REPORT TO: Karen Page – Senior Policy Analyst – QLDC

FROM: Nick Karlovsky (Urban Designer)

REFERENCE: Plan Change 41 – Shotover Country Estates

SUBJECT: Urban Design Assessment

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Introduction

Plan Change 41 proposes to rezone an area of approximately 120 hectares of rural land to the north west of the confluence of the Shotover and Kawarau rivers for primarily residential activities. Other activities enabled would include educational and small scale commercial. The subject land is a series of river terraces that descend towards the rivers edges, and would essentially enable the development proposed to occur below the field of vision from passing cars on the nearby Ladies Mile stretch of State Highway 6 (SH6), the main vehicular access route to Queenstown from the east. The plan change proposes a series of activity areas, which include a central core area that is intended to enable a school, activity areas adjoining the school area which would enable medium density and small scale commercial development, and outlying activity areas that would enable low density residential activity. This report assesses the urban design implications the proposed rezoning within the parameters of the Operative District Plan and the Growth Management Strategy for the Queenstown Lakes District (2007).

The report is divided into three parts. Part 1 examines whether urban expansion should occur in this location. Part 2 examines whether the urban form and type enabled is an appropriate type and form, if urban development is deemed appropriate in this location. Part 3 assesses the provisions and assessment criteria set out in the proposed plan change relevant to urban design outcomes.

Part 1 Is this an appropriate location for urban growth?

- 1.1 Principle 1 from the Growth Management Strategy is: *Growth is located in the right places*.

 The fundamental question in regard to the proposed plan change is therefore: is this the right place for a new Queenstown suburb?
- 1.2 Shotover Country sits outside what has become, with the development of Glenda Drive, Quail Rise and the anticipated development of the Plan Change 19 and 5 Mile area, the natural eastern boundary of the Queenstown urban area, the Shotover River. Similarly to the development that has occurred at the foot of the McDonnell Road escarpment near Arrowtown, and Lake Hayes Estate, allowing the Plan Change can be viewed as enabling urban sprawl, or urban spillage into surrounding visual amenity landscape.
- 1.3 The relevant strategies identified in the growth management strategy to support Principle 1 are:
 - 1a All settlements are to be compact with distinct urban edges and defined urban growth boundaries.
 - 1b Growth is to be accommodated mainly in the two urban centres (Queenstown/ Frankton and Wanaka), and existing special zones outside of these centres.
 - 1c Settlements in the Wakatipu Basin (Arthurs Point, Arrowtown, Lake Hayes Estate and Jacks Point) are not to expand beyond their current planned boundaries. Further development and

- redevelopment within current boundaries is encouraged where this adds to housing choices and helps to support additional local services in these settlements.
- 1e The landscape values and the character of rural areas surrounding the urban areas and townships are to be protected from further urbanisation (i.e. changes from a predominately rural character to an urban character).

Under these terms the proposed new zone would undermine the distinct urban edge to the Queenstown urban area by expanding the urban area over the Shotover River, thereby compromising that edge. The edge would be particularly undermined in that the development lies in such close proximity, signalling that the boundary no longer maintains its validity. It would also undermines the compact nature of Queenstown's urban areas as it takes development beyond the easy travel distance of non vehicular modes of travel to the local services of Frankton.

