APPENDIX I - TRAFFIC ASSESSMENT





10787.000 20 September 2010 Traffic Design Group Ltd 127 Armagh Street PO Box 13-835, Armagh Christchurch 8141 New Zealand

P+64 3 379 2404 F+64 3 379 3406 W www.tdg.co.nz

Mike Botting
Paterson Pitts Partners (Wanaka)
PO Box 283
Wanaka 9343

Dear Mike

North Three Parks: Assessment of Access Options

Following our recent discussions and earlier correspondence, we have undertaken an initial review of the access arrangements to the proposed plan change area. Our assessment is as follows.

1. Traffic Generation and Distribution

We understand that the proposed plan change area will accommodate 840 residential properties together with additional business and commercial areas. However the residential development will occupy 90% of the total area and therefore in practice is likely to be the prime determinant of the traffic generation characteristics.

The Council's subdivision standards require each residential property to be assessed as generating 8 vehicle movements per day, making a total of 6,720 movements (in+out). Of these, we consider that in practice, around 750 movements (in+out) will occur in each of the peak hours. In the morning peak hour we anticipate 560 vehicles will emerge from the site and 190 will enter, and in the evening peak 260 vehicles will emerge from the site and 490 will enter.

While the distributions used within the Three Parks analysis have not been made available to us, the Transportation Assessment summarised the modelling which had been undertaken. Disregarding the access onto Riverside Road, this suggested that around 80% of the traffic generated by the site would use the state highway with 20% using Ballantyne Road. It should be noted that only 27% of the traffic generated by Three Parks is associated with residential land uses whereas it is much greater for North Three Parks. Notwithstanding this, it is suggested that there will continue to be a bias towards the highway for traffic generated by the proposed plan change. Thus we suggest that for the purposes of analysis, two scenarios should be taken forwards for evaluation, being a 80-20 split (in favour of the state highway over Ballantyne Road) and a corresponding 60-40 split (again, state highway over Ballantyne Road).

On this basis, the state highway intersection will accommodate between 450 to 600 vehicle movements in each peak hour, with Ballantyne Road accommodating 150 to 300 vehicle movements in the same period.



2. Forms of Intersection

We note that the analyses undertaken for Three Parks did not specify the exact form of each intersection and we have therefore undertaken an assessment from first principles.

The prevailing traffic volumes using Ballantyne Road are considerably lower than those on the state highway. The Transportation Assessment for Three Parks set out that on Ballantyne Road traffic volumes were some 1,400 vehicles per day in 2006 rising to 3,500 vehicles per day in 2026, whereas on the highway corresponding volumes of 5,500 vehicles per day rising to 9,500 vehicles per day were expected. Using these figures, we consider that either a priority intersection or a roundabout could accommodate the likely traffic flows on Ballantyne Road should the proposed plan change be adopted.

In practice, we consider that a priority intersection is the more likely to occur. In part, this is because it would require less land and is more favourable to non-car modes of travel than a roundabout. Further, a high level of service is likely to be provided with such a configuration because of the lower traffic volumes passing through the intersection. However, one advantage of a roundabout is that it would act as a self-enforcing speed reducing feature and therefore could be favoured over a priority intersection as a mechanism of extending the urban speed limit on the approach to Wanaka.

On the state highway, a key matter relates to the spacing of intersections. In particular, a priority intersection serving North Three Parks would be too close to any form of intersection serving Three Parks for the arrangement to meet NZTA's requirements. Therefore, the options available are for a roundabout to be constructed which would serve both areas (with potentially one arm serving both areas or with both areas having their own arms) or for a single priority intersection. At this stage, we consider that NZTA is likely to favour a roundabout, given that the priority intersection serving Anderson Road (just west of the likely Three Parks access location) had a poor road safety record associated with failures to give way to opposing traffic prior to its relatively recent reconstruction as a roundabout.

