

### 3.0 SITE CONSTRAINTS AND OPPORTUNITIES

#### 3.1 Site Analysis

In preparing this Plan Change, and in recognition of the preceding analysis of the site context, a site analysis was undertaken by Baxter Design Group Ltd. The full analysis is attached as Appendix E.

The first step was to assess the site in the context of its surroundings.

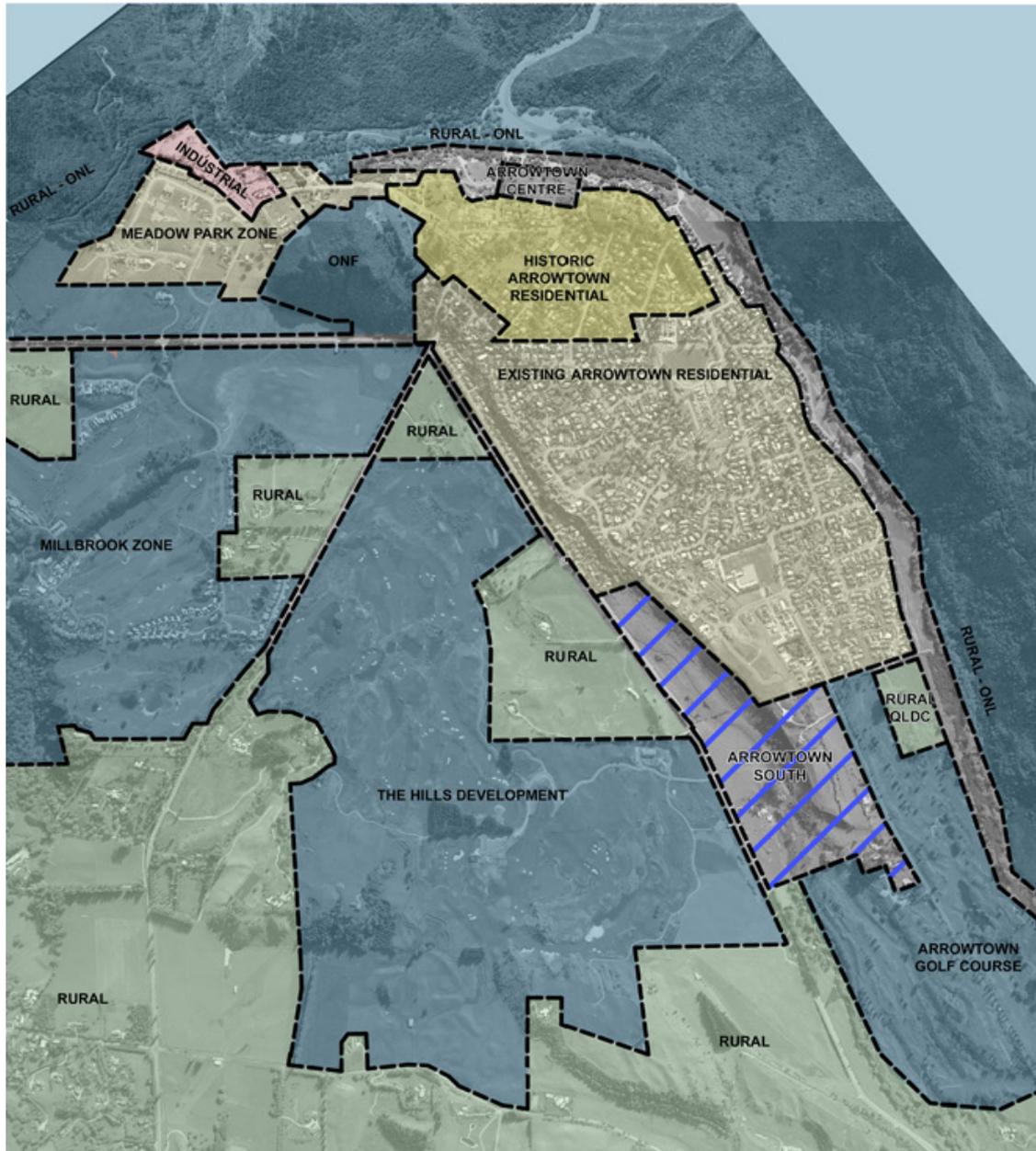


Figure 3.1 Arrowtown – Existing Growth Restrictions and Limits

Potential growth around Arrowtown is constrained by a number of physical and human features. To the north of Arrowtown is the Arrow River and German Hill and beyond that, the Harris Mountain Range. Part of the catchment area for the Arrow River includes Big Hill Saddle, New Chum Gully and Sawpit Gully all of which is Crown pastoral leasehold land. The topography of this area is characterised by steep-sided gullies.

To the northwest of Arrowtown – above the Meadow Park Special Zone is a combination of Crown and Council land, with the Council plantation forest nearby. Again, this is very steep land that is classified ONL.

The topography, land ownership and landscape classification of these northern areas provide a natural containment preventing and restricting any future northern expansion of the township.

Feehly's Hill is located on the western edge of the original Arrowtown urban area. It is one of the few Outstanding Natural Features within the Wakatipu Basin, and is classified as a Scenic Reserve.

To the west of Arrowtown is Millbrook Resort and The Hills Golf Course, both of which have involved substantial investment to create world class golf courses. Millbrook has a zone that is based on Activity Areas which allocate the location and capacity of housing (up to 400 houses over approximately 160 hectares), and as such it provides a managed and predominantly open space buffer around Arrowtown.

The Hills Golf Club is a full 18 hole championship course, with clubhouse and ancillary buildings. Consent has recently been granted for 17 dwellings surrounding the course, over an area of approximately 160 hectares.

The Arrow River provides a natural boundary to the adjoining Crown Range (Tobins Track and Mount Beetham). The face of the Crown Terrace that overlooks Arrowtown is mostly in private ownership, and is again part of the ONL – Wakatipu Basin category.

Alongside the Arrow River the land is classified as Recreation Reserve and is Crown land administered by the Council.

