

# **LT McGuinness**

Site 10 Development, Wellington Waterfront

**Construction Traffic Management Plan** 

7 October 2014

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# Construction Traffic Management Plan Quality Assurance Statement

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# 1. Background

TDG have been commissioned by LT McGuinness to develop this Construction Traffic Management Plan (CTMP) in support of the planned development of a commercial building known as 'Site 10', on Wellington Waterfront. The purpose of this report is to outline the anticipated construction method, as it is known at this early stage of planning, to provide Council with information as to how the effects of the construction phase on the wider roading network are planned to be mitigated.

This CTMP has been developed for the construction of the commercial building only; the construction of the adjoining Open Space areas (which form a parallel Resource Consent to that for the building itself) will be the responsibility of others.

The site is located to the north of the Waterloo Quay intersection with Whitmore Street. Although it can be accessed via a number of intersections located along Waterloo and Customhouse Quay, it is most conveniently accessed via the Whitmore Street intersection or Bunny Street (to the north).

The site is currently used as a surface level campervan park and commuter carparking area, with an established residential apartment building (Shed 21) to the immediate north. To the north-east of the site, the land and wharves are under the control of CentrePort, and on-going access to these established facilities will need to be provided for the duration of the construction period.



# 2. Existing Environment

The Site 10 development site is located within land under the management of Wellington City Council City Shapers (previously Wellington Waterfront Ltd) and is located to the immediate north-east of the Customhouse Quay intersection with Whitmore Street.

The site is currently used as a public carpark and campervan park, with a poorly defined vehicle laneway running north-south to the east of Site 10. This laneway provides access to Site 10, the established Shed 21 (to the north) and CentrePort land (to the north-east). The laneway has connections with both Bunny Street and Whitmore Street, and also connects to the established Kumototo Precinct laneway to the south.

The Waterfront as a whole attracts and carries a significant volume of pedestrian and cycle traffic. To the south of the site, formed routes are established throughout the Waterfront to cater for these users. In the immediate vicinity of the site, pedestrians and cyclists are less well catered for, with these modes being mixed with vehicular traffic. Nonetheless, there remains a high volume of pedestrians and cyclists travelling along the laneway and across Customhouse Quay, and these users will require particular consideration when planning the construction development.



# 3. Construction Operations

## 3.1 Construction Programming

Preliminary programming of the construction works has identified an overall work programme of some 18 – 24 months, likely beginning mid-2015 (subject to various consents being granted).

**Stage 1:** The initial construction phase will involve piling around the perimeter of the site, before excavating to enable the basement carpark and services to be established.

For this initial period of around 9 months (during which the piling, excavation, and construction of the basement through to approximately Level 1 of the building will be undertaken) the footpath fronting Waterloo Quay will be closed to enable the works to be completed. Pedestrian diversion signage throughout the surrounding area will be required to support this closure.

In addition, due to localised constraints between the construction site and the 'Old Ferry Building', the laneway will be restricted to one way (southbound) with a painted pedestrian/cycle lane adjacent.

**Stage 2:** The construction of the building (L1 and above) will allow for the Customhouse Quay footpath to be re-opened with the protection of a covered gantry to be provided so as to enable safe pedestrian access. The laneway will remain as a one way (southbound) route, with the adjacent pedestrian/cycle lane.

In keeping with other developments throughout the Waterfront, construction traffic access will be restricted during peak pedestrian periods. On-going access for all legitimate users of the waterfront will be maintained.

#### 3.2 Site Access

#### 3.2.1 Stage 1: Piling and Ground Floor Development

During the initial construction period, controlled access will be established from the Waterfront land to the construction site itself, so that only vehicles associated with the works are able to access the site. Staff will be made available on the ground during the arrival and departure of heavy vehicles, to ensure the safety of other users through the area.

It is intended that site access for heavy vehicles will be achieved primarily via the Whitmore Street gates. As the right turn into the waterfront area is banned from the south at the Whitmore Street intersection, this will mean that all trucks will arrive at the site either via Waterloo Quay (to the north) or Whitmore Street (to the west).