Notwithstanding this, there are several site-specific design constraints evident including the alignment of the highway (which restricts sight distances for vehicles approaching the intersection and for those emerging from the plan change sites), the topography (which affects the extent of earthworks required to construct the roundabout as well as gradients), and the presence of the accesses to the Mount Iron Reserve car park on the northern side of the highway. Many of these matters would be more difficult to address if a separate roundabout arm for North Three Parks was pursued, because such an arrangement would necessarily mean that the diameter of the roundabout would have to be greater. We would therefore suggest that North Three Parks seeks to link into the roundabout using the currently-proposed access into Three Parks.

I trust that this assists in providing an overview of the likely access arrangements into North Three Parks, but please do not hesitate to contact me if there are any matters which you wish to discuss.

Yours faithfully

Traffic Design Group Ltd

Andy Carr

Senior Associate

North Three Parks

Proposed Private Plan Change

Transportation Assessment Report

Traffic Design Group

PO Box 13-835 Christchurch New Zealand

P: +64 3 379 2404

www.tdg.co.nz

October 2011

North Three Parks

Proposed Private Plan Change

Transportation Assessment Report Quality Assurance Statement

Prepared by:

Chris Rossiter

Senior Transportation Engineer

Reviewed by:

Judith Makinson

Principal Transportation Engineer

Approved for Issue by:

Andy Carr

Senior Associate / Branch Manager

Status:

Final

Date:

11 October 2011

PO Box 13-835 Christchurch New Zealand

P: +64 3 379 2404

www.tdg.co.nz

Traffic Design Group

Millian Anger

Executive Summary

The Wanaka Structure Plan was adopted by Queenstown Lakes District Council in 2007 and provides a framework for controlling future development within the town. Plan Change 16 (for the Three Parks Zone) and Plan Change 32 (for the Ballantyne Road Mixed Use Zone) partially give effect to the structure plan and enable urban development of land generally bounded by State Highway 84 (SH84) to north, Ballantyne Road to the south and Riverbank Road to the east. However, the land between the Three Parks Zone and the Wanaka Golf Course is still zoned as rural and consequently rezoning is required to give better effect to the Wanaka Structure Plan. This report provides an assessment of traffic effects associated with rezoning this section of land for predominantly residential development in line with the Wanaka Structure Plan.

Since the proposed plan change will enable residential development in a manner that is consistent with the Wanaka Structure Plan, no further assessment of the wider area traffic effects of the plan change has been undertaken because it can be expected that this will have been addressed as part of the development of that structure plan. Therefore, this assessment has focused on the more localised traffic effects of the proposed plan change.

With the development of the Three Parks Zone creating a new suburban area for Wanaka that includes a commercial centre, development of the proposed plan change area will create opportunities for people to live and work in close proximity which will reduce the demand for the travel by motor vehicle and create opportunities for more walking and cycling trips.

It is anticipated that the operative plan changes PC16 and PC32 will result in significant growth in the traffic volumes on both SH84 and on Ballantyne Road. While the structure plan for the Three Parks Zone does not identify an intersection form for the main roading connection with SH84, the analysis undertaken for this assessment has indicated that a roundabout with two circulating lanes and two lanes on all approaches would be required to meet the travel demands for the zone. Such an arrangement would also provide sufficient capacity to meet the additional travel demands associated with the proposed plan change area.

The forecast traffic volumes by 2021 on SH84 for the morning and evening peak periods are more than double the existing traffic volumes. However, it is considered that even with these traffic volumes, the existing highway will provide an acceptable level of service.

Ballantyne Road east of Golf Course Road is currently classified as a Local Road. With the development enabled by the Three Parks Zone and the Ballantyne Road Mixed use Zone, the traffic volumes on Ballantyne Road will be significantly higher than at the current time and it is considered that the road will be upgraded as part of those plan changes to meet a future function as an Arterial Road. With these improvements, the road will have sufficient capacity to accommodate the additional traffic associated with the proposed plan change area.

The plan change request has also been assessed against the relevant transport planning framework contained in regional and local strategies, and overall, it is considered that the proposal is consistent with the transport-related objectives and policies of those documents. Of relevance is that the proposed plan change gives effect to the Wanaka Structure Plan.

Accordingly, the proposed plan change can be supported from a transportation perspective.



