

7.0 ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

7.1 Overview

This chapter provides an assessment of effects on the environment in accordance Clause 22 (2) of the First Schedule of the Resource Management Act 1991. This assessment relates to the effects anticipated from the implementation of the proposed change.

7.2 Resource Management Act Requirements

Clause 22(2) of Schedule 1 of the Resource Management Act states:

- (2) *Where environmental effects are anticipated, the request shall describe those effects, taking into account the provisions of Schedule 4, in such detail as corresponds with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the change, policy statement, or plan.*

Clause 2 of Schedule 4 of the Act sets out the matters which should be considered when preparing an assessment of effects on the environment as follows:

2. *Matters that should be considered when preparing an assessment of effects on the environment*

Subject to the provisions of any policy statement or plan, any person preparing an assessment of the effects on the environment should consider the following matters:

- (a) *Any effect on those in the neighbourhood and, where relevant, the wider community including any socioeconomic and cultural effects:*
- (b) *Any physical effect on the locality, including any landscape and visual effects:*
- (c) *Any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:*
- (d) *Any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural, or other special value for present or future generations:*
- (e) *Any discharge of contaminants into the environment, including any unreasonable emission of noise and options for the treatment and disposal of contaminants:*
- (f) *Any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.*

7.3 Context

To avoid unnecessary repetition this chapter needs to be read in conjunction with the technical reports attached in the Appendices, and other parts of this assessment document.

The basis of the assessment includes:

- 30 hectares off land included in the proposed change

- Up to 215 residential units
- 17.7 hectares of residential land
- Approximately 4.6km of publicly accessible trails/ footpaths
- A range of section sizes (between 450m² through to 2,600m²)
- Approximately 12.2 hectares of Open Space
- Protection of the McDonnell Escarpment from any development
- A small Village area (approximately 8,374m²), with limits on building footprint
- A roading pattern that allows for connection between Centennial Avenue and McDonnell Road
- Water and Effluent reticulated through existing township infrastructure
- Stormwater either disposed to the un-named stream or towards Centennial Avenue

Expert reports have been prepared as follows:

Baxter Design Group Ltd - Landscape Architecture
Report Title: *Site and Landscape Analysis*

Rebecca Skidmore Urban Design Ltd - Urban Design
Report Title: *Arrowtown Southern Extension, 09010-03, May 2009*

Traffic Design Group Ltd - Traffic
Report Title: *Proposed Private Plan Change Arrowtown South, Transportation Assessment Report, June 2009*

MWH Ltd - Infrastructure
Report Title: *Arrowtown South Private Plan Change, Infrastructure Feasibility Report, August 2009*

Market Economics Limited - Economic
Report Title: *Arrowtown South Private Plan Change, Economic Impact Assessment, June 2009*

Natural Solutions of Nature Ltd - Ecology
Report Title: *Arrowtown South Private Plan Change, Ecological assessment and Recommendations, NSN 92/09, June 2009*

Extracts from these reports are referenced within this assessment

7.4 ASSESSMENT OF EFFECTS

7.4.1 Landscape

The objectives and policies of the Plan (Part 4.9) identify urban growth and extensions to urban areas occurring only in those areas where the landscape can absorb change, and where it protects the visual amenity. Similar policies refer to the need to avoid urban sprawl.

To respond to these issues it is essential to understand the landscape. The Baxter Design Group report (Appendix E) identifies that the land included within the change, and the surrounding landscape is part of the Visual Amenity Landscape category.

That report confirms the context of this land relative to the Arrowtown urban area, golf courses and public open spaces. The report concludes that Arrowtown has a modified arcadian greenbelt that surrounds it (Arrowtown Golf Course, the Hills Golf Course, Millbrook Resort, Butel Park and the predominantly introduced tree species that cover the Tobin's Track backdrop to the township). Where the green-belt is part of the valley floor it is not only a clearly modified landscape but also a very well maintained landscape, and in some cases it is almost manicured. Along the Tobin's Track hill face and also the adjoining enclosing hillsides to the north – these slopes are more rugged in appearance corresponding to the steep ragged nature of their topography.

The report concludes that the land affected by the proposed special zone does not form part of this green belt surrounding Arrowtown, and more importantly, that rezoning the land from rural to urban will not degrade the context or setting of Arrowtown.

