WAKA KOTAHI NZ TRANSPORT AGENCY

RCA consent (e.g., CAR/WAP) and/or RCA contract reference	

TRAFFIC MANAGEMENT PLAN (TMP) – FULL FORM

Use this form for complex activities. Refer to the NZ Transport Agency's Traffic control devices manual, part 8 Code of practice for temporary traffic management (CoPTTM), section E, appendix A for a guide on how to complete each field.

Organizations /TMP reference	**TMP reference:**	**Contractor (Working space):** CDL//Building WANAKA	**Principal** *(Client)*: CDL//Building WANAKA
		Contractor (TTM): TMSCO TRAFFIC MANAGEMENT SERVICES CENTRAL OTAGO	**RCA:** QUEENSTOWN LAKES DISTRICT COUNCIL

Location details and road characteristics	**Road names and suburb**	**House no./RPs** *(from and to)*	**Road level**	**Permanent speed**
	Brownston St, Wanaka: 10808 (est.) 24/07/20 6% H.	RP 0.500 to RP 0.820	L1	40 km/h
	Pembroke Ln, Wanaka: 113 (est.) 23/08/19 6% H.	RP 0.000 to RP 0.040	LV	40 km/h
	Dungarvon St, Wanaka: 4684 (est.) 23/08/19 4% H.	RP 0.100 to RP 0.300	L1	40 km/h
	Helwick St, Wanaka: 4123 (est.) 24/07/20 5% H.	RP 0.110 to RP 0.300	L1	40 km/h
	Dunmore St, Wanaka: 4484 (est.) 23/08/19 10% H.	RP 0.000 to RP 0.175	L1	40 km/h

Traffic details (main route)	**AADT**	**Peak flows**
	SH 8, **Alexandra 5607** (est.) 24/12/2020 6.4% H.	**07:00 – 09:00 and 16:00 – 18:00 hrs.** (est.)

Description of work activity

CDL/Building Wanaka have been commissioned to construct the boutique Kitea Hotel on the vacant allotment at 67 Brownston, Wanaka.

Planned work program

Start date	**15th November 2021**	**Time**	**7:00**	**End date**	**31st December 2022**	**Time**	**18:00**

Consider significant stages, for example: • road closures • detours • no activity periods.	***Project Phases*** • **Nov 15th 2021_*Cut to waste***: Bulk excavations with material to be removed from site and clean gravel imported. Due to limited site area, trucks may be required to reverse into site. (Site vehicles to approach from the west and depart to the east). • **Dec 2021_Connection to services:** Road closure and detour during night works to connect services from the property boundary across the Brownston St carriageway, estimate 2 consecutive nights, (18:00-06:00), to complete works. • **Jan 2022_Establish site office/containers:** Positioned between the kerb and frontage of 67 Brownston St, blocking pedestrian access. To be delivered to site under a (a) Full Road Closure at night, alternatively (b) Lane Closure during the night/(c) day as availability arises with contractors. • **Feb 2022_Foundation and retaining works:** Establish Concrete pump onsite with multiple truckloads of concrete. • **April-July 2022_Prefabricated Panels:** Establish mobile Crane Tower onsite with multiple truckloads of scaffolding. Arrival of Prefabricated panels delivered to site under a (a) Full Road Closure at night, alternatively (b) Lane Closure during the night/(c) day as availability arises with contractors. • **Nov 2021-Dec 2022_Deliveries to site:** Smaller deliveries to site on an 'as required basis', to be offloaded in the designated loading bay at the frontage of the property. (Occupation of the New World carpark fronting Brownston St for deliveries and stowage of materials is anticipated).
Alternative dates if activity delayed	• Planned work program dates have contingency for unforeseen delay. An update to the TMP will be submitted if a work extension is deemed necessary.

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Road aspects affected *(delete either Yes or No to show which aspects are affected)*					
Pedestrians affected?	Yes	**Property access affected?**	Yes	**Traffic lanes affected?**	Yes
Cyclists affected?	Yes	**Restricted parking affected?**	Yes	**Delays or queuing likely?**	Yes

Proposed traffic management methods

Installation *(includes parking of plant and materials storage)*

Preparation

- All required equipment to be loaded onto the installation vehicle correctly for offloading from the non-traffic side.
- The STMS is to check and record that all equipment loaded is an acceptable condition.
- Vehicle on road compliance and operational preparedness is to be verified at this time and documented. (WOF, RUC, walk around vehicle check completed).

Equipment Installation; personnel on LV and L1 roads

- Installation vehicle to have amber flashing beacon and TV4 / RD6R on the rear of the vehicle, crew to be wearing the appropriate PPE.
- Relevant signage and delineation will be installed as per the site-specific layout diagram listed below.
- Delineation devices may be installed in the live, trafficable lane, by personnel on foot provided a **spotter** is observing the task, *(as per CoPTTM F4.10 and Company Policy).*
- Signs to be placed on foot from the **non-traffic side** of the vehicle which will stop **10 meters** prior to each sign location **shadowing** the workers placing the signs.
- All signs are to be weighted with sufficient ballast and marked with a cone on the roadside.
- STMS to note the time last and positions where TSL is installed on the Company On-Site Record.

Traffic Sign Installation

- Calculated time to install each phase of TTM ***is estimated to take 30-70min with 2 personnel***.
- TTM installation to be established **prior** to the introduction of the **materials** to site and or **personnel, machinery** and **materials encroaching 5m** of the **edge-line**.
  1. Complete site **risk assessment** and **toolbox forms** with all staff involved on the site.
  2. Signs to be installed first starting with **Advanced Warning** and appropriate **supplementary plate.**
  3. Installation vehicle to proceed in a **methodical clockwise direction** that **minimises** the need to cross approaching traffic.
  4. Vehicle to complete **safe U-turn** utilising the **side streets adjoining the site and designated parking lots** with ample access/egress enabling **clear vision** of approaching traffic in both directions.
  5. Complete drive through to **check site layout** is correct.
  6. Complete the **On-Site Record**.
  7. Hold a **site toolbox meeting** with the **Person in Charge** (PIC) of the **working Space** discussing relevant aspects of the TTM installation and Instruct the PIC that the site is ready for operation.