Table of Contents

1.		ction		
2.	Existing Transport Environment			
	2.1	Location	2	
	2.2	Roading Network	2	
	2.3	Footpaths and Cycling	4	
3.	Current	Transportation Patterns	5	
	3.1	Daily Traffic Volumes	5	
	3.2	Hourly Traffic Pattern	5	
	3.3	Intersection Survey Data	7	
	3.4	Cyclists and Pedestrians	7	
	3.5	Road Safety	7	
4.	Future	Changes to Transport Networks	10	
	4.1	Otago Regional Land Transport Programme 2009-2012	10	
	4.2	Long Term Council Community Plan (2009-2019)	10	
	4.3	Wanaka Structure Plan	10	
5.	Propos	ed Plan Change	14	
	5.1	Overview	14	
	5.2	Road Network	14	
	5.3	Cyclists and Pedestrians	14	
	5.4	Development Pattern	14	
6.	Traffic (Generation and Distribution		
	6.1	Existing Traffic Generation	17	
	6.2	Expected Traffic Generation	17	
	6.2.1	Three Parks Zone (Plan Change 16)	17	
	6.2.2	Ballantyne Mixed Use Zone (Plan Change 32)	17	
	6.2.3	Future Year Traffic Generation	18	
	6.2.4	Proposed Plan Change Area	18	
	6.3	Traffic Distribution	19	
7.	Assessi	ment of Traffic Effects	21	
	7.1	Road Network	21	
	7.1.1	Wide Area Effects	21	
	7.1.2	State Highway 84	21	
	7.1.3	State Highway 84 / TPZ Main Road	22	
	7.1.4	Ballantyne Road	22	
	7.1.5	Riverbank Road	23	
	7.2	Walking and Cycling	23	
	7.3	Road Safety	23	

8.	Plannin	g Policy Framework	24
	8.1	Introduction	24
	8.2	Otago Regional Policy Statement	24
	8.3	Otago Regional Land Transport Strategy	25
	8.4	Wanaka Structure Plan	27
	8.5	Wanaka Transportation and Parking Strategy	27
	8.6	Long Term Council Community Plan	27
	8.7	Queenstown Lakes District Walking and Cycling Strategy	28
	8.8	Queenstown Lakes District Transport Safety Strategy	28
	8.9	District Plan Objectives and Policies	29
	8.10	District Plan Rules	32
9.	Summa	ry and Conclusion	33

1. Introduction

The Wanaka Structure Plan was adopted by Queenstown Lakes District Council in 2007 and provides a framework for controlling future development within Wanaka. Plan Change 16 for the Three Parks Zone and Plan Change 32 for the Ballantyne Road Mixed Use Zone give partial effect to the structure plan and will enable urban development of land generally bounded by State Highway 84 (SH84) to north, Ballantyne Road to the south and Riverbank Road to the east. However, the land between the Three Parks Zone and the Wanaka Golf Course is still zoned as rural and rezoning is required to give better effect to the Wanaka Structure Plan. This report provides an assessment of traffic effects associated with rezoning this section of land for residential development in line with the Wanaka Structure Plan.

This report begins with a description of the existing transportation infrastructure surrounding the site, traffic volumes and a review of road safety in the area. It then describes the transportation components of the plan change request and the potential traffic generation of the development that will be enabled by the plan change. An assessment of the potential traffic effects associated with the development facilitated by the proposed plan change is followed by an assessment against strategic planning considerations from a transportation perspective.



2. Existing Transport Environment

2.1 Location

The proposed plan change area comprises the rural land between the Wanaka Golf Course and the Three Parks Zone (TPZ). The site has frontages to two existing roads, State Highway 84 (SH84) to the north and Ballantyne Road to the south-west.

2.2 Roading Network

Figure 1 shows the location of the plan change area and the existing road hierarchy in the vicinity of Wanaka as set out in the Queenstown Lakes District Council District Plan (District Plan).

