

IMPROVING THE AMENITY IN THE HIGH DENSITY ZONES:

PROPOSED PLAN CHANGE 10

Technical Report on Urban Design

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INTRODUCTION

1. Boffa Miskell Ltd has been engaged by Queenstown Lakes District Council (QLDC) to prepare an urban design report of the proposed Plan Change 10 to the Partially Operative Queenstown Lakes District Plan. This is appended to the Planning Officer's Report.

2. Plan change 10 seeks to:

Improve external amenity values between public and private spaces and between lots in the High Density Residential Zone b developing new provisions for and amending current provisions as they relate to the High Density Residential Zone

3. This report has been prepared by Tim Church. I am employed as a Senior Urban Designer with Boffa Miskell Ltd, an environmental consultancy specialising in planning, design and ecology and an original signatory to the New Zealand Urban Design Protocol in March 2005.

4. I hold the qualifications of a Master degree in Urban Design from University of Sydney and a Bachelor degree of Landscape Architecture (with honours) from Lincoln University. I am a graduate member of the New Zealand Institute of Landscape Architecture.

5. I have practised as an Urban Designer for the past five years and Landscape Architect for the previous four years. Prior to joining BML in January 2006, I was an Associate Urban Designer in a London-based architectural practice where my responsibilities included work on a number of urban regeneration projects. During this time, one of my key projects was awarded 2005 RTPI London Planning Award for 'Best conceptual project contributing to London's future' and was one of three projects contributing to this practice being awarded 2004 Regeneration Architect of the Year (UK).

6. My work at Boffa Miskell has recently included technical reports on urban design for the New Brighton Residential Density Study and Business 4 Suburban Industrial Zone, both prepared for Christchurch City Council as part of broader Section 32 reports.

7. I have carried out my own assessment of Queenstown and Wanaka High Density Residential Zone (HDRZ) and have drawn my own conclusions in regard to Plan Change 10.

8. Urban design is defined in as:

'the art of making places for people. It includes the way places work and matters such as community safety, as well as how they look. It concerns the connections between people and places, movement and urban form, nature and the built fabric, and the process of ensuring successful villages, towns and cities.

Urban design is the key to making sustainable developments and the conditions for a flourishing economic life, for the prudent use of natural resources and social progress'

By Design: Urban Design in the Planning System (DETR 2000)

9. This report is divided into two parts:
- Part One identifies the ‘Seven C’s’ of the New Zealand Urban Design Protocol (MfE 2005) as the principles used to assess the effectiveness of Proposed Plan Change 10 rules. These principles are then interpreted in relation to higher density residential environments and their application to the Queenstown and Wanaka objectives, policies and rules explained.
 - Part Two investigates each of the proposed Plan Change 10 rules. An assessment of effectiveness is made with regard to the urban design principles in Part One, submissions, purpose and rationale of the Section 32 report and the results of the modelling exercise contained in Appendix B.
10. Appendices attached to this report include:
- Appendix A – Maps of Queenstown and Wanaka HDRZ and (including sub zones and walkable catchments)
 - Appendix B – Modelling of Proposed Plan Changes 6, 8 and 10 (Presentation to Pre Hearing Conference 13th November 2004)
 - Appendix C – Existing Photographs of Queenstown and Wanaka HDRZ
 - Appendix D – Effects of building bulk on sloping sites

PART 1: URBAN DESIGN PRINCIPLES FOR HIGHER RESIDENTIAL DENSITIES

11. Part 1 provides a brief interpretation of the New Zealand Urban Design Protocol (the Protocol) principles and analyses their application in the District Plan and Queenstown and Wanaka contexts. These are specific to the HDRZ within these two townships and interpretations and applications may vary in across different communities or in other zones.
12. Protocol has been used as the basic criteria for assessing Plan Change 10 in relation to widely recognised and accepted urban design principles. QLDC became a signatory to the Protocol on 17 May 2006, by which they commit to '*create quality urban design through their own actions*'.
13. The Protocol identifies seven urban design principles (seven C's) that contribute to making high quality urban environments. It is important that these principles are not seen in isolation but as a coherent set, which work together to achieve a holistic outcome. The essential urban design principles include:
 - Context
 - Character
 - Choice
 - Connections
 - Creativity
 - Custodianship
 - Collaboration
14. I have also drawn on other urban design best practice documents from both New Zealand and internationally to assist in my interpretation of these broad principles. These include:
 - *People, Places, Spaces: A design guide for urban New Zealand* (MfE 2002)
 - *Better Urban Living: Guidelines for urban housing in NSW* (UDAS/ DPWS 1998)
 - *By Design: Urban Design in the Planning System* (DETR 2000)
 - *Urban Design Compendium* (Llewelyn-Davies, 2000)
15. Urban design principals are a major consideration when reviewing amenity issues in the Queenstown and Wanaka HDRZ. However, there are other considerations (e.g. economics) that are beyond the scope of this report. In particular, urban growth and visitor accommodation issues are covered in the report by Mr Mead of Hill, Young and Cooper, also appended to the Planning Officer's Report.

CONTEXT

16. The *Context* principle is defined and described in the Protocol as:

"Context: Seeing buildings, places and spaces as part of whole towns and cities.

Quality urban design sees buildings, places and spaces not as isolated elements but as part of the whole town or city. For example, a building is connected to its street, the street to its neighbourhood, the neighbourhood to its city, and the city to its region. Urban design has a strong spatial dimension and optimises relationships between buildings, places, spaces, activities and networks. It also recognises that towns and cities are part of a constantly evolving relationship between people, land, culture and the wider environment.

Quality urban design:

- *takes a long-term view*
- *recognises and builds on landscape context and character*
- *results in buildings and places that are adapted to local climatic conditions*
- *examines each project in relation to its setting and ensures that each development fits in with and enhances its surroundings*
- *understands the social, cultural and economic context as well as physical elements and relationships*
- *considers the impact on the health of the population who live and work there*
- *celebrates cultural identity and recognises the heritage values of a place*
- *ensures incremental development contributes to an agreed and coherent overall result.'*

The New Zealand Urban Design Protocol (MfE 2005)

Interpretation

17. Consideration of *Context* ensures incremental development integrates with and enhances an agreed and coherent townscape. *Context* takes the broad urban area into consideration and recognises that each component affects the perception and function of the urban environment as a whole. This need not be uniform but could operate across a number of scales from overall form of the township to the role of individual streets or spaces within a hierarchy.
18. Integrating development into a broader contextual order is generally achieved through establishing a permitted baseline, beyond which developments depart from an accepted prevailing order. Significant variations can occur within this permitted baseline and it is important from an urban design perspective to find an appropriate balance between order and variety.
19. Developments that do not meet this permitted baseline standard may equally struggle to integrate into the urban context. To achieve anticipated urban design outcomes, District Plans need to be tailored to both encourage and control development to achieve this balance.
20. Recognition of *Context* can also be successful by providing a positive contrast, in which a limited number of key departures reinforce the qualities of each other. These are typically reserved for buildings or spaces of community (or civic)

importance or to improve the legibility of the urban environment for recognition and wayfinding purposes (ie. landmarks, gateways etc.). Plan rules are typically formulated to control generic development, and valid departures are better considered through the use of area specific rules (i.e. corner sites) or the resource consent process.

Application to Queenstown/ Wanaka

21. The Plan, through its objectives and policies, generally aims to protect and enhance residential cohesion where developments integrate well with the neighbouring locality including streetscapes, nearby properties and public areas. It seeks to avoid visually dominant buildings and establish a strong delineation between residential and rural areas. Another strong theme is enhancing the relationship of the urban environment with the landscape.
22. All these residential issues relate to *Context* due to their intentions to broadly integrate development into the wider townscape and landscape setting.
23. Similarly, rules I regard as relevant to *Context* generally affect the height and bulk of buildings, which is perceived from a distance in relation to other parts of the townscape or adjacent landscape. These mainly include:
 - Building size
 - Setbacks
 - Building coverage
 - Height
24. I consider the HDRZ to be an intermediate zone between Queenstown and Wanaka town centres, and the medium and low density zones on their periphery. It is consistent that height and bulk in the HDRZ is clearly delineated from both of these by avoiding the higher intensity of development (taller, commercial building forms) in the town centres or relaxed suburban development (low rise, detached building forms) on the fringes.
25. This townscape profile could potentially be quite visible as both town centres are situated on the lake edge and surrounded by hills or terrace formations.
26. In urban situations, it is reasonable for the lake edge to have a strong built edge relative to the zone it sits adjacent to. However, it is appropriate that development along Frankton Road and adjacent lakeside track provides some delineation between the lower profile of Frankton and the more intense development in Queenstown.

CHARACTER

27. The *Character* principle is defined and described in the Protocol as:

"Character: Reflecting and enhancing distinctive character, heritage and identity of urban environments

Quality urban design reflects and enhances the distinctive character and culture of our urban environment, and recognises that character is dynamic and evolving, not static. It ensures new buildings and spaces are unique, are appropriate to their location and compliment their historic identity, adding value to our towns and cities by increasing tourism, investment and community pride.