Attended (day)

TM Methodology

- **Install Temporary Pedestrian Crossing:** TTM to be utilized during the installation of the temporary pedestrian crossing, **(Bollards, RD6L signage and ramps),** at **0.705 RP** on **Brownston St. (Layout #1).**
- **Site works with Pedestrian Management:** TTM shall be installed **24/7** when the footpath is occupied once site containers are delivered to location in January 2022, (Date TBC). **(Layout #2).**
  Note: Footpath **MUST** only be closed and diverted when hazards to pedestrians prevail.
- **MTC_Stop/Stop,** (Trucks X-ING): TTM to be installed to manage trucks entering and exiting site. Due to limited site area, trucks may be required to reverse into site. (Site vehicles to approach from the west and depart to the east). **(Layout #3).**
- **MTC_Lane closure with alternate flow:** TTM shall be used as a contingent layout for activities (b) and (c) listed below whereby night works can not be scheduled with contractors and or suppliers. **(Layout #5).**

Vehicle Access/Egress

- Site shall be accessed and exited **with** the **flow** of the traffic. Work vehicles shall use their indicators and have their flashing beacons on. Beacons must be **switched off** once the vehicle has matched the posted or temporary speed limits.
- Site access will be managed by the STMS, cones may by shifted whilst a vehicle enters or exits the site and **replaced immediately** thereafter.
- Vehicles not directly involved in the works will be **legally parked**.
- Plant and materials will be within the working space for daily use or delivered to site on an 'as required' basis.

Attended (night)	• **Road Closure with detour route:** TTM shall be installed for works that significantly impact the traffic flow on Brownston St carriageway inclusive of: **(Layout diagram #4).** (a) Connection to services across carriageway, December 2021, (Date TBC). (b) Delivery and position of Office/Storage container to site by crane truck, January 2022, (Date TBC). (c) Bulk delivery of prefabricated tilt panels. • **MTC_Lane closure with alternate flow:** TTM shall be used as a contingent layout for activities (b) and (c) if full road closure is not practical.
Unattended (day)	• **Site works with Pedestrian Management:** TTM shall only be installed when the footpath is occupied once site containers are delivered to location in January 2022, (Date TBC). **(Layout #2).**
Unattended (night)	• **Site works with Pedestrian Management:** TTM shall only be installed when the footpath is occupied once site containers are delivered to location in January 2022, (Date TBC). **(Layout #2).**
Detour route	• **Road Closure:** TTM installation detour route proposed **by-passing Brownston St** from **0.555 RP** to **0.725 RP**. Detour route follows **Dungarvon St_Dunmore St_Helwick St.** Does detour route go into another RCA's roading network? **No** ~~*If Yes, has confirmation of acceptance been requested from that RCA?* Yes No *(delete either Yes or No)*~~ ***Note:*** *Confirmation of acceptance from affected RCA must be submitted prior to occupying the site.*
Proposed traffic management methods (cont.)	
Removal	***Equipment removal; personnel from LV and L1 roads*** • Removal vehicle to have amber flashing beacon and TV4 / RD6R on the rear of the vehicle, crew to be wearing the appropriate PPE. Delineation devices may be removed from the **live, trafficable lane**, by personnel on foot provided a **spotter** is observing the task, *(as per CoPTTM F4.10 and Company Policy).* • Signs to be removed on foot whilst under the **protection** of a **shadow vehicle** stopping **10 meters** prior to each sign location. TTM gear to be **stowed** in a practical location more than **5m** from the **edge line** or onto the **non-traffic side** of the vehicle. ***Traffic Sign Removal*** • Calculated time to remove TTM ***is estimated to take 30-70min with 2 personnel***. • Removal shall only commence after the Contractor has returned the **roading corridor** to an **acceptable state** and workers have departed the worksite. *(No heavy machinery or work vehicles to remain within 5m of the roading edge line).* 1. Complete site **risk assessment** and **toolbox forms** with all staff involved on the site. 2. Having 1st removed delineation devices, TTM workers may remove signage, leaving the **1st Warning sign** on each side of the TTM to be **removed last**. 3. Removal vehicle to proceed in a **methodical clockwise direction** that **minimises** the need to cross approaching traffic. 4. Vehicle to complete **safe U-turn** utilising the **side streets adjoining the site and designated parking lots** with ample access/egress enabling **clear vision** of approaching traffic in both directions. **5.** STMS must complete a **final drive through** of the site to check the **road** is completely **clear** of any **debris** and that all **TTM Equipment, including sign tape**, are **removed,** or **stowed safely** as required. 6. On completion of all TTM removal, STMS will record the time and road condition on the **On-Site Record.**

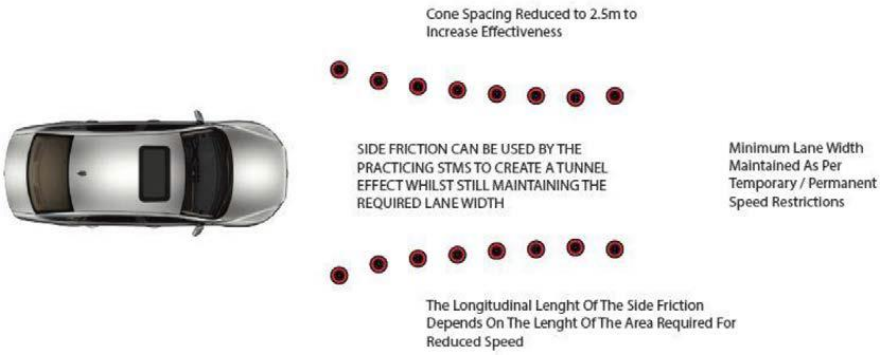
RCA consent (e.g., CAR/WAP) and/or RCA contract reference	