- 1.4 The area clearly sits outside the Queenstown urban edge and pre-existing special zones outside urban boundaries.
- 1.5 The larger part of Queenstown's urban area nestles between the Outstanding Natural landscape (ONL) boundaries of the lake edge and the slopes of Queenstown Hill, Ben Lomond and Peninsula Hill. Until recently the transition from urban to rural towards the east has been blurred by the rural remnants on the Frankton Flats, however the development of Remarkables Park, the Events Centre and associated sports fields, Glenda Drive, Quail Rise and the consolidation of the airport have shifted the balance towards a distinctly urban character. The impending rezoning of the Plan Change 19 area will enable the completion of this transition. For the Frankton Flats, the concept of the urban area being framed by ONL mountain and water boundaries remains robust with K No2 and Ferry Hill to the north reading as extensions to Queenstown Hill, and the Kawarau and Shotover Rivers to the south and east extending the natural water edge of Frankton Arm to the west. These are powerful and compelling natural boundaries.
- 1.6 The clarity of the junction of Queenstown and its ONL boundaries is intrinsic to the town's character. In my opinion this is Queenstown's defining feature. Extending east beyond the Shotover River boundary would urbanise an area of rural Visual Amenity Landscape that would not otherwise be subject to a suburban level of development and will undermine the character of land around it. Such an extension can only be categorised as sprawl.
- 1.7 The counter argument to the above is based around the extent to which existing landscape values would remain protected by virtue of the development enabled being visually screened from State Highway 6 (SH6). In my opinion this rationale is flawed.
- 1.6 The District Wide Issues of the District Plan include:
 - **6. Urban Development** (d) To avoid remedy and mitigate the adverse effects of urban subdivision and development in visual amenity landscapes by avoiding sprawling subdivision and development along roads.
 - 7. Urban Edges To identify clearly the edges of:(a) Existing urban areas; (b) Any extensions to them;
 and (c) Any new urban areas
 by design solutions and to avoid sprawling development along the roads of the district.
- 1.7 The above issues place a heavy emphasis on the visual impact of new urban areas from roads in response to which development within the subject land has been essentially restricted to locations beyond the field of vision of motorists on SH6. However there are other vantage points from where the development will be seen, including the road to the Remarkables Ski field, and from the air from which development will be acutely apparent owing to its close proximity to the eastern end of

the airport runway. The view from the air will form part of the gateway entry experience of Queenstown for high numbers of visitors. Once it is known to be there, even passersby on SH6 will more keenly observe the consequent effects of urbanisation, including the entrance roads and associated traffic movements, road signs, the proposed park and ride facility as well as the kind of adhoc parking and car sales as have occurred near the Lake Hayes Estate access road junction. And such evidence of domestication of rural amenity would occur within seconds of arriving at the Shotover Bridge, the effective eastern roadway gateway to Queenstown.

1.8 Beyond its visual impact on the landscape, it is also relevant to analyse the location in terms of the implications efficiency of energy use and transport. Relevant district wide issues are:

4.5.3 Objectives and Policies -Objective 1 - Efficiency The conservation and efficient use of energy and the use of renewable energy sources. Policies:

- 1.1 To promote compact urban forms, which reduce the length of and need for vehicle trips and increase the use of public or shared transport.
- 1.2 To promote the compact location of community, commercial, service and industrial activities within urban areas, which reduce the length of and need for vehicle trips.
- 1.9 Under issue vii 'Transportation' PC 41 recognises "the ability to provide connections to existing communities, facilitate public transport connections, integrate non-vehicle based modes of transport, and implement measures to reduce overall vehicle demand are important to the management of the safety and efficiency of the road network." However what the PC 41 text doesn't say is that these factors also significantly influence the sustainability and affordability of the area as a place to live. There are clear impediments at Shotover Country to the implementation of non-vehicle based options and also issues regarding public transport:
- 1.10 While the location of the subject land is in relatively close physical proximity to Frankton Flats and the extensive range of activities and amenities both provided for there and planned for the ease of actual access to these services is highly dependent on mode of transport. The distance from the centre of the proposed zone to the current Glenda Drive intersection with SH6 is approx. 3km and Frankton corner lies approximately 2km further along SH6. This distance in itself is a deterrent to walking and is compounded by the lack of a pedestrian option on the Shotover Bridge necessitating crossing SH6 and an extra distance of approximately 1km get to the old bridge, now reserved for pedestrians and cyclists, and to get back to SH6 on the east side. And at that point there is no footpaths until beyond Glenda Drive and getting to that footpath then requires a second crossing of the state highway. The narrow carriageway, high traffic speed and exposure to winds on Shotover Bridge is also a significant deterrent to cyclists as is the fall and rise on either side of the Shotover. This is particularly a deterrent to commuter, as opposed to recreational, cyclists who may use these areas in times of lower traffic volumes, or have time to detour to the old bridge.
- 1.11 Public transport could be provided to Shotover Country as an additional detour, or an extension to the LHE detour, on the Arrowtown to Queenstown bus service. However doing so would increase the duration of the trip time of that route and detract from the appeal of that service. This appears to be the rationale behind creating a park and ride area, close to the Lake Hayes Estate access road to SH6. However this underscores the extent to which residents will need to get in their cars to go anywhere out of the immediate neighbourhood, including catching a bus. The park and ride location also raises issues of the degradation of the visual amenity from SH6 as covered in Marion Read's report.
- 1.12 Given the above, the proposed plan change can only be seen as promoting compact urban form to the extent that some areas of higher than standard low density residential are enabled, and vehicle trip times towards town will be shorter than for other residential development located further from