Quality urban design:

- *reflects the unique identity of each town, city and neighbourhood and strengthens the positive characteristics that make each place distinctive*
- *protects and manages our heritage, including buildings, places and landscapes*
- *protects and enhances distinctive landforms, water bodies and indigenous plants and animals*
- *creates locally appropriate and inspiring architecture, spaces and places*
- *reflects and celebrates our unique New Zealand culture and identity and celebrates our multi-cultural society."*

The New Zealand Urban Design Protocol (MfE 2005)

Interpretation

28. *Character* is closely related to *Context* and involves much more subtle patterns of development. Built character results from a composition of elements and their application within a specific context.
29. A critical part of integrating development within the wider context is reinforcing and evolving the distinctive local character. This can also be broken down into smaller character 'sub-units' which have references to both patterns seen across the town as a whole and those that relate to distinctive locations or roles within the town.
30. The protocol notes that character is not static and could apply to anticipated outcomes, as long as they are responsive and appropriate to local circumstances. This includes distinctive responses to qualities such as the local physical environment (development patterns and building forms), natural environment (topography, sunlight, views.) and local social and economic need (building types, open space requirements, mix of uses).
31. The real challenge in higher density developments is maintaining these character traits while still accommodating growth. This is where urban design techniques become increasingly important for developments, such as breaking down the visual scale of larger buildings.

Application to Queenstown/ Wanaka

32. The Plan makes numerous references to *Character* or other related amenity issues to do with the aesthetic appeal of Queenstown and Wanaka.
33. Objectives and Policies generally aim to ensure the external appearance of development reflect the significant landscape values and enhances a coherent urban character; has a high architectural quality; avoids repetitive or continuous building forms and provides for open space/ landscape onsite.

34. Objectives and Policies for Queenstown and Wanaka have a slightly different emphasis, yet the zone rules formulated to control the permitted baseline development are generally the same. Height controls are the only exception.
35. Zone rules are quite blunt instruments for achieving the anticipated character, as much design differentiation is possible within the permitted baseline envelope. As the *Character* at this baseline level may well be similar, there seems little merit in providing further differentiation between Queenstown and Wanaka.
36. The inclusion of sub zones is perhaps one mechanism for providing differentiation between parts of Queenstown and Wanaka, but not between the towns themselves. As Wanaka does not have a Sub Zone A, the *Character* is anticipated to appear less intensive.
37. Objectives and Policies identify the key elements of general *Character* in terms of density, height, access to sunlight, privacy and views. I do not regard the latter three to be directly related to character, but part of broader residential amenity issues. However, I do regard the following rules to be most relevant to Character.
 - Multi unit development
 - Building coverage
 - Continuous building length
 - Set back from roads
 - Set back from internal boundaries
 - Landscape coverage
 - Fence heights
 - Height
38. As indicated above, there is scope within the Protocol to take into account an anticipated Character. The HDRZ is currently in transition and reasons for considering this Plan Change are that the transition to higher densities is perceived to have progressed too far, too quickly.
39. Similar to Context, I regard the HDRZ to acquire a character distinct from lower density areas but should still manage this transition in a way that maintains responsiveness and appropriateness to the historic character and the cultural and landscape setting within which it has evolved.
40. Other techniques will also need to be utilised to achieve a more refined and distinctive character such as urban design guidelines or the advice of the Urban Design Panel. These will be covered in the *Collaboration* section.

CHOICE

41. The *Choice* principle is defined and described in the Protocol as:

"Choice: Ensuring diversity and choice for people

Quality urban design fosters diversity and offers people choice in the urban form of our towns and cities, and choice in densities, building types, transport options, and

activities. Flexible and adaptable design provides for unforeseen uses, and creates resilient and robust towns and cities.

Quality urban design:

- ensures urban environments provide opportunities for all, especially the disadvantaged
- allows people to choose different sustainable lifestyle options, locations, modes of transport, types of buildings and forms of tenure
- encourages a diversity of activities within mixed use developments and neighbourhoods
- supports designs which are flexible and adaptable and which will remain useful over the long term
- ensures public spaces are accessible by everybody, including people with disabilities"

The New Zealand Urban Design Protocol (MfE 2005)

Interpretation

42. This principle complements both *Context* and *Character*. Variation within a broader overriding order is a positive attribute that prevents 'sameness' but also recognises different current and future needs across a town or within a zone.
43. *Choice* is not about providing for all possibilities in each area, but establishing a clear differentiation of lifestyles in appropriate parts of the town most suited for them. Diversity of dwelling type or land use also creates activity and a vibrant atmosphere spread throughout the day. This leads to more eyes on the streets and a safer environment.
44. This principle discourages too much prescription or 'blanket' controls, which could preclude a mixture of outcomes responding to current and future needs. Alternatively, it might increase restrictions on particular dominating activities in order to maintain an appropriate diversity and choice, particularly for those that are disadvantaged.
45. In addition, some building forms and site configurations are recognised by urban designers to provide better adaptability if needs change. These tend to be simple 'finer-grain' developments, rather than large scale 'mega-structures'. They tend to be better suited to merge or separate and respond quickly and easily to unforeseen future uses.
46. The higher density zones are appropriate for providing an alternative to lower density living and therefore zone rules should reinforce this distinction. Higher density zones tend to be closer to town centres, as discussed in the next section on *Connections*, and typically provide for a wider range of activities and *Choice* than outer zones.
47. In my opinion a higher density zone should encourage housing types, which are mixed in type but offer real alternatives to lower density zones in terms of internal and external space standards and therefore unit size. An expectation of a higher density lifestyle should be to provide greater freedom from suburban

commitments, such as property maintenance, to enjoy the high quality common amenities provided within the collective development or town.

Application to Queenstown/ Wanaka

48. No Objectives in the Plan specifically refer to *Choice*. Only a few policies in the Plan explicitly promote Choice in the HDRZ through encouraging a mix of housing types and sizes. The Plan's other relevance to Choice is through provision of non-residential activities. However, this is relatively conservative with references mainly targeted to ensure residential amenity is not undermined.
49. Rules relevant to both amenity and promoting Choice include:
 - Multi unit development
 - Site density
 - Building footprint size
 - Landscape coverage
50. In addition, there are other Controlled or Restricted Discretionary Activities, which are relevant to provision of Choice. Visitor accommodation, a dominant activity, is currently part of a separate plan change and outside the scope of this report. This quality is also dependent on an assessment of housing distribution within the HDRZ and elsewhere, as part of Mr Mead's report on implications for urban growth and economic development.
51. Both Queenstown and Wanaka have extensive natural and cultural amenities close to the town centres that would have the capacity for greater use. By designating HDRZ and providing for an alternative choice of lifestyle, not traditionally experienced in Queenstown or Wanaka, there should be a corresponding commitment by the Council to invest in providing a high quality public realm, including streetscape, open spaces and service provisions matched to increased population. Amenity in higher density zones, particularly landscaping, is often transferred to the public realm and the responsibility of Local Authority.

CONNECTIONS

52. The *Connections* principle is defined and described in the Protocol as:

"Connections: Enhancing how different networks link together for people

Good connections enhance choice, support social cohesion, make places lively and safe, and facilitate contact among people. Quality urban design recognises how all networks - streets, railways, walking and cycling routes, services, infrastructure, and communication networks - connect and support healthy neighbourhoods, towns and cities. Places with good connections between activities and with careful placement of facilities benefit from reduced travel times and lower environmental impacts. Where physical layouts and activity patterns are easily understood, residents and visitors can navigate around the city easily.

Quality urban design:

- *creates safe, attractive and secure pathways and links between centres, landmarks and neighbourhoods*
- *facilitates green networks that link public and private open space*
- *places a high priority on walking, cycling and public transport*
- *anticipates travel demands and provides a sustainable choice of integrated transport modes*
- *improves accessibility to public services and facilities*
- *treats streets and other thoroughfares as positive spaces with multiple functions*
- *provides formal and informal opportunities for social and cultural interaction*
- *facilitates access to services and efficient movement of goods and people*
- *provides environments that encourage people to become more physically active"*

The New Zealand Urban Design Protocol (MfE 2005)

Interpretation

53. Quality urban design *Connections* is about achieving a close correlation between higher density and good accessibility. This is a symbiotic relationship where reduced space standards and private amenities provided within higher density developments are exchanged for higher quality shared community amenities (open space, shops, etc.) close at hand. These in turn benefit from the increased population within a walkable catchment or along a route, referred to as the 'movement economy'.
54. There are, of course, other environmental benefits, including reduced car dependence and increased urban vitality from people walking along streets or using public transport.
55. Good accessibility is regarded to be limited to a maximum range of 400-800m, or 5-10 minute walk, from key community facilities, or near to stops along a public transport corridor. Where good accessibility does exist it is beneficial to maximise the population within this catchment. Increased occupation levels are a key component.
56. It is also important that the experience of the street scene functions well and is visually interesting and safe to encourage walking or cycling.