Proposed TSLs *(see TSL decision matrix for guidance)*

	TSL details as required Approval of Temporary Speed Limits (TSL) are in terms of Section 6 of Land Transport Rule: Setting of Speed Limits 2017, Rule 54001/2017 *(List speed, length, and location)*	**Times** *(From and to)*	**Dates** *(Start and finish)*	**Diagram ref. no.s** *(Layout drawings or traffic management diagrams)*
Attended day/night	A temporary maximum speed limit of **30**km/h is hereby fixed for motor vehicles travelling over the length of: **230**m situated between **0.560** RP and **0.790** RP on **Brownston St, Wanaka** **60**m situated between **0.200** RP and **0.260** RP on **Helwick** St, Wanaka	**7:00–18:00**	**15th Nov 21** to **31st Dec 22**	**Layouts 1,3 & 5**
~~**Unattended day/night**~~	~~A temporary maximum speed limit of ____ km/h is hereby fixed for motor vehicles travelling over the length of ____ m situated between ____ (House no./RP) and ____ (House no./RP) on ____ (street or road name)~~			
TSL duration	Will the TSL be required for longer than 12 months? ~~***If yes**, attach the completed checklist from section I-18: Guidance on TMP Monitoring Processes for TSLs to this TMP.*~~			**No**

Positive traffic management measures

- **Amber Flashing Beacons** on all worksite Vehicles is mandatory.
- **Side-friction: live lane to be reduced to 3m** width to create a tunnel effect for vehicles travelling through the work site to further reduce the operating speed of the travelling vehicles, providing a safer environment for the public and contractors.



- **Cone offset delineation**: where cones are placed either side of a lane(s), the cones on one side are placed longitudinally offset from the other by a half cone spacing.
- **TSL positions** may be lengthened to cater for queuing resulting from high volume traffic flow.
- **Site extension** to extend the advance warning signage in the event of unforeseen traffic volumes is covered under this application, (refer to Roading Positions in this plan for approved TTM working zone).

Contingency plans

Generic contingencies for: • major incidents • incidents • pre planed detours. *Remove any options which do not apply to your job*	**Major Incident** A major incident is described as: • Fatality or notifiable injury - real or potential • Significant property damage, or • Emergency services (police, fire, etc) require access or control of the site.	**Actions** The STMS must immediately conduct the following: • stop all activity and traffic movement. • secure the site to prevent (further) injury or damage. • contact the appropriate emergency authorities. • render first aid if competent and able to do so. • notify the RCA representative and / or the engineer. • under the guidance of the officer in charge of the site, reduce effects of TTM on the road or remove the activity if safe to do so. • re-establish TTM and traffic movements when advised by emergency authorities that it is safe to do so. • Comply with any obligation to notify WorkSafe.

RCA consent (e.g., CAR/WAP) and/or RCA contract reference	

	Incident An incident is described as: • excessive delays - real or potential • minor or non-inquiry accident that has the potential to affect traffic flow. • structural failure of the road.	**Actions** The STMS must immediately conduct the following: • stop all activity and traffic movement if required. • secure the site to prevent the prospect of injury or further damage. • notify the RCA representative and / or the engineer. • STMS to implement a plan to safely remove TTM and to establish normal traffic flow if safe. • re-establish TTM and traffic movements when it is safe to do so and when traffic volumes have reduced.
	~~**Detour**~~ ~~If because of the on-site activity it will not be possible to remove or reduce the effects of TTM once it is established a detour route must be designed. This is likely for:~~ • ~~excessive delays when using an alternating flow design for TTM.~~ • ~~redirecting one direction of flow and / or~~ • ~~total road closure and redirection of traffic until such time that traffic volumes reduce, and tailbacks have been cleared.~~ ~~The risks in the type of work being undertaken, the risks inherent in the detour, the probable duration of closure and availability and suitability of detour routes need to be considered.~~ ~~The detour and route must be designed including:~~ • ~~pre- approval forms the RCA's whose roads will be used or affected by the detour route.~~ • ~~ensure that TTM equipment for the detour - signs etc. are on site and pre-installed.~~	~~**Actions**~~ ~~When it is necessary to implement the pre-planned detour the STMS must immediately undertake the following:~~ • ~~Notify the RCA and / or the engineer when the detour is to be established.~~ • ~~Drive through the detour in both directions to check that it is stable and safe.~~ • ~~Remove the detour as soon as it practicable and safe to do so and the traffic volumes have reduced, and tailbacks have cleared.~~ • ~~Notify the RCA and / or the engineer when the detour has been disestablished and normal traffic flows have resumed.~~
	Also note the requirements for no interference at an accident scene: In the event of an accident involving serious harm the STMS must ensure that nothing, including TTM equipment, is removed or disturbed and any wreckage article or thing must not be disturbed or interfered with, except to: • save a life of, prevent harm to or relieve the suffering of any person, or • make the site safe or to minimize the risk of a further accident; or • maintain the access of the general public to an essential service or utility, or • prevent serious damage to or serious loss of property, or • follow the direction of a constable acting in his or her duties or act with the permission of an inspector.	
Other contingencies to be identified by the applicant *(i.e., steel plates to quickly cover excavations)*	• **PASSAGE OF EMERGENCY VEHICLES:** STMS will manage these situations using their **judgement** and a **risk-based approach** as the situation presents. • **OTHER:** STMS is **authorized** to make **minor onsite changes** and will ensure these are **documented** on the on-site records before actioned. ***Note:*** • *Anything **beyond a minor change** will require an approved **amendment** to the **TMP*** • Under an **emergency situation** & in the **absence** of **Emergency Services**, the **STMS** has the **authority** to act as they see fit without consent of the RCA. Compliance with **CoPTTM – section A7.8.1** shall be **maintained** as **practicable**.	