SH84 links Wanaka town centre to State Highway 6, with the latter commencing approximately 2km east of Wanaka. SH84 is a two-way road providing a traffic lane of 3.3m width in each direction. At the western approach to the roundabout intersection with Anderson Road, which is classified as an Arterial Road in the District Plan, SH84 widens to two lanes, one for left turning traffic onto Anderson Road and one for straight ahead traffic. Similarly, there is widening to provide for two approach lanes on Anderson Road, but the eastern (state highway) approach has just one traffic lane. The posted speed limit along this section of SH84 is 50km/h, which changes to a 70km/h limit approximately 500m east of the Anderson Road intersection.

Ballantyne Road forms the south-western boundary to the plan change area. It is classified as a Local Road under the District Plan south of Golf Course Road and as a Collector Road to the north of Golf Course Road. The District Plan describes the function of a Local Road as "accessways to properties and...not intended to act as through routes for vehicles". While a Collector Road may provide access to properties with frontage to the road, the function of a Collector Road is to "provide for the distribution and circulation of traffic between or within local areas and to and from the arterial road network".

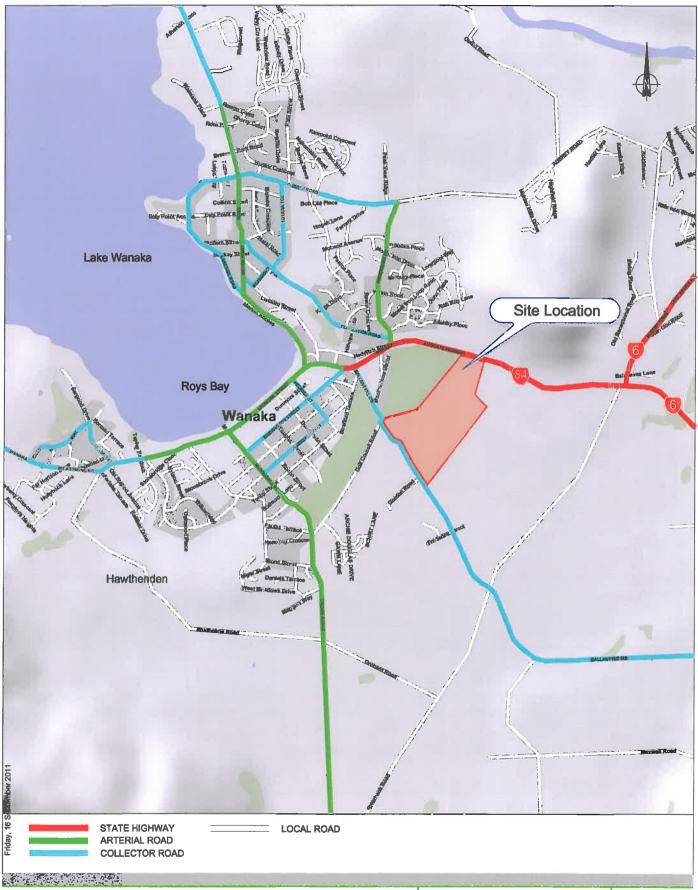
Within the Wanaka urban area, Ballantyne Road has a posted speed limit of 50km/h which increases to 70km/h around 100m south of Golf Course Road. Ballantyne Road generally has two 3.5m wide traffic lanes and 0.9m wide sealed shoulders.

Golf Course Road is classified as a Local Road, and provides a connection between Ballantyne Road and Cardrona Valley Road. Golf Course Road meets Ballantyne Road at a priority intersection controlled by give-way signs on Golf Course Road. The sign-posted speed limit on Golf Course Road is 70km/h.

MacPherson Street is classified as a Local Road and provides a connection between Ballantyne Road and SH84 west of Golf Course Road. MacPherson Street meets Ballantyne Road at a priority intersection controlled by give-way signs on MacPherson Street.

There are currently no formed roads within the proposed plan change area or within the TPZ.





Proposed Plan Change, North Three Parks, Wanaka Site Location & Road Hierarchy

Traffic Design Group

SCALE: N.T.S.

2.3 Footpaths and Cycling

SH84 has wide sealed shoulders that enable cyclists to have separation from the faster moving vehicular traffic. A footpath has been provided on the south side of the road only which connects Wanaka and Puzzling World.

