



12th March 2024

Attention: Vincent Ashman

Senior Resource Consents Planner

Hutt City Council

Transportation Assessment Report & Traffic Engineering Report (RM230018 & RM230019, 30 Benmore Crescent) – Final Peer Review Report

Introduction

This report provides a full assessment and wrap up of the transport elements of the resource consent applications (RM230018 & RM230019), comprising development of the full site at 30 Benmore Crescent into multiple allotments as well as an individual application to establish a Waste Management Resource Recovery Park on one of the proposed allotments.

To date the applicant has provided transport assessment reports for each application, with each carried out by Stantec. Across the two resource consent applications, substantial works within the road corridor are proposed to support substantial intensification of traffic movements to and from the site. A portion of road improvements extend into the Waka Kotahi State Highway designation, requiring Waka Kotahi review and signoff.

Detailed below are the specific matters within each resource consent that have been raised through my own technical peer review of the transport assessments, including the responses and further information provided by the applicant in relation to my requests for further information. Throughout this report are my conclusions with respect to the matters raised in order to provide Hutt City Council with clarity around the transport matters.

Background to applications RM230018 & RM230019

- Applicant is seeking to redevelop existing 13ha rural site, with potential for numerous tenancies
- The site is subject to two resource consent applications (one to develop the site (roads and other infrastructure), and another for one of the proposed tenancies – a substantial resource recovery park).
- Application No RM230018 is for the development of the overall site
- Application No RM230019 is specifically for the development of the resource recovery park which will have commercial and public access
- Upgrades are proposed to the Benmore Cres/Manor Park Rd intersection
- Level crossing upgrades are proposed at the nearby crossing on Manor Park Road
- The site will be developed for up to 3 industrial type tenancies



Transportation Assessment Peer Review

I was commissioned to undertake a peer review of each the two transport assessments prepared by Stantec in March 2023. This review was completed and issued to Hutt City Council on the 16th April 2023. This was issued as one report with the report covering the following:

1. Background to resource consent applications
2. Existing transport environment
3. Other stakeholders
4. District plan compliance
5. Site access & Manor Park level crossing
6. Forecast site traffic generation, trip distribution & assessment of traffic effects
7. Individual site design & individual tenancy access
8. Proposed development (Resource recovery park)
9. Traffic generation (Resource recovery park)
10. Internal site design (Resource recovery park)
11. District plan compliance (Resource recovery park)
12. RFI matters (RM230018)
13. RFI matters (RM230019)

The transport assessment peer review provides a detailed commentary of items 1 to 11.

Due to the scale of the proposed development and the assessed impacts, it was determined that more information was required from the applicant in order to adequately assess the transport matters within each application. A section 92 response was received from the applicant in early August 2023 after which I carried out a further assessment of the matters outstanding. I can confirm that many of the matters originally raised were satisfied at that time. The general context of the RFI's is summarised below:

In total across both applications approximately 23 RFI's were prepared.

RFI Matters – RM230018 & RM230019 (Summary)

My initial assessment of the application and accompanying transport assessment resulted in concerns around road safety particularly at the intersection of the Manor Park Road/Benmore Crescent intersection as well as the State Highway 2 interchange which included accompanying concerns regarding the intersection modelling undertaken.

These matters lead onto needing to understand the assumptions made around trip generation for the site as a whole (considering not just the proposed Resource Recovery Park but also the proposed vacant allotments). This included understanding how heavy vehicle movements had been estimated and the how the intersection design had responded to this.

Some questions were raised around the rail level crossing on Manor Park Road particularly concerning how growth in regional rail services may impact on vehicle queuing on Manor Park Road. This included clarity requested around pedestrian safety here.

Some remaining questions were raised with respect to the proposed operation of the of the Resource Recovery Park as well as understanding how construction traffic would be managed as part of the development of the site.

Hutt City Council's roading team also raised several questions in relation to both applications, noting that these were focused around addressing any conflicts of interest with respect to the work done to assess the



safety of the level crossing, clarification on future traffic volumes including those for pedestrians and cyclists as well as the form and function of Benmore Crescent and details surrounding the intersection upgrade.

RFI Matters – RM230018 & RM230019 (Response Summary)

The applicant provided a full response to the transportation related RFI's in mid-August 2023, including several additional areas of information to allow assessment of the transport matters to recommence. Based on the responses provided by the applicant approximately 23 of the RFI's were satisfied with the remaining 8 requiring further information to be provided. **This included a full response to council's roading team RFI's too.**

In order to expedite resolving the outstanding transport matters, a meeting was set up by Stantec that was attended by Mark Georgeson (Stantec) and myself on Friday the 29th September. During this meeting the outstanding matters were discussed with it being confirmed that some of the information had been prepared however had not made its way through to me including the proposed construction traffic management plan (CTMP).

I provided Mark with additional clarity around the following outstanding matter and what was required to satisfy my concerns:

1. Effect of the rail level crossing on the performance of Manor Park Road (queuing) as well as effects on the performance of the Manor Park Road/Benmore Crescent Intersection.

A detailed response was provided by Stantec regarding this matter on the 15th October. To summarise this, the existing Sidra Model used to inform the design of the Benmore Crescent/Manor Park Road intersection was amended with the rail level crossing added as a signalised leg of the intersection with this set up with 45 second and 150 second phase times respectively to assess the effects of the current delay caused when trains would be travelling through as well as the future state delay that would be caused by a higher frequency of trains travelling through.