- the existing urban edges of Queenstown. The proposal would however be essentially vehicle dependent. In urban design terms this is dispersal as opposed to consolidation of urban form.
- 1.13 While the distance of the proposed zoning to Frankton Flats is too far to encourage more sustainable transportation modes, it is relatively close by vehicle, effectively encouraging less sustainable vehicular commuting. This will also militate against the success of any local retail or commercial facilities such as they will have to compete with the greater retail choice and cheaper prices available close by in Frankton Flats. To some extent relief to this vehicular dependency would arise should the provisions for enabling a school and small scale commercial activities be realised. However as discussed in the next section, these activities are in no way assured by the provisions of this plan change.

Part 2 Is the urban form enabled by the plan change appropriate?

2.1 Relevant to this question is District Wide *Objective 3 - Residential Growth - Provision for residential growth*

Policies

- 3.1 To enable urban consolidation to occur where appropriate.
- 3.2 To encourage new urban development, particularly residential and commercial development, in a form, character and scale which provides for higher density living environments and is imaginative in terms of urban design and provides for an integration of different activities, e.g. residential, schools, shopping.
- 3.3 To provide for high density residential development in appropriate areas.
- 3.4 To provide for lower density residential development in appropriate areas and to ensure that controls generally maintain and enhance existing residential character in those areas.
- 2.2 PC 41 issue ii 'Community' states: "Development should occur in a manner that provides for the integration of activities important for the social wellbeing of the community." Objective 2 Integrated Community states "A complimentary mix of uses which creates an integrated community". The mix of uses envisaged is residential, educational, small scale commercial, recreational and community activities.
- 2.3 This intention of creating an integrated community offers potential benefits in offsetting the vehicular dependence of the community and promoting a stronger sense of local community. The risk in this is that of the mix proposed, only residential and recreational activities can be reasonably assured. Realising a primary school is dependent on the Ministry of Education who need to be able to justify a school on the basis of role size. The Ministry of Education are unable to make strategic purchases in anticipation of the development of demand and the plan change provisions provide only a limited window in which the school site is reserved for this use. Even within this period the provisions enable residential development on the proposed school site further undermining the likelihood of a school being built here.
- 2.4 Small scale commercial is dependent on both first creating a large enough residential catchment, and the level of business confidence once the catchment has occurred. Lake Hayes Estate is an example of where a 'village core' was intended but now that it is about to be built out, will only amount to a café and a nearby childcare facility. Without a school and with little or no small scale retail uptake, Shotover Country would become another dormitory suburb outside the natural boundaries of Oueenstown.