RCA consent (e.g., CAR/WAP) and/or RCA contract reference	

Authorizations				
Parking restriction(s) alteration authority	**Will controlled street parking be affected?**	Yes	**Has approval been granted?**	No
	Application for LTO loading zones is to be presented to Wanaka Trustee Board.			
Authorization to work at permanent traffic signal sites	**Will portable traffic signals be used or permanent traffic signals be changed?**	No	**Has approval been granted?**	~~Yes No~~
Road closure authorization(s)	**Will full carriageway closure continue for more than 5 minutes (or other RCA stipulated time)?**	No	**Has approval been granted?**	~~Yes No~~
Bus stop relocation(s) – closure(s)	**Will bus stop(s) be obstructed by the activity?**	No	**Has approval been granted?**	~~Yes No~~
~~**Authorization to use portable traffic signals**~~	~~**Make, model and description/number**~~			
	~~**NZTA compliant?**~~	~~Yes No~~		

EED			
Is an EED applicable?	No	~~**EED attached?**~~	~~Yes No~~

Delay calculations/trial plan to determine potential extent of delays
Works that may significantly impact the traffic flow of the Brownston St carriageway are to be conducted at night.

Public notification plan	
The contractor shall notify business that may be impacted by works in due course.	
Public notification plan attached?	No

On-site monitoring plan	

Attended *(day and/or night)*	*On completion of installation*:
	Site to be Inspected Immediately and 2 Hourly thereafter.
	***Every 2 hours*:**
	Full check of site completed and documented.
	• STMS or delegated TMO.
	• 2 hourly site checks to be recorded on Company On-site Record by STMS.
	Any incidents or accidents of note should be recorded on the specific form.
	• First inspection must take place as soon as equipment has been installed as per the approved TMP. This verifies that all devices are correctly in place, no item has been omitted, all equipment meets its condition requirements, and no conflicting messages exist between permanent/ temporary signs, or other devices.
	• The STMS/TMO will always be present at the attended worksite.
	• STMS/TMO may delegate their authority to an appropriately qualified person to monitor the site if they need to leave the site. This must be documented on the onsite record.
	• The STMS must ensure that constant monitoring of the worksite and a minimum of 2-hourly site checks must be carried out to ensure the site is:
	  • Fit for purpose.
	  • Suitable for the nature and duration of the work.
	  • Installed, set up and used correctly.
	  • All required contractors are wearing required PPE.
	  • When layout changes are made all traffic management devices function properly for the full duration of their installation.
	  • The visibility and effectiveness of all devices and signs is maintained.
	  • Damaged equipment is repaired or replaced, as appropriate, and suitable equipment is available at short notice in case of un-programmed removal, alteration or installation of a closure is necessary.

RCA consent (e.g., CAR/WAP) and/or RCA contract reference	

Unattended *(day and/or night)*	• Unattended sites will be checked **at least once daily**. • For sites that impact the live lane, more frequent checks may be required. *The STMS will assess each TTM instated to decide on appropriate levels of monitoring.*

Method for recording daily site TTM activity *(e.g. CoPTTM on-site record)*

- STMS to **record 2 hourly site checks** on the approved digital On-site Record or COPTTM paper form if required.

Site safety measures

- Company **PPE policy** to be followed and adhered to.
- All **personnel entering** the **worksite** are required to report to the STMS or Person In Charge, (PIC), upon arrival, be briefed on hazards and site specific requirements, and have that briefing recorded.
- **Mandatory – CoPTTM Compliance**.
- **High Visibility Clothing** for all TTM workers, (vest minimum).
- **STMS Vest** – for STMS of event only.
- **Wet Weather Gear** - Recommended in the event of inclement weather.
- **Safety Footwear**, (as deemed appropriate by the TM provider)

Risk Assessed

- Safety Glasses (as required)
- Hard Hat (as required)
- Gloves (as required)
- **Illuminated wand (as required for night works)**

- Installation procedure will be **undertaken on foot**. Between each sign placement the TMO & TTM Workers will **remain inside** the work truck cabin.
- The use of **seatbelts** is mandatory when vehicles are moving.
- Having conducted a situational risk assessment, TMO & TTM Workers may enter the live lanes of traffic with TTM equipment on LV roads or during times of low volume traffic on L1 roads when under the supervision of a spotter and in accordance with company polices.
- A **vehicle** with flashing amber beacon must be used to **create separation** between personnel installing TTM equipment in the live lane of a **State Highway** and traffic during normal flow conditions.

