BEFORE THE INVERCARGILL CITY COUNCIL

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of application for resource consent for the Hawthorndale Care Village
BY	**THE HAWTHORNDALE CARE VILLAGE CHARITABLE TRUST** Applicant

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BRIEF OF EVIDENCE OF SREENATH KRISHNAIYER VENKATARAMAN FOR THE HAWTHORNDALE CARE VILLAGE CHARITABLE TRUST

November 3, 2020

INTRODUCTION

1) My full name is Sreenath Krishnaiyer Venkataraman. I am employed as a Transportation Engineer by WSP NZ, based in Invercargill. I hold the qualifications of Bachelor's in Engineering in Civil and Master of Engineering Studies in Transportation.

2) My experience has been in Transportation Engineering and Traffic Safety Engineering. I have been working in these areas for the last 16 years.

3) I am familiar with the Code of Conduct for Expert Witnesses contained in the Environment Court of New Zealand Practice Note 2014. I have read and agree to comply with that Code. My evidence is within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

SCOPE OF EVIDENCE

4) In my evidence I discuss

4.1 my involvement in the proposed Hawthorndale Care Village (HCV) development project;

4.2 traffic safety concerns relating to the proposed design including response to traffic safety issues raised by the submitters;

INVOLVEMENT WITH THE PROJECT

5) I was engaged to complete a traffic impact assessment report for the proposal.

TRAFFIC AND SAFETY CONCERNS

PARKING

6) The applicant's proposed plans indicate 62 staff car parks, 41 resident car parks and 28 visitor car parks will be provided within the development site. The total number of on-site car parks proposed is therefore 131 car parks. A copy of the of the latest site plan for HCV is attached in the Appendix 1.

7) The total number of on-site car parks required for the HCV as per the ICC District Plan requirements assessed in the TIA is 136. This was based on the scenario that 84 staff will be working at the facility during peak time which would have required 42 carparks.

8) Since writing my report of the TIA, I have been provided with updated shift change details proposed for the HCV care staff,

HCV Care Staff Shifts			
Shift	**Start**	**Staff #**	**Finish**
1	7am	18	1pm – 3pm*
2	8am – 9am	15	1pm – 5pm*

3	2.45pm	18	9pm – 11pm*
4	9pm	4 - 5	7am

9) From the Information provided by HCV, Shift 1, the morning shift, starts at 7am ending at 3pm, and will require a maximum of 33 car parks in total. Of which 5 car parks occupied by cleaners and kitchen staff will become free before the afternoon shift starts. This is assuming all staff occupy a car park.

10) There will be an overlap of 28 car parks when the care givers and nurses change shifts during the afternoon 2.45pm shift; when the maximum number of car parks required will increase to 46, which is less than the 62 car parks provided. The overlap will only last 10 to 15 mins for the nurses and caregiver's changeover which will free up 18 car parks.

11) During night shift only a skeleton staff of 4 to 5 will be on the premises and will change over at 9pm. Most of the car parks within the facility will be free at this time. I also note that it is a possibility that some staff will travel to and from work by other means such as walking, cycling and public transport. Staff may also ride share. I further note that none of the residents of the Residential Care Homes will drive or have vehicles. This reduces demand for on site car parking given there will be up to 86 residents in the Residential Care Homes.

12) Based on the staff shift information provided, at any time there will be no more than 50 staff working at HCV, which only requires 25 car parks as per District Plan requirements. HCV have provided 61 car parks which exceeds the requirements.

13) 5 car parks are for retail sales and commercial activity, which will only cater for the residents of HCV. There are 15 car parks for chapel, bloke shed and theatre which will only be used by the residents and visitors to the facility. The café will cater to residents, staff and visitors to the facility.

14) In my opinion the number of off-street carparks provided within the facility is sufficient to cater for car parking demand from residents, staff and visitors. Especially for some aspects of the proposal, it exceeds the car parks required by the District Plan. I therefore agree with Ms Steele's assessment at section 7.83 in her S42A Report and her conclusion that any adverse effects associated with car parking will be no more than minor. I note her conclusion is based on 84 staff requiring 42 carparks which is high compared to 50 staff on site at any one time, requiring a maximum of 25 car parks.

15) Queue Space – I agree with Ms. Steele's assessment in section 7.84 of her S42A report, the probability of vehicles blocking the access is relatively low.

16) In my opinion the 6 parking spaces west of the fountain should be allocated as designated staff parking; this will prevent visitors from accessing the Water fountain area and will contain them in the main car park, preventing any conflicts with pedestrians.

TAY STREET ENTRANCE

17) The applicants met with Waka Kotahi New Zealand Transport Agency (Waka Kotahi) to gain approval for an access onto Tay Street. It was chosen as the best option for the development as the majority of the vehicles visiting the site will be limited to State Highway thereby avoiding residential streets.

18) The proposed Tay Street entrance has been relocated 40m west of the previously proposed access. This was based on the feedback from Waka Kotahi.

19) The new location of the access does not change the assumed traffic generation or direction of traffic as assessed in the Traffic Impact Assessment Report (TIA). The traffic split from the east and west remains the same as stated in the TIA.