There is a recently constructed metalled footpath/cycleway within the northern berm of Ballantyne Road, which will assist the movement of these road users. Elsewhere, Ballantyne Road has narrow sealed shoulders and any cyclists would be required to travel within the traffic lanes, and any pedestrians using Ballantyne Road would need to use the wide grassed berms on either side of the road.

There is a formally marked crossing place for golfers in the vicinity of the Ballantyne Road / Golf Course Road intersection. This uses non-standard road signs, showing a golfer with clubs on a green/yellow diamond-shaped warning sign. There are however no carriageway markings indicating the presence of the crossing.

3. Current Transportation Patterns

3.1 Daily Traffic Volumes

Traffic count information has been obtained from Queenstown Lakes District Council (QLDC) and the New Zealand Transport Agency (NZTA). The most recent Annual Daily Traffic (ADT) volumes on roads in the vicinity of the proposed plan change area are summarised in Table 1 below.

	Location	ADT (vpd)	Count year
	Gordon Road to Golf Course Road	810	Estimated
Ballantyne Road	Golf Course Road to MacPherson Street	3,800	Feb 2008
	MacPherson Street to Ardmore Street	2,700	Feb 2009
Golf Course Road	Ballantyne Road to Cardrona Valley Road	1,200	Jul 2008
Macpherson Street	Ballantyne Road to SH84	1,000	Jul 2009
Anderson Road	SH84 to Plantation Road	4,000	Feb 2008
State Highway 84	Mt Iron - Near Entrance to Reserve	6,700	2010
State Highway 6	South of Cardrona River Bridge	3,700	2010

Table 1: Daily Traffic Volumes

The traffic count data reflects the roles of each section of road within the road hierarchy with the Local Road section of Ballantyne Road carrying the least traffic and the Arterial Road and state highways carrying higher volumes of traffic.

As the traffic volumes on SH84 are monitored each year, it is possible to use these volumes to calculate the prevailing rate of traffic growth. Based on a linear fit to the most recent five years of data, traffic volumes on SH84 are currently growing at about 2.5% per annum.

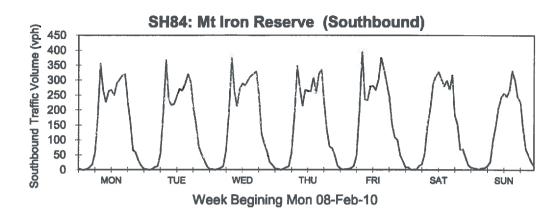
3.2 Hourly Traffic Pattern

Figure 2 shows the hourly pattern of traffic volumes recorded on SH84 near to Mt Iron Reserve over the period of a week in February 2010. The weekday average traffic volume was 7,300 vehicles per day (vpd). The weekend traffic volumes are significantly lower with 6,600vpd recorded on Saturday and 6,000vpd on Sunday. The February 2010 ADT volume was 7,000vpd which is about 5% higher than the Annual Average Daily Traffic (AADT) volume reported by NZTA for 2010. This is consistent with February being one of the busier months of the year.

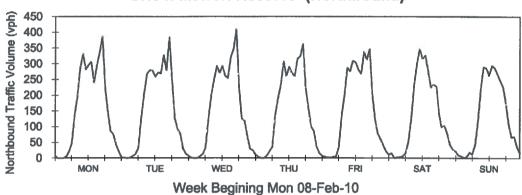
The weekday hourly data shows a short duration peak between 8am and 9am in the morning and a broader peak in the northbound direction in the afternoon peak period. This is commensurate with a typical commuter travel pattern, with people travelling to their workplace in the morning and back home in the evening.

In the morning peak hour, a two-way volume of 560vph was observed which represents less than 7.6% of total daily volume. In the evening a peak hour volume of 710vph was observed which represents 9.6% of the average weekday traffic volume. Typically a value of around 10% to 15% of greater would be anticipated, which suggests that commuter vehicles on the highway form a lower proportion of the traffic volume than might be expected.

