

4 May 2022

Project/File: 310205039

Emma McLean
Cuttriss Consultants Limited
17 Ihakara Street
Paraparaumu

Dear Emma,

Reference: Residential Development - 240 Kapiti Road, Paraparaumu

The Gresham Trust has lodged an application for Resource Consent (RM220070) relating to land at #240 Kapiti Road, Paraparaumu, to provide for a new residential townhouse development. Stantec prepared the supporting Integrated Transport Assessment (ITA).

Kapiti Coast District Council (**Council**) has commissioned Tonkin + Taylor to undertake a peer review of the ITA, and a subsequent Section 92 request for further information has been issued in respect of a number of traffic and transport matters. This report has been prepared to address these matters. For ease of reference the Tonkin + Taylor peer review wording and relevant numbering is included in each case.

Further Information Required:

1. Forecast development site parking demand
 - a. *Provide details for the generation of the 1.2 average vehicle ownership rate and how applicable to the development.*
 - b. *Provide details of how travel demands will be accommodated for non-private car vehicle travel eg ride-share, biking, micro-mobility*
 - c. *Provide the number of unit-allocated carparks, visitor carparks, and the number of on-street carparks included in the assessment.*
- a. Further detail around the rationale for the parking demand of 1.2 vehicles per dwelling adopted within the ITA assessment is set out below.

A review of the latest 2018 census data for the Statistical Areas¹ surrounding the development site show that of the 162 dwellings, a total of 243 vehicles are owned by the residents. This then translates to a car ownership of approximately 1.5 vehicles 'per dwelling', noting this established residential activity comprises standalone 'low density' housing where car ownership is greater than the higher density, smaller (predominantly 2-bed) typology units in the development site.

To assess the forecast parking demand associated with the development's smaller typologies, surveys of an established comparable typology residential townhouse development off Jackson Street in Petone (the 'Te Ara O Paetutu' development) has been drawn on. On-site parking at

¹ 2018 Statistical Area 1 '7019398' and '7019401'

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that site is provided at 1 space per unit, with surveys of the existing utilisation during the evening showing a demand of 66 vehicles (including any site-related vehicles utilising the adjacent kerbside parking on Jackson Street). Noting the development includes 56 units, this translates to a vehicle ownership rate of approximately 1.2 vehicles per dwelling.

Application of the 1.2 vehicles per dwelling then is considered a reasonable rate for the proposed townhouse activity. Further, the on-street parking survey undertaken to inform the ITA of the adjoining kerbside resource within a short walk of the development site indicates there are >100 available on-street car parks capable of accommodating any site overspill parking, without adversely impacting on the current parking amenity.

- b. As described below, the on-site parking includes some additional spaces beyond those allocated to dwelling units, that could be used to accommodate a future ride-share initiative for residents. Such an arrangement would provide convenient access to vehicles for short term rental, and would therefore assist in reducing the overall car ownership levels for those living within the development.

As described in the ITA (at section 6.2), pedestrian and cycle connectivity to and through the site is provided via a network of footpaths and walkways. Direct access between the site and Kapiti Road for active modes will provide connection to the wider walking and cycling networks that in turn link to the adjacent bus stops, local amenities, and the town centre and rail station.

In terms of storing bikes and micro-mobility vehicles, the proposed new townhouse units include outdoor courtyards that will be able to accommodate sheds or storage lockers (readily available from home improvement stores) should residents require them, as described at section 5.5 of the ITA. These will provide a convenient secure storage option for cycles, ebikes and scooters for those wishing to store these external of the dwelling units.

- c. It is proposed that parking at the site will be allocated as follows:
- one park assigned to each of the 120 x two bed units (120 parks);
 - two car parks assigned to each of the 19 x 3-bed unit (38 parks); and
 - 12 parks assigned for visitor and maintenance vehicles.

The on-street parking assessment undertaken to determine the existing utilisation of the kerbside resource near the development site included a total of 120 surveyed spaces. The survey data shows that during the busier evening period a total of 12 vehicles were observed to be utilising on-street parking within the study area, leaving more than 100 parks available.

To avoid undesirable parking practices associated with vehicles parking in the vicinity of Halsey Grove and the adjacent intersection with Regent Drive, broken yellow no stopping lines could be introduced through the intersection to maintain safe sightlines for turning traffic, and to prevent the risk of vehicles blocking residential driveways.

2. Traffic generation rates

The traffic generation rates adopted are an average of Research Report 453 'Trips and parking related to land use' and survey data. The survey data provides a rate much lower than those in the Research Report, and it is unclear how these survey rates were developed. Reference is made to a

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trip generation survey of the 'Te Ara O Paetutu' in Petone, undertaken on Tuesday November 16 2021. Please provide details of this and other survey data and how relevant to this development.