A loading zone will be installed adjacent to the laneway, and truck access and egress associated primarily with the earthworks will be provided to and from the site at the southeastern corner of the site. Site access for construction traffic will be restricted to these two locations through the establishment of hoarding and/or site fencing.



Key features of the traffic management during this stage include:

- closure of the Customhouse Quay footpath adjacent to Site 10, with pedestrian diversion route signs established within the adjoining Waterfront area and road network;
- the eastern laneway will remain open for southbound traffic only. A painted pedestrian/cycle lane will be provided adjacent to the laneway;
- most truck access to the site will be via Whitmore Street gates;
- a loading zone will be established adjacent to the laneway, with access limited through the provision of site fencing.

Figure 1 shows the intended work site area, and access for the largest vehicles.

The temporary closure of the Customhouse Quay (E) footpath will require directional signage to be installed throughout the area. This will be agreed with Council as part of future construction traffic management planning. However, site observations have shown the predominant pedestrian routes through this area are either along the internal laneway, or the Customhouse Quay (W) footpath. The existing signalised pedestrian crossing at Whitmore Street will remain available throughout construction. Therefore, given the alternative routes for pedestrians have already developed as the primary pedestrian routes in the locality, it is considered that the footpath closure will result in only minor inconvenience to the public.

#### 3.2.2 Stage 2: Level 1 (and above) Construction

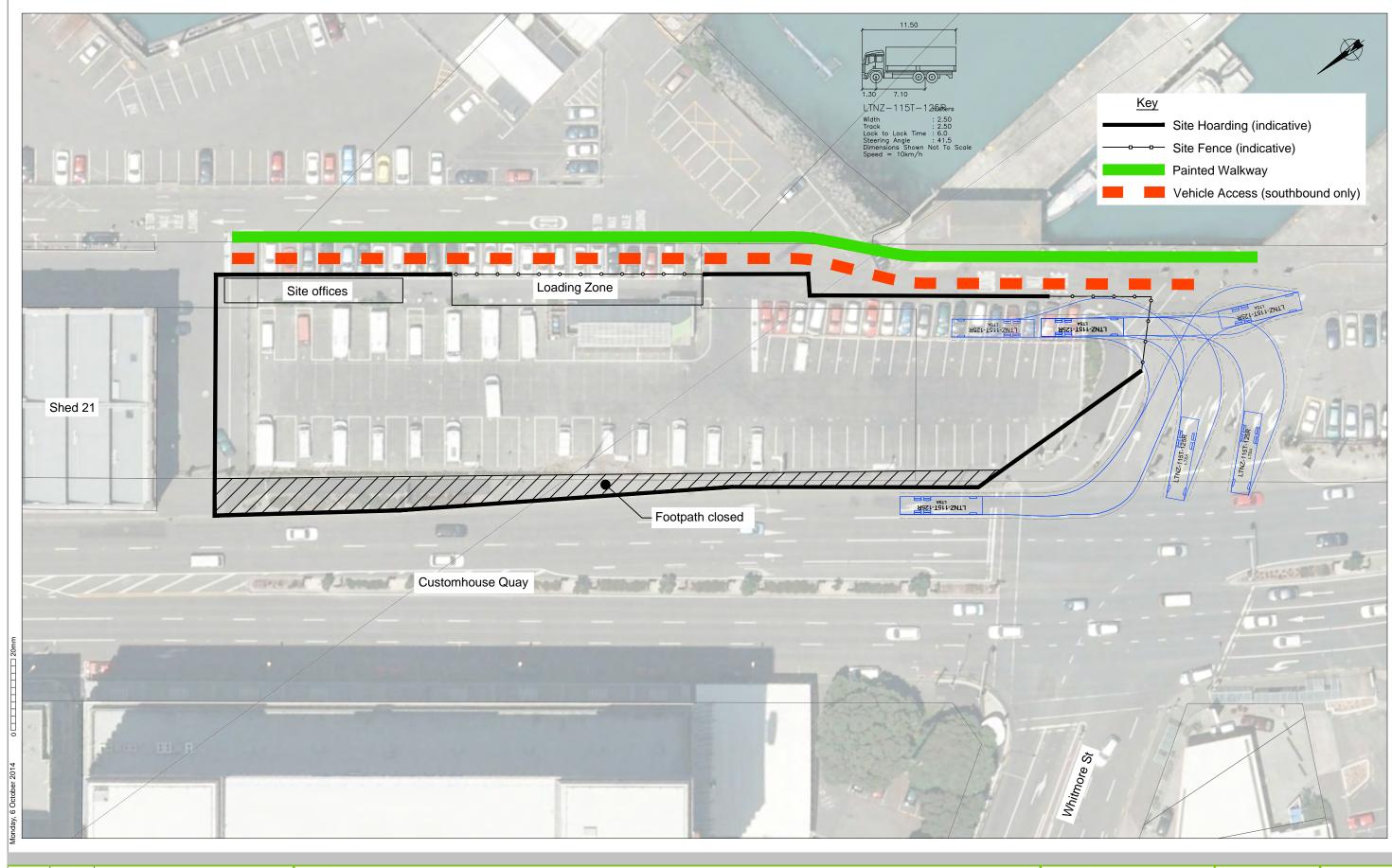
During the latter period of construction (when the above ground building work is underway), loading will occur by way of a dedicated loading zone adjacent to the laneway. This is shown on **Figure 2.** 