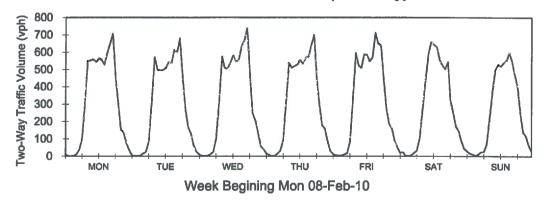




SH84: Mt Iron Reserve (Northbound)



SH84: Mt Iron Reserve (Two-Way)



Proposed Plan Change, North Three Parks, Wanaka Traffic Volumes on SH84

Thursday, 15 September 2011

Traffic Design Group

2 SCALE: —

3.3 Intersection Survey Data

Turning count information for both light and heavy vehicles was collected at the SH84 / Anderson Road intersection in November 2010. **Figure 3** shows the observed turning counts during the morning and evening peak hour.

In the morning peak hour, the dominant movement was the right turn from Anderson Road onto SH84 towards Wanaka town centre.

In the evening peak hour, the outbound movement from the town centre is about twice the volume of traffic on either of the other approaches with the turning movements split equally between the through movement and the left turn onto Anderson Road.

3.4 Cyclists and Pedestrians

Informal on-site observations indicate that there is a very low level of cyclist and pedestrian activity in the vicinity of the proposed plan change area, although there will be some level of activity associated with golfers crossing Ballantyne Road. Given the extent of development in the immediate vicinity, and the distance to any likely walking and cycling destinations, these observations are not surprising.

3.5 Road Safety

The NZTA Crash Analysis System (CAS) has been used to identify all reported accidents on SH84 and Ballantyne Road between Ardmore Street and Riverbank Road. The search period included the most recent, full five year period ending 2010 and any reported accidents for 2011.

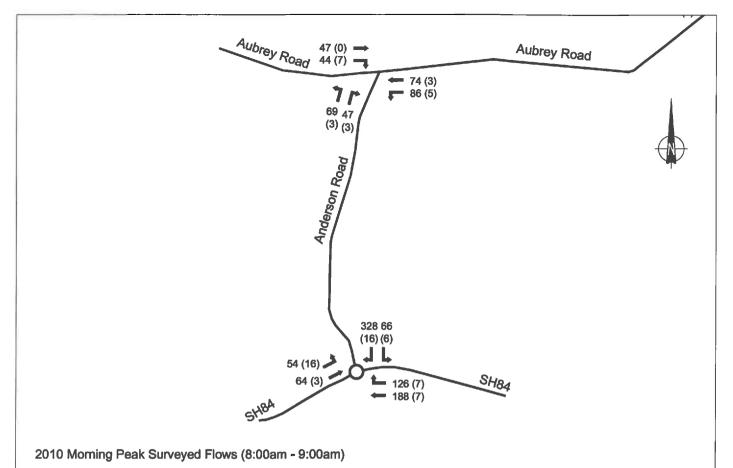
The search identified 24 crashes with four of these resulting in serious injuries. Ten of the accidents resulted in minor injuries.

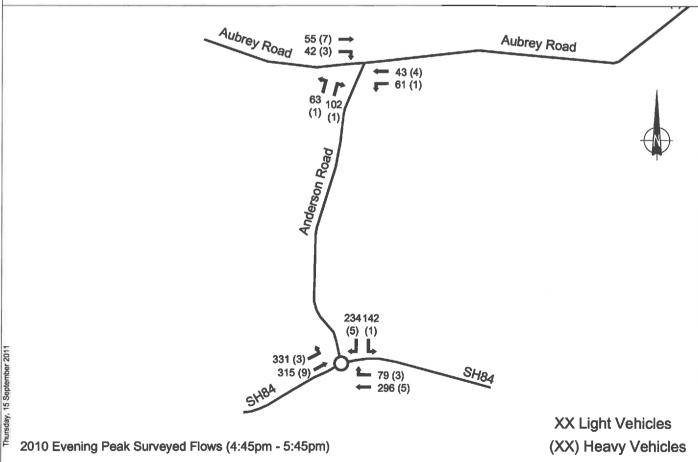
There were six accidents reported on the mid-block section of SH84 between the Anderson Road roundabout and SH6 with five of the accidents causing injury. All of these reported accidents occurred before 2009. In one accident, an intoxicated pedestrian suffered serious injury while walking in the road. Although two of the other accidents occurred in dark icy conditions, they occurred in different locations. The other accidents were widely spaced along the road and no common factors have been identified.

