
TO:	Paul Freeland
FROM:	Dr Crystal Filep – Team Leader Urban Design
DATE:	28 September 2017
SUBJECT	Urban Design Comments DIS-2017-1 Bus Hub

Dear Paul,

Thank you for the opportunity to comment in regard to the above application. As you are aware, I have been in regular dialogue since February 2017 with the Otago Regional Council (ORC) and Beca, who have been contracted by the ORC to develop the proposed bus hub design. This dialogue has been helpful in terms of coordinating the bus hub design with Dunedin City Council's plans to upgrade the Central City from 2018/19. Thus, my comments below address not only public submissions relating to urban design and matters of compliance with the District Plan, but also the contextual 'fit' of the bus hub with any future amenity upgrades carried out nearby.

The following are urban design matters arising from submissions on the Notice of Requirement for a New Designation from Otago Regional Council: Dunedin Central City Bus Hub:

- heritage-related matters
- suitability of central city location
- traffic congestion
- safety and security
- accessibility and usability
- wayfinding and signage
- amenity and provision of facilities

Heritage-related matters

While comments in regard to the proposed bus hub's impact on heritage values are provided by Dunedin City Council's Heritage Planner and Heritage New Zealand, there are some heritage-related matters that pertain also to urban design. I will address these first before moving on to other urban design matters arising from public submissions. Of interest is that historically no transportation hub has been located on the site (Great King Street between Moray Place and St Andrew Street), although some records indicate that a car shed and stables were located nearby on Cumberland Street during the 19th Century, as part of Dunedin's horse and cable tramway systems. The bus hub site is not located within a heritage precinct in the Second Generation Plan; although it neighbours The Octagon, George Street, and Stuart Street Heritage Precincts. In the operative District Plan, part of the site is within the Townscape and Heritage Precinct TH09 – George St Commercial Heritage Precinct, and neighbours The Octagon Townscape and Lower Stuart Street Heritage Precincts. As such, strict townscape and heritage precinct considerations are not required, but it is important that the bus hub design is considered carefully in regard to its likely effects on streetscape and urban amenity values within the wider Central City context of which these precincts are an integral part.

The scale of the existing streetscape and the extent to which any changes are visually dominant or impact on urban amenity values

Due to its size and functional importance, the proposed bus hub will be visually dominant on Great King Street and have an impact on urban amenity values within the central city area. Appropriate consideration should be evident in the subsequent Outline Plan or any other design details presented as part of this application for New Designation. For example, it is expected that the bus shelters will be of an appropriate scale so as to contribute to (rather than detract from) the visual appearance and experience of the existing streetscape. Of particular note in this regard is the location of Bus Bay 1 in proximity to Heritage New Zealand's Category 2 Community House (Stephens Ink) building. For this matter, I agree with the first part of Heritage New Zealand's requested condition of the designation:

Where any new structure such as public toilets, bus shelters and kiosks are to be located adjacent to any heritage item as scheduled in this Plan, the structure shall be sited so as to be recessed from the street frontage of the heritage building (if located in vacant space next to a heritage building).

Although not necessarily opposed to this request, I would recommend that alternative locations or a full awning canopy option be weighed up as alternative options to re-orienting a bus shelter "to face inwards toward the building" if "located in the roadway in front of a scheduled building". If it is decided that re-orientation is the best option, then care needs to be taken with design details to ensure that the safety and security of bus users is not compromised from decreased visibility due to screening by the shelter from 'eyes on the street'.

Where any new structure is to be located adjacent to any heritage building and if suggested by the DCC's Heritage Planner, I would support a required spacing between that building and new structure so as to maintain heritage values, access for maintenance, and privacy. Such a requirement would support Dunedin Community House's requested determination by helping to reduce the impact of noise and mitigate privacy concerns at their site.

The design and appearance of the bus hub, including materials and colour and relationship to its setting

As has been communicated with the applicant over recent months, there are a number of opportunities and challenges that should continue to be addressed during design development of the proposed bus hub, including a good understanding of and response to the hub's setting, and an integrated approach with Dunedin's existing and proposed central city character (as much as is practicable). Recent dialogue between myself and the applicant has proved positive in this respect, although some elements of discussion are not yet evident in this application. Therefore and following on from the point above, it is expected that the following details are carefully considered and coordinated with Dunedin City Council (DCC) in the Outline Plan or any other design details presented as part of this application for New Designation:

1. *street furniture / shelter / amenity structure design*
2. *paving / surface treatment*
3. *lighting specifications*
4. *wayfinding / signage*

Suitability of central city location

A number of public submissions on this application discuss the suitability of Great King Street for locating the new bus hub. While there is some disagreement about this matter amongst submitters, bus hubs greater than 4 buses are Discretionary in the Second Generation Plan.