As described in the ITA at section 7.1, the trip generation rates adopted for the assessment of development site traffic effects have drawn from a combination of the industry standard 'Research Report 453 - Trips and Parking Related to Land Use' (**RR453**), and survey data collected by Stantec. The primary purpose of drawing from survey data is that the RR453 does not provide specific trip rates for higher density townhouse developments such as that proposed here. Further, it is noted the rates provided in RR453 are now dated, with more recent survey information for general residential suburban activity indicating lower rates of 6-8 vehicles per day (**vpd**).

To inform the ITA, a trip generation survey was undertaken at the 'Te Ara O Paututu' residential development in Petone. This site was chosen since it comprises a comparable townhouse typology of 2 and 3-bed units and is situated in similar proximity as the development site to the strategic Wellington rail corridor. The survey involved installation of a miovision² traffic camera on Jackson Street recording all vehicle movements in/out of the site over a 24-hour period, as well as capturing any site-related trips associated with vehicles (including residents and visitors) utilising on-street parking on Jackson Street. The observed total vehicle movements for the key peak hour periods indicated a 'per dwelling' trip rate of 0.52 vehicles per hour (**vph**) for the AM peak and 0.4vph for the PM peak.

Acknowledging that Covid-19 continues to impact travel demands, and particularly in relation to commuter trips, and noting the survey data may have captured some of this influence, a mid-point of the surveyed rates and the RR453 has therefore been adopted to provide a generous assessment of development site trips.

3. Parking space design

Confirm the design vehicle used to design the parking spaces.

The on-site car parking spaces have been designed to comply with the minimum stall and manoeuvre aisle dimensions set out in the Kapiti Coast District Plan (**District Plan**) and the industry standard AS/NZS2890.1:2004 'Parking Facilities Part 1: Off-street car parking' (**AS/NZS2890.1**). The dimension requirements in AS/NZS2890.1 at Figure 2.2 (User Class 1A) are based on consideration of both B85 and B99 vehicles, noting that Appendix B section B4.8 suggests that vehicles larger than a B85 would need to undertake a 3-point turn, which is entirely appropriate in cases such as this where turnover will be low and any associated delay to through traffic caused by a vehicle manoeuvring at an adjacent car park, infrequent.

4. Emergency vehicle access

The vehicle tracking plans do not show the entire development so it is unclear whether fire services will achieve their distance requirements to all units. Provide details for how this will be provided.

The Fire and Emergency New Zealand 'Designers guide to firefighting operations – Emergency vehicle access' (page 3) sets out an expectation that access to individual buildings must be achieved within a 75m 'hose run' distance of the hardstanding that will accommodate the firefighting appliance. The proposed development has been designed to meet this guidance, with fire appliances able to circulate

² Traffic camera affixed to a light pole on a telescopic arm, to get a 'birds eye view' of the street and site access driveways

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through the site's RoW, meaning the maximum distance between a dwelling and parked fire appliance would be <35m, thereby comfortably meeting the 75m maximum.

5. Vehicle speed within the site

Confirm any control measures to control vehicle speeds. The mix of pedestrians and private vehicles and cyclists creates a safety risk. Consider the potential for raised pedestrian crossing points within the site including near the entrance to Halsey Grove.

The proposed RoWs have been designed to promote a slow speed environment, by avoiding an overly wide trafficable width which could encourage higher operating speeds. Notwithstanding, and noting that conventional speed humps in residential developments can introduce unwanted noise issues, surface textural and colour delineation treatments will be included along the RoW carriageway at intervals at the interface with pedestrian routes where they cross the carriageway, to further promote slow speed behaviour and reinforce the 15kph site speed limit that will be signposted throughout the development.

6. Other vehicle access

Rubbish trucks will block vehicle access around internal loop road when accessing the refuse bins. The report states that if vehicles are blocked by trucks they will be able to complete a u-turn and head the opposite direction. It is unclear whether there is enough room to u-turn if all carparks are full. Provide details for how this will be managed.

If a rubbish truck is parked within the RoW in such a position as to block other vehicles from passing (for the short duration it takes to empty the bin), car park traffic could undertake a U-turn within the adjacent aisle and re-route around the loop road to exit the site or access their allocated park. Such a manoeuvre is illustrated in the appended plan (noting that rubbish trucks would logically circulate anti-clockwise through the site, so as to be on the correct side of the carriageway when stopping adjacent to the bin areas), with additional manoeuvring space available at any empty car parking bays nearby.

In reply to Council's Request for Further Information, we trust this response satisfactorily addresses the transport matters requiring further explanation.

