
In the Matter of: The Resource Management Act
1991

and

In the Matter of: The Christchurch Proposed
Replacement District Plan
under the Canterbury
Earthquake (Christchurch
Replacement District Plan)
Order 2014

and

In the Matter of: Chapter 15
Commercial Core Zone (North
Halswell)

**Statement of Rebuttal Evidence of Anthony Thomas Penny
on Behalf of Danne Mora Holdings (#1134)**

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Statement of Rebuttal Evidence of Anthony Thomas Penny, BSc BE FIPENZ CPEng IntPE(NZ)

Introduction

1. My full name is Anthony Thomas Penny. My qualifications and experience have been outlined in full in my main statement of evidence.
2. I again agree to apply with the Environment Court Practice Note 2014 in presenting this evidence and have done so in preparing it.
3. In this matter, I have been asked by Counsel for Danne Mora Holdings Ltd to review and provide rebuttal comments on the evidence for Terrace Development Services Limited (TDL) of the following:
 - (i) Jacobus (Kobus) Mentz, and
 - (ii) Andrew David Carr
4. I have also read the evidence of Michael Grant Calvert on behalf of the Christchurch City Council and of Ian David Clark on behalf of the Crown. I largely agree with their evidence and their general support of the Key Activity Centre (KAC) location and size as indicated on the proposed North Halswell Outline Development Plan (NHODP).

Kobus Mentz

5. Mr Mentz's Figures 1 and 2 relate, amongst other matters, to "access to the wider community" (Paragraph 28). While some KAC visitors from Aidanfield and Wigram will use the highlighted collector road (Aidanfield Drive) for vehicular access, it will not be as dominant as implied by the arrows indicated on the figures. Most access from "the wider community" will be by vehicle, predominantly off Halswell Road from the north and to a slightly lesser extent from the south. There will also be access from Sparks Road to the south but like access from Milns Road and Hendersons Road, this will be relatively minor in comparison to access from State Highway 75. Therefore in terms of vehicular access, including public transport, the access pattern will be somewhat eccentric with a dominating focus for access to the KAC on the proposed intersection of Halswell Road and Augustine Drive, and not as simplistically indicated by Mr Mentz's arrows.

6. Mr Mentz's assessment of the respective transport interchange catchments is also misleading in my opinion. The location of the interchange on the ODP is described as "indicative". Its eventual location will be determined by many factors including staging of the KAC development, a desire to minimise "dead running" distances into the interchange particularly for the main high frequency route along Halswell Road to the city ("Orange Line") as well as the matter of the walking catchment. The Danne Mora design could therefore locate the interchange more centrally.
7. However given the likelihood that the interchange will be established at an early stage and that development is likely to start in the northern quadrant of the KAC, it may well be practical to locate the interchange close to Augustine Drive and Halswell Road intersection where reliable and efficient access can be assured. If the interchange were located centrally it would involve more "dead running" and it is likely to be isolated for some time, and require the early construction of connecting roads. Access for northbound bus services would also rely on a temporary right turn movement proposed by TDL which I do not believe is practical.
8. In Figure 18 and 19 Mr Mentz indicates a pattern of roads to provide vehicle access off Halswell Road to the larger centrally located KAC supported by TDL. As noted in the previous paragraph, this relies on a temporary right turn facility from Halswell Road South into a new road some 300m south of Aidanfield Drive. This new intersection is located on a bend in Halswell Road and drivers wishing to turn right at this location would have restricted vision of southbound vehicles on Halswell Road because of the bend. This is a potentially dangerous location for an intersection and could require the early (alternative) construction of the expanded Dunbars Road intersection and a link road all the way to the KAC.
9. If NZTA did allow the temporary right turn into this new road then it would be necessary to design the layout of the intersection in a way that would physically prevent vehicles from turning right out onto Halswell Road from this new access road. Again potential visibility restrictions would make this right turn a risky manoeuvre. I anticipate that Halswell Road would not have been upgraded to a median divided 4-lane road by this stage, so a section of median would be required to prevent the right turn exit.
10. Figure 18 also shows a left turn into a slip lane running along the frontage of the KAC from north of Aidanfield Drive to south of Aidanfield Drive. The further detail in Figure 19

indicates that this slip lane would provide one way access to side roads and a series of car parking areas. It is general traffic engineering practice not to provide one way restrictions in a greenfield development because of the potential confusion for circulation patterns.