Conclusion

The landscape and visual effects of the proposed special zone have been considered in the context of the landscape category of this land, and the impact the change would have on the legibility of the wider landscape (both the rural and urban context). The land has the potential to absorb the level of change proposed. The potential or anticipated landscape related effects resulting from the special zone would be to reinforce the broader greenbelt pattern around the Arrowtown community.

7.4.2 Urban Design

The urban design assessment (Appendix C) has been prepared by R. A Skidmore Urban Design Ltd, a signatory to the New Zealand Urban Design Protocol. The size and shape of the Arrowtown settlement is constrained visually and topographically, and also as a result of human influences over a number of years.

Some of the key urban design features of Arrowtown include:

- ~ A well connected street pattern in the older parts of the settlement – that are influenced by topography.
- ~ An informal design of the street environment
- ~ A variety of trees within the public realm, providing striking autumn colours
- ~ Traditionally small houses built on large sections of land
- ~ A sense of spaciousness within the town
- ~ The streetscape is not dominated by garages

The report confirms that the proposed expansion of the township is consistent with good urban design practices for the following reasons:

- ~ The adjoining golf courses provide a logical open space boundary to the settlement;
- ~ McDonnell Road and Centennial Avenue create clear boundaries and accessways into the site and the established town;
- ~ Development already extends along the terrace and McDonnell Road escarpment;
- ~ Appropriate development of the land has the potential to enhance the arrival experience when entering Arrowtown from the south via Centennial Avenue;
- ~ The undulating nature of the land provides the potential for the creation of a high amenity living environment;

- ~ The opportunity exists to enhance the visual quality and amenity of the stream that runs through the area.

Overall, it is concluded that the proposed special zone provides a suitable southern 'book-end' to the settlement of Arrowtown, creating a clear urban edge that is defined by adjoining open spaces and main street axes.

The key recommendations within the Urban Design assessment include:

Creating a distinctive entrance to Arrowtown that contributes to the collective character of the settlement

- Acknowledge Centennial Avenue as the main southern entrance to Arrowtown;
- Provide a co-ordinated landscape edge to Centennial Avenue and McDonnell Road, providing for the planting of large specimen trees;
- Ensure buildings front these main streets, contributing to the visual quality and character of the entrance experience;
- Control front fencing of properties adjoining these streets.

Respect topography

- Keep development clear of the steepest areas of the McDonnell escarpment;
- Keep building heights low along the top of the escarpment;
- Ensure streets follow contours;
- Encourage buildings to respond to natural landform patterns.

Capitalise on views to surrounding landscape

- Enable buildings in locations with good aspect that enjoy views to surrounding areas;
- Align streets to capitalise on views to surrounding landscape.

Enhance natural water courses as structuring element and amenity feature

- Ensure watercourse and its margins are retained and remain free from development;
- Encourage a development pattern that creates a positive interface (i.e. fronts) the watercourse;
- Use watercourse as a route to provide pedestrian connections;

Create a high amenity public realm, that reflects the character of Arrowtown

- Ensure design of streets reflects the informal character of Arrowtown – matters such as scale of formed carriageway, provision of footpaths, materials used, lighting, planting require consideration;
- Encourage buildings to front streets with garaging recessed behind main building facades;
- Encourage planting within front yards.

Provide good connectivity

- Provide a restricted, slow speed street connection through the area from McDonnell Road to Centennial Avenue;
- Ensure network of streets are easily understood;
- Complement street connections with walking trails.

Create a strong vegetative framework

- Use planting within streets and open spaces to contribute to the character of the neighbourhood;
- Use planting to contribute to the legibility of the neighbourhood;

- Ensure co-ordination of planting along McDonnell Road and Centennial Avenue frontages.

Enable building intensity, scale and form that provides good residential amenity and responds to key character features of Arrowtown.

- Provide different densities in different areas of the neighbourhood, with the lowest density at the southern periphery;
- Enable comprehensive development at a higher density in appropriate locations;
- Require a low building coverage to maintain a sense of spaciousness;
- Encourage the use of pervious surfaces around dwellings;
- Limit heights in response to topography and to retain general low scale form of development that is characteristic of Arrowtown;
- Encourage larger building forms to be broken down into a series of simple components, respecting the historic pattern of building in the area;
- Encourage front boundary treatment that creates a positive interface with the street.