The basement parking area will be used as site offices and for staff parking.

Key features of the traffic management during this stage include:

- Customhouse Quay footpath will be re-opened, with a pedestrian gantry installed to enable works to safely occur overhead;
- an overnight lane closure of the left/through lane may be required on occasion, subject to Council approval;
- the eastern laneway will remain open for southbound vehicle traffic, only, alongside the painted pedestrian/cycle lane provided adjacent to the laneway in Stage 1;
- a loading zone will be established adjacent to the laneway, with access limited through the provision of site fencing.





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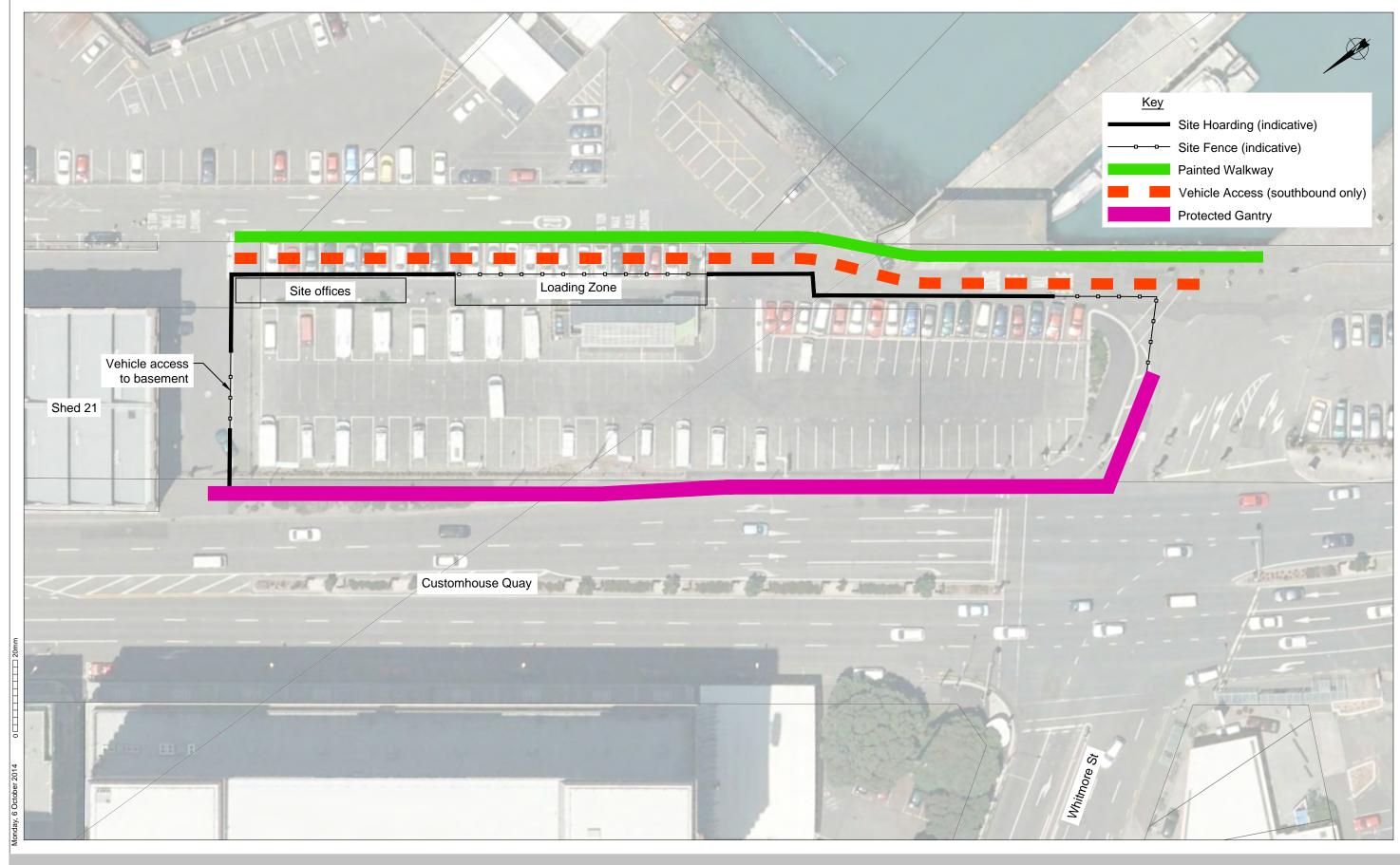
Site 10 Construction Traffic Management Plan