Additionally, I do agree generally with the reasons that Public Health South has outlined for the location's suitability: (1) walking distance to the key activities and services within the city centre, (2) some discouragement of unlawful behaviour due to the police station's adjacency, (3) the enabling of easy transfer between services (if good shelter is provided), (3) the potential to help ease traffic congestion in the central city, and (4) the reduction of carbon emissions through improvement of our public transport network. However, I do recognise challenges and complications associated with locating a bus hub along this stretch of Great King Street. In order for the bus hub to be successful in its proposed location, considerations in regard to traffic congestion, safety and security, accessibility and usability, wayfinding and signage, as well as amenity and the provision of facilities are essential, as outlined below.

Traffic congestion

The New Zealand Police and Ngai Tahu Justice Holdings Limited, as well as a number of private submitters, are concerned about traffic congestion being generated or worsened by the new bus hub. Of greatest concern is the congestion likely to occur around the New Zealand Police Station's vehicle entry on Great King Street. Although it is important to note that the bus hub is recognised by Public Health South and the University of Otago for its potential to help ease traffic congestion, I recommend that the applicant work with the New Zealand Police and Ngai Tahu Justice Holdings Limited to ensure a successful urban experience (which may involve investigating the possibility of placing a new traffic control system on Cumberland Street). Thus, I support the following three Ngai Tahu Justice Holdings Limited recommended conditions of consent:

- *Any landscaping located within the kerb build-outs either side of the NZ Police Station vehicle crossing onto Great King Street shall be maintained at a height of no greater than 1 metre, or in such a manner as to maintain driver visibility for vehicles exiting the site.*
- *No building or structure shall be erected that will restrict the visibility of vehicles entering or exiting the NZ Police Station.*
- *Ngai Tahu Justice Holdings Limited (or subsequent legal entity) and the NZ Police shall be consulted as part of any Outline Plan [if one is lodged] under section 176A of the RMA, or any future change in the operational characteristics of the hub. The outcome of consultation shall form part of the Outline Plan [if lodged], including the identification of measures designed to avoid, remedy or mitigate adverse effects identified through consultation.*

Safety and security

Safety of all users, but particularly of pedestrians and those living with disabilities, is of upmost importance in the bus hub design. Adequate lighting is essential. And although Public Health South claims that security may be elevated due to proximity with the police station, installation of CCTV is important to ensure a safe and secure environment. Therefore, I support the fourth Ngai Tahu Justice Holdings Limited recommended condition of consent:

- *CCTV shall be installed to monitor public activity within the area proposed to be designated. Access to the CCTV footage shall be provided to the NZ Police upon their request.*

Pedestrian safety needs to be a top priority in the design of pathways and crossing points associated with the bus hub. Public Health South notes that pedestrians "have priority movement at conflict points with vehicles", but nevertheless "would like to see further efforts to give pedestrians priority within the bus hub." In support of this point, I believe the applicant should better explain how the design responds to an existing desire line that is likely to become more heavily trafficked once the bus hub is operational. This desire line is described in detail by the Bus Users Support Group:

The majority of passengers departing from the bus hub will do so on southbound buses departing from the eastern side of Great King St, which will require a crossing of the road for all people originating from the Octagon, Library or George St areas. This flow of pedestrians is poorly provided for in the design,

with the sharply-angled shape of Community House deflecting the flow of pedestrians away from the hub. These people heading to the opposite side of the hub are then provided with a street crossing which also heads away from their desire line. People who spot their bus ready to depart on the far side of the hub are likely to wander across the street, in conflict with turning buses arriving and departing the hub at the Moray PI intersection. The hub development includes the blocking of a popular pedestrian route over publicly-owned land behind Community House, when this route could provide a safer route to the heart of the hub, with its own mid-block street crossing located where buses are travelling in a straight line, not turning.

In my recent dialogue with the applicant, this desire line has been mentioned; nevertheless, I do seek clarification on why it has been deemed unsafe and what is to be achieved by attempting to re-route pedestrians around the corner of Dunedin Community House. Similarly, I seek clarification on why the mid-block crossing point has been located as shown in the current proposal; would it be possible to shift slightly so as to better address desire lines and/or align with the centre of the police station's pedestrian entrance? Such nuanced alignment could help anchor the proposal as an integral piece of urbanism responding to and enhancing its context. Furthermore, there could be an opportunity to explore additional seating and shelter options for the public space in front of the police station.

Similarly, any design of a new structure (such as the public toilets, shelters, cycle stands and kiosk proposed near Dunedin Community House) should not result in obstructed, poorly lit or 'leftover' space in which a person's safety and security could be compromised. In other words, the applicant should ensure that improvements made to one part of the site do not inadvertently result in decreased amenity or safety on another part of the site.