Temporary safety barrier system	**Will a temporary safety barrier system be used at this worksite?**	No	~~**If yes, has the temporary safety barrier system been designed by an installation designer and independently reviewed as being fit for purpose?**~~	~~Yes No~~
	~~**Statement from temporary safety barrier installation designer attached**~~		~~Attached~~ ~~Not attached~~	

Other information

In the event of an on-site incident, STMS/TMO must manage the **imminent hazards** and **associated risks** then **alert** the **RCA** and their **operations team** as soon as practicable.
Details captured by the STMS/TMO will be integral to the **incident report**, completed by the **Traffic Management Contractor** and forwarded to the **RCA** and **NZTA** *(copttm.incidents@nzta.govt.nz)* within **24hrs**.
This report must include:

- The **approved TMP**, referencing the **specific stage** or TMD if relevant.
- **Photos** of the site.
- Completed CoPTTM **incident report form**.
- **Crash diagram**.
- **Onsite records.**

Site specific layout diagrams

Number	Title
1	**Install Temporary Pedestrian Crossing**
2	**Site works with Pedestrian Management**
3	**MTC_Stop/Stop,** (Trucks X-ING).
4	**Road Closure with detour route**
5	**MTC_Lane closure with alternate flow**

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Contact details					
	Name	**24/7 contact number**	**CoPTTM ID**	**Qualification**	**Expiry date**
Principal	CDL/Building WANAKA **Patrick Gallagher:** Project Manager	0277033757			
TMC	QUEENSTOWN LAKES DISTRICT COUNCIL **Tony Francis**	021849112		LV1 STMS	
Engineers' representative					
Contractor	CDL/Building WANAKA **Patrick Gallagher:** Project Manager	0277033757			
STMS	TMSCO TRAFFIC MANAGEMENT SERVICES CENTRAL OTAGO **Taane Royce:** TTM Manager STMS for the site will be recorded on the daily check forms.	021720162	100648	LV1 STMS	13/12/22
TMO					
Others as required					

TMP preparation						
Preparation	**Taane Royce**	17/09/21		100648	TTMP LV1 (NP)	13/12/22
	Name (STMS qualified)	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*

This TMP meets CoPTTM requirements	**Number of diagrams attached**	**5**

TMP returned for correction *(if required)*						
	Name	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*

Engineer/TMC to complete following section when approval or acceptance required						
Temporary safety barrier system	**The attached temporary road safety barrier design has been independently reviewed as being fit for purpose**				Yes No Not required	
TMP Approved						
	Name	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*
Acceptance by TMC *(only required if TMP approved by engineer)*						
	Name	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*

RCA consent (e.g., CAR/WAP) and/or RCA contract reference	

Qualifier for engineer or TMC approval
Approval of this TMP authorizes the use of any regulatory signs included in the TMP or attached traffic management diagrams. This TMP is approved on the following basis: 1. To the best of the approving engineer's/TMC's judgment this TMP conforms to the requirements of CoPTTM. 2. This plan is approved on the basis that the activity, the location and the road environment have been correctly represented by the applicant. Any inaccuracy in the portrayal of this information is the responsibility of the applicant. 3. The TMP provides so far as is reasonably practicable, a safe and fit for purpose TTM system. 4. The STMS for the activity is reminded that it is the STMS's duty to postpone, cancel or modify operations due to the adverse traffic, weather or other conditions that affect the safety of this site.

Notification to TMC prior to occupying worksite/Notification completed			
Type of notification to TMC required		**Notification completed**	Date Time

TMP or generic plan reference	

ON-SITE RECORD On-site record must be retained with TMP for 12 months.			Today's date	
Location details	Road names(s):	House number/RPs:	Suburb:	

Working space

Person responsible for working space		
	Name	*Signature*

Where the STMS/TC is responsible for both the working space and TTM they sign above and in the appropriate TTM box below

TTM

STMS in charge of TTM					
	Name	*TTM ID Number*	*Warrant expiry date*	*Signature*	*Time*
Worksite handover accepted by replacement STMS					
	Name	*ID Number*	*Warrant expiry date*	*Signature*	*Time*
	Tick to confirm handover briefing completed				

Delegation

Worksite control accepted by TC/STMS-NP					
	Name	*ID Number*	*Warrant expiry date*	*Signature*	*Time*
	Tick to confirm briefing completed				

Temporary speed limit

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

TMP or generic plan reference	

Worksite monitoring

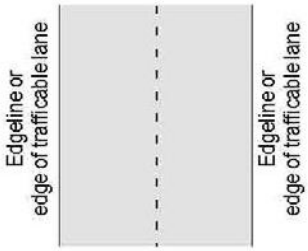
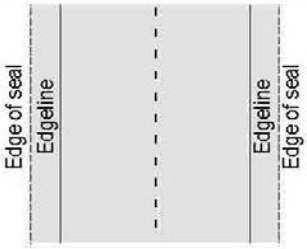
TTM to be monitored and 2 hourly inspections documented below.

Items to be inspected	TTM set-up	2 hourly check	2 hourly check	2 hourly check	2 hourly check	2 hourly check	TTM removal
High-visibility garment worn by all?							
Signs positioned as per TMP?							
Conflicting signs covered?							
Correct delineation as per TMP?							
Lane widths appropriate?							
Appropriate positive TTM used?							
Footpath standards met?							
Cycle lane standards met?							
Traffic flows OK?							
Adequate property access?							
Barrier deflection area is clear?							
Add others as required							
Time inspection completed:							
Signature:							

Comments:

Time	Adjustment made and reason for change

LEGEND FOR DIAGRAMS

Working space 	Mandatory: • Cones • Signs 
Safety zones 	Optional: • Cones • Signs 
Edgeline or edge of trafficable lane (indicated by solid black line) 	Hazard area 
	Manhole 
Edge of seal (indicated by dotted line next to solid black line) 	Barrier, safety fence or cone bars
	Ramp 
If the STMS has been delegated self-approval of TMPs by the RCA, this TMD must be referred to the TMC for approval 	

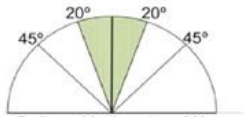
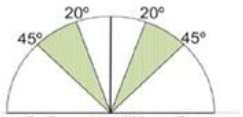
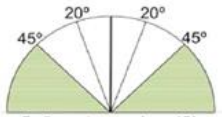
TMP or generic plan reference	

TEMPORARY SPEED LIMIT (TSL) DECISION MATRIX WORKSHEET

INSTRUCTIONS
Select the appropriate road condition description for each of the four factors, and in the right hand circle list the chosen TSL for that road condition. Transfer lowest TSL to the bottom circle.