Yours sincerely,

STANTEC NEW ZEALAND

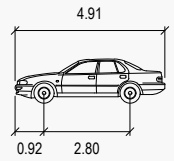


Jamie Whittaker
Principal Transportation Planner



Mark Georgeson
Transportation Operations Lead – New Zealand

Attachment: Tracking Plan

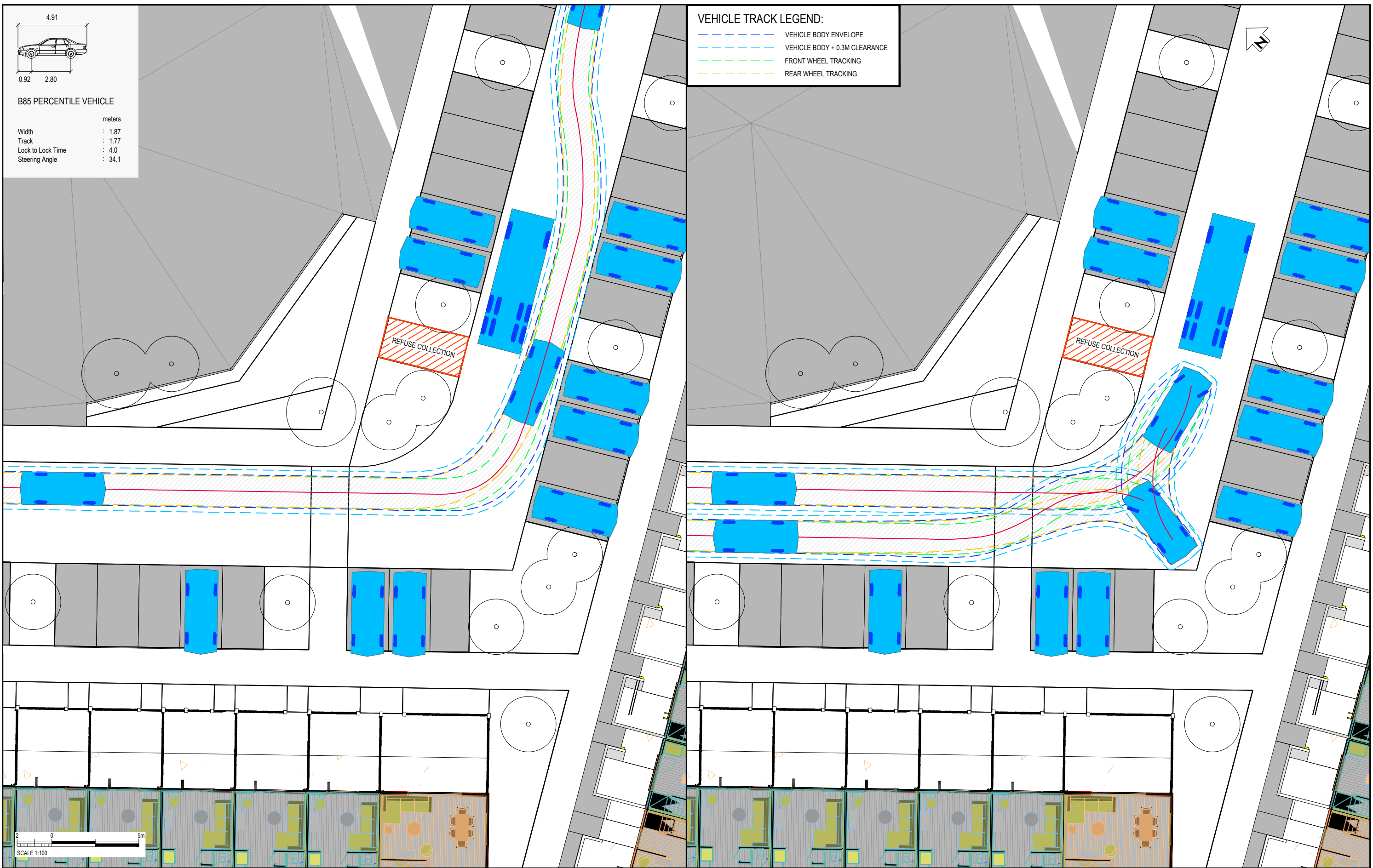


B85 PERCENTILE VEHICLE

	meters
Width	: 1.87
Track	: 1.77
Lock to Lock Time	: 4.0
Steering Angle	: 34.1

VEHICLE TRACK LEGEND:

- VEHICLE BODY ENVELOPE
- VEHICLE BODY + 0.3M CLEARANCE
- FRONT WHEEL TRACKING
- REAR WHEEL TRACKING



NOT FOR CONSTRUCTION

REV	ISSUED FOR INFORMATION	REVISIONS	AKJ	JW	DRN	CHK	APP	DATE
A	ISSUED FOR INFORMATION							04.05.22

SURVEYED		
DESIGNED		
DRAWN	A Jagodzinski	04.05.22
CAD REVIEW	J Whittaker	04.05.22
DESIGN CHECK		
DESIGN REVIEW		
APPROVED		
PROF REGISTRATION:		



Client:

240 KAPITI ROAD

VEHICLE TRACKING
B85 CAR - CIRCULATION

Status Stamp	WORKING PLOT
Date Stamp	04.05.2022
Scales	1:100 @ A1 / 1:200 @ A3
Drawing No.	310205039-01-001-SK001-08
Rev	A