- 2.5 If urban development is to occur in the plan change area, I support the aspirations of the plan change towards creating an integrated community. A very rough rule of thumb for the critical residential mass to support a corner shop is 650 houses. The residential capacity of Shotover Country is 758 houses if activity area C realises an education use. However a single corner shop on its own provides convenience however falls short of forming a community hub. The concept of medium density residential, around a neighbourhood core, is likely to increase the likelihood of supporting small scale commercial ventures, by increasing the customer base within the ped-shed (comfortable walking distance usually between 400 and 800m radius reflecting a 5 to 10minute walk).
- 2.6 Having Lake Hayes Estate located contiguously could also be purported to add to the viability of local businesses. The eventual combined population of Shotover Country and Lake Hayes Estate is likely to be comparable to Arrowtown, which supports a primary school and lively commercial precinct. However Lake Hayes Estate sits outside the ped-shed and over the rise and fall over two terrace faces from the medium density zones of Shotover Country, making cars the most likely mode of travel between the two. Once people are driving the proximity of cheaper shopping in Frankton would tend to undermine the commercial viability in Shotover Country. Furthermore Arrowtown is significantly further from the commercial options provided by Queenstown to the extent that people will weigh the additional cost and time of travelling to Queenstown against the higher costs of the local shop. And Arrowtown is supported by the significant numbers of tourists who visit it on a daily basis.
- 2.7 The plan change provisions offer no clear layout for a true village core to the community. As it stands a school and unspecified community uses are enabled in the most central area and small scale commercial activity is enabled within the activity areas intended for medium density around that education core. The outline development plan process enables a more comprehensive plan to emerge at a later date, however such a would be significantly constrained by the pre-determination of the roading and activity areas layout.
- 2.8 This in my opinion represents a very significant failing of the plan change in that it reflects an absence of robust urban design analysis underpinning its development. Together with its weak provisions regarding activity outcomes, this failing creates significant uncertainty that the village core will be successful or even be developed.
- 2.9 The fall-back position for activity area 3 of medium density residential, should a school not readily eventuate, appears to set too easy a threshold to invoke. In addition, the location of small scale commercial activities is likely to be dependent on what land remains after there is sufficient uptake of residential activity to sustain the commercial ventures. The establishment of either commercial activities or a school will need to be supported by a substantial established local population in the plan change area and consequently would be only likely to occur in the later stages of this development. However given the permissiveness of the rules providing for other activities it may prove difficult to resist market pressures and preserve activity areas 2 and 3 for these uses for that length of time. Further the permissiveness of provisions enabling the Medium Density Living activity areas to be alternatively developed for low density residential may result in a poorly designed mix of densities within this area.
- 2.10 Of further concern is the absence of a central open reserve space in the vicinity of the medium density areas, which would serve as a focal point for community interaction, particularly in the absence of a school or small scale commercial. This again reflects the lack of consideration of fundamental urban design principles in the development of this structure plan. Higher density housing is more reliant on open space reserves that can offset the lower levels of private open space the typology affords them. The transmission corridor does abut these areas however the transmission lines and its linear form will detract from its appeal as a community focal point.

- 2.11 The open space escarpment and associated terrace buffers will apparently fall within private sections on subdivision. Although these would be planted prior to subdivision and no fencing across the terraces is permitted, maintenance of planting would then presumably fall to individual landowners likely resulting in a wide variation in appearance and undermining the coherence of the most significant place defining natural features within the plan change area. A preferred solution would be to retain them in common ownership and management and enable pedestrian trails along the terrace buffers.
- 2.12 The development of the plan change has clearly been undertaken in the absence of urban design expertise. No urban design assessment has been provided in the accompanying documentation and no such assessment process or underlying master planning process has informed the development of the structure plan or plan change provisions as would normally be expected for a plan change of this size and importance. This in particular undermines the robustness of the plan change's laudable objective of achieving an integrated mixed use community. The plan change provisions do enable such an outcome, however give no certainty or guidance in regard to the form and integrity of this outcome should it occur. The plan change provisions also enable an almost entirely low density residential outcome, with no diversity or choice of housing options and with no particular community heart identified or three dimensional vision set out that might establish a specific sense of local identity.

Part 3 Assessment of Proposed Plan Change provisions in terms of urban design outcomes

Outline Development Plan (ODP) Provisions

- 3.1 The underlying ODP provisions are generally sound however their scope needs to be extended to cover activity area 1/1a. Subdivision is proposed as a controlled activity in activity area 1, meaning consent could not be declined. In my opinion this does not assure a satisfactory outcome in the absence of an ODP with which subdivision is required to comply. Subdivision is a vital stage in achieving desirable urban design outcomes and low density neighbourhoods should not be neglected from robust assessment. The character and functionality of a neighbourhood is largely determined by the street pattern, section sizes and shapes and relationships to streets, other open spaces and community facilities. An ODP prior to subdivision could enable assessment of: integration with natural environment; connectivity of street pattern; amenity of streetscape; suitability of section size and shape for good site layouts with appropriate solar orientations for solar access, open spaces and community facilities with suitable street frontage for surveillance and amenity appreciation; low impact stormwater design; and suitability of design guidelines to encourage well designed and sustainable homes.
- 3.2 The extent of the area covered by each ODP needs to be more clearly defined. A staging plan could assist with this, with each ODP required to cover a given stage as well as showing linkage and integration with the subsequent stage and any adjoining later stages in order to achieve a cohesive outcome.
- 3.3 The ODP assessment criteria set out in the Plan Change could be improved by being more specific about the relationship of the street network and lots to the reserve network. An established principle in urban design is to have roads fronting onto reserves as opposed to backing onto them, bringing the reserves more fully into the public realm from where they are more widely appreciated. This also has significant Crime Prevention Through Environmental Design (CPTED) implications by ensuring reasonable levels of passive surveillance over the reserve.