Application to Queenstown/ Wanaka

57. Objectives and Policies on *Connections* in the Plan generally relate to multi unit developments and focus on walking distances and safe pedestrian access. Other references relate to consolidation of residential areas, to retain easy access to rural areas and the lakeshores and locating higher density areas close to the town centres. Maps in Appendix A indicate the walking catchments, or ped sheds, from both Queenstown and Wanaka town centres.
58. Rules which are related to both *Connections* and residential amenity include:
 - Multi unit development
 - Building coverage
 - Building footprints

- Height
 - Setbacks from road
 - Fence heights
 - Site density
59. Most of these relate to either allowing sufficient density to maximise the efficient use of the land near the town centres and public transport or promoting the safer and more aesthetic experiences along routes to encourage walking.
60. A number of references in the Objectives and Policies for residential zones are also made in regard to the provision of access and car parking. Technical aspects are subject to Plan Changes 6 and 8 and are beyond the scope of this plan change. However, there are a number of amenity issues associated with access and car parking in terms of land take, aesthetics and safety which are valid considerations under this principle.

CREATIVITY

61. The *Creativity* principle is defined and described in the Protocol as:

"Creativity: Encouraging innovative and imaginative solutions.

Quality urban design encourages creative and innovative approaches. Creativity adds richness and diversity, and turns a functional place into a memorable place. Creativity facilitates new ways of thinking, and willingness to think through problems afresh, to experiment and rewrite rules, to harness new technology, and to visualise new futures. Creative urban design supports a dynamic urban cultural life and fosters strong urban identities.

Quality urban design:

- *emphasises innovative and imaginative solutions*
- *combines processes and design responses that enhance the experience we have of urban environments*
- *incorporates art and artists in the design process at an early stage to contribute to creative approaches*
- *values public art that is integrated into a building, space or place*
- *builds a strong and distinctive local identity*
- *utilises new technology*
- *incorporates different cultural perspectives"*

The New Zealand Urban Design Protocol (MfE 2005)

Interpretation

62. *Creativity* is similar to *Choice* in that it contributes to the variety within a place. Within the overall coherence and order established within our urban environment there needs to be provision for design excellence and unique approaches to residential issues. This enables designers to solve technical issues, add aesthetic variety and continue to adapt New Zealand housing types to our unique landscape and cultural values.

63. Controls on development must not be so prescriptive that innovative or 'technical' solutions cannot be employed to resolve amenity issues and yet still achieve high quality urban design outcomes. This is particularly relevant for the higher density areas where there is less opportunity to solve amenity issues through generous space allowances or greater separation between buildings. For example, resolving issues like privacy are not solely dependent on separation distances of buildings or windows, but could be resolved through technical solutions such as off-setting windows or controlling the direction of views. Higher density areas tend to rely heavily on creativity to achieve consolidation objectives without compromising amenity.

Application to Queenstown/ Wanaka

64. *Creativity* is not explicitly mentioned in residential Objectives and Policies, but is implicated where design challenges exist for developers. Imaginative residential development forms are encouraged, but only in relation to major new residential areas (i.e. Remarkables Park/ Jacks Point).
65. Rules which are related to both *Creativity* and residential amenity include:
- Number of units per site
 - Building coverage
 - Continuous building length
 - Setback of buildings from internal boundaries
 - Site density
66. It is important to note that while *Creativity* is an important ingredient in high quality urban design, not all developers will necessarily be skilled or inclined to apply it to proposals. It is therefore, wise to have *Creativity* available as an option, but have a standard suite of rules as a fall back.

CUSTODIANSHIP

67. The *Custodianship* principle is defined and described in the Protocol as:

"Custodianship: *Ensuring design is environmentally sustainable, safe and healthy.*

Quality urban design reduces the environmental impacts of our towns and cities through environmentally sustainable and responsive design solutions. Custodianship recognises the lifetime costs of buildings and infrastructure, and aims to hand on places to the next generation in as good or better condition. Stewardship of our towns includes the concept of kaitiakitanga. It creates enjoyable, safe public spaces, a quality environment that is cared for, and a sense of ownership and responsibility in all residents and visitors.

Quality urban design:

- *protects landscapes, ecological systems and cultural heritage values*
- *manages the use of resources carefully, through environmentally responsive and sustainable design solutions*
- *manages land wisely*

- *utilises 'green' technology in the design and construction of buildings and infrastructure*
- *incorporates renewable energy sources and passive solar gain*
- *creates buildings, spaces, places and transport networks that are safer, with less crime and fear of crime*
- *avoids or mitigates the effects of natural and man-made hazards*
- *considers the ongoing care and maintenance of buildings, spaces, places and networks*
- *uses design to improve the environmental performance of infrastructure*
- *considers the impact of design on people's health."*

The New Zealand Urban Design Protocol (MfE 2005)

Interpretation

68. Custodianship is essentially about developments being a "good neighbour" in the respect that they contribute in a positive way to global as well as local urban environments.
69. Related urban design objectives like urban consolidation can better limit the impact on the natural landscape through more intensive brownfield development, reducing urban sprawl, efficient use of infrastructure and creating towns with greater natural surveillance, walkable neighbourhoods and vibrancy.
70. There are, of course, other environmental issues that arise from more intensive development which either have greater impact on the environment (ie. earthworks and groundwater) and/or from the environment (i.e. flooding). As I have alluded to in the previous quality of Creativity, these types of environmental issues could be resolved through technical solutions beyond the scope of urban design, but are consequences of intensive development that need consideration.
71. Other areas of environmentally responsive design such as encouraging naturally ventilated buildings and high levels of daylighting through dual aspect units or narrow building footprints are more difficult to control through the current or proposed rule package. Better coordination between rules in the Plan may contribute in some way.
72. *Custodianship* also encourages the use of Crime Prevention through Environmental Design (CPTED) principles to improve community safety. This should promote qualities like territorial definition, natural surveillance and active ground level uses and other techniques to reduce opportunities for crime.
73. Creating safer neighbourhoods in higher density zones often conflicts with typical suburban interpretations of amenity, such as generous set backs and substantial amenity planting. Greater encouragement of walking and public transport requires a reciprocal increase in active edges and good natural surveillance often achieved through reducing setback distances and removing visual barriers.

Application to Queenstown/ Wanaka

74. The objectives of the HDRZ introduce sustainable residential communities are under the heading 'Amenity Values'. However, the policies that follow are primarily focused on amenity issues with the only real focus of sustainability concerning the encouragement of a mix of housing.
75. Objectives on Multi Unit Developments touch on *Custodianship* in terms of their appropriate location and references to CPTED.
76. Urban design objectives like urban consolidation are already covered under the qualities of *Context* and *Connection*, but equally apply here. The use and intensification of brownfield land is a positive step from an environmental standpoint, providing technical issues can be overcome. Brownfield development often involves remediation of the site and other challenges related to site assembly, nuisances and integration issues, which often discourage sustainable regeneration of townships over greenfield expansion. A balance needs to be struck between maintaining the demands for brownfield sites as a primary means of sustainable urban growth (and regeneration of the town), while maintaining a level of amenity and social wellbeing the community is comfortable with. This again relies on the report of Mr Mead and projections of supply and demand for brownfield development.
77. Zone rules appropriate to promoting *Custodianship* and residential amenity include:
 - Setback
 - Building footprints
 - Continuous building length
 - Fence heights
 - Site density

COLLABORATION

78. The *Collaboration* principle is defined and described in the Protocol as:

"Collaboration: *Communicating and sharing knowledge across sectors, professions and communities.*

Towns and cities are designed incrementally as we make decisions on individual projects. Quality urban design requires good communication and co-ordinated actions from all decision-makers: central government, local government, professionals, transport operators, developers and users. To improve our urban design capability we need integrated training, adequately funded research and shared examples of best practice.

Quality urban design:

- *supports a common vision that can be achieved over time*
- *depends on leadership at many levels*
- *uses a collaborative approach to design that acknowledges the contributions of many different disciplines and perspectives*

- *involves communities in meaningful decision-making processes*
- *acknowledges and celebrates examples of good practice*
- *recognises the importance of training in urban design and research at national, regional and local levels."*

The New Zealand Urban Design Protocol (MfE 2005)

Interpretation

79. *Collaboration* is mainly about the communicating a clear message on the intentions to improve residential amenity and how this aims to be achieved.
80. In District Plans this is achieved primarily through the Objectives and Policies and reinforced in the Zone Rules that apply to development. There are other 'backup' processes, such as urban design panels, where this message can be reinforced if necessary.
81. Ideally rules should be composed to achieve many of the urban design qualities outlined above. Due to the nature of these rules, much variation is possible and, as previously stated, some developers may legitimately choose to underdevelop or exceed the permitted baseline standards. This poses a number of difficulties for achieving quality urban design that strives to balance order and coherence alongside variety and creativity. In this respect collaboration is an important way of communicating these qualities.