Appendix B

Possible Temporary Speed Limit

	EXCELLENT (110, 100, 90)	AVERAGE (80, 70)	BELOW AVERAGE (60, 50)	POOR (40, 30, 20)
1. Minimum Lane Width	3.5m	3.25m	3.00m	2.75m
2. Pavement / Surface Condition	The shoulder and lane is clear of loose or greasy material and the traveled way is smooth	The road is close to normal condition except for a few minor defects (eg small pot holes or a few pieces of loose aggregate) **70km/h** where new seal has been swept but not marked	Defects and / or loose material on the lane (eg unattended reseals) **50km/h** for protection of a new seal	There are major defects and / or significant loose material on the lane (eg recently milled surface , large stones, steel plates)
3. Visibility and Alignment	There is greater than 140m visibility to the first cone in taper, **and** the worksite has not imposed a change in alignment	There is less than 140m visibility to the first cone in taper, **or** vehicles are deflected by 20 degrees or less from the original direction of travel  Deflected by less than 20°	There is less than 60m visibility to the first cone in taper, **or** vehicles are deflected by 20-45 degrees from the original direction of travel  Deflected by 20° to 45°	There is less than 30m visibility to the first cone in taper, **or** vehicles are deflected by more than 45 degrees from the original direction of travel  Deflected more than 45°
4. Site Clutter	Low site clutter, clear vehicle lanes, cycle lanes and footpaths	Some site clutter either plant or materials, vehicle lanes, cycle lanes and footpaths are lightly trafficked	Considerable site clutter requires additional management to guide vehicles though the site. Some queues of road users	Has numerous driver distractions including construction traffic. Cycle lanes or footpaths are closed. **30km/h** for portable traffic signals, MTC operations or where traffic has to traverse the actual active working space (either in a delineated single lane or where traffic is not separated from the working space)

Is the lowest speed 80km/h or less and at least 10km/h below the permanent speed?

- Yes → Use this Temporary Speed Limit
- No → No Temporary Speed Limit Required

COMBINED LEVEL LV & LEVEL 1 LAYOUT DISTANCES TABLE

Permanent speed limit or RCA-designated operating speed (km/h)		≤50	60	70	80	90	100
Traffic signs							
A	Sign visibility distance (m)	50	60	70	80	90	100
B	Warning distance (m)	50 or 30*	80	105	120	135	150
C	Sign spacing (m)	25 or 15*	40	50	60	70	75
Safety zones							
D	Longitudinal (m)+	10 or 5*	15	30	45	55	60
E	Lateral (m)+	1	1	1	1	1	1
	Lateral behind barrier installation	As specified by the Installation Designer					
Tapers							
G	Taper length (m)#	30	50	70	80	90	100
G	LV roads taper length (m)#	25	30	35	40	45	50
K	Distance between tapers (m)	40	50	70	80	90	100
Delineation devices							
Cone spacing in taper (m)		2.5	2.5	5	5	5	5
Cone spacing: Working space (m)##		5	5	10	10	10	10

* Larger minimum distances apply on all state highways and also on all multi-lane roads. The smaller minimum distances may be applied on other roads to accommodate road environment constraints.

\+ On LV roads the longitudinal and lateral safety zones may be reduced, or eliminated, in order to retain a single lane width. Positive traffic management and an appropriate TSL must be used.

\# 1. On non-state highways with speeds 50km/h or less, a **10m taper** (with cones at 1m centres) may be used when there are road environment constraints (eg intersections and commercial accesses).

2. On all roads where the shoulder width is less than 2.5m and the activity does not affect the live lane, a **10m shoulder taper** is permitted (with at least 5 cones at no greater than 2.5m centres).

3. A **taper of 30m** (with cones at 2.5m centres) **must** be used where manual traffic control (stop/go), portable traffic signals or priority give way are employed.

\## LV roads: double the cone spacing alongside working space (eg 5 = 10, 10 = 20).

Lane widths (based on permanent speed or TSL if applied)

Speed (km/h)		30	40	50	60	70	80	90	100
F	Lane width (m)	2.75	2.75	3.0	3.0	3.25	3.25	3.5	3.5

Except for delineation device spacings, which are maximum values, the distances specified in the above tables are minimum values.

LV/low-risk roads (less than 250vpd - less than 20 vehicles per hour)

When on the shoulder:

- *If CSD **not** available*: Advance warning sign and base to be installed with sign visibility distance and warning distance in place
- *If CSD available:* Advance warning sign may be attached to the rear of a work vehicle which has an amber flashing beacon(s) and is visible to approaching road users from the rear.

When the activity encroaches onto a live lane consider alternating flow controls.

If the above requirements cannot be achieved, the operation must be modified to comply with the appropriate level LV or level 1 requirements.

MOBILE OPERATION FOR TTM INSTALLATION
- Level LV & Level 1 Roads
CSD to work vehicle for Advance Warning Installation

Notes

1. Static Advanced Warning T1A Road Works & TG2 Works End Signs will be installed before remaining signs are installed at a location where the work vehicle is able to pull off the live lane (Zone B) and CSD is available Ref: CoPTTM D3.3.2

2. Where Work vehicle can pull fully off the live lane (Zone B), TTM signage to be installed 10m ahead of vehicle (beyond roll ahead zone)

3. Where Work vehicle is located on the live lane (Zone C), due to insufficient shoulder, signage will be installed alongside the vehicle.

