis

The potential traffic generation for these blocks has been assessed, for an intensified development under the current High Density Residential zoning, and also for the proposed change to Town Centre zoning. The following parameters have been used in this assessment:

- Total gross area of the two blocks 22,000m²;
- Typical site coverage: 70 %;
- Town Centre zoning adds a further one storey of development to that like to be developed with the High Density Residential zone (i.e. three storey development within Town Centre zone compared with two storeys under the HDR zone);
- An equal split (in terms of floor area) between residential, visitor accommodation (unit type) and visitor accommodation (room type) activities;
- Retail and commercial activity (for Town Centre zone) taking up 25 % of the total floor area;
- Assumption that the expected boutique / speciality retail / commercial likely to be developed under the Town centre zoning would generated only 50% new traffic movements (the remainder being drawn from the surrounding residential and visitor accommodation activities within these blocks); and
- Trip generation rates based on those used for the Lakeview plan change activities.

It is anticipated that the change from their potential development High Density Residential to Town Centre zoning will have a negligible increase in 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 up to approximately 62 additional vehicle movements per hour.

These assessments are based on the scenario of there being one additional storey of permitted development under the proposed Town Centre zoning, which could potentially result in, for example, additional residential and / or visitor accommodation in the upper levels of development and potential retail and / or commercial activities at ground level. Such potential trip generation arising from such an 'ultimate development scenario' and being fully developed and fully occupied by 2026 it's unlikely to have reached that level. This is considered to be a conservative over-estimate of the generated traffic movements and therefore points towards an upper-estimate of expected effect from this additional land within the proposed zoning.

With reference to the level of effects expected from the activities on the Lakeview site change, this increase is comparatively small. The Lakeview ITA notes that the network will experience a lower overall level of service during the PM peak than the AM peak, which is consistent with the higher traffic flows carried during the busier PM peak.

In particular Stanley St (SH6A) is expected to experience a range of performance levels ranging from LOS D to F (the latter being in the relatively short section (100m or so) between Ballarat and Beetham Streets). Such LOS levels indicated a higher operating flow and reduced performance during these peak periods.

The LOS pattern is not significantly changed with the addition of the Lakeview Plan Change traffic. The model also indicates that the intersections on SH6A between Beetham Street and Dublin Street will operate at LOS D during the PM peak. LOS D is generally considered to be acceptable performance for an urban arterial intersection at peak times.

While some lower levels of service are expected on relatively short sections of the major routes through the town, these reflect an existing pattern of use and the effects of the Lakeview plan change have been assessed as being acceptable. The additional traffic which can be expected due to the change from High Density Residential to Town Centre is not expected to significantly change the nature or scale these outcomes.

5.2 Pedestrian Connections

The change to Town Centre zoning has the potential to support and enhance the existing pedestrian network within Queenstown. The current town centre includes numerous pedestrianized zones and connections, including the Hay Street steps at the western end of these blocks, Brecon Street steps located centrally, and footpaths on Camp Street to the east. Additionally, there is a pedestrian route to Shotover Street through the Man Street car park, although this is not a public right-of-way.

With appropriate controls as referenced above, the inclusion of these blocks within the Town Centre zone can support and maximise pedestrian movement within these blocks, and between the Town Centre and Lakeview. It is recommended that the pedestrian (and vehicle) way-finding strategy that has been recommended for the Lakeview plan change be included in the forward detailed design and planning for this site, to provide a consistent and coherent way-finding strategy throughout Queenstown.

5.3 Public Transport Accessibility

As described in the Lakeview ITA, Queenstown has a number of bus routes which provide good connections to the Queenstown urban area, including Fernhill / Sunshine Bay and Frankton, as well as to the wider area including Arthur's Point, Arrowtown and Wanaka.

The three routes which service Queenstown town centre stop or interchange at Camp Street, which is approximately 200 m to 500 m, or 2 to 5 minutes' walk, from various parts of these blocks. Two of these bus routes pass closer to the subject sites, along the Shotover Street / Beach Street and Shotover Street / Gorge Road corridors, which are within one block of Man Street.

The change to Town Centre zoning, with the likely increase in movements to and from these blocks, has the potential to both be supported by the local public transport network, and in return to support the sustainability and growth of the network through increased demand for, and patronage of, public transport.

6. Parking and Loading

A number of clear parking patterns are apparent within the existing town centre. As noted in the Lakeview ITA, characteristics of that behaviour include the adoption of the cheapest (free) parking option for commuter and long-stay parking, as evidenced by the high utilisation of free kerbside parking on many of the roads on the periphery of the town centre.