Application to Queenstown/ Wanaka

82. Where possible, the *Collaboration* process should start prior to developers submitting resource consents and any formal statutory consultation process, if required. One way the Council can collaborate is through the development of non-statutory urban design guidelines or best practice notes, presenting good precedent developments from Queenstown and Wanaka. These would communicate with the development community early in the design process and assist in interpreting and working within the permitted rules to achieve the Council's intended outcomes. Another is through pre-submission negotiations or early advice from the Urban Design Panel. This potentially provides more certainty for developers and may speed up the consent process.
83. In addition (or alternatively), the Council may choose to collaborate once the statutory process has already been initiated using the standard Assessment Matters and the Urban Design Panel. If these techniques were to continue to be used in isolation as they currently are, then providing a lower threshold to trigger discretionary activities may be valid to achieve urban design quality, although the mere presence of an urban design panel tends to automatically raise standards. In principle, the more *Collaboration* of this kind the better it is for improving urban design quality.

PART 2: ASSESSMENT OF PROPOSED RULES

84. This section assesses the effectiveness and likely outcome of the Plan Change 10 rules in relation to achieving the urban design principles outlined above. The assessment of each rule has regard to:
- Relevant urban design principles
 - The purpose and rationale of the Section 32 report;
 - The modelling of proposed Plan Changes 6, 8 and 10; and
 - Comments and relief sought by submitters
85. It is important to note that many examples of bulky buildings visible in Queenstown and Wanaka may not have been permitted activities under the rules prior to Plan Change 10. Boffa Miskell requested a range of previous PIM submissions from QLDC during the modelling exercise but, of those supplied, few were actually permitted activities. Photographic examples referenced under each rule below may not be a permitted activity under the rules prior to Plan Change 10 but simply serve to illustrate a particular point.
86. In preparing this report, I have assumed that the commissioners will be familiar with each of the proposed rule changes, as publicly notified in Plan Change 10. These have been summarised in the planning report prepared by Ms Rykers and are detailed in the Section 32 report.

MULTI UNIT DEVELOPMENT

87. A summary of submissions on this proposed rule is as follows:

In opposition

67 submitters oppose this proposed rule. There is some concern that limiting the number of multi units that can be built on a site does not consider the size and character of individual sites. Some sites are more capable than others of containing multi units. One submitter notes that amenity is related to design and not the number of buildings on a site whilst another queried the meaning of the word 'unit' as it is not clearly defined. 8 submitters noted that multi units provide centralised living close to amenities and existing infrastructure. At least 43 submitters have stated that they would like this rule to be deleted.

In Support

66 submitters support Plan Change 10 but two submitters would like the proposed rule amended. Bill and Loris King believe that multi units and buildings over specific size should be discretionary activities. Whereas John William Acton Smith and Dinah Virginia Smith Family Trusts recognize that some lots in Zone C are considerably greater in size and would comfortably support more than three units.

88. Urban design principles that should be considered in reviewing the multi-unit development rule include:
- Context
 - Character
 - Choice
 - Connections
 - Custodianship
89. The section 32 report expresses concern that multi-unit developments in Queenstown and Wanaka are acquiring a more ‘commercial’ appearance due to their ‘large and bulky nature’.
90. I agree that some multi-unit developments over the maximum numbers indicated in the rule do display these large and bulky characteristics. However, I do not believe this to be a *direct* result of the number of units within a development but more related to the ability of the building envelope to accommodate them and unit sizes.
91. The modelling exercise (Appendix B) illustrates that the building bulk achievable in each of the sub zones is similar. This appears to be the influence of other zone rules (ie. setbacks, parking and access widths etc). This is reinforced by the building coverage and Gross Floor Area (GFA) data that indicates Sub Zone A models, containing six smaller units, often produce less area than those in Sub Zones B and C, containing four and two larger units respectively.
92. In my opinion, a more telling trait of commercial looking development (i.e. hotels) is the high degree of modular repetition and regularity *within* this building bulk. Repetition becomes more obvious as unit numbers and building bulk increase and unit sizes decrease. This gives a ‘mass-produced’ appearance that is easily recognisable in existing developments of varying bulk around Queenstown and Wanaka, as illustrated in Photographs 1-3, Appendix C.
93. Comments received from our meeting with local architects during the modelling exercise suggest that developers were attempting to maximise the number of smaller units on a site rather than providing larger, more exclusive units. This indicates market pressure to propagate these characteristics in the future. Furthermore, I foresee this proposed rule potentially encouraging developers to subdivide larger sites to improve the development feasibility. However, the current site density rule would prevent the most intense proposals.
94. Of the two concerns above, I consider building bulk to be more effectively controlled by other rules proposed within Plan Change 10. A multi unit development rule should therefore be targeted at avoiding the adverse effects of developers excessively dividing this building bulk down into the smallest possible unit size.
95. Submission points on the inconsistent relationship between the number of units and site size do have some merit. For example in Sub Zone A, with a maximum number of six units, a large site at 2000m² (1 unit/333m²) is likely to have a very

different effect on amenity compared to an equivalent number on a smaller site at 450m² (1 unit/75m²), the minimum subdivisible lot size. On the larger site, units are likely to be either detached and spread across the site or concentrated within generous landscaped areas. In both cases, these outcomes represent a lower density amenity and are unlikely to achieve many of the urban design principles, such as *Context*, *Character*, *Choice*, *Connections* and *Custodianship* appropriate to the HDRZ. However, six units on the smaller site of 450m² may have an equally adverse effect on *Character*, as explained under this principle.

96. Nevertheless, I regard the maximum of two units identified for Sub Zone C as being generally too low a number for a higher density zone (ie. 1 unit/ 225m² on the minimum subdividable lot size). Modelling across all slope scenarios illustrates that this generally results in larger detached dwellings that are not representative of the HDRZ. This would only be acceptable if Sub Zone C was a special amenity or character area.
97. I agree, in principle, that a limit needs to be placed on the number of units at which a design and appearance assessment is triggered to enhance the anticipated *Character* of the HDRZ. However the inconsistency of this rule when applied to varying site sizes potentially results in a wide spectrum of permitted outcomes. I consider the site density rule, discussed later in this report to be more site responsive, providing it is set to trigger design and appearance assessment at an appropriate density and in combination with other Plan Change 10 rules controlling building bulk.
98. Using the site density rule, in lieu of a multi unit development rule, does have potential risks. While building size rules will prevent overly bulky buildings, there may be some amenity issues relating to repetitive, or 'cookie cutter' designs across larger sites. This may result in environmental outcomes similar to the development in Photograph 4, Appendix C. In my opinion, this is a more acceptable outcome particularly from a distance (ie. viewed across the lake from Kelvin Heights). The likely outcome can be compared between distant views of the same development in Photograph 5 and adjacent bulkier developments in Photograph 6, both illustrated in Appendix C.
99. In my view, applying the multi unit development rule and assessment matters are unlikely to change this outcome significantly, nor would it prevent developers using the same design on adjacent sites.

BUILDING SIZE

100. A summary of submissions on this proposed rule is as follows:

In opposition

66 submitters specifically referred, and were opposed to this proposed rule, and 9 are generally opposed to Plan Change 10. It was considered that the proposed building size is too small and no consideration has been given to the effects of a series of smaller buildings compared to one large building. Also Van Brandenburg Associates commented that controlling the size of the building does not

guarantee good design and amenity. 2 submitters stated that the proposed footprints are too small and 1 submitter believes such a rule may prevent land being able to be used for high-density purposes and landowners should receive compensation. 43 submitters stated that they would like this proposed rule deleted.

In support

66 submitters support Plan Change 10 with Wanaka Residents Association Inc supporting the need for additional restricted control factor to cover the effect of the development on the character of the neighbourhood. Bill and Loris King, Wanaka support this proposed rule but believe that multi units and buildings over the specified size should be discretionary activities.

101. Urban design principles that should be considered in reviewing the building footprint rule include:
 - Context
 - Character
 - Choice
 - Connections
 - Custodianship
102. The modelling exercise (Appendix B) illustrated that the maximum building footprint rule was effective in dividing potentially very large buildings. In combination with the continuous building length rule, restricting the aggregate length of elevations to 30 metres, the building depth was often broken in two. This potentially improves the amenity (outlook, sunlight, access, etc.) for neighbours and reduces some effects of façade repetition.
103. On the relatively narrow 25 metre site used in the modelling, the maximum footprints had little impact on the bulk and mass of buildings presented to the street, due to internal boundary setbacks and/or access requirements. In my view this is acceptable as the internal setbacks preserve some possibility of views from the street into sites and to the landscape beyond, while ensuring that some definition of the street edge is maintained.
104. On larger sites the maximum façade rule would limit buildings becoming excessively long and narrow (ie. to maximise views) and presenting excessive bulk across slopes where the character of hillside areas within the HDRZ could be compromised when viewed from a distance. The diagram in Appendix D taken from By Design (DETR 2000) broadly illustrates this point and with an existing poor example in Photograph 7 and a relatively good example in Photograph-8, Appendix C.
105. The building footprint and continuous building length rules work in tandem. Without a building size rule a building footprint could potentially be 30m x 30m or 868m². I regard this as excessive in terms of *Character*. It would present bulk in two directions offering little relief to both neighbours and the street. On *Custodianship* grounds, this would allow buildings with little opportunity for

daylighting or cross ventilation unless a substantial internal courtyard or atrium was provided. This would effectively create two buildings anyway.