4. TTM Installers may not carry TTM equipment across any State Highway Road.

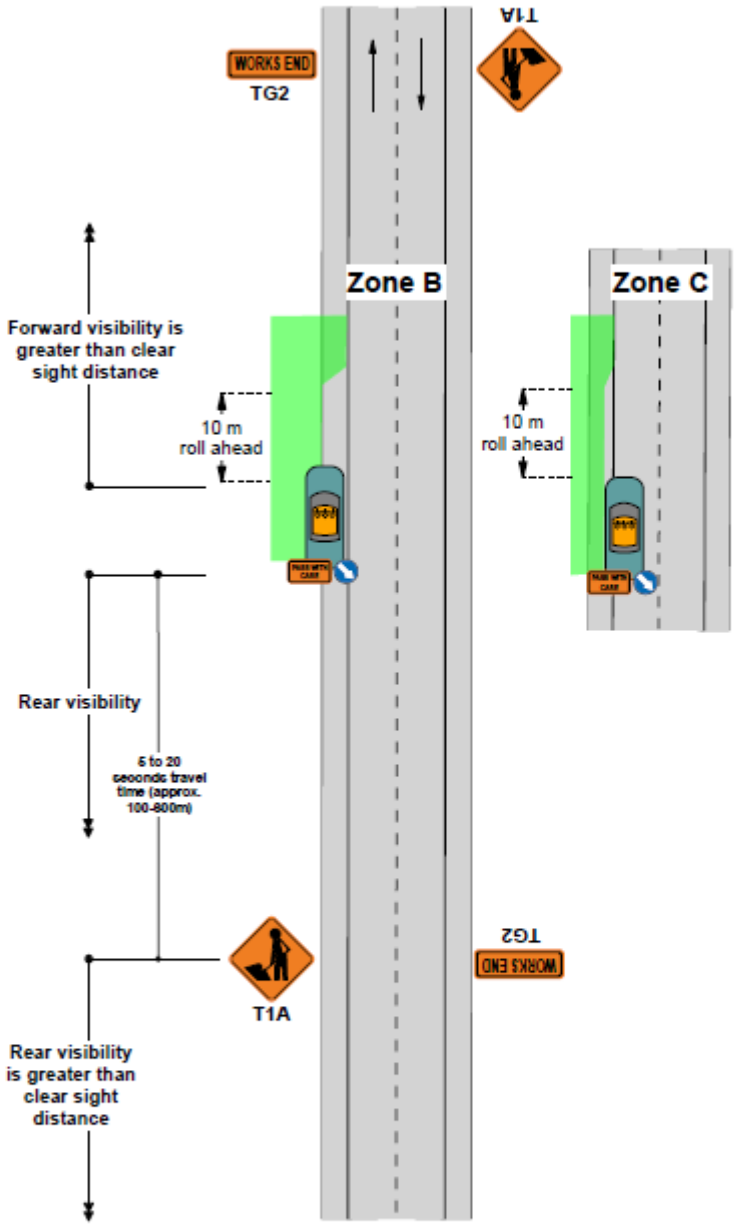
5. A single installation vehicle fitted with amber flashing beacons and a Pass With Care sign and RD6 Arrow on the rear.

6. Signs to be removed from the non-traffic side of the vehicle.

D3.3.2 TAIL PILOT REQUIREMENTS:
A tail pilot vehicle is not required on level LV and level 1 roads where the permanent speed limit is greater than 65km/h and where the work vehicle(s) is:
- within 5m of the edgeline,
- is not on the live lane, and
- CSD to the work vehicle(s) is available at all times.

In these situations, the appropriate road works signs must be erected to warn road users of the mobile operation on the road ahead. These signs must be erected at spacings no greater than 4km. A TG2 WORKS END sign must be erected at each end of the mobile operation worksite.

CLEAR SIGHT DISTANCE:
Either: 3 x permanent speed limit
Or: 75m on L1 non-SH roads with permanent speed limit <55km/h



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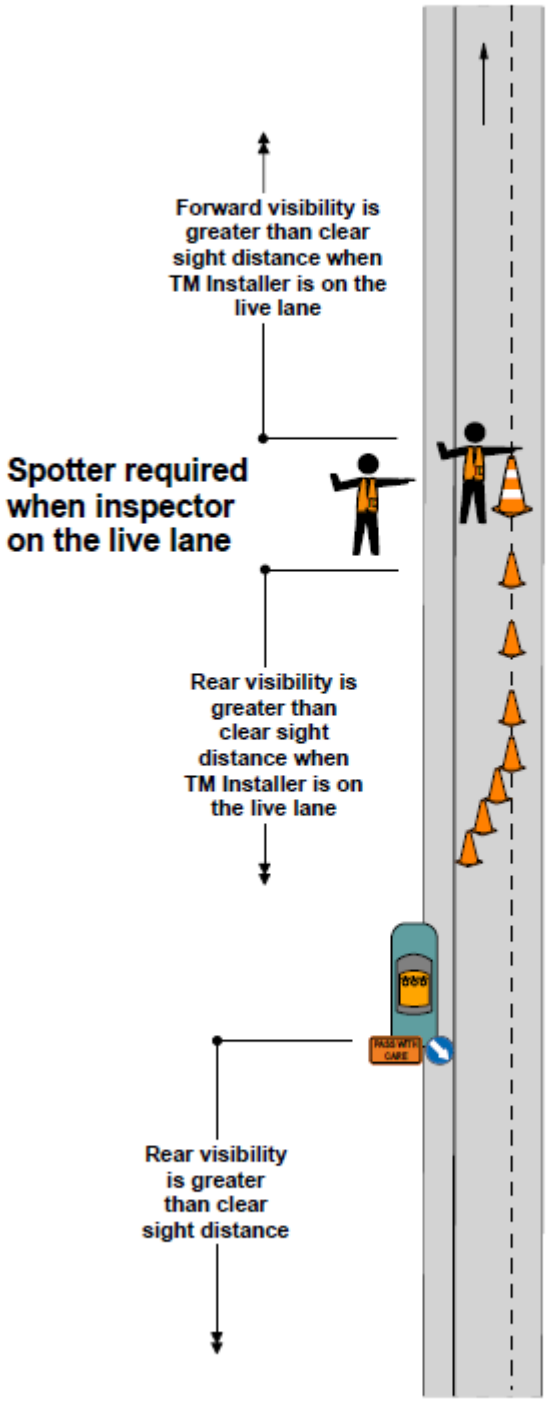
INSPECTION ACTIVITY FOR TTM INSTALLATION
- Level LV & Level 1 Roads
Installing tapers and delineation devices on the live lane