The inclusion of these two blocks within the Town Centre zone will move the boundary of the current town centre, and it is recognised that there is potential for the existing parking patterns to simply shift to the new 'periphery' streets. It is likely that such a change would develop gradually; however, as the change in land use following the Lakeview Plan Change would occur over a number of years as individual lots are developed. Furthermore, as previously described, it is anticipated that only a relatively small proportion of the land will change to commercial office or retail activities; the bulk of these blocks is expected to remain as residential or visitor accommodation, although the density of this activity may increase over time due to the removal of the requirement to provide on-site parking.

The risk of extending or relocating the existing long-stay, on-street parking demand should be overcome through a wide-ranging parking strategy which should look to both supply levels and parking management strategies. Any such work in this area should be undertaken on an integrated outcome basis which includes both these blocks and the Lakeview site, and should recognise the potential for shared provision of parking on the Lakeview site and within the wider Town Centre.

The proposal will allow the development of a consolidated town centre and the efficient use of infrastructure, including parking resources. The Town Centre zone development philosophy is not to fully satisfy the unrestricted parking demand but to promote the shared use of existing transport / parking facilities with complementary strategies to promote other travel modes and to reduce the overall demand for travel through, for example, co-location of complementary activities. As noted in the Lakeview ITA, development of sustainable, practical alternatives to private car use is in large part driven by demand, and providing for private car use through the provision of generous on-site parking will simply increase this demand for private car use, to the detriment of the whole Town Centre.

Demand management measures are already recognised in QLDC's own transport strategies (e.g. Travel Demand Management Programme, March 2009), and should be further reinforced through the shared parking provision strategies as well as Council's wider programme of strategic transport management (e.g. parking information, enforcement of time restrictions, and progressive introduction of paid parking options).

The strategic design approach of the town centre is to create a balance between on-site parking provision and the wider area parking provided elsewhere in the zone, recognising that many areas of kerbside parking within the Town Centre are already full at peak periods. The District Plan includes a policy "to promote an integrated approach to traffic management, vehicle access and car parking within the Queenstown town centre". One of the methods identified in the Plan to achieve this is "To designate an integrated off-street parking network".

Council is already commencing steps towards the updating of its Town centre parking supply and management strategy which will incorporate consideration of the overall parking supply (on-site, kerbside, other off-street facilities for example Man Street car park) and parking management strategies such as, but not limited to, pricing.

A wider parking strategy consistent with the 2005 Future Link Parking Strategy would effectively see a progressive reduction in the free, all-day parking supplied along Man Street (potentially combined with the introduction of a hierarchy of parking charges) so that the accessibility for both pedestrians and vehicles to the Town Centre, including these blocks, is increased. The development of a parking charging strategy should be undertaken within the umbrella of a Town Centre Parking Strategy so that the wider transportation outcomes, including accessibility and environmental sustainability, can be achieved in a wider context.

It is noted that utilisation of the Man Street car park facility is relatively modest and is not adopted by many commuter parkers, who instead favour the free kerbside parking option (albeit at more distant locations). This points to a need for a consistent and Town Centre-wide approach to parking management. It is recommended that the parking strategy should include for a multi-site parking supply, optimising the efficient provision of parking across the Town Centre and seeking to amalgamate these two blocks with both the existing town centre and the Lakeview site.

The development of pedestrian links and the overall streetscape environment are also intrinsically linked to parking, as a safe and pleasant pedestrian environment and the ability for pedestrians to easily and conveniently access these blocks will minimise the demand for localised parking within the core of the Town Centre. One method of potentially improving the streetscape environment, perhaps counter-intuitively, is the removal of on-street parking. Any comprehensive parking strategy should recognise the primary role that the pedestrian environment can have on the level and location of parking demand.

7. Recommendations & Summary

This report has been prepared to quantify and assess the traffic and transportation aspects of the proposed plan change for two blocks of land in central Queenstown. The plan change application is for the rezoning of approximately 1.85ha of land bounded by Hay Street, Camp Street, Man Street and Isle Street. The land is currently zoned High Density Residential, and it is proposed to rezone it as a new Sub-Zone within the Queenstown Town Centre Zone. No changes are planned to the current road network. Subsequent resource consent applications for lots within these blocks will seek approval for individual land parcels.

