

Two emails from NZTA and /or WSP on transport matters – part of 2nd FIR responses

First email from NZTA
Dated 3 April 2024

Kia ora Vanessa, Jesse, Russell,

Thanks for meeting with us last Thursday 28 March to discuss the proposed Bombay Commercial Vehicle Safety Centre (CVSC). WSP will email shortly with the clarifications on sight distances and the northbound off-ramp movements.

Council also had some queries about operation of the CVSC in relation to the safe management of the state highway network. Those are addressed in this email.

The proposed operation of the CVSC site was set out in the Notice of Requirement package. The purpose of the proposed designation is “to construct, operate, maintain, and improve a vehicle safety centre **as part of the operation of the state highway network**”. The objective of Waka Kotahi under s94 of the Land Transport Management Act 2023 is “to undertake its functions in a way that contributes to an **effective, efficient, and safe land transport system in the public interest**” (emphasis added).

Key points arising from our discussion on Thursday are set out below.

- The operation of the state highway network is monitored by the Auckland Transport Operations Centre (ATOC).
- ATOC is a joint venture between Waka Kotahi and Auckland Transport. ATOC operates 24/7 to help manage the transport network in real-time, collaborating with others including emergency services to respond to planned and unplanned events which can disrupt all modes of transport.
- Real-time monitoring of the transport network occurs using CCTV cameras and other sources (e.g. traffic detection and counting loops).
- ATOC can respond as required across the Auckland motorway network, for example by advising drivers of route options, adjusting lanes open / closed on the Auckland Harbour Bridge, optimising traffic signals at interchanges.
- The existing Bombay intersection is also monitored by ATOC as part of the wider state highway network. A CCTV camera mounted on Mill Road has visibility of the Mill Road / northbound off-ramp / BP exit area. Traffic counting loops are located on the state highway off-ramps.
- Waka Kotahi will implement safety improvements at the Bombay intersection in mid-2024. The scope of those improvements has been provided to Auckland Council.
- The Bombay CVSC site will be constructed by Waka Kotahi.
- Supporting infrastructure will be installed in the existing state highway. This comprises Weigh-In-Motion (WIM) detectors, Automatic Number Plate Recognition (ANPR) cameras, and Variable Message Signs (VMS) which direct HCVs to divert to the CVSC. This work was set out in a request for an Outline Plan waiver, which was granted by Council earlier this year.
- Once constructed, the Bombay CVSC site will be operated by the NZ Police on behalf of Waka Kotahi (as stated in the AEE).
- ATOC will continue to monitor the Bombay intersection following the planned improvements in 2024. This will inform operation of the CVSC site.

- ATOC monitoring of the wider state highway network will also pick up any changes in traffic volumes and patterns that might occur across the network over time as development continues in southern Auckland.
- ATOC will provide real-time information to the NZ Police at the Bombay CVSC and alert them if conditions on the state highway network require management actions. One of those management actions might be to stop diverting Heavy Commercial Vehicles (HCVs) via the northbound or southbound off-ramps to the Bombay CVSC for a certain duration.
- Traffic diversion to the CVSC can be stopped by switching off either or both VMS which direct HCVs to divert to the CVSC. HCV data will continue to be collected by the ANPRs and the WIMs.

The above monitoring and management process will be managed by ATOC and NZ Police, and Waka Kotahi as Requiring Authority responsible for the state highway and CVSC designations.

Ngā mihi,
Belinda

Belinda Petersen

Principal Planner – Poutiaki Taiao / Environmental Planning
System Design, Transport Services

Email: Belinda.Petersen@nzta.govt.nz

Phone: 09 928 8823

Mobile: 027 406 2047

Waka Kotahi NZ Transport Agency

Auckland / Level 5, AON Centre, 29 Customs Street West
Private Bag 106602, Auckland 1143

Second email from WSP **[AND ATTACHMENT]** 4 April 2024

Hi Russell,

The following provides a response to the outstanding matters raised at the Traffic Expert Meeting held with Auckland Council on Thursday 28th March:

1. RFI 23 [25 in SME's list] further information:

WSP have undertaken sightlines assessment based on the topographic information along Gt South Rd (please see **Attachment A-** sketch SK-C-0050). We have included assessments at two locations:

- the northern access which is the relocated private driveway access; and
- the southern access which is the CVSC exit.