Each of these recommendations has been identified and included within the Structure Plan or the proposed objectives, policies and rules for the zone.

Conclusion

The quality of the urban environment and any expansion of it have potential socioeconomic and cultural effects. The Arrowtown community is defined by both the heritage values and the containment of the township. That containment has been reinforced by topographical and cultural constraints. The effects of implementing the special zone on the form and function of the existing township could result in some loss of character or a sense of place. This effect is managed through adopting a Structure Plan for the zone, that leads through to a series of design related processes including design guidelines and establishing defined neighbourhoods that offer a consistent level of design and amenity.

7.4.3 Economic

Market Economics Ltd (MEL) were commissioned in early 2009 to report on the supply and demand of housing in Arrowtown and to make further assessment of this private plan change request relative to those factors and also to the Council's *Dwelling Capacity Model* and *Growth Projections* .

MEL found that the Council had significantly underestimated the demand for housing in Arrowtown, while also over-estimating the available supply.

As a basis for analysis MEL identified that there were 1,254 dwellings in Arrowtown as at 2006.

In summary the Council has estimated that demand for housing in Arrowtown will peak at a maximum of 254 more houses, and upon reaching that maximum of 1,508 houses – there will be no further demand. However this assumption is based upon a 'constrained supply'.

MEL estimates the real 'unconstrained' demand to be approximately 170 new houses every 5 years.

In terms of supply, the Council's Dwelling Capacity Model identifies a theoretical capacity of 34 dwellings in the Historic Management zone and 219 dwellings in the Low Density Residential zone. The suggested total of 253 additional dwellings appears to contradict

the statements provided in Plan Change 29 that there is potential for 312 additional dwellings.

Conclusion

The proposed special zone will have an effect upon the existing Arrowtown community. This land provides the opportunity, from a cultural and socioeconomic perspective, to provide additional land supply – to meet the anticipated demand through the next planning period. The change has a positive effect, by enabling the attainment of the underlying urban growth objectives of the plan, while still ensuring that the various environmental bottom lines are not compromised.

7.4.4 Infrastructure

MWH undertook an Infrastructure Feasibility Report to address the feasibility of providing services to approximately 200 residential lots with a limited commercial area within the special zone area. The assessment addressed all engineering issues including water supply for the properties, wastewater collection, surface water runoff, collection and treatment, ground conditions and flood risk.

The land is currently un-serviced by reticulated infrastructure befitting its current Rural General zoning.

Servicing of the development is proposed as follows:

- Water supply to be connected to the existing Arrowtown reticulated supply.
- Wastewater pumped or gravity fed to existing pump stations in Arrowtown's wastewater network
- Surface water drainage to an unnamed tributary of the Arrow River

This special zone will develop over a number of years so that infrastructure capacity can be regularly reviewed and development impact levies imposed for any additional upgrades that are required at that time.

Conclusion

The report and further independent analysis confirms that both the existing storage facilities and pipe network in Arrowtown are of sufficient capacity such that the land within the proposed zone can be connected without affecting existing levels of service.

Potable water supply shall be connected to the existing Arrowtown reticulated supply. Arrowtown is fully reticulated with water supply sourced from two bores outside of the town that is pumped and held in three reservoir storage tanks above the Cemetery in Caernarvon Street, and is then fed to the town reticulation via a booster pump.

Daily demand for the developed special zone has been assessed at 420m³. This is based upon NZS4404:2004 which QLDC uses. The Arrowtown water supply currently has a 1,450m³ storage reservoir, which is for normal demand and fire fighting. The Firefighting water supplies Code of Practice SNZ PAS 4509:2008 requires 180m³ of water to be stored and available for fire fighting. The water demand for the additional 200 lots is 140 m³, and the additional 42 lots on Advance Terrace is 29m³, being a total of 169m³. This 169 m³ combined with the average daily flow of 1,047 m³, and fire fighting storage of 180 m³ giving a net total storage requirement of 1,227m³. This means that the 1,450 m³ tank has sufficient storage capacity to accommodate the new lots, and that no upgrade of the existing water storage is required to service the plan change area whilst also maintaining the required level of service in Arrowtown.