Other provisions

- 3.3 Minimum set back from roads (4.5m in area 1, & 2m in areas 2a, 2b & 3) all exclude garages.

 Particularly in medium density residential areas where section widths are narrow, it is good urban design practise for garages to be located behind the front wall of the dwellings to avoid garage frontages dominating the streetscape. This relatively simple measure can easily be applied in areas of flat terrain and when coupled with provisions that require houses to actively address the street as set out in the ODP assessment criteria, serves to improve the character of a streetscape and facilitate community interaction and crime prevention through improved sight lines between houses and the street. Kingston and Three Parks are examples of where such a provision has been applied in a recent plan change.
- 3.4 The 2m setbacks in activity areas 2 and 3 are unlikely to be suitable for small scale retail premises.

 The 'corner shop' for instance is typically built up to the street edge, a characteristic that readily identifies the activity. It is therefore recommended that small scale retail be exempted from this rule.
- 3.5 The Appendix 4 Illustrative Diagrams Terrace Buffer areas are not clear. 'Horizontal view' is not a drafting term in common usage (presumably an elevation or longitudinal section view) and fails to symbolically or figuratively represent vegetation or open space. The presence of site boundaries is indicative that the terrace buffer areas will be subdivided as part of adjoining sections. As covered in 2.11 above, it is recommended that the terraces should be held and managed in common ownership. It is also unclear as to whether the terrace buffer areas are to be included as part of the activity area 5b in terms of the fencing site standard iv(b) that states that there shall be no fencing except along the boundary of the Activity Area. If it is not included, this would enable fencing at the junction of the terrace face and the terrace buffer. This would be very visually intrusive and I assume is not what is intended.

4 Conclusions

- 4.1 The impact of the rezoning of this land is essentially contrary to the underlying principles of the growth management strategy, and a number of the issues of the District Wide chapter of the District Plan.
- 4.2 The plan change area sits outside the Queenstown urban edge and pre-existing special zones outside urban boundaries. The development enabled would undermine the distinct urban edge to the Queenstown urban area by expanding the urban area over the Shotover River, thereby compromising that distinct, powerful and compelling natural urban edge.
- 4.3 Its location is within a relatively short vehicular trip of the Frankton Flats, however it would create a suburb essentially reliant on vehicle based transport options.
- 4.4 The viability of non residential uses and aspirations towards creating an integrated community with a complimentary mix of uses that might offset vehicular dependence of the predominant residential component and foster a sense of local community are tenuous and the provisions of the plan change offer no certainty that they would ever be realized.
- 4.5 The plan change area lies in close proximity to Lake Hayes Estate, however the topography of the intervening land acts as a visual separation and an impediment to ease of pedestrian movement between the two. They would not effectively consolidate as a community. A relative paucity of

- activities other than residential in either community would create little incentive for interaction between two such separated communities.
- 4.6 The absence of urban design input in the development of the plan change is reflected in the absence of both a clearly articulated master planned vision for a neighbourhood community core and plan provisions sufficiently robust to assure the delivery of the complimentary mix of uses that can foster an integrated community. This undermines the plan change's laudable objective of achieving an integrated mixed use community.
- 4.7 Should the commissioners be of a mind to recommend approval of the plan change, I consider the provisions need to be strengthened if there is any chance that this area can develop into anything other than an isolated commuter suburb sitting outside the Queenstown urban area, but totally dependent upon it.