The road frontage is posted at 60km/h while southbound, the 80/60km/h speed change is approximately at 50m north of the relocated driveway access. Findings as follows:

- SB sight distance to relocated driveway (Section A-A) = 190m; NB (from the roundabout) sight distance to relocated driveway (Section C-C) = 210m.
- SB sight distance to CVSC exit (Section B-B) = 270m; NB (from the roundabout) sight distance to CVSC exit (Section D-D) = 150m

Based on the table below that outline the recommended sight distances, the sightline distances from the assessment of the relocated driveway comply.

Approach Sight Distance (ASD)			
Direction	Operating Speed	Recommended Sight Distance	Available Sight Distance
To the north	84.6 km/hr	141 metres	>233metres
To the south	60 km/hr	67 metres	>150 metres
Safe Intersection Sight Distance (SISD)			
Direction	Operating Speed	Recommended Sight Distance	Available Sight Distance
To the north	84.6km/hr	212 metres	>233metres
To the south	60 km/hr	117 metres	>150 metres

Table: Table excerpt from s92 response (26 January) - Appendix 7, and s92 response (18 March) - Attachment G.

2. RFI 16: Route shown for traffic management at the Interchange.

Under our response RFI 16 we stated "Vehicles can also utilize the separated left-turn bypass before reaching the intersection if queues are present, as shown in Figure 4 below. This alternative route would ensure left-turn vehicles are not affected by right-turn queue length."

We emphasise this follows three other mitigating factors for traffic at the interchange to comprehensively demonstrate that an additional 9 HCV traffic movements in the right turn lane of the northbound off-ramp will have a minimal impact on the operation of the SH1 interchange.

This statement is amended to read:

"Some drivers (general traffic vehicles) may currently use the left turn exit through the private retail property, as shown in Figure 4, to avoid the interchange. We do not expect the very low CVSC traffic volumes to affect driver behaviour at this off-ramp, including any use of the private property, because in addition to the available lane queue capacity shown in RFI 16 figures 1, 2 and 3:

- CVSC HCV traffic will be making a right turn at the interchange from the northbound off-ramp (and not use the retail property as an access route), and
- CVSC HCV traffic volumes are very low (accounting for approximately 1% of traffic), so not expected to materially affect queue lengths and therefore driver behaviour for left turn traffic, and access to the commercial centre will not be restricted. In summary, there will be less than minor effects on the interchange as a result of the CVSC operations"



Figure 4 - Illustration of separated left-turn lane before reaching the intersection if queues are present

Figure – Excerpt figure from the s92 response (18 March)

3. Operational management

The NZTA manages the State Highway network, to ensure effective and efficient operation. This interchange, like all other interchanges on the Auckland Motorway System, are continually monitored and as such the NZTA do not offer a condition which requires monitoring of traffic at this location. Monitoring is an ongoing activity that is part of the operation of the network.

Council does not need to assess effects on the network managed and operated by the NZTA.

NZTA has provided a summary information statement on the network monitoring which already occurs (and will continue), via separate email (03/04/24).

WSP finds the outstanding matters have been resolved, and there are no further information requests to address. NZTA request that a decision on notification is undertaken as soon as possible.

Kind regards,
Tina



Tina Kalmar
Intermediate Planner

T: +64 9 304 8053
M: +64 27 273 2396
Tina.Kalmar@wsp.com

WSP
Lvl 3, The Westhaven
100 Beaumont St
Auckland, 1010
New Zealand

wsp.com/en-nz