106. Submissions have indicated that building footprints seem small and there may be adverse effects from many smaller buildings. A maximum 500m² building in Sub Zone A could be approximately 23.4m x 23.4m or 30m x 18.8m at its maximum dimension.
107. I would not regard buildings of this size as particularly small for residential activities, especially given the existing character within the zone. Therefore, I would be reluctant to accept the prospect of bigger buildings during this sensitive transition period, where in some situations new buildings will be built alongside traditional kiwi baches (Photograph 9, Appendix C). Of course, there are no guarantees to good building design, but in my opinion it does improve the chances of this occurring.
108. I regard the maximum building footprints to be of sufficient size to accommodate a range of unit types to provide *Choice*. For example, a 500m² footprint (or 1000m² over two floors) could accommodate at least eight x 100m² two bedroom units, including an allowance for circulation.
109. In my opinion, smaller buildings discussed above would enhance the *Context* and *Character*. Preventing long façades would improve both neighbour-to-neighbour amenity and reduce the bulk of a building exposed across the slope.

SET BACKS

110. A summary of submissions on this proposed rule is as follows:

In opposition

72 submitters oppose this site standard and 53 submitters made specific reference to garages. Many submitters are opposed to the new rule, as it does not consider the steep topography of many of the affected sites. 10 submitters were concerned that the proposed setbacks would reduce the development potential of many sites with at least 1 believing it may render High Density Residential zoned land as being incapable of reasonable high density use. 43 submitters believe that garages should continue to be allowed within the front setback and the proposed new site standard for the HDRZ is deleted. Storage should also be allowed within the front setback and the internal setback rules should remain as currently worded.

Wensley Developments Limited considers that the existing rules are more than sufficient to protect amenity and privacy levels. One submitter did state that there was nothing to suggest that garages built within front yards were affecting visual amenity.

Eight submitters noted that a 4 metre building separation would have no benefits, as it is unlikely a window would be placed on that aspect of a building. Such an area would become 'dead' space, as due to the south facing aspect of many of the sites, it would be difficult to cultivate these areas.

In support

66 submitters support Plan Change 10 with one submitter requesting an increase in the setback from the road to 5 metres along the route of the proposed bypass.

111. Urban design principles that should be considered in reviewing the setback rules include:
 - Context
 - Character
 - Choice
 - Connections
 - Creativity
 - Custodianship
112. Two rules relate to set backs - Road Boundary Setbacks and Internal Boundary Setbacks. These fulfil different urban design objectives.

Road Boundary Setbacks

113. The modelling exercise (Appendix B) did not allow for much comparison between rules prior to and proposed for Plan Change 10 for assessing the impacts of garage location within the road setback.
114. However, some surface parking was provided within the Sub Zone A road setback in Scenario 1 (pages 15-16), as individual garages would have significantly compromised the building coverage. The wider access way requirements also significantly affected the building setback and generally highlighted issues regarding the amenity of parking facilities in front of buildings.
115. From an urban design perspective, garages permitted within the road setback tend to dominate the street scene, as illustrated in Photograph 10, Appendix C. They have an adverse effect on the anticipated *Character* of the HDRZ by interrupting the definition and continuity of the built edge. In addition, garage location has effects on *Connections* and *Custodianship*, where encouragement of walking is related to enhancement of both ground level activity and natural surveillance to improve safety and discourage car use. At the very least, garages should be positioned alongside or behind the main building line to enhance these qualities.
116. There are several other broader issues related to the 4.5m setback distance in the HDRZ.
117. A potential issue with garages positioned beyond the 4.5m road setback is that it enables cars to be parked on the accessway in front of them, as illustrated in Photograph 11, Appendix C. Apart from dominating the street scene, this distance is less than the standard car park depth and requires cars to reverse out of the accessways onto the street.
118. Submissions commenting on the zoned land being incapable of higher density use have some validity. The modelling exercise (Appendix B) illustrated that for a

1000m² site the setbacks occupied 350m². This was a major constraint in achieving the permitted site coverage for both Sub Zones A and B. Excluding garages from the setback, whilst desirable from an urban design perspective, potentially compounds this issue.

119. I indicated in the section on *Choice* that higher density zones typically transfer amenity to the public realm to reduce the maintenance burden on residences who choose to utilise the town centre amenities or live a 'lock and leave' lifestyle. I regard a 4.5m setback as an onerous responsibility, or typically not treated well by developers seeking low maintenance solutions, as illustrated in Photograph 12, Appendix C.
120. For the principles of *Context*, *Character* and *Connections*, a well-defined and proportioned streetscape is critical to achieving a vital, safe and human scaled neighbourhood that is distinct from the lower density zones, which have the same 4.5 metre road setback rules. A street enclosure from frontage to frontage (or street tree to street tree) of ratio 1:3 is regarded as an appropriate target. A street width of approximately 20 metres with 3m road setbacks and an 8 metre height control would be more effective to achieve these principles.
121. Furthermore, it would be acceptable in terms of *Context* to reinforce legibility of the townscape. Further reducing the road setback distances on corners and/or removing the requirement for two 4.5 metre setbacks would allow for landmark buildings to better assist pedestrian orientation.
122. It is important to note that the road setback is ideally utilised for territorial definition as a semi-private transition space between public and private realms. It is therefore recommended that it is not encouraged for use as private space, but could be of sufficient depth to allow tables and chairs to help animate the street. I believe the new fence line rule reinforces these assertions.
123. A 3 metre road setback would still allow for standard manoeuvrability into garages from the property boundary and would encourage garages to face internal boundaries rather than the street. This would also relieve some submitters concerns over the amount of earthworks required to provide for garages and access ways or would encourage greater underground parking, removing the presence of cars from the street scene.
124. I regard the outdoor storage in the road setback to be a similar issue to garages, as this would include storage sheds or similar obtrusive structures. These are better placed in more private or internal areas.

Internal Boundary Setbacks

125. Modelling of internal boundary setbacks (Appendix B) illustrated that vehicle or pedestrian access ways and the 3m minimum dimension for outdoor living spaces often pushed buildings beyond the 2m setback distance, as illustrated in Photograph 13, Appendix C. The requirement for one additional 4.5m setback was utilised for access ways and deeper outdoor living spaces, but still resulted in some reduction in potential site coverage. On sloping sites, where mutual setbacks applied between two buildings on a site, this outdoor living space could

be provided between the buildings and allow buildings to maximise the site width for greater views, etc. In these cases the 2 metre internal boundary setback did apply.

126. It should be noted that these mutual setbacks do affect building coverage and effectively minimise any apparent differentiation between Sub Zones A, B and C on this site size or smaller.
127. There is a potential risk that if the landscape coverage rule was not included, developers would seek to relocate the outdoor living space to upper levels to maximise site coverage. This could result ground level units moved to an upper level and the ground level being used for car parking etc., again illustrated in Photograph 12, Appendix C. This would affect the *Character, Custodianship and Connections* in relation to active ground floors and pedestrian safety, particularly on sloping sites where views, earthworks, costs and lack of recession planes encourage this.
128. I do not regard the removal of common (party) walls between neighbouring properties, as a privacy issue given both buildings would not have the opportunity to overlook each other. This is a technique frequently used in higher density areas internationally. However, in terms of the *Character* of Queenstown and Wanaka, where buildings are generally detached, plantings soften buildings and visual connections to the landscape are important, I consider this rule change appropriate to discourage long terraced building forms and abuse of the previous building size rule. Similarly, applying the mutual setback rule between buildings within a site will have a consequential effect on neighbouring properties but cannot be relied upon to achieve higher amenity on adjoining sites. However, I agree that there is a need for amenity controls within a site as this could affect views from the public realm where sites have extensive street frontages, again illustrated in Photograph 1, Appendix C
129. I do not consider the potential setback distance, equating to 4m between neighbouring buildings, to provide adequate privacy, if between openings of opposing habitable rooms, as illustrated in Photograph 14, Appendix C. Other planning rules, such as in higher density areas of the City of Sydney, require a minimum of 12 metre between habitable rooms and have a sliding scale for lesser privacy conflicts. This could be unworkable on narrow sites but may encourage more active street frontages with less privacy conflicts. The introduction of a minimum privacy distance between habitable rooms could be accompanied by an option to reduce this distance through technical means, as explained in the Creativity section above. This could apply universally, within or between sites.
130. Finally, I agree that there are potential difficulties in cultivating plants on predominantly southerly aspects within the zone. However, this is not dissimilar to road setbacks and I regard broader *Context* and *Character* considerations of more importance.

CONTINUOUS BUILDING LENGTH

131. A summary of submissions on this proposed rule is as follows:

In opposition

65 submitters are opposed to this site standard and 9 submitters expressed concern that the proposed rule would reduce the efficient use of sites. It was also considered that there is a need to consider the design of, rather than reducing the length of walls. 43 submitters would like to see the proposed site standard deleted and the original wording retained.