The existing land within these blocks is developed as low density residential and visitor accommodation activities, and is located between the western edge of the Queenstown town centre and the proposed Lakeview site. The proposed plan change will facilitate the development of higher density residential activity, visitor accommodation, and small to medium scale retail and commercial activity. It is anticipated that the retail and commercial activity will occupy only around 25% of the land area. This mix of activities is intended to create an urban village environment which will have the potential for a significant degree of internal activity, and will supplement rather than compete with the existing town centre. The site's proximity to the town centre – being the neighbouring blocks at the western edge – will allow activities to gain maximum potential from existing sustainable transport modes. The potential increase in public transport usage will, in turn, strengthen the public transport network by providing a wider user base.

It is assessed that the potential difference in traffic generation between the existing High Density Residential zoning and the proposed Town Centre zoning is small. This is in part due to the expected prevalence of residential and visitor accommodation activity within these two blocks, under the Town Centre zoning. The effects on the road network due to the inclusion of these blocks within the Town Centre zone are expected to be modest.

One of the key outcomes of the plan change will be the removal of minimum parking requirements for activities on these two blocks. It is expected that residential and visitor accommodation will remain the predominant activities on these blocks, and to a large degree will continue to provide off-street parking as it has a high amenity value to these activities. The expected retail and commercial activities have a higher potential to make use of shared facilities, as parking facilities which are shared and / or a short distance away are frequent occurrences for these types of activities. To this end, a comprehensive parking strategy is recommended, which takes into account the existing Town Centre zone, the addition of the Isle St / Man St blocks to that zone, and also the proposed Lakeview subzone, in an integrated manner. The management of parking demand is intrinsically linked to the provision of pedestrian facilities and linkages (permeability) and the availability of public transport options. It is assessed that the rezoning of these blocks, together with the Lakeview proposal, can be managed in such a way as to develop these three facets in an integrated and complementary manner.

This plan change supports established policy objectives by providing for a complimentary mix of high-density residential dwellings, visitor accommodation and commercial activity within easy walking distance of existing bus routes and making use of established pedestrian and cycling infrastructure to encourage travel by non-car modes.

In conclusion, this addendum report has reviewed the proposed plan change and assessed the integration of the plan change area with surrounding transport networks, and found the proposals to be consistent with established best practice and guiding policy. There are no identifiable transport or traffic-related effects that would prevent the proposed plan change proceeding as intended.

TDG



Brecon Street Partnership Ltd
QLDC Lakeview Plan Change

Addendum to ITA (34 Brecon St)

August 2014

Brecon Street Partnership Ltd

Lakeview Plan Change

Addendum to ITA (34 Brecon St)

Quality Assurance Statement

Prepared by:



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Senior Transportation Engineer

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Status: Final report

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1. Introduction

TDG has recently completed an integrated transportation assessment (ITA) on behalf of Queenstown Lakes District Council (QLDC) for the proposed Lakeview Plan Change. The Lakeview Plan Change has been proposed to allow the development of a number of possible activities on land west of the Queenstown town centre, including hot pools, residential and visitor accommodation, and retail activities, as well a potential conference centre. The proposed zoning would be a new sub-zone within the Queenstown Town Centre zone. Further land parcels have also been proposed by QLDC for inclusion as a subzone within the Town Centre zone, known as the Isle St Subzone. These are the subject of an earlier addendum to the Lakeview ITA.

Following public consultation, Brecon Street Partnership Ltd has requested the inclusion of its property, 34 Brecon Street, in the Lakeview Plan Change process. This report supplements the Lakeview Plan Change ITA with an assessment of further effects from the inclusion of 34 Brecon Street within the re-zoning sought by the requested Plan Change. This report is not intended to be read in isolation, but is an addendum to the Lakeview Plan Change ITA.

If the Plan Change for the Lakeview area and adjacent blocks proceeds then the Queenstown Town Centre zone would extend westwards from its current limits. The Brecon Street Partnership is seeking to include 34 Brecon Street in the Plan Change to enable the possibility for future development along similar lines to the activities proposed for the Lakeview site and to enhance possible development and access options available within the wider Lakeview site.

An excerpt from QLDC District Plan planning maps is shown in Figure 1, with 34 Brecon Street and the Lakeview and proposed Plan Change areas highlighted.