The outputs of the modelling show that the Benmore Crescent/Manor Park Road intersection will operate at level of service A based on the existing situation (with signalling improvements carried out) and in the future state where trains volumes increase significantly. It has been confirmed that with the proposed intersection design improvements in place the effects on vehicle queueing at the intersection will be manageable.

Comments on intersection modelling (General)

As part of the transport assessments undertaken by Stantec, extensive Sidra intersection modelling has been carried out, both of the existing baseline traffic environment as well as that of the traffic environment if the proposed Resource Recovery Park is established as well as any number of uses that may establish on the vacant allotments.

In order to estimate the trip generation rates for the proposed Resource Recovery Park it is understood that Waste Management New Zealand have provided existing trip generation rates for their Seaview facility. A breakdown of the types of vehicles and their volumes on a daily basis were provided with the outputs of the modelling used to inform the proposed intersection design at Benmore Cres/Manor Park Road. I am comfortable that the intersection modelling undertaken including further work to incorporate the effects of the rail level crossing is sufficient with potential for further refinement of the model during engineering design.



Comments on the Rail Level Crossing

An independent team from Stantec including a third-party consultant undertook a Level Crossing Safety Impact Assessment in line with KiwiRail (KR) requirements (and ultimately signed off by KR) of the existing level crossing on Manor Park Road. This assessment identified serious safety deficiencies at the crossing particularly for pedestrians with a range of improvements identified including in particular introducing a specifically designed crossing point across the tracks for pedestrians among other signalling improvements tied into the position of trains at Manor Park Station.

Comments on proposed Benmore Cres/Manor Park Intersection

As part of the transport assessments undertaken by Stantec, concept designs for the Benmore Cres/Manor Park Road intersection were included as part of the application. Updated drawings were provided by Stantec on the 13th November as it is understood that some changes have been incorporated to meet Waka Kotahi's requirements (noting some of the proposed improvements lie within the State Highway designation).

The general scope of the improvements includes widening the kerb lines at the intersection to cater to heavy trucks as well as significant kerb widening on the south western leg of the intersection in order to create a dedicated right turn bay on Manor Park Road for vehicles to turn right into Benmore Crescent.

The improvements include appropriate tie in to Benmore Crescent including the provision of a footpath along its eastern side leading to a pedestrian level crossing at the rail level crossing to the east. Based on the information provided within the application documents as well as in subsequent RFI responses the intersection design is considered to be appropriate for its intended use and any resultant effects can be managed. It would be prudent for council to require that independent safe system audits be undertaken at the detailed design and post construction stages of all works in road reserve and adjoining private roads including the intersection, rail level crossing and the public and proposed private sections of Benmore Crescent.

Comments on responses provided in relation to HCC's roading team RFI's

I am comfortable that there was no conflict of interest between the Stantec employees working on the Resource Consent Applications and those working on assessing the level crossing. Within the application documents and the further information provided it is evident that Stantec engaged a third party (that was known to Kiwirail) to undertake one of the level crossing assessments. It has been made clear that Stantec involvement across the two areas of the project sit within different areas of the business, further confirming there to be no conflict of interest.

The remaining RFI responses relate to clarifying the traffic data used and the difference between before now and after at the Benmore Cres/Manor Park intersection. This has been provided and is evident in the Sidra modelling provided. One of the councils RFI requests relates to confirming a road classification for Benmore Cres, noting that at the time of this application being lodged, Hutt City Council was yet to confirm the reclassification of its transport network under the One Network Framework (ONF), therefore I am comfortable with the approach taken by the applicant to assume a classification of a primary collector under ONRC (One Network Road Classification) at this stage.

Given the application documents only relate to the development of one site at this stage (Waste Management) I consider that the presence of cyclists and pedestrians has been adequately catered for within the proposed upgrades to Benmore Cres and onwards to Manor Park Rd (particularly where pedestrians are concerned). There will be further opportunity to consider pedestrian/cycle use when the proposed vacant lots are developed at a later stage. A question was also raised around a road safety audit



with applicant agreeing that this could be undertaken. I am in agreement that a safe system audit (SSA) should be commissioned by the applicant at this stage (consent) and at the engineering approval and S223/224 stages due to the scale of improvements planned within public road.

The SSA should be carried out by an independent transport engineering consultant that has not been involved in the application up to this point including in the transport design elements of the project. (i.e. not to be carried out by Stantec.).

Conclusion

The two resource consent applications (RM230018 & RM230019) as received in March 2023 have undergone a detailed technical review in relation to the transport elements of both applications. Detailed transport assessments have been undertaken by Stantec with these reviewed thoroughly initially resulting in a significant request for further information. I have endeavoured to also review the responses provided by the applicant that address Councils own roading team RFI's, noting that I am in agreement safe system audits should be carried out at the respective stages of this project.

Due to the nature and scale of the resource consent applications, several months of back and forth with the applicant and their transport advisors Stantec has been required with additional information, analysis and designs provided by the applicant.

Subject to a safe system audit (SSA) being carried out of the planned upgrades to Benmore Crescent, Manor Park Rd and its intersection, the responses provided to date suggest that the transport effects are likely to be acceptable in relation to this application.

LUKE BENNER
SENIOR TRAFFIC ENGINEER – DIRECTOR