Wastewater

The land is currently outside of Council's network of reticulation. However the analysis identified that the special zone can connect to that network, and that the existing pipe sizes are suitable for the additional loading. Effluent disposal in Arrowtown relies upon a series of pump stations that allow eventual disposal at the Shotover Ponds. All but one of the pumps is likely to require upgrading.

Wastewater would be collected by a network of gravity pipes. Some pumping may be required within the development area to lift wastewater to discharge to the Arrowtown reticulation. Allowing for the topography of the site, two connection points to the Arrowtown reticulation are likely to be required; one at McDonnell Road for the western part of the new development and one at Centennial Avenue for the eastern part. The western portion of the site comprising of approximately 130 lots that would connect to the McDonnell Road Pump Station. Wastewater would then be pumped into the gravity network at Cotter Avenue and flows on to the Norfolk Street Pump Station. The eastern portion of the site comprising approximately 70 lots can connect to the gravity reticulation at Centennial Avenue then gravitate to the Norfolk Street Pump Station.

Thus the McDonnell Road Pump Station lifts to the gravity network at Cotter Ave and from there gravitates to Norfolk Street Pump Station, which in turn pumps to Bendemeer (Lake Hayes PS 2) Pump Station, which then pumps the wastewater to the Shotover oxidization ponds.

The McDonnell Street Pump Station is currently being upgraded with larger capacity pumps, but these may not have sufficient capacity for the additional inflow, although this will be confirmed at the detailed design stage if additional upgrades are required.

The Norfolk Street Pump Station has sufficient capacity to accommodate the additional flow from the special zone.

The Bendemeer Pump Station (Lake Hayes PS 2) is also in the process of being upgraded. The current pump station has a flow rate of 89.2l/s and head of 40 m at the duty point, and the new single pump will have a duty point of 63.4 l/s at 56.3 m, and will be limited to 80l/s. The 80l/s can be manually overridden to exceed this allowance, which would ensure that no inundation of the pump station occurs during wet weather flow. The use of this override facility would need to be confirmed with QLDC at the detailed design stage.

Stormwater

Stormwater management for the site will comprise of the following:

- Drainage of roads to surface swales or channels. These swales will be drained by sumps and pipe connections to surface water channels, or directly to those surface water channels if possible. In the immediate vicinity of the watercourse, the sumps will discharge directly.
- Courtyard areas adjacent to houses will be drained to sumps, with pipe connections to surface water channels.
- Building platforms will be provided with a connection to a piped collection system. Pipelines will discharge to surface water channels.
- Landscaping and stormwater ponds
- Landscaped channels.

Due to the nature of the expected development, there will be an increase in peak stormwater run-off from the site. The current peak flow from the existing catchment is approximately 1.1m³/s, and the estimated peak runoff flow was calculated as 1.6m³/s. This peak stormwater flow increase is due to higher impermeability within the special zone from existing rural land. However it is considered that the increased flow within the

area is still low, and that the existing water flow can be shaped to pass this flow. In addition, the increased peak flow can be mitigated by detailed design of surface drainage swales, landscaping and stormwater ponds and in channel controls.

Geotechnical

MWH undertook an Infrastructure Feasibility Report to address the feasibility of providing services to 200 residential lots with a limited commercial area within the special zone. This report included an assessment on ground conditions and flood risk to determine if the site is safe for future residential development.

There are three main areas to the site, being the higher terrace on the eastern part of the site parallel to Centennial Ave, the western part which consists of valley floor on either side of the creek, and in between these two areas is a ridge with an escarpment to its western flank, with a 1 in 2 slope at its steepest.

Test pits were dug in nine locations across the site. The recommendations in the report state that the area on the terraces away from the creek is suitable for building, subject to normal inspection and foundation design. In terms of services, care may be required for trench support. The areas closer to the creek will need a more detailed investigation prior to design being carried out on either roading or building platforms, and specific design may be required for building foundation. However soil stability would be improved by draining the area.

In terms of flood risk, the properties near to the creek may be at risk of flooding. However this risk could be mitigated through constructing an elevated building platform above the predicated flood level (as per the requirements of the New Zealand Building Code).

Conclusion

The various forms of infrastructure have been analysed and modeling has taken place. This research confirms that there is minimal infrastructural impediment to the proposed zoning. The effects upon the environment of enabling this proposed change are minor.