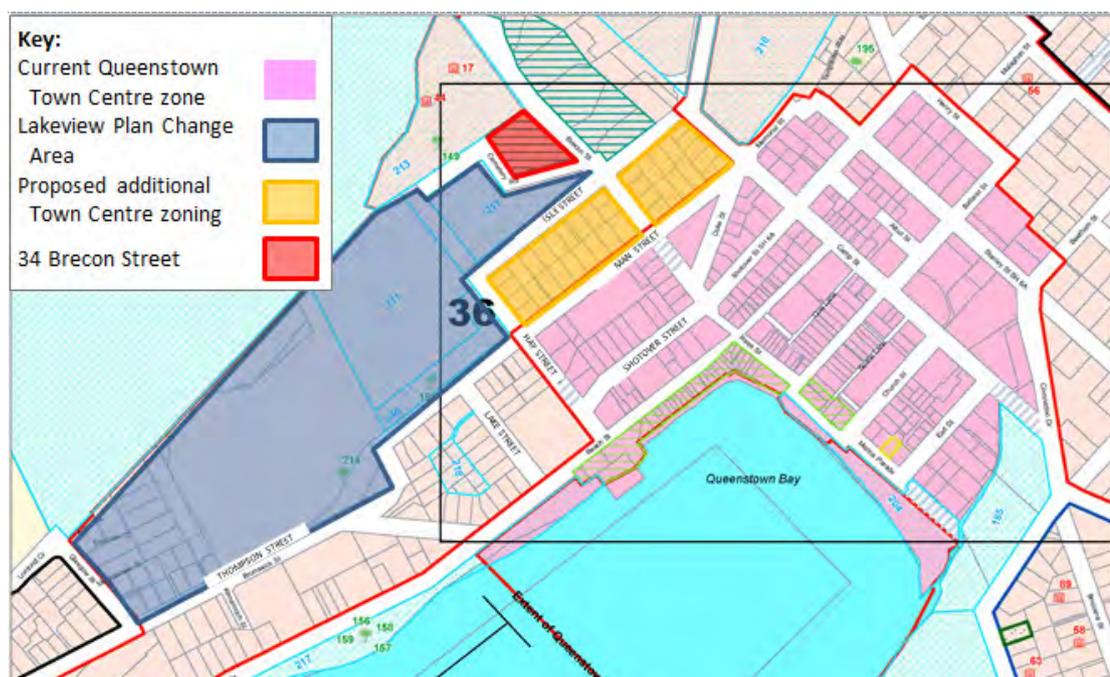


Figure 1: Existing Town Centre and proposed Lakeview Plan Change areas

This addendum to the Lakeview ITA provides an assessment of the traffic and transport effects which may be expected as a result of this extension to the Lakeview re-zoning sought.

2. Site Description and Access

The subject site, 34 Brecon Street, comprises a single lot with a gross area of approximately 3900m². It is bounded by the following:

- on its south-east and south-west sides by Cemetery Road, with the Lakeview Plan Change area beyond;
- on its north-west side by the Queenstown cemetery; and
- on its north-east side by Brecon Street.

The site is currently zoned High Density Residential in the District Plan, and also falls within a Commercial Precinct overlay which applies to the majority of lots on Brecon Street north of Isle Street. It is currently developed as a mini-golf commercial recreational activity. Access to the site is via a vehicle crossing connecting to Brecon Street at the northern corner of the site. There is currently no direct vehicle access to Cemetery Road.

The key vehicle access route to the site will generally be Brecon Street and Man Street. The southern end of Brecon Street has pedestrian access via the Brecon Street steps to the Duke Street/Shotover Street intersection, and the Queenstown Town Centre zone.

3. Zoning Overview

3.1 High Density Residential

The 34 Brecon Street site is currently zoned High Density Residential (“HDR”) within the Operative Queenstown Lakes District Plan. Chapter 14 Table 1 of the District Plan identifies the parking rates required for activities in the High Density Residential as follows:

Accommodation Type	Visitors	Staff
Residential units	1 per unit	None
Unit-type visitor accommodation	1 per unit up to 15 units; thereafter 1 per 2 units. In addition 1 coach park per 30 units.	1 per 10 units
Room-type visitor accommodation (hotel)	1 per 3 guest rooms up to 60 guest rooms; thereafter 1 per 5 guest rooms. In addition 1 coach park per 50 guest rooms	1 per 20 beds
Room-type visitor accommodation (backpacker hostel)	1 per 5 guest beds. In addition 1 coach park per 50 guest rooms	1 per 20 beds

Table 1: District Plan parking requirements for High Density Residential zones

The parking rates in the HDR zone reflect the expectations of progressive higher density development within these blocks and appropriate provision of parking without necessarily reflecting the relative proximity of these lots to the town centre zone and the available public parking resources therein.