Stage 1: Indicative Work Site

DRAWN: Quentin O'S
DATE: 6/10/2014
SCALE: 1:500 @ A3
DWG NO:12950W1A



1



Site 10 Construction Traffic Management Plan

Stage 2: Indicative Work Site

DRAWN: Quentin O'S
DATE: 6/10/2014
SCALE: 1:500 @ A3
DWG NO:12950W1A



2

For a period of approximately 6 weeks, a cantilevered structure is proposed to be installed at a height 4.9m above the adjacent southbound left/through lane on the Quay, to enable the façade to be constructed. This height is noted as being the absolute minimum vertical clearance within the NZTA (Transit) Bridge manual (Appendix A: Bridge widths and clearances Figure A2). This will require approval by Council, and will require careful planning. Over-height loads will therefore be required to use the outer southbound lanes, and this restriction will need to be clearly sign-posted in advance. It is anticipated that VMS will be required.

#### 3.2.3 Staff Parking

When practicable, some staff parking will be available within the work site itself. This will include the basement carpark (once it is completed). When no space is available, staff will be directed to park elsewhere or use public transport, noting that the Wellington Train Station and Bus Transfer Station are located in close proximity to the site.

## 3.3 Hours of Operation

Construction traffic movements into and out of the site will be limited to between 7am and 7pm Monday – Saturday, with heavy vehicle movements avoided during the peak pedestrian periods. It is not expected that works on the site itself will need to be undertaken outside these hours, with the exception of some façade work on the western side of the building, which will occur during the proposed overnight lane closures.

## 3.4 Access to Adjacent Properties

On-going and enduring vehicular access through the area will be maintained throughout the construction period, to ensure full access to Shed 21 and CentrePort is provided. In addition, access will be ensured for pedestrians and cyclists via diverted routes and delineated pathways.

As previously described, the Customhouse Quay footpath will be closed for a period of approximately nine months, to enable piling and excavation works to be completed. Pedestrian diversion routes (either through the Waterfront area or on the adjoining public roading network) will be sign-posted for this period.

# 3.5 Dust Suppression and Detritus Control

Dust suppression and detritus control is to be provided by the Contractor. The Contractor is to liaise with the Road Controlling Authority to ensure that dust suppression and the spread of detritus material (dropped from heavy haulage vehicles carting materials to or from the site) is appropriately controlled and remedied. The Contractor is to adhere to any further guidance given by the Traffic Management Co-ordinator and/or the road controlling authorities (such as localised speed restrictions) in relation to dust suppression and removal of detritus material.