In support

There were 67 submissions in support of the Plan Change with one submitter (John William Acton Smith and Dinah Virginia Smith Family Trusts) wanting clarification of the rule on Continuous Building Length, as it is unclear that where two titles are amalgamated whether two buildings of 16m each joining at the boundary can be built. Paterson Pitts Partners (Queenstown) Limited, who oppose the rest of the Plan Change, support the proposed site standard as a useful design requirement in terms of breaking up the impact of large buildings.

132. Urban design principles that should be considered in reviewing the continuous building length rule include:

- Context
- Character
- Creativity
- Custodianship

133. Urban design principles of *Context* and *Character* are relevant in creating a distinction between different zones within the townscape. The town centres of Queenstown and Wanaka are generally characterised by long continuous building façades where common walls create vertical repetition and use design details (eg. signage, verandahs, etc.) and live ground level activities to create articulation and variety. I consider that with a likely reduction in façade repetition, detail and activity levels in the HDRZ, other means of achieving building articulation are necessary and appropriate.

134. The modelling of the rules prior to Plan Change 10 (Appendix B) allowed the entire building façade to be stepped back where the length of the building exceeded 16m. This illustrated that the developer could achieve long flat and bulky building façades with a high degree of repetition. In these scenarios, the loss of building coverage, by choosing to use a flat façade, was not significant as other site considerations such as boundary accessways and 3 metre deep outdoor living spaces were already required and tied in neatly with this particular setback option. This is illustrated in Photograph 15, Appendix C. Had the option been used of progressively stepping the building façade back 0.5 metres, I anticipate this would have had little effect on the apparent bulk of the façade and this is illustrated in Photograph 1, Appendix C.

135. The proposed Plan Change 10 rule of providing a 2m x 4m break in the façade will better modulate the street façade, as illustrated in Appendix B, Pages 23-24. This appeared to be consistent with the breaks that would occur between buildings. The proposed rule also assists in reinforcing a sense of overall order in the vertical rhythm of the street scene on a different scale to those buildings within the town centres.
136. However, the modelling assumed developers would place this break between units, which was often shorter than the full 16m maximum distance. In Sub Zone C models, where only one dwelling occupied the frontage, the full 16m was utilised. This resulted in only a small corner of the façade being stepped back (Appendix B, Page 19) and appears quite generous. The 16m distance was more effective along the depth of the site, ensuring at least a break or often a full division of the building in two occurred.
137. It must be noted that the 16m length does not achieve an even modular repetition in relation to the maximum 30 metre aggregate length of the building and often results in a combination of 16m/ 4m/10m repetition. A 13m/ 4m/ 13m interval would be equally, if not more, effective in breaking down façades and providing a more regular and recognisable sense of order along the street.
138. Moreover, there is no depth specified for discontinuous rooflines or eaves. It would be advantageous from a *Context* and *Character* perspective to ensure that more than a cursory break occurs and the roofscape appears well articulated from a distance to reflect the modulation required at ground level. This has the added benefit of potentially increasing gaps in the roofline and enhancing the landscape connection for the outlook of public space or buildings behind.
139. Potential environmental sustainability benefits of deeper breaks in building façades include more opportunities for cross ventilation and natural daylighting of units. This is particularly relevant in the HDRZ where building footprints tend to be deeper and is consistent with the *Custodianship* principle explained above.

BUILDING COVERAGE

140. A summary of submissions on this proposed rule is as follows:

In opposition

61 submitters specifically referred to this site standard and 9 are generally opposed to Plan Change 10. There was no agreement on alternatives but 2 submitters would like building coverage increased (Highview Apartments, Sub-Zone B from 55% to 65% and Paterson Pitts Partners (Queenstown) Limited, Sub-Zone C up to 55%). Van Brandenburg Associates and Perron Developments Limited consider that coverage should be traded with height i.e. build up not out. Woodlot Properties Limited did not specify any requirements but believe that lowering building coverage could prevent the High Density Residential Zone being used for high-density activities. 43 submitters would like the new site standard to be deleted and a range of maximum building coverage percentages for the subzones created with the minimum being 55%.

In support

66 submitters supported the proposed site standard, however 30 of those submitters consider that the building coverage should be reduced further to 45% in Sub-Zone B and 35% in Sub-Zone C.

141. Urban design principles that should be considered in reviewing building coverage include:
 - Context
 - Character
 - Connections
 - Creativity
 - Custodianship
142. The modelling exercise (Appendix B) illustrated that building coverage was relatively even across all sub zones (ie. within 5%), except Sub Zone A on the two flat site scenarios where other rules, particularly access widths (Plan Change 6) and car parking (Plan Change 8) requirements, constrained building coverage below those achieved by both Sub Zones B and C. All sub zones were below the building coverage possible prior to Plan Change 10, even were Sub Zone A had the benefit of underground parking in Scenario 2 (Appendix B, Page 19-20). Sub Zone C was the only sub zone to consistently meet the maximum site coverage target, but required substantial unit sizes to achieve this.
143. The Gross Floor Area, a better indicator of building bulk, illustrated a similar trend, although showed a considerable increase on steeper sites where recession planes do not apply. The benefits for *Context*, *Character* and *Custodianship* principles are unlikely to occur on this particular site size or less. This may even discourage multi unit developments in Sub Zones A and B where walkability and the *Connections* principle is intended to apply most.
144. A trade in coverage for height, or a Floor Area Ratio (FAR), option has been suggested by several submitters. This has been applied in other higher density zones (eg. Christchurch). It needs to work closely with a height control that provides some flexibility to build higher or further out. In my experience FAR works well in terms of achieving consistent *Character* traits where one particular driver such as landscape views, encourages a consistent built form approach (ie. taller narrower buildings that allows more ground level parking or landscape coverage). I discuss this further in the section on height below.
145. Modelling suggests that height controls are comfortably reached as unit size is simply manipulated to fill the envelope. A FAR may be beneficial to control building bulk better than controlling height only.

LANDSCAPE COVERAGE

146. A summary of submissions on this proposed rule is as follows:

In opposition

66 submitters are opposed to this rule. Again the main issues were the inefficient use of land within the high-density zone. Also 8 submitters noted that the type and density of vegetation is not defined, which could possibly affect view shafts and the south facing nature of many of the sites does not promote plant growth. 43 submitters requested that the proposed site standard is deleted and the site standard for visitor accommodation reinstated.

In support

66 submitters are in favour of the proposed site standard, however 30 submitters consider that landscaping requirements for Sub-Zone B should be 35% and for Sub-Zone C, 45%. One submitter would like the site standard for visitor accommodation reworded to follow the proposed landscape coverage and reinstated.

147. Urban design principles that should be considered in reviewing the landscape coverage rule include:
- Context
 - Character
 - Choice
 - Creativity
 - Connections
 - Custodianship
148. The modelling exercise (Appendix B) illustrated that the landscape coverage minimum was comfortably obtainable on a 1000m² site, even with substantial access and car parking requirements in Sub Zone A. Much of this landscape coverage was provided in undevelopable parts of the site, particularly setback areas. However, landscape coverage may become a constraining factor on smaller sites, where equivalent areas of parking and access remain constant, as illustrated in Photograph 16, Appendix C.
149. In combination with the building coverage rule, all sub zones are left with 15% available for other site uses, such as car parks (12 in Sub Zone A or four in Sub Zone C). On smaller sites it is likely that the landscape coverage rule would encourage Sub Zones A and B to either provide underground parking (and associated earthworks) or necessitate incorporating more parking within the building footprint. Either way, *Character* and *Connections* principles potentially benefit from this rule. Landscape coverage would potentially remove or mitigate the adverse visual effects of surface or freestanding garaging in exchange for opportunities to soften the higher density buildings on site.
150. This also encourages the provision of ground level dwellings, as outdoor living space would be included in the minimum coverage. This has potential positive implications for *Custodianship*, as ground level dwellings promote active edges, natural surveillance and enhance the sense of ownership of common grounds and the street.

151. It is important to note that landscape coverage is provided for within the *Context* of a higher density zone, where the emphasis is on consolidation to avoid other urban areas unnecessarily extending into the natural or rural landscape of Queenstown and Wanaka. Any increase in landscape coverage potentially further limits density and shifts environmental issues further out.
152. A higher density zone is not a location where the landscape should be expected to dominate over buildings, as they would in lower density areas. A balance should be struck where planting is effective in softening edges without compromising other good urban principles, like *Choice* or *Custodianship*.
153. In addition, an increase in minimum landscape coverage shifts the maintenance responsibility back onto property owners. Yet within the HDRZ it is appropriate that amenity beyond private outdoor living spaces, territorial definition and screening requirements becomes the responsibility of the Council to provide within the public realm (i.e. streetscape, open space and other public amenities). A higher density zone requires high quality landscape treatments, and developments should not be relied upon to provide or maintain this or provide a consistent and memorable landscape themes across the zone.