Safety matters can also include those relating to noise pollution, which have been raised by Dunedin Community House, the University of Otago and a number of private submitters. In both the operative District Plan and the Second Generation Plan (Section 9.3.6), vehicles (including buses) operating on public roads (such as Great King Street) are exempt from noise emission limits. I also note the removal of 'timing stops', which will minimise idling noise. Nevertheless, I encourage the applicant to take into account a few submitters' points about any future consideration of quieter, electric buses, which may require safeguarding the bus hub's design to ensure its on-going viability. This point is addressed below, in regard to accessibility and usability.

Accessibility and usability

Of utmost importance to any public transport system and associated infrastructure is universal accessibility and usability. As noted by many submitters, the bus hub is a significant investment in the central city; its on-going viability should be considered not only in the current context, but in anticipation of changing needs, design considerations and technological advances. I encourage the applicant to assess whether or not the current bus hub design would be usable should an alternative fleet of smaller, electric buses become viable in the future. If practicable, small alterations (such as the provision or easy retrofitting of electric charge points) could be made to the design to ensure the hub's enduring success in a changing urban environment.

Concerns raised by submitters about availability of car parks, taxi stands and loading zones near the bus hub also are legitimate in regard to accessibility and usability, although such concerns must be balanced in relation to wider objectives. In the transition to a more sustainable city centre and as noted by Generation Zero, Dunedin needs

...to improve the accessibility and desirability of public transport by building supporting infrastructure which takes into account modern urban design principles (requiring a shift away from the current car-dominated paradigm of the city's urban planning).

Of importance in the Dunedin City Council's planned upgrades to the central city will be adequate provision of mobility parks and loading zones in proximity to the bus hub, so as to ensure universal accessibility to public transport.

Similarly and as noted by Generation Zero:

[D]esign plays a critical role in the accessibility and desirability of public transit network, especially the following: wayfinding information (clear signage, routes, maps, etc.), seating and shelter (including space for people with prams and those in wheelchairs) that ensures safety, and clear paths (clarity between pedestrian and vehicle paths) that are universally accessible and well lit.

If the bus hub is to be universally accessible, then the design should include, as requested by the Bus Users Support Group, continuous shelter along both sides of the street (as much as is practicable). With continuous bus shelter provision (rather than disconnected, smaller shelters), all bus stops will more effectively be linked together for enhanced accessibility and usability. Ideally there would also be a continuous, sheltered link to George Street, although I recognise that this further link may need to be explored by Dunedin City Council as part of larger Central City Plan upgrades. In absence of this further link, increased foot traffic is likely through Farmers as a sheltered desire line immediately available.

Wayfinding and signage

Integral to accessibility and usability of the bus hub is the provision of adequate wayfinding measures and appropriate signage. As Public Health South notes, the proposal should prioritise

up-to-date transport information (including interactive 'real time' timetable displays, maps of local and regional areas, maps of routes, locations and serviced areas, and large print information and hearing augmentation loop technology).

In regard to signage, the bus hub design must comply with the operational District Plan or (depending on timing) the Second Generation Plan. It should be noted that in line with Policy 2.4.1.6 of the Second Generation Plan that across the whole city, visual clutter from signage will be avoided through rules that:

- a. restrict the size, number and design of signs ancillary to activities;*
- b. restrict the size, number, design and location of temporary signs;*
- c. do not allow new commercial advertising (hoarding) sites.*

As noted in the Plan (Note 22.6A), commercial advertising is a non-complying land use activity in all zones except the Airport Zone. As such and through a desire to maintain and enhance Dunedin as a memorable city with a distinctive built character, I would not support the incorporation of any commercial advertising that would have a significant visual impact on the streetscape. If commercial advertising is considered in the design of bus shelters or other bus hub structures, then I suggest that it be allowed only on the *inside* of these structures (so as to minimise visual impact). Similarly, the incorporation of any commercial advertising may obstruct views into and out of the bus shelters, which could compromise the safety and security of bus users. For safety and urban amenity purposes, I therefore support the use of glazing (which may be patterned or frosted in part) in lieu of commercial advertising.

Amenity and provision of facilities

As noted within many points raised above and in accordance with Section 7 of the Resource Management Act, the bus hub should maintain and enhance amenity along Great King Street (and within the central city area more generally). I commend the applicant for incorporating toilets, lighting, cycle stands, seating and shelter into the proposed design. As noted above and in recent dialogue between myself and the applicant, I have some recommendations in regard to the design of these elements. Of particular importance is that these facilities are safe and secure, accessible, usable, well-lit, appropriate to their context and contribute to a comprehensive and well-coordinated design. Additionally, Public Health South notes that there may be scope for the provision of further facilities, the most important of which would be a GoCard sale and top-up facility (for accessibility and usability purposes).

In principle, I am supportive of this application and see a number of benefits from improved public transport infrastructure in Dunedin's central city. Urban design matters are discussed above with the aim of ensuring a successful and enduring bus hub into the foreseeable future.

Regards,

Dr Crystal Filep

TEAM LEADER URBAN DESIGN