3.2 Town Centre Zoning

The current Town Centre zone rules do not require the provision of parking. The lack of minimum or maximum requirements allows the market to drive the provision of parking. On-street parking is provided on many of the town centre streets, with a number of both public and private off-street car parks providing further parking capacity in the Town Centre.

Parking related to town centre activities is also apparent on roads surrounding the town centre zone, where parking controls allow for all-day parking. These are often residential streets but also include the commercial areas along, for example Hallenstein Street and Lake Esplanade, and near the subject land in Man Street and Robins Road.

4. Scale of Possible Development

It is proposed that the Brecon Street land be included within the Lakeview Subzone of the Queenstown Town Centre zone. It is understood that the likely activities on the subject site will be commensurate with those proposed for the wider Lakeview Plan Change area, i.e. a mix of commercial and retail activities as well as residential and visitor accommodation facilities. The development of activities and buildings on this lot will be carefully managed through the District Plan to accommodate a high quality mixed use-commercial environment. The anticipated activity changes facilitated by the Plan Change are outlined as follows.

The objectives set for the Lakeview sub-zone anticipate a range of new business, tourist, community and high density residential activities, with the range of activities provided for including:

- commercial recreational activities, offices and small-medium scale retail activities;
- high quality visitor accommodation; and
- well-designed, high density residential activities.

The Lakeview sub-zone transport philosophy anticipates providing an integrated transport and land-use outcome focussed on people movement rather than promotion of private car use. It is anticipated that a high quality pedestrian environment will be established within the Plan Change area, with a range of walking connections through and beyond the site, so that vehicle transport and associated parking does not dominate the site development. In the same way as the existing Town Centre incorporates a combination of roads and lanes, the sub-zone transport outcome will enable multiple options for visitors, locals, employees and residents to access the site and move around / within the site.

The location of 34 Brecon Street in relation to the Lakeview area will allow for a continuation of this design philosophy from the Lakeview site through to the upper Brecon Street area, which is noted as being a key and well-established pedestrian route between the town centre and the commercial activities around the Queenstown Skyline Gondola. The inclusion of the site within the subzone allows the potential for a high level of sustainable travel mode connectivity as well as possible alternative access connections from Brecon Street into the wider Lakeview site.

5. Network Assessment

5.1 Network Analysis

The potential traffic generation has been assessed for the site, for intensified development under the current High Density Residential zoning, and also for the proposed change to Town Centre zoning. A number of scenarios have been considered, which seek to reflect the wider range of possible development outcomes that may result for the site.

5.1.1 Mixed-Use Scenario

The first is similar to that expected for the rest of the Lakeview site, and is based on the following parameters:

- Site area of 3,900m²;
- Typical site coverage: 80 %;
- Town Centre zoning adds a further one storey of development to that likely to be developed within the High Density Residential zone;
- An equal split (in terms of floor area) between residential, visitor accommodation (unit type) and visitor accommodation (room type) activities;
- Retail and commercial activity (for Town Centre zone) taking up 25 % of the total floor area;
- Assumption that the expected boutique / speciality retail / commercial likely to be developed under the Town Centre zoning would generated only 50% new traffic movements; the remainder being drawn from the surrounding residential and visitor accommodation activities within these blocks and adjoining activities; and
- Trip generation rates consistent with those used for the Lakeview Plan Change activities.

It is anticipated that the change from the potential development of High Density Residential to Town Centre zoning will have a negligible increase in traffic generation from these blocks 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%, however this is still a modest level of approximately 20 additional vehicle movements per hour.

5.1.2 Single Use Commercial Scenario

The Lakeview ITA and the previous addendum have assessed entire blocks, with multiple lots per block. This increases the likelihood of a variety of different activities being developed, at different times. With 34 Brecon Street being a single lot, it is considered to be more likely (although by no means certain) that a single activity type may dominate future development. While a mixed-use development is considered to be more likely, for the purposes of testing sensitivity, an assessment has also been made of the entire lot being developed as retail and commercial activity. As with the previous assessments, consideration has been given to the likelihood of such activity serving the immediately

surrounding residential and visitor accommodation activities, the proximity to the town centre, and the excellent pedestrian connectivity.