FENCE HEIGHTS

154. A summary of submissions on this proposed rule is as follows:

In opposition

65 submitters oppose this proposed rule. 10 submitters stated that limiting the height of fences would affect amenity and privacy levels within front yards. 1 submitter believes that the fence height should be 'an average height of 1.2 metres' whereas 8 submitters believe the potential for planting to mitigate reduced fence height should be considered. This has the potential to affect sight lines especially along SH6a. Moreover, it could create a monotonous appearance along front boundaries therefore fence height should be a controlled activity. 43 submitters requested that this proposed rule be deleted.

In support

66 submitters support Plan Change 10 with one submitter specifically referring to this rule. Richard B Thomson believes clarification on 'visually opaque' is required.

155. Urban design principles that should be considered in reviewing the fence height rule include:
 - Character
 - Connections
 - Custodianship
156. The modelling exercise (Appendix B) illustrated that apart from an allowance for accessways, fences generally extended across the remaining road frontage. They were often positioned in front of required outdoor living spaces where models

utilised the 4.5m road setback to absorb the minimum 3m dimension required. In other models, such as in Sub Zone A, scenario 1a, and Sub Zone B, in scenario 3, fences were located adjacent to surface or rooftop car parking, which require screening from the public road.

157. Principles of *Connections* and *Custodianship* both promote a safe and interesting pedestrian experience to encourage walking within higher density zones. I consider the maximum 2 metre fence height (before being defined as a building) to detract from these qualities, as it generally extends above sightlines for both inward and outward views. This is illustrated in Photograph 17, Appendix C.
158. Visually permeable fencing above 1.2 metres would be preferable provided the following related issues are considered.
159. Reduced fence heights must relate to the use of the space created by the road setback to work effectively. Lower fence heights reduce the sense of privacy and therefore rules should discourage this setback being used primarily as private space. Private use in this space will potentially result in higher screen planting or temporary artificial screening of this boundary with subsequent issues of rule enforcement and adverse amenity arising.
160. Road setbacks are intended to be semi-private spaces, which provide a transition from private interior space to the public realm. In higher density zones it is inefficient for sites to have deep setbacks if not suitable for private space. This reinforces the need to reduce road setback distances, which would release other parts of the site for private outdoor use.
161. The reduced ability to screen carparking areas, apart from soft landscaping, could be used to encourage rear or underground parking provisions. It is acknowledged that screen planting conflicts with several urban design principles, but it is anticipated that this will be less of an effect and maybe minimised by developments wanting to maximise views or sunlight access, if setbacks are reduced.
162. It must be noted that restrictions on opaque fence heights only apply within the road setback and should be considered for boundaries fronting other public open spaces or public accessways, such as Frankton Track. In these situations, the same urban design principles apply.

SITE DENSITY

163. A summary of submissions on this proposed rule is as follows:

In opposition

65 submitters oppose this proposed rule. 10 submitters voiced concern regarding the effect of the proposed rule on site density within the HDRZ. Woodlot Properties Limited believes that it may affect the ability of sites to be used for high density and is in opposition to the objectives set out in Queenstown Tomorrow. Instead of consolidating urban development, this rule may lead to urban sprawl and the rezoning of rural land for urban development. 8 submitters

noted that 200m² was first considered in 1995 but that development in Queenstown has changed since that time and consideration of the existing environment needs to happen. Neither does the proposed rule allow for site specifics or consider the appropriateness of different sized units. Also importantly 'unit' has not been defined; does it relate to the built form or the individual unit (this has been defined). 43 submitters requested that the rule deleted.

In support

Of the 66 submitters in support of Plan Change 10, 29 specifically referred to this proposed rule and believe that site densities should be further increased to 200m² in Sub-Zone B and 250m² in Sub-Zone C.

164. The urban design principles that should be considered in reviewing the site density rule include:
 - Context
 - Character
 - Connections
 - Creativity
 - Custodianship
 - Choice
165. The modelling exercise illustrated (Appendix B) that no Plan Change 10 sub zone model dropped below the site density zone standard. However, this threshold is likely to be reached on a 600m² site for Sub Zones A and B, and 400m² for Sub Zone C (three units would match the Sub Zone A and B threshold of 600m²).
166. However, the thresholds were exceeded on both sloping site scenarios under rules prior to Plan Change 10 and would act to limit the number of units and potentially increase unit size.
167. Site area analysis undertaken as part of the modelling exercise, indicates that approximately 37% of current sites in Queenstown and 40% in Wanaka (not accounting for future aggregation or subdivision) would be subject to this Zone Standard, if they chose to maximise the multi unit development rule (Appendix B, Page 11 and 13).
168. As previously discussed under the multi unit development rule, I regard site density as a more site responsive trigger for design and appearance assessment. Mr Mead in his report considers appropriate levels of site density relative to growth projections and experience of similar applications in other centres.

HEIGHT AND ELEVATION RESTRICTIONS ALONG FRANKTON ROAD

169. A summary of submissions on this proposed rule is as follows:

In opposition

25 submitters oppose this proposed rule. As Woodlot Properties Limited state, linking a rule to the “Frankton Roadway Centre Line” is impractical and impossible as no centre line exists and the surface may change altering the effect of the rule. Similarly the Frankton walkway does not have a centre line and may be subject to upgrade or maintenance that could change the surface level in the future.

Two submitters note that Frankton Road is a major arterial road and therefore scenic viewing should not be a priority especially for drivers. One submitter believes this rule will add to the imposing nature of buildings and mean that units will have to utilize steps to reach the track.

One submitter suggested flexibility in the height rule to allow for high-pitched roofs, if significant design improvements are to be made. Whereas another voiced concern that site owners can still plant vegetation that blocks views and the existing rules (site coverage of 55%, height of 7 metres and internal boundaries of 2 metres) ensure gaps through which views can be glimpsed. If the Council wishes to retain views especially along the Frankton Walking Track then they should clear or trim vegetation or purchase land for reserves.

In support

None of the 66 submitters in favour of Plan Change 10 specifically commented on or referred to this proposed site standard. However, one submitter generally opposed to Plan Change 10 does support the floor levels being 2 metres above Frankton Track.

170. Urban design principles that should be considered in reviewing the height and elevation rules along Frankton Road include:
 - Context
 - Character
 - Connections
 - Custodianship
171. The modelling exercise only applied to rules prior to Plan Change 10 and Sub Zone B as no other sub zones related to the south side of Frankton Road or Frankton Track.
172. The model for Sub Zone B (Appendix B, Pages 21-22) illustrated the loss of at least one potential building storey compared to rules prior to Plan Change 10. This was removed to protect views from Frankton Road and elevate the building off the lower Frankton Track.
173. An assumption was made during the modelling exercise that it would be impractical and potentially uneconomic for developers to provide a vehicle ramp from the top of the site to locate eight car parking spaces below the road level. The convenience of locating parking on the building roofs, directly off Frankton

Road, was considered preferable but created various visual amenity issues (i.e. cars and barriers projecting above the height control level).

174. I regard the existing amenity along Frankton Road to be unsatisfactory considering it is the major gateway into Queenstown. As demonstrated in the modelling, only one storey is currently possible above the road level and this is often constrained by extensive access ramp requirements. The significant views towards Lake Wakatipu and Remarkables Mountains, combined with the lower amenity of Frankton Road, have resulted in many developments turning their back to the street. As a result, recent developments are using this façade primarily for access and utility purposes, as illustrated in Photograph 18, Appendix C.
175. I regard the proposed rule as appropriate to serve the dual function of protecting views from the road and mitigating adverse amenity effects of these 'rear' façades.
176. Furthermore, constraining development below the road level is consistent with *Context* where there is an opportunity to visually separate Frankton and Queenstown townships and better allow for future opportunities to create a distinctive gateway into Queenstown.
177. Roof top parking could potentially be avoided if there were sufficient economies of scale to provide ramps to underground parking, as seen in some of the larger developments along this stretch of road. This is unlikely under current Sub Zone B rules as they stand and would favour the redesignation to Sub Zone A. However, any increases in permitted density would need to be closely related to the *Connections* principle, in terms of close accessibility to public transport.
178. The proposed elevation of building floor levels above Frankton Track is important, for similar reasons of *Context* above. The effect of development should not overly compromise the experience of remoteness along the track between Queenstown and Frankton.
179. It is likely that further development will remove parts of the existing tree coverage exposing buildings to the track edge, as illustrated in Photograph 19, Appendix C. A 2m buffer appears to be an acceptable height to provide some mitigation for these effects. However, this is a long and relatively isolated walk, which has potential to be increasingly used as a pedestrian connection to the Queenstown town centre. It is important that the separation distance does not over compromise the principles of *Custodianship* (i.e. natural surveillance) that development could provide. It is therefore recommended that the fence height rule is also applied to this public accessway.

HEIGHT

180. Plan Change 10 did not suggest any alteration to the existing height rules. However, the modelling exercise (Appendix B) has identified a number of amenity issues that need more detailed consideration beyond the scope of this report.

181. A summary of submissions on this rule is as follows:

The majority of submitters requested changes to the height rule for specific sites or blocks of sites rather than comprehensive change across a proposed sub-zone, apart from three submitters. High View Apartments and Michael Morel, who believe the height limit, should be 9 metres. These two submissions also linked building height to an increase in building size suggesting taller buildings with view corridors and landscaping between buildings. Whereas, Perron Developments Limited who own Laurelbank at 18 Frankton Road suggested a trade-off relationship between site coverage and height to provide for a better urban form while keeping to a human scale by limiting height to 4 storeys or 12 metres.