With five injury accidents reported over five years, a comparison with the NZTA Economic Evaluation Manual (EEM) accident rate model has been undertaken. The model predicts a midblock accident rate of about 0.5 injury accidents per year and therefore the observed rate is higher than expected. However, it has been noted that there have been no accidents since 2009.

Ten accidents have been reported at the SH84 / Anderson Road intersection with five of these occurring after the intersection was converted to a roundabout in 2007. Two of the crashes were the result of drivers losing control of their vehicle and the other three occurred when drivers failed to give way.







Proposed Plan Change, North Three Parks, Wanaka **Intersection Turning Counts**

Traffic Design Group

SCALE: N.T.S.

Two of the crashes at the roundabout resulted in injury and occurred within a year of the roundabout being constructed. There have been no reported injury accidents since July 2008. Therefore, while the accident rate measured over the last three years since the roundabout was installed represents a higher accident rate than would be predicted by the EEM accident rate model, this is not considered to be a concern because of short time history available for calculating an accident rate and because of the low number of reported injury accidents since 2008.

One mid-block accident has been reported on Ballantyne Road to the south of the plan change area and occurred when a driver misjudged the intentions of another driver as they turned into a driveway.

There have been two reported accidents at the Ballantyne Road / Golf Course Road intersection, two at the Ballantyne Road / MacPherson Street intersection and two at the Ballantyne Road / Ardmore Street intersection. Both accidents at the Ballantyne Road / Ardmore Street intersection involved cyclists and resulted in injury. Inadequate lighting on the cycle was identified as a contributing factor to one of these crashes which occurred late at night.

One of the crashes at the Ballantyne Road / Golf Course Road intersection resulted in serious injury when the driver failed to negotiate the intersection but intoxication was identified as a contributing factor.

Overall, there are no factors within the accident records which suggest any underlying road safety issues on the roading network. The pattern of accidents occurring on the more rural sections of road, and of failure to give-way accidents occurring in the urban areas is not unusual and does not suggest the need for any mitigation measures to resolve existing problems.



4. Future Changes to Transport Networks

4.1 Otago Regional Land Transport Programme 2009-2012

There are no major projects specifically identified for funding within the Otago Regional Land Transport Programme (RLTP) 2009-2012 for northeastern areas of Wanaka. However, the program does provide funding of \$53K for implementation of the Wanaka Walking and Cycling Strategy in 2012.

4.2 Long Term Council Community Plan (2009-2019)

The QLDC Long Term Council Community Plan (LTCCP) outlines Council funding for key transportation related projects between 2009 and 2019. There are no major roading projects identified for Wanaka within the current funding programme.

The LTCCP does set out that the Council will seek to progress the Wanaka Structure Plan and Wanaka Town Centre Strategy. While the town centre strategy is unlikely to have any significant impacts upon the transportation networks in the vicinity of the plan change area, the structure plan sets out an intention to provide bus routes linking key destinations within the town, including the town centre, schools and employment areas.

4.3 Wanaka Structure Plan

The Wanaka Structure Plan was adopted by the QLDC in 2007 and provides a tool for the Council to manage growth in Wanaka over the next 20 years. The Structure Plan was developed together with the Wanaka Transportation and Parking Study.

The Structure Plan identifies that approximately 5,000 additional dwellings will be needed to accommodate the anticipated growth in permanent residents within the township to 2026, of which some 1,860 dwellings could be provided through development of existing residential zones. Figure 4 shows the proposed zoning under the Wanaka Structure Plan. To accommodate the remaining growth, the Structure Plan identifies the preferred approach to be consolidation of some development in existing rural residential and rural lifestyle zones, continued infill and new urban zones.