For this type of single-use development it is assessed that traffic generation in the AM peak would likely be less than that generated by the current High Density Residential zoning, by around 26% or 7 vehicles per hour. In the PM peak it is expected that traffic would increase by around 56%, or 14 vehicles per hour.

5.1.3 Other Possible Development Scenarios

The land owner has also identified accommodation for seasonal workers as a possible activity for the site, similar in scale to the cabins on the current Lakeview site. While it would be possible to have a higher number of units on the site than larger standard residential units, the nature of this activity type would be expected to have a lower traffic generation rate per unit due to a number of factors including lower vehicle ownership rates and proximity of the site to the Town Centre and administrative focus of Queenstown's commercial visitor operations. As a result, it is assessed that there would be no practical change in the volume of traffic generated from the site for this activity compared with the equivalent baseline activity able to be developed in accordance with the HDR zone rules.

5.1.4 Summary

With reference to the level of effects expected from the activities on the Lakeview site change, the potential increases described above comparatively minor. The Lakeview ITA notes that the network will experience a lower overall level of service during the PM peak than the AM peak, which is consistent with the higher traffic flows carried during the busier PM peak. In particular Stanley St (SH6A) is expected to experience a range of performance levels ranging from LOS D to F (the latter being in the relatively short section (100m or so) between Ballarat and Beetham Streets). Such LOS levels indicated a higher operating flow and reduced performance during these peak periods.

The traffic modelling undertaken for the Plan Change ITA also indicates that the intersections on SH6A between Beetham Street and Dublin Street will operate at LOS D during the PM peak. LOS D is generally considered to be acceptable performance for an urban arterial intersection at peak times.

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. 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 HDR zone rules, and therefore is not expected to significantly change the nature or scale of these outcomes.

5.2 Pedestrian Connections

The change to Town Centre zoning has the potential to support and enhance the existing pedestrian network within Queenstown. The current town centre includes numerous pedestrianized zones and connections, including the Hay Street steps at the western end of these blocks, Brecon Street steps located centrally, and footpaths on Camp Street to the east. Additionally, there is a pedestrian route to Shotover Street through the Man Street car park, although this is not a public right-of-way.

The Brecon Street site is located on a key pedestrian route between the Town Centre and the gondola and other attractions on the upper section of Brecon Street. The wider range of activity types which may be developed under the proposed Plan Change have the potential to allow for an integrated streetscape environment along the Brecon Street frontage, enhancing the existing route. The inclusion of this site within the Plan Change area would potentially extend the proposed Lakeview subzone north-eastwards, and create a zone boundary on upper Brecon Street. This creates the potential to develop more movement connections (both pedestrian and vehicular) and a more integrated pedestrian network between the site and Brecon Street.

With appropriate controls the inclusion of this block within the Town Centre zone can support and maximise pedestrian movement within the Lakeview site, and between the Town Centre and Lakeview. The pedestrian (and vehicle) way-finding strategy that has been recommended for the Lakeview Plan Change will extend to this site, providing a consistent and coherent way-finding strategy throughout Queenstown.

5.3 Public Transport Accessibility

As described in the Lakeview ITA, Queenstown has a number of bus routes which provide good connections to the Queenstown urban area, including Fernhill / Sunshine Bay and Frankton, as well as to the wider area including Arthur's Point, Arrowtown and Wanaka.

The three routes which service Queenstown town centre stop or interchange at Camp Street, which is approximately 300 m, or 3 minutes' walk, from the site. Two of these bus routes pass closer to the site, along the Shotover Street / Beach Street and Shotover Street / Gorge Road corridors, which are within one to two blocks of the site or 3-5 minute walk from the site frontage.

The change to Town Centre zoning, with the likely increase in movements to and from these blocks, has the potential to both be supported by the local public transport network, and in return to support the increasing sustainability and growth of the network through increased demand for, and patronage of, public transport.

6. Parking and Loading

6.1 Parking

Brecon Street north of Isle Street (including along the immediate site frontage of 34 Brecon Street) currently has P240 parking on both sides of the road. On the Cemetery Road frontages parking is generally not permitted, although some kerbside parking is provided along the boundary of the holiday park opposite. While this on-street parking could serve retail or commercial activity customers at 34 Brecon Street, there is limited opportunity for longer-stay on-street parking for residents or commuters.

In a wider context, a number of clear parking patterns are apparent within the existing town centre. As noted in the Lakeview ITA, characteristics of that behaviour include the adoption of the cheapest (free) parking option for commuter and long-stay parking, as evidenced by the high utilisation of free kerbside parking on many of the roads on the periphery of the town centre including parts of Isle Street, Man Street and Robins Road.