7.4.5 Open Space and Recreation

The physical landscape has the potential to create a range of walkways and parks. Whilst this would result in the loss of currently open rural zoned land, it has the potential to create linkages to existing walkways, and create pockets of green open space in keeping with current development in Arrowtown.

The concept of walkability in Arrowtown is identified and discussed in the Community Plan and the earlier 1994 Charrette. This had developed from the small size of Arrowtown and its generally flat topography (except for the McDonnell Road area), together with generous grass road verges and the relatively quiet nature of the town.

The Council and community established the Wakatipu Trails Trust, which has been tasked with creating opportunities for a trail network within the Basin. The primary objective has been the creation of a trail between Queenstown and Arrowtown. This route is largely established. Other routes, links between routes and extensions to existing tracts have also been developed.

A trail extends along the western side of McDonnell Road, opposite the proposed zone, and also along the western side of Centennial Avenue, adjacent to the Golf Course. These trails, together with other urban linkages create a well connected community. The proposed zone provides for a Structure Plan that provides further extension and connections between those trails.

Conclusion

The proposed change provides for a series of pedestrian and cycle connections to be achieved, as well as positive connectivity between McDonnell Road and Centennial Avenue. This allows existing residents with an extension of trails, while also allowing new residents of the proposed zone to walk back through the existing settlement to the various services and facilities. Any actual or potential effects anticipated as a result of this change are likely to be positive for the Arrowtown community

7.4.6 Cultural and Heritage

The land affected by the proposed special zone includes three items of heritage significance that are listed in the district plan. These items are not registered by the New Zealand Historic Places Trust, but are identified as part of the Council's heritage register.

These items are:

- ~ The Muter Homestead (McDonnell Road frontage)
- ~ The Doctors Homestead (Centennial Avenue frontage)
- ~ A Wellingtonia tree (Centennial Avenue frontage)

The special zone does not affect the heritage register or propose any changes to it. The status of these items is maintained, and the consent processes within Part 13 of the Plan remain unaffected.

The special zone creates a series of Neighbourhoods, effectively like sub-zones. Prior to any development occurring within these Neighbourhoods there needs to be separate approval granted for a design Guideline and also a Neighbourhood Development Plan.

Heritage is identified in the special zone through an objective and supporting policies, and rules developed to ensure that protection and enhancement of these features occurs. An archaeological assessment is required within the Village Neighbourhood prior to any works occurring.

The special zone goes a step further by promoting design guidelines to be developed, and for subsequent building to occur in accordance with the relevant design guideline.

Following consultation with Kai Tahu ki Otago, it has been established that this land does not contain any items of significance to local iwi, nor was the land historically used by iwi

Conclusion

The three protected items as well as other items of probable significance can continue to be protected as a result of the proposed special zone. Other parts of the District Plan will continue to provide protection. The historical and cultural value of Arrowtown is recognised by this change through identifying design guidelines, neighbourhood areas and assessment matters that encourage the recognition of heritage, and building consistent forms that contain those elements. The change is considered to result in a positive outcome for the heritage values within this land.

7.4.7 Ecology

Natural Solutions for Nature Ltd undertook an Assessment of the land and the likely development pursuant to the proposed special zone. (Refer to Appendix E).

The report provides a comprehensive assessment of the existing environment. The report recognises that the land is highly modified and contains very limited amounts of indigenous vegetation or habitat.

The report then assesses the opportunities created by the proposed special zone. The actual or potential effects on the environment likely to occur as a result of the change are summarised as follows:

Beneficial effects

- *Removal of cattle will stop continuing damage and fouling of the riparian margins and creek,*
- *The channelised creek will be realigned and naturalised within the 'Adamson block' and retained throughout as an open flow and planted to increase indigenous floristic diversity,*
- *The southern pond and its riparian margins will be retained and enhanced according to a master landscape plan,*
- *The schist outcrop on the western boundary will be managed as a public reserve releasing it from the cover of woody weeds,*
- *The western escarpment is identified for management which would likely include the control of woody weeds and therefore the retention of the short tussock grassland.*

Adverse effects

- *The small seepage/tributary of McDonnell Creek near the southern boundary will be built over and/or taken underground to facilitate the proposed access and residential development in this area resulting in the loss of this small area of wetland and pukeko habitat provided by it,*
- *The riparian area is likely to be more confined in the context of the subdivision landscape design than in its present, albeit degraded open state. This will affect the habitat value (openness) of the wetland areas for pukeko, waterfowl and waders although they may continue to use habitat enhanced by planting.*