To the south of Arrowtown is the 18-hole Arrowtown Golf Course which occupies approximately 45 hectares and is located on both sides of Centennial Avenue. This land provides a popular recreational space for the local community, and is owned partly by the Golf Club (the front nine holes) and the Council (the back nine).

These factors provide for the long term containment for the settlement of Arrowtown. Boundaries within the settlement have been defined through historical occupation and land uses, some of which is protected today such as the Chinese Settlement and reserve areas. Physical constraints preventing development are all the natural landforms addressed above, and more recently human influences such as the establishment of golf courses provide further development constraints to urban growth and possible sprawl.

### 3.2 Site Constraints

The proposed Arrowtown South Special Zone contains approximately 30 hectares of land at the southern end of Arrowtown.

The actual physical landscape of this area has varied topography, and is positioned between two existing formed roads being Centennial Avenue and McDonnell Road, forming in broad terms a 'L' shaped land area. The land on the southern boundary has a maximum width of approximately 400m, reducing towards the northern boundary along

McDonnell Road to approximately 110m. The McDonnell Road frontage has a length of approximately 1000 m, and the Centennial Avenue frontage approximately 660 m. As mentioned above, the site is buffered by existing residential development, natural landforms and surrounding greenspaces in the form of golf courses.

The key feature of the site is an escarpment that runs through the middle of the site in a north-south direction. The escarpment begins at the northern boundary (McDonnell Road end) for a distance of approximately 940m rising slightly towards Centennial Avenue. The escarpment has a steep slope (1:2) and as such is unsuitable for building. For development purposes it creates a distinct split, forming an upper level (Centennial Avenue frontage) and lower level (McDonnell Road frontage), with each level being described in detail below.

The Centennial Avenue level has varied topography. The area of land adjacent to the road is generally flat, although it extends upwards to form a terrace with a medium slope (1:4). The vegetation is predominately grass with some trees and bushes. As this portion of the site is elevated, the site has views of landforms surrounding Arrowtown including, but not limited to Tobins Track, Arrow River flats, surrounding golf courses, Crown Range, Coronet Peak and The Remarkables.