It is recognised that there is potential for the existing commuter parking patterns to simply shift to the new 'periphery' streets around the extended Town Centre zone. For this site, it is noted that with the existing parking controls on Brecon Street and Cemetery Road any increased parking pressure on local streets would likely focus on Isle Street, the central and northern end of Man Street, and Brecon Street south of Isle Street. The Man street car park is also conveniently located, approximately 160m from the site providing a conveniently located, paid parking option.

With one of the more likely development scenarios for the site it is anticipated that only a relatively small proportion of the land will change to commercial office or retail activities; the bulk of the development is expected to remain as residential or visitor accommodation, although the density of this activity may increase over time due to the removal of the requirement to provide on-site parking for some activities.

The Lakeview ITA recognised the risk of extending or relocating the existing long-stay, on-street parking demand, and noted that the outcome should be managed through co-ordination with Council's developing wide-ranging parking strategy which is expected to consider both supply levels and parking management strategies. Any such work in this area should be undertaken on an integrated outcome basis which includes the wider Town Centre and surrounding residential areas. This will necessarily include the subject site and the surrounding roads, and the proposal is consistent with the previous recommendation for the development of a consolidated town centre and the efficient use of infrastructure, including parking resources.

The Town Centre zone development philosophy is not to fully satisfy the unrestricted parking demand but to promote the shared use of existing transport / parking facilities with complementary strategies to promote other travel modes and to reduce the overall demand for travel through, for example, co-location of complementary activities. As noted in the Lakeview ITA, development of sustainable, practical alternatives to private car use is in large part driven by demand, and providing for private car use through the provision of generous on-site parking will simply increase this demand for private car use, to the detriment of the whole Town Centre.

Demand management measures are already recognised in QLDC's own transport strategies (e.g. Travel Demand Management Programme, March 2009), and should be further reinforced through the shared parking provision strategies as well as Council's wider programme of strategic transport management (e.g. parking information, enforcement of time restrictions, and progressive introduction of paid parking options).

The strategic design approach of the town centre is to create a balance between on-site parking provision and the wider area parking provided elsewhere in the zone, recognising that many areas of kerbside parking within the Town Centre are already full at peak periods. The District Plan includes a policy "to promote an integrated approach to traffic management, vehicle access and car parking within the Queenstown town centre". One of the methods identified in the Plan to achieve this is "To designate an integrated off-street parking network". It is understood that Council is presently working towards developing a parking supply and management strategy which will incorporate consideration of the overall parking supply (on-site, kerbside, other off-street facilities for example Man Street car park) and parking management strategies such as, but not limited to, pricing.

A wider parking strategy consistent with the 2005 Future Link Parking Strategy would effectively see a progressive reduction in the free, all-day parking supplied along Man Street (potentially combined with the introduction of a hierarchy of parking charges) so that the accessibility for both pedestrians and vehicles to the Town Centre, including these blocks, is increased.

Utilisation of the Man Street car park facility is relatively modest and is not adopted by many commuter parkers, who instead favour the free kerbside parking option (albeit at more distant locations). This points to a need for a consistent and Town Centre-wide approach to parking management. It is recommended that the parking strategy should include for a multi-site parking supply, optimising the efficient provision of parking across the Town Centre and seeking to amalgamate these two blocks with both the existing Town Centre and the Lakeview site.

Activities on the site will be subject to the Lakeview Subzone parking requirements. This means that visitor accommodation, retail and commercial activities will reflect the 'no minimum' parking provision of the Town Centre zone, with commercial recreation activities and residential activity having parking requirements in line with those of the current High Density Residential. These are detailed further in the Lakeview ITA.

The site is located on a key pedestrian route between the town centre and the gondola and other attractions on the upper section of Brecon Street. This provides convenient access to the wider parking resource within the town centre. Internal links within the Lakeview subzone could connect the site with shared parking in the subzone.

6.2 Service Access

The inclusion of this site into the Lakeview Plan Change area also opens the possibility of a new service lane or secondary, supporting vehicle access point being provided from Brecon Street along the north boundary of the Plan Change site. Such a service lane has the potential to provide service access to a large proportion of the site. Previously this option was not considered viable based on the configuration of Cemetery Road and the north end of Isle Street. At this early stage of development planning no particular weight has been

attached to this concept, and it is identified here in recognition of the possible benefits which may be obtained at a future date.