## 3.6 Material Storage

All materials will be stored on-site. No material will be stored within the public road reserve at any time.

## 3.7 Weight Restriction

A weight restriction of 5 tonne per axle is in place on the laneway adjacent to Site 10, as the lane is constructed partially on a wharf structure. This weight limit will apply to <u>all</u> construction vehicles accessing the site as part of these works.



# 4. Traffic Management

The adjoining roads are classified as Principal or Arterial Streets, and as such are designed to accommodate large and heavy vehicles. Trucks using the laneway will be further restricted to a maximum weight of 5 tonnes, as previously described. Based on the size of the development area, it is anticipated that the largest truck able to be accommodated on site will be a maximum rigid truck. The number of truck movements associated with the development will be subject to a more detailed traffic management plan to be developed prior to works being undertaken, but access by the large vehicles will be limited to outside pedestrian peak periods, to ensure the on-going safety of the general public.

#### 4.1 Access

Given the constrained size of the development site, it is not anticipated that any significant number of heavy construction vehicles will be on site at any one time. Any heavy vehicles entering the site will be marshalled while moving to and from the building site to ensure pedestrian and cycle safety is maintained. The manner in which trucks may access the site was detailed previously in Figure 1.

#### 4.1.1 Stage 1: Heavy Vehicles

Heavy vehicle access to the site will be managed principally via the Whitmore Street intersection during the initial construction period, to minimise the impact of heavy vehicle traffic around the adjoining Shed 21 residential building during the excavation works. With right turns into the waterfront excluded at this intersection, the arrival of heavy vehicles will be restricted to Customhouse Quay (north) and Whitmore Street (west). All outbound movements are permitted at the Whitmore Street gates, so the outbound route adopted by the heavy vehicles will not be restricted.

Trucks will enter the site in a forward motion where possible. However, there may be the occasional need for a truck to reverse into the site or loading zone (from the Whitmore Street driveway access area) dependant on construction operations at any given point. These movements will occur under the control of marshals to ensure the on-going safety of the public.

All movements out of the site will occur in a forward direction via the signalised intersection approach from the Waterfront.

A loading zone adjacent to the laneway will be provided, with access limited through the provision of site fencing.

#### 4.1.2 Stage 2: Heavy Vehicles

During subsequent periods of construction, the loading zone will be retained adjacent to the laneway. The preferred location of the zone will be identified once detailing such as the crane location is finalised, but has been shown indicatively in the previous Figure 2. During this period, all vehicles will be directed to enter via Bunny Street and exit via Whitmore Street. No heavy vehicles associated with the construction will be permitted during peak pedestrian periods, including the weekday commuter period and Saturday mid-day



(summer) periods or event days (such as the Rugby 7's). The timing of permitted access will be agreed with Council prior to works beginning on site.

#### 4.1.3 General Access and Management

Smaller vehicles associated with the construction phase (trades vans and the like) may arrive and depart from either the Whitmore Street or Bunny Street access, as suits.

The laneway adjacent to Site 10 will be restricted to one way (southbound) for all traffic throughout the construction period.

The Site and/or Project Manager will be responsible for communicating the site access limitations to all drivers and/or contractors bringing trucks to the site at the initial site induction safety briefings as described in a later section of this CTMP report.

## 4.2 Loading

During the initial piling and excavation phase, most loading and unloading will occur within the construction site at its southern end. Some deliveries will be accommodated within the loading zone, as required.

During the subsequent phases, as the above ground levels are constructed, loading will occur from a loading zone adjacent to the laneway. The exact location of the loading zone will be confirmed as the planning for the construction works is developed.

# 4.3 Signage

Traffic and warning signs will, wherever possible, conform to the standards specified in COPTTM. These signs may be supplemented with some specifically designed signage, particularly with respect to providing information for pedestrian diversion routes. All such specific signage will be clearly shown on plans to the approval of Council, as an integral part of the CTMP and any subsequent TTMPs.

# 4.4 Storage of Materials

All materials will be stored on-site. No material will be stored within the public road reserve at any time.