Plan Change 16 (Three Parks Zone, TPZ) gives partial effect to the Wanaka Structure Plan and is now operative. The purpose of the TPZ is to provide for a range of activities, including commercial, residential, visitor accommodation, community and recreation activities, as well as an open space network. **Figure 5** shows the Three Parks structure plan and the subzones for the area. The structure plan shows a new Collector Road connecting Ballantyne Road and SH84 that will form the main road through the zone. The Ballantyne Road intersection will be about 250m to the south of Gordon Road while the SH84 intersection will be about 800m from the Anderson Road roundabout. The structure plan shows potential connections to indicative new roads in the land between the TPZ and golf course, the land that is the subject of this plan change request.

The Ballantyne Road Mixed Use Zone (BMUZ) was created by Plan Change 32 which became operative in April 2009. The zone is located to the north of Ballantyne Road opposite Frederick Street and east of the TPZ. The zone provides predominantly for service and industrial activities, with appropriate mixed business uses allowed for at the periphery of the zone to enable development to be absorbed into the landscape and to provide a transition from the service and

industrial activities to the more amenity-driven residential activities anticipated on adjacent land by the Wanaka Structure Plan. The BMUZ Structure Plan does not show any roads but based on the Wanaka Structure Plan, road connections to the TPZ, Ballantyne Road and Riverbank Road are anticipated.



Proposed Zoning

- --- Structure Plan Inner Growth Boundary
 - more Structure Plan Outer Growth Boundary
- Cutstanding Natural Landscape (ONIL) Line
 - ONL Line Not Confirmed
- Road Network (Indicative) Retail Core
- New Open Spaces/Reserves
 - Waniaka Town Centre Education
- Area Subject to Further Study
- Visitor Accommodation Overlay Urban/Landscape Protection
- Existing Open Spaces/Reserves/Solf Club
- Deferred Mixed Business/Office/Technology Deferred Future Commercial/Retail

Manaka Town Centre

- Commercial/Retail
 - Mixed Business
- Existing Business/Industrial
- Industrial Yard based
- Medium/High Density Residential Low Density Residential
- IIII Landscape Protection Area Mixed Use Zone
- Existing Zoned/Developed Areas

Water



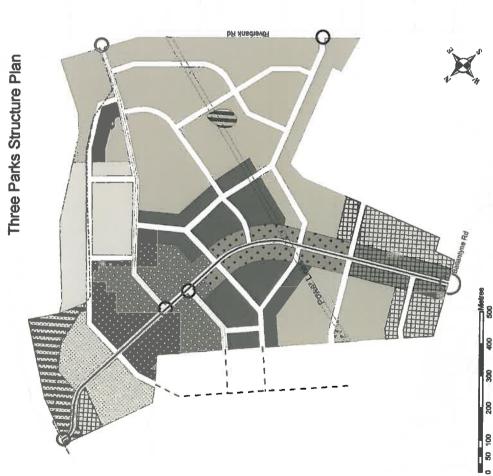
Proposed Plan Change, North Three Parks, Wanaka

DRAWN: J.TAYLOR DATE: 28.09.2011 SCALE: N.T.S. DWG NO:10787-T1A FIG 4

Traffic Design Group

Wanaka Structure Plan

THREE PARKS ZONE



Medium Density Res (Deferred Mixed Use) Indicative road beyond zone boundary Existing sewer and stommater pipes Tourism & Community Facilities Collector roads All other roads indicative only Deferred Commercial Core Road fixed connection point (mex 20m variation) Indicative connection point (max 30m variation) Three Parks Subzones Business (Main Street) Open Space (Overlay) Medium Density Res Commercial Core Low Density Res Business Key:

12 - 169

明日の と目のなられ、公司とのにある。 ながらにたいかん DATE: 29.09.2011 SCALE: 1:8000 @A3

DWG NO:10787-T1A FIG 5

Traffic Design Group

Proposed Plan Change, North Three Parks, Wanaka

Three Parks Structure Plan

Queenstown-Lakes District Council - DISTRECT PLAN (May 2011)