Eight submitters (Erin Property Ltd, Emma Jane Ltd, Queenstown Lodge, Youth Hostels Association of New Zealand Incorporated, Pounamu Hotel Nominee Limited, Infinity Investment Group Limited, Highside Limited, Future Recovery Limited, The Philip Sleigh Family Trust and Bowen Street Enterprises Limited) suggested that any breach of height limits should be assessed as a restricted discretionary or discretionary activity via site standards.

It is also noted that most submitters requested an increase in the maximum height with only 3 suggesting it should remain at 7-8 metres (Erin Property Ltd, Emma Jane Ltd and Queenstown Lodge). Highside Limited, Future Recovery Limited, The Philip Sleigh Family Trust and Bowen Street Enterprises Limited sought a height limit of at least 24 metres for part of sub-zone B including their site. Youth Hostels Association of New Zealand Incorporated and Infinity Investment Group Limited requested increases in height ranging from 7-15 metres, which considered location, topography, and potential adverse effects on other/adjoining properties.

Clearsky Mountains NZ Limited and Medcentre Queenstown Limited own land within a 'commercial precinct' and sought to add rules specific to this precinct, with the height limit increased to 12 metres. John Thompson and MacFarlane Investments Limited also sought to increase the height limit to 12 metres or alternatively such lower height limit between 8 and 12 metres the Council considers appropriate.

IHG Queenstown Limited and Carter Queenstown Limited sought to rezone a block of land as Queenstown Town Centre Zone, with a maximum height limit to be achieved under existing use rights except that in no case should buildings on the land protrude through a horizontal plane 8 metres above the ground along all points along the Mann Street frontage to the properties in the subject block of sites.

182. Urban design principles that should be considered in reviewing the height rule include:

- Context
- Character
- Connections

- Custodianship

183. The modelling exercise (Appendix B) illustrated that the application of recession planes to flat sites along all boundaries would substantially restrict the extent of upper storeys. Two 3 metre storey heights are possible with 7 and 8 metre height controls, but the effect of the 25° recession plane shows deep setbacks are required from each boundary, which centralise upper storeys in the middle of the site. However, the ground floor can extend up to the boundary setback distances without being affected by the recession planes. This creates a potential difference between the floor area of ground and upper levels, leading to a horizontal stepping of buildings above the first floor or substantial roof pitches on some façades, as illustrated in Photograph 20, Appendix C. Alternatively, the ground floor could be retracted to meet the upper façade, but would reduce the building coverage substantially.
184. This has implications for the distribution of residential units within flat sites. Recessed upper storeys make it more difficult to create single level apartments on each floor for various reasons including access, structure and dwelling size restrictions. Two storeyed terraced, semi-detached or detached dwellings were used in the modelling which allowed smaller upper storeys to be utilised in combination with larger ground levels. However, these ran into the depth of the site rather than along the frontage.
185. On steeper sites, where recession planes are not required, modelling illustrated the potential for four storeys across the depth of the site with up to three storeys on the road frontage. The height limit can also span the full width of the site between the internal set back distances. This is illustrated in Photograph 21, Appendix C. However, the combination of setback distances and the angle of the site means buildings are limited to just over one storey on the top end of the slope, as illustrated in Photograph 22, Appendix C. This allows neighbouring or rear properties to have upper storey views over rooftops to landscapes beyond but reduces street enclosure.
186. Appendix B (pages 12-13) illustrates that within each sub zone there are a mixture of sites predominantly above or below the 6° slope angle in Queenstown and Wanaka. It is concerning, primarily from a *Context* and *Character* perspective, that the modelling illustrates a considerable difference between flat sites that require recession planes and steeper sites which do not. In many instances these are located side by side.
187. I agree that sloping sites are better at absorbing vertical height. There is an ability to step the building up the slope yet only present two or three storeys at street level but this can be seen from a distance (i.e. Kelvin Heights). However, it has been recognised in the assessment of other rules that the wide bulk of buildings across the slope is an amenity issue.
188. The modelling has also shown that there is little difference in the relative height of buildings to internal site boundaries, (Photograph 23, Appendix C), yet flatter sites are subject to strict recession plane controls. I consider these controls too strict for a higher density residential zone. Assessment of relative Gross Floor

Area between the modelling slope scenarios show a significant difference in capacity, which is largely due to upper storey setbacks imposed by the 25° recession plane.

189. Furthermore, there is minimal gain in amenity for neighbours or public by having a recession plane off the road boundary. Removing this would improve the street definition and natural surveillance purported by *Character* and *Custodianship* principles. I believe the zone would generally benefit from a review of recession planes to make them apply to sloping sites, more site responsive depending on orientation to the sun and appropriate angles to better accommodate higher density developments.
190. There is potential for the height limit to be increased to encourage greater street definition, enclosure and active frontages. This increase should encourage developments to face the street and make full use of the street façade. Allowing up to three storeys may coax developers into placing car parking either at the rear of the site or underground to better utilise the frontage. Use of a Floor Area Ratio may be a better way to introduce a height increase, as this would then be a positive trade-off to improve the purposes of other amenity rules such as building coverage. Above three storeys, I would recommend the use of a 'development control line' to maintain a comfortable scale at street level, while pushing the taller parts buildings to the back of the site. This already occurs on sloping sites but could target flat sites in particular.

CONCLUSIONS

191. This technical report considers the role of urban design in controlling amenity of the HDRZ. It highlights and explains seven urban design principles from the New Zealand Urban Design Protocol that, when considered together, help create quality urban environments.
192. These were used as the basis to assess the submissions on proposed Plan Change 10 rules, in conjunction with the Purpose and Rationale of the Section 32 report and modelling exercise.
193. It must be noted that both principles and rules are only the first of many positive steps required to deliver high quality urban environments. They are not intended to deliver high quality residential amenity single handedly. Both QLDC and the market are responsible for taking further steps to deliver the intention of the protocol and the Plan. Principles and rules only provide the broad guidance and a set of minimum benchmark standards, which could be supplemented by proactive urban design panels and general *Collaboration* techniques, particularly on larger schemes.
194. The principles may be relatively consistent across all New Zealand, but their application is very much measured against the existing *Character* of the Queenstown and Wanaka urban environment and their sensitivity to change. The current pace of transition in these two towns is rapid. In this report, I support the purpose of Plan Change 10, which is trying to be more considered in guiding the

shape and pace of future character change. This is important for the sustainable growth of the community and the tourism industry.

195. The use of the term 'High Density Zone' is relative. For instance, European interpretations of higher density are quite different from those in New Zealand's. Therefore, each should be assessed on the relative community expectations and the existing benchmark character at which periods of growth depart from. Queenstown and Wanaka are different, but are in relatively early periods of transition. This is not to say that growth and consolidation should be avoided at all costs, in many respects it is impossible to stop, so needs to be moderated and targeted in the right locations.
196. Change should not be perceived as a negative step, but one that can bring a different but equally enjoyable urban environment. The challenge is establishing a number of incremental steps to manage this change of which Plan Change 10 is one. As the Protocol requests, this will need to be monitored regularly for its effectiveness.
197. I generally agree with the proposed Plan Change 10, but I am conscious that they must not be interpreted as regressive, but seeking a strong and positive direction for the heart of Queenstown and Wanaka. The recommendations in the report identify where I consider growth could be accommodated within the zone rules, without adversely affecting the existing character and amenity of these townships. These include:
 - removing the multi unit development rule to be replaced by a more site responsive approach (ie. site density);
 - reducing road setback distances to 3 metres including removing the requirements for two deep setbacks on corner sites;
 - adding minimum privacy distances between habitable rooms with a dispensation for technical solutions below this distance;
 - increasing height and moderating recession planes on sites under 6° with consideration of a 'building height control line' to maintain a human scale along the street edge. Review height to boundary rule for slopes over 6° (subject to further investigation);
 - investigating the use of floor area ratio in combination with other rules;
 - reducing the maximum continuous building rule to 13 metres and specify a depth for continuous roof lines and eaves;
 - applying fence height rule to internal boundary setbacks where they interface with public open spaces;
 - re-designating Frankton Road from Sub Zone B to Sub Zone A, subject to improved public transport accessibility;
 - considering site specific urban design guidance or best practice notes to enhance the distinctive character of Queenstown and Wanaka;
 - accepting the remaining proposed changes.

198. I believe these will allow for continued growth in a more targeted way that better recognises the role the HDRZ plays between the town centres and their lower density residential hinterland.

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APPENDICES

Appendix A – Maps of Queenstown and Wanaka HDRZ (including sub zones and walkable catchments)

Appendix B – Modelling of Proposed Plan Changes 6, 8 and 10 (Presentation to Pre Hearing Conference 13th November 2004)

Appendix C – Existing Photographs of Queenstown and Wanaka HDRZ

Appendix D – Effects of building bulk on sloping sites