# 5. Pedestrian and Cycle Access

## 5.1 Stage 1

As previously described, for an initial nine month period, the Customhouse Quay footpath adjacent to the site will be closed to pedestrian traffic, to enable the piling and excavation works to be completed.

In addition, the laneway located to the east of the construction site will be limited to southbound vehicle traffic only. There is a localised pinch-point to the south-east of the building footprint, and a requirement to provide for on-going access to Shed 21 and CentrePort. Pedestrians and cyclists will be supported through the provision of a painted pathway running adjacent to the traffic lane. Traffic volumes through this area are expected to be low following the closure of the existing surface level carpark and campervan park, and in practice, pedestrians and cyclists would share the laneway area, in a manner similar to that which is currently observed within the completed Kumototo Plaza to the south.

The anticipated extent of the closure was shown previously in Figure 1. Pedestrians will be directed to travel either along the laneway, or Customhouse Quay (W) footpath. The signalised pedestrian crossing at Whitmore Street will remain fully accessible throughout. Alternative crossing points at Bunning Street and Waring Taylor Street will also remain in place, providing a number of convenient crossing points for pedestrians to travel between the waterfront and CBD.

The full extent of the signage adopted will be agreed with Council as part of the more detailed TTMP process which will be undertaken prior to construction works beginning.

# 5.2 Stage 2

After the initial works have been completed, a gantry will be established along the same length of Customhouse Quay to enable protected pedestrian access through this area, with construction work then able to occur above.

Pedestrians and cyclists will continue be able to access the laneway, using the marked lane to be installed adjacent to the traffic lane.



# 6. Implementation and Liaison

### 6.1 Project Manager Contact Details

Contact details for the Project Manager and associated personnel are provided below:

- Project Manager: Mark Mulhern;
- Site Traffic Management Supervisor: TBC.

#### 6.2 Affected Parties

Access to Shed 21 and CentrePort will be maintained throughout the works, as will access for pedestrians, cyclists and vehicles through the adjacent area.

Notices detailing the timing of the construction works will be provided to the owners and occupiers of Shed 21 commercial and residential units, as well as CentrePort and City Shaper. In addition, public notices will be posted in the vicinity of the site in advance of the works and remain for the duration of the period that the footpath is closed.

Liaison with representatives of the adjoining properties will be undertaken in advance of the conversion of the laneway from two-way to one-way (southbound). Informational signage will be provided in advance of the works to inform the public of the restriction.

Communication with the occupants of Shed 21, CentrePort and City Shaper will be the responsibility of the Project Manager, and will be on-going through the duration of the works. A contact number will be provided within all communications, in order that any issues may be raised and dealt with promptly.

These communications will be issued at least ten working days prior to the commencement of works on site. All communication will be the responsibility of the Project Manager.

#### 6.3 Driver Induction

The STMS is responsible to undertake a site induction with all transport operators contracted to transport materials to the site. The induction is to cover (but not be limited to):

- the route of travel;
- permissible times of deliveries;
- requirement for and use of possible communication systems;
- requirements to abide by local speed restrictions for dust and detritus management;
- requirement for courteous driving;
- requirement to report hazards on the transport route.



## 6.4 Utility Services

There will not be a need to restrict access to utilities providers. Should access to the site or surrounding area be required by such parties, the Project Manager should be engaged.

## 6.5 Complaints Procedure

Any communications issued will include contact details for the Project Manager to whom any complaints are to be directed. Any comments will be quickly communicated to the relevant project staff and a response provided and actions taken as appropriate. Should any changes be required to any approved CTMP or TTMP, a record of the change itself shall be kept, including by way of the Council authorisation process.

A full record of complaints and responses shall be maintained by way of a complaints register, available for inspection on site at all times.

## 6.6 Updates to Plans

Approved CTMPs and TTMPs will be reviewed by the Project Manager and STMS on a regular basis, to ensure that the documents remain relevant for use.

Any changes to these plans will be recorded.

The structure of and requirements for the CTMP are to be approved by the road controlling authority prior to construction, as directed by the conditions of consent.

Traffic Design Group Ltd