Recommendations include:

- (a) In all riparian areas, landscape planting must incorporate indigenous sedges and species naturally associated with Carex sedgeland ecosystems in N5 environments.*
- (b) Retention of the open flow of the creek and riparian habitat should be a focus of the master landscape plan with provision for as much width as possible between access roads, residential boundaries and the creek margin. The incorporation of species listed in Table 3 is recommended for landscape enhancement planting (Refer to appendix for details)*
- (c) Where residential allotment adjoin creek or riparian environments, the extension of riparian planting onto or over the property boundary should be encouraged to minimise the potential for habitat loss.*
- (d) Planting and management of public reserves and the western escarpment should protect and enhance (expand) areas of short tussock grassland and associated species in order to retain the natural diversity of the Private Plan Change area.*
- (e) Reinstating short tussock grassland and berry bearing indigenous shrubs (Melicytus/ Coprosma/ Corokia) will improve the potential for the schist outcrop on the western boundary to provide lizard habitat and reinstate the indigenous character if lizards are no longer present. The incorporation of these species is therefore recommended in the landscape treatment of these areas.*
- (f) The habitat of NZ falcon will be enhanced by the establishment of a mosaic of grey shrubland – tussock grassland and occasional emergent taller species on the western escarpment. Refer to Table 3 in Appendix for recommended species.*
- (g) A planting list provided as Table 3 (Refer to Appendix), is recommended as a guide for landscape planting in public open spaces, reserves and on individual allotments.*

(h) Woody and noxious weeds must be removed from the Private Plan Change area to prevent their spread within the site or into surrounding areas.

Conclusion

The land contains very little native vegetation and no habitats of significance, and the effect of the proposed change upon those values, such as they are, will be negligible. However the change does provide an opportunity for enhancement of both vegetation and habitat restoration, particularly along the face of the escarpment and around the edge of the stream. The overall effect of the change that is anticipated from the implementation of the proposed special zone is positive.

7.4.8 Traffic

The report prepared by Traffic Design Group Ltd examines both the impact the proposed special zone would have on the roading network of Arrowtown, including levels of service, intersection

The report identifies that the land has frontage to both Centennial Avenue and McDonnell Road. The relevant posted speed limits of the roads generally range between 80km/h (McDonnell Road) to 100 km/h (Centennial Avenue).

The special zone includes a Structure Plan that identifies both the internal roading pattern and the external intersections. This Structure Plan is a very deliberate plan, and the supporting rules require a high level of compliance with that Structure Plan. This has allowed for each of the external intersections to be properly assessed with a high degree of certainty as to future location and effect.

The report identifies that the anticipated level of traffic generated by the special zone will be approximately 1600 vehicle movements per day (based upon 8 movements per household per day). The impact of this additional traffic has been assessed both by road and intersection capacity.

During the peak hours (8am – 9am and 5pm to 6pm) the additional traffic flows generated by the change would equate to one additional vehicle every 40 to 50 seconds (two way). The report acknowledges that the most obvious increase will be on Malaghan Road – where additional vehicle loading would equate to one additional vehicle every 30 seconds.

These additional levels of traffic would potentially reduce the level of service on Malaghan Road from level B to C, although it would still remain a stable flow.

Overall the Traffic Design Group Report identifies that the proposed special zone will have limited off-site traffic effects.

Conclusion

The change will eventually result in up to 215 household units that will generate residential traffic movements. There will be in the order of 1600 vehicle movements resulting from the change of zoning. The traffic will principally utilise McDonnell Road and Centennial Avenue as the primary external connections.

The anticipated effect from the implementation of the change is a slight reduction in the 'level of service' of the roading network in the vicinity of the proposed special zone. That resulting level of service is still acknowledged as being within the acceptable range of roading standards. The delay times at intersection in the vicinity would increase slightly, but generally not noticeable.

7.4 Conclusion

This assessment of effects on the environment that may result from implementation of the proposed South Arrowtown Special Zone assists in identifying those matters that need to be included either by way of objective, policy or rule (see Chapters 8 and 9). Incorporating those matters into the proposed special zone will result in those effects on the environment being no more than minor.