11. Furthermore, if it were determined at a future date that a full crossroad intersection would be required at the Aidanfield Drive / Halswell Road intersection, then this slip lane would be in conflict with the extension of Aidanfield Drive as it would not be possible to accommodate a crossroad intersection immediately east of the SH75 intersection. Even the next north-south road in the KAC design for TDL is marginally too close to Halswell Road intersection with Aidanfield Drive. It could be affected by queuing from the Halswell Road traffic signals.
12. If the Aidanfield Drive intersection were to be constructed at a later stage with the TDL KAC, then there would be a total of five access points along Halswell Road between Augustine Drive and Dunbars Road whereas I understand NZTA are prepared to contemplate, at most, three access points.
13. A further concern with the proposed left turn only movements between Halswell Road and the KAC is the potential for introducing u-turn manoeuvres on the major arterial. In the short term these could occur immediately downstream of the left-in / left-out intersections or any medians constructed, but later with the expected upgrading of this section of SH75 to a 4-lane median-divided road, u-turns would occur at the next intersection which would not be able to specifically cater for them. For example, a motorist using the proposed new road at the southern edge of the TDL KAC and wishing to travel north would be required to turn left on to Halswell Road and then would be likely to execute a u-turn at the Dunbars Road intersection.
14. Although the “proposed amended ODP” in Figure 20 does not show the access point represented by the proposed slip lane, it still does show four access points on Halswell Road where only three are currently contemplated.
15. In Paragraph 55 Mr Mentz questions the amount of car parking that would be required to support the Danne Mora KAC concept. He has related the parking needed to support the KAC with the minimum parking requirements of the current District Plan and concluded there would be a shortfall of 149 spaces. The District Plan review is contemplating less rigorous application of minimum parking requirements but in any event the economies of scale and the complementary use of parking at large activity centres of this type have been

recognised by Council officers and are amply demonstrated by actual parking demands at established centres. This results in the overall parking supply being able to be considerably less than the currently specified minimum levels. Of particular note is Mr Mentz's comment that "with several large format retail outlets indicated this will substantially increase the ... parking bay shortfall." This is not correct as the parking demand for large format retail outlets is less than the average used in the Danne Mora KAC design assessment which was based on a mix of general retail and large format retail and therefore already accounts for the lower parking demand for large format retail.

Andy Carr

16. I note in Paragraph 3.18 Mr Carr agrees that the KAC "development will initially take place towards the north of the site and around the Augustine Drive extension before extending towards the southwest". I agree that this would be a practical outcome from a transport perspective.
17. In Paragraph 3.19 Mr Carr suggests that in the initial stages there will only be "one access onto Halswell Road (via the Augustine Road extension)." He is concerned that this could cause problems if that access were temporarily blocked by a road accident. He suggests this is a reason for having an additional point of access from Halswell Road at an early stage. I suggest his concern is not well founded because with the early development of the Meadowlands subdivision there will be an additional access route to Hendersons Road. Therefore in an emergency situation, such as an accident, this route could be used as an alternative access route.
18. Contrary to Mr Carr, I have some concerns about the early introduction of a left-in / left-out access on Halswell Road for the KAC because it is unlikely that Halswell Road will be four-laned with a solid median in the short term. Accordingly as I have mentioned above, it would be necessary to prevent motorists from executing a right turn particularly out of a road designed for left-in / left-out turns. Motorists are inclined to turn right around the triangular shaped island used at left-in / left-out intersections or turn left and then execute a u-turn and this can be dangerous.
19. I note in his Paragraph 4.6 Mr Carr suggests that an acceleration lane would be provided for the left turn exit at such intersections. It might be difficult to accommodate at the proposed new southern driveway because the acceleration lane should be at least 150m

long for the 80 kph speed environment and that would then begin to interact with the lanes on the Halswell Road northern approach to the Dunbars Road intersection. There is only 150m between the proposed new intersection and the start of the right turn chevron for the Dunbars Road intersection. This would not allow for any transition section of road between the above merge and the diverge for the Dunbars Road right turn lane.

20. Similarly if a left-in / left-out intersection were to be introduced to the north of Aidanfield Drive intersection, then again it would not be practical to provide an acceleration lane of a suitable standard for the 80 kph speed environment without some interaction with the right turn into Aidanfield Drive.

Mike Calvert and Ian Clark

21. I support the proposals to modify the ODP to include a flexible third access point somewhere between Augustine Drive and Dunbars Road. I agree that there will be the opportunity to assess the best form and location for the third access point in the future once the travel demand pattern for the first stages of the KAC (and the adjacent residential neighbourhood) have been demonstrated and reviewed.
22. However there may be some design constraints (as discussed above) with providing the left-in / left-out only access contemplated by NZTA for the third access point. I certainly do not agree with providing additional left-turn only access points as proposed by TDL.

Anthony Thomas Penny
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1 May 2015