20) The new location of the Tay Street access will enable the existing pram crossing point on Tay Street to remain operational, as there will be no vehicle conflicts due to the HCV access location.

21) The location for the HCV access has good visibility in both directions for vehicles entering and exiting the facility.

22) The proposed access on Tay Street will have 6m wide no stopping lines on the eastern side of the access to ensure visibility from the access. The no stopping lines on the SH1 access will be within the property frontage of 40 Fairview Avenue and will not extend into the neighboring properties or on the other side (north side) of Tay Street.

23) There will be room for 5 to 6 on-street parking spaces on Tay Street outside the HCV.

RIGHT TURN BAY AT THE TAY STREET ACCESS

24) The right turn bay at the Tay Street access was proposed to avoid U turn movements at the Stuart Street Intersection. U turn movements take more time to complete than right turns, the exposure to traffic when completing U turns is higher compared to right turns.

25) Most of the traffic (70%) arriving to the HCV will be from the west, travelling from the City Centre / residential areas this would likely increase the number of U turns at the Stuart Street intersection. To accommodate these movements at the Stuart Street Intersection, the existing right turn bay at the intersection would have to be extended.

26) The Tay Street intersection with Lithgow Street has a right turn bay with two lanes in each direction which provides enough width to complete the U turn. The existing right turn bay has enough length to cater for an increase of 15 vehicles per hour.

27) Currently residents complete these U-turns at Stuart Street to access their properties. Monarch Hotel visitors have the option of turning right from Tay Street onto Stuart Street and use the Stuart Street access.

28) In my opinion the amended location of the proposed HCV access to Tay Street represents the best option from a traffic safety viewpoint.

ACCESS ONTO STUART STREET

29) The main access to the development was always considered to be onto Tay Street. This was to ensure most of the traffic accessing HCV was from an arterial (Tay Street) not from a residential street.

FAIRVIEW AVENUE ACCESS

30) The Fairview Avenue access is 4.9m wide and will operate as a two-way access. The access will be used by residents and will be a shared space for vehicles and pedestrians. The speed at the access will be restricted to 25km/hr with traffic calming measures.

31) I agree with Ms. Steele's assessment in section 7.73 of her S42A report and her conclusion that any adverse effects of traffic generation at the Fairview Avenue access can be appropriately mitigated by ensuring that vehicle access is limited to residents only.

32) As detailed in my TIA, the Fairview access will only be used by residents and will be a shared space (can be used by pedestrians/cyclists) with low operating speed. I agree with Ms. Steele's assessment in section 7.77 of her S42A report, to impose the following conditions
    1) Requiring that the access to the site at 40 Fairview Avenue have a permanent gate (or other effective barrier to vehicles) installed before commencement of construction, and that gate (or barrier) remain closed for the duration of the construction programme. The gate will be kept closed and not locked, to be used only during emergencies.
    2) Precluding construction traffic from using the Fairview Avenue access to the site, aside from emergencies.
    3) Requiring that a maximum speed limit of 25 km per hour be maintained and enforced on the Fairview Avenue access to the site, and traffic calming measures/ speed bumps be installed sufficient to ensure that the maximum speed cannot comfortably be exceeded by vehicular traffic.
    4) Requiring that practical measures are implemented to ensure only residents on the site have vehicular access to it via the entrance at 40 Fairview Avenue post construction.

33) With the above conditions imposed, I agree with Ms. Steele's assessment in section 7.77 of her s42.A report that the adverse effects of traffic generation at the Fairview Avenue access can be appropriately mitigated by ensuring that access is limited to residents vehicles only.

PUBLIC TRANSPORT

34) Windsor Comet – Bus service stops at the intersection of Lithgow Street on Tay Street and on Stuart Street. This service provides another mode of transport to the HCV.

CONCLUSION

35) In my opinion the proposed HCV can be developed and can operate in manner that, any transportation/traffic and parking effects will be no more than minor.

36) A number of conditions of consent are promoted by the applicant that will mitigate potential effects; these are listed below
    1) Requiring that the access to the site at 40 Fairview Avenue have a permanent gate (or other effective barrier to vehicles) installed before commencement of construction, and that gate (or barrier) remain closed for the duration of the construction programme. The gate will be kept closed and not locked, to be used only during emergencies.
    2) Precluding construction traffic from using the Fairview Avenue access to the site, aside from emergencies.
    3) Requiring that a maximum speed limit of 25 km per hour be maintained and enforced on the Fairview Avenue access to the site, and traffic calming measures/ speed bumps be installed sufficient to ensure that the maximum speed cannot comfortably be exceeded by vehicular traffic.
    4) Requiring that practical measures are implemented to ensure only residents on the site have vehicular access to it via the entrance at 40 Fairview Avenue post construction.
    5) Installing right turn bay at the access on Tay Street
    6) Install no stopping lines 6m on the east of the access to maintain visibility.

SREENATH VENKATARAMAN

November 3, 2020

Appendix 1 LATEST SITE PLAN