The McDonnell Road level has varied natural features. There is an un-named creek which enters in the north-west corner, generally flowing through the centre of the site, passing to the rear of the existing homestead, where it gains additional flow from springs and widens, eventually flowing into the Arrow River. The land is generally flat from McDonnell Road to the toe of the escarpment, with the exception of two hillocks, one on the southern boundary, and one in the middle of the site adjoining McDonnell Road. In addition there are small rock outcrops within the site. The land is generally grassed, although there are mature trees around the homestead and scrub along the escarpment. Solar access and views to the surrounding landscape from his portion of the site vary according to location in relation to the escarpment.

#### Summary of Constraints:

- ~ Steep escarpment running in a north – south direction through the middle of the land
- ~ The disjointed shape of the land, in particular the more narrow part of the land that extends between McDonnell Road and the more recent subdivisions of Cotter Avenue and Advance Terrace
- ~ The un-named creek that runs through the lower part of the land – generally in a north-south direction – following the toe of the escarpment
- ~ Potential for shading – as a result of the proximity of the escarpment
- ~ The location, layout and design of other existing houses within the urban zoned part of Arrowtown that adjoin the proposed zone

### 3.3 Site Opportunities

As detailed above, the site is constrained by physical and human influences within Arrowtown and its surrounds. The design determinants for this site are in respect of the natural features being the escarpment, site topography and the creek, and in built form, the existing stables and homestead.

The opportunity exists to create a finite boundary to Arrowtown. Structured development in this area would provide a holistic approach to urban development, developing the land in a manner in keeping with the historic setting of Arrowtown, whilst providing a sustainable pattern of development.

The opportunity to develop approximately 30 hectares would result in managed development for up to 200 lots. This is an opportunity to take the aspects of Arrowtown development that have been successful and provide a cohesive, well planned development for future residents to enjoy. It also ensures the best use of land, in respect of maximising the potential of the land, but to a low to medium density level. If the land was not developed in this manner there is the potential for ad hoc subdivision into rural-residential type areas, with varying section sizes and house designs.

The opportunity that exists here is for consolidated residential development, around a small Village area, creating a southern entrance to Arrowtown with the advantages of pedestrian linkages, managed open space areas, landscaping, design controls and ability to utilise existing infrastructure. Piece-meal development by separate landowners could not achieve these features of the proposal.

The proposed objectives, policies and rules reflect the natural aspects of the site and the historic settlement of Arrowtown to create a cohesive development.

One of the key development opportunities is the formation of a road link between McDonnell Road and Centennial Avenue. The benefits of this development are numerous, creating easy linkages to existing services and flow between all of Arrowtown.

Based on the physical aspects of the site, the opportunity exists for seventeen neighbourhood areas, covering an area of approximately 17 hectares for up to 215 lots. Potential densities vary according to topography, but with a minimum size of 450m<sup>2</sup> per lot.

In addition, proposed dwelling heights vary according to the topography of the site, for example along McDonnell Road there is a maximum height level of 7.0m, and on the upper terrace the maximum height is 5.0m. Development on these areas would be restricted by Design Guideline requirements.

Approximately 12 hectares of green spaces are proposed, in the form of small pocket parks, wetlands and the escarpment walkway. Development of these areas would be subject to Management Plans, part of which would require the formation of a walkway along the escarpment to improved pedestrian linkages.

The Village Core covers an area of approximately 8,000m<sup>2</sup>. These heritage buildings provide a strong design lead in respect of retaining and enhancing heritage buildings with the potential to form a core for the future residents. The residential development and green spaces would flow from this portion of the site.

### 3.4 Conclusions

The site provides natural design leads from existing topography, site location between two roads, existing heritage buildings and the surrounding greenbelt/buffer. It is the final piece of the jigsaw for urban growth at Arrowtown.