From an integrated transportation point of view, the inclusion of this site into the Plan Change provides a positive opportunity develop a safe alternative to the Isle Street / Cemetery Road / Brecon Street intersection, perhaps rationalising access for this site, the holiday park and cemetery. This is still just a concept at this stage, however and is not proposed, or indeed required, for the Plan Change to proceed but does enable a range of alternative secondary access options to be explored and potentially constructed so as to improve the current Isle Street / Cemetery Road / Brecon Street intersection.

Both of the above possibilities may include a requirement for land swaps or some form of access or right-of-way agreement. These matters will require further discussion between the relevant parties at the appropriate time, however from a transportation perspective the inclusion of the site within the Plan Change provides positive future opportunities without introducing any significant adverse effect.

7. Recommendations & Summary

This report has been prepared to assess the transportation aspects of the proposed inclusion of 34 Brecon Street within the proposed Lakeview Plan Change in central Queenstown. The Lakeview Plan Change application is for the rezoning of approximately 11ha of land bounded by Hay Street, Camp Street, Man Street and Isle Street, plus two additional blocks south of Isle Street with an area of 1.85ha. This proposal contemplates the inclusion of 34 Brecon Street, at approximately 0.39ha, within the larger Lakeview site. The land is currently zoned High Density Residential, and the proposed change will incorporate it within the proposed Lakeview Sub-Zone of the Queenstown Town Centre Zone. No changes are planned to the current road network, although it is noted that the inclusion of this site within the Plan Change area opens the door to the future realignment of the Isle Street / Cemetery Road / Brecon Street intersection, and also the possibility of a service lane along the north boundary of the Lakeview site. These changes are conceptual at this stage. Subsequent resource consent applications for the site would be required to give effect to these opportunities.

The lot currently accommodates a low intensity, commercial recreational activity, and is located at the north-eastern end of the proposed Lakeview site. The proposed Plan Change would facilitate the development of higher density residential activity, visitor accommodation, and small to medium scale retail and commercial activity. It is anticipated that the retail and commercial activity could occupy around 25 % of the floor area, although higher proportions of commercial activity have also been assessed. This mix of activities is intended to integrate within the existing environment of residential and visitor accommodation as well as the commercial activities on upper Brecon Street (being the common walking route through to the Skyline Gondola), and will supplement rather than compete with the existing town centre. The site's proximity to the town centre and direct pedestrian link along Brecon Street will allow activities to gain maximum potential from existing sustainable transport modes.

The potential difference in traffic generation between what can be currently developed under the existing High Density Residential zoning and the proposed Town Centre zoning has been assessed and is very small. This is in part due to the expected prevalence of residential and visitor accommodation activity on the site under the Town Centre zoning. The effects on the road network due to the inclusion of these blocks within the Town Centre zone are expected to be low.

One of the key outcomes of the Plan Change will be the removal of minimum parking requirements for visitor accommodation, retail and commercial activities on the site. It is expected that residential and visitor accommodation will remain the predominant activities on these blocks, and to a large degree, will continue to provide off-street parking as it has a high amenity value to these activities. The expected retail and commercial activities have a higher potential to make use of shared facilities, as parking facilities which are shared and / or a short distance away are frequent occurrences for these types of activities.

To this end, it has been identified that a comprehensive parking strategy for the Town Centre is both required and presently being initiated by Council, which takes into account the existing Town Centre zone, the proposed Lakeview subzone, the addition of the subject site to that zone, and the rezoning of the adjacent Isle St / Man St blocks, in an integrated manner. The management of parking demand is intrinsically linked to the provision of

pedestrian facilities and linkages (permeability) and the availability of public transport options. It is assessed that the rezoning of the subject land at Brecon Street, together with the Lakeview proposal, can be managed in such a way as to develop these transportation facets in an integrated and complementary manner.

This Plan Change supports established policy objectives by providing for a complimentary mix of high-density residential dwellings, visitor accommodation and commercial activity within easy walking distance of existing bus routes and making use of established pedestrian and cycling infrastructure to encourage travel by non-car modes.

In conclusion, this addendum report has reviewed the proposed Lakeview Plan Change and assessed the inclusion of 34 Brecon Street within the Plan Change area, and found the proposal to be consistent with established best practice and guiding policy. There are no identifiable transport or traffic-related effects that would prevent the inclusion of this site in the proposed Plan Change area.

TDG