Notes

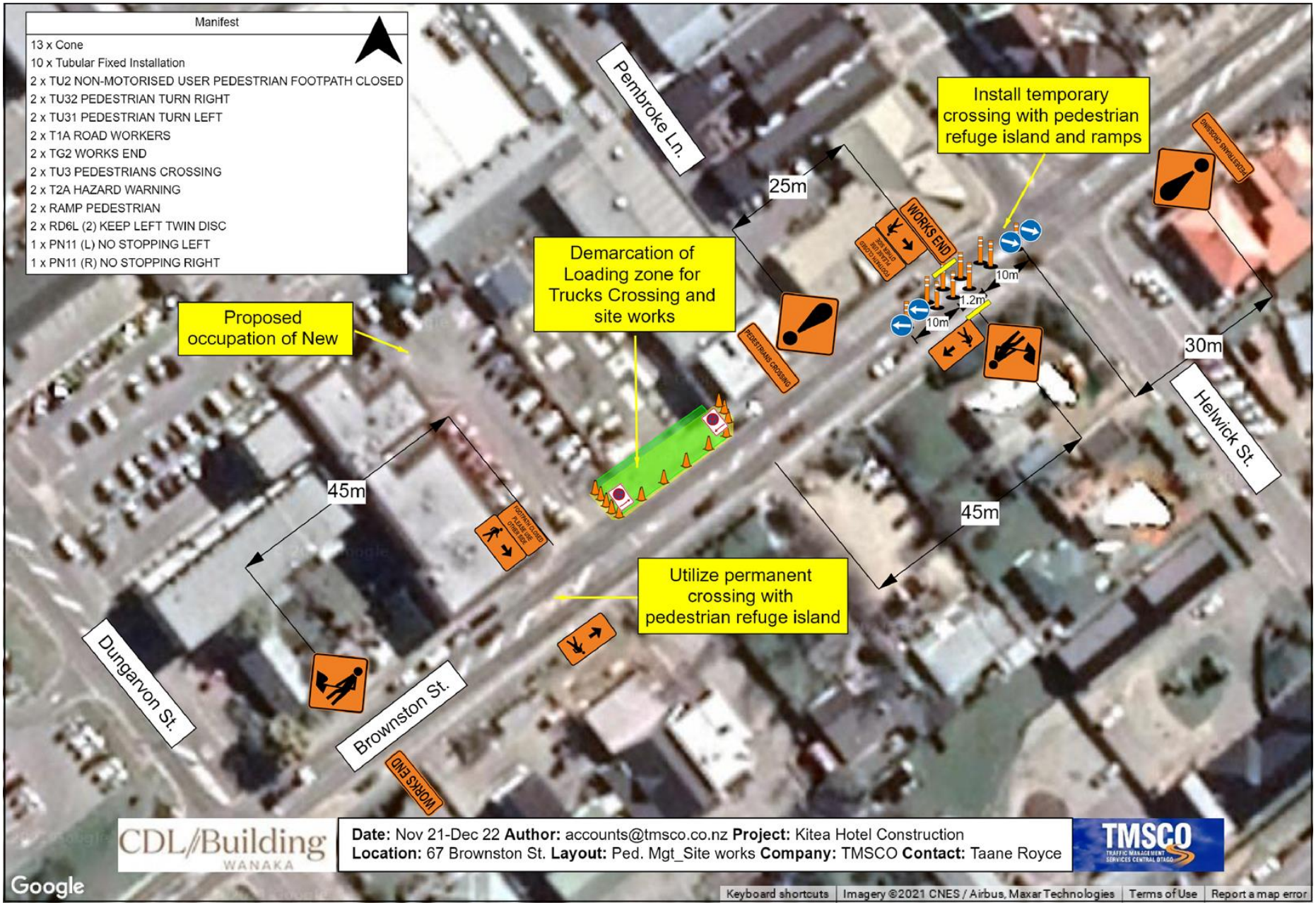
1. TM Installers must move from live lanes to avoid traffic. They must not expect traffic to drive slowly or drive around them
2. On level LV and level 1 roads, a person completing an TM installation cannot be on a live lane for more than 5 minutes
3. All TM installations on the live lane of level 1 roads require a spotter.
4. There must be CSD to the TM Installer when on the live lane. If this cannot be achieved, a spotter must be placed in a position where CSD can be attained and verbal instructions be given to the inspector. If this is not possible, a static or mobile operation is required.
5. A spotter is not required for TM Installation on level LV roads or working off the live lane of a level 1 road
6. Where an unaccompanied TM Installer is not able to maintain adequate attention (eg due to work tasks or poor visibility), a spotter will be required or another type of traffic management operation used
7. For TM Installation activities that are carried out by a TC on level LV and level 1 roads the STMS must be immediately contactable but does not have to be within 30 minutes travel time of the worksite
8. An unaccompanied TM Installer may walk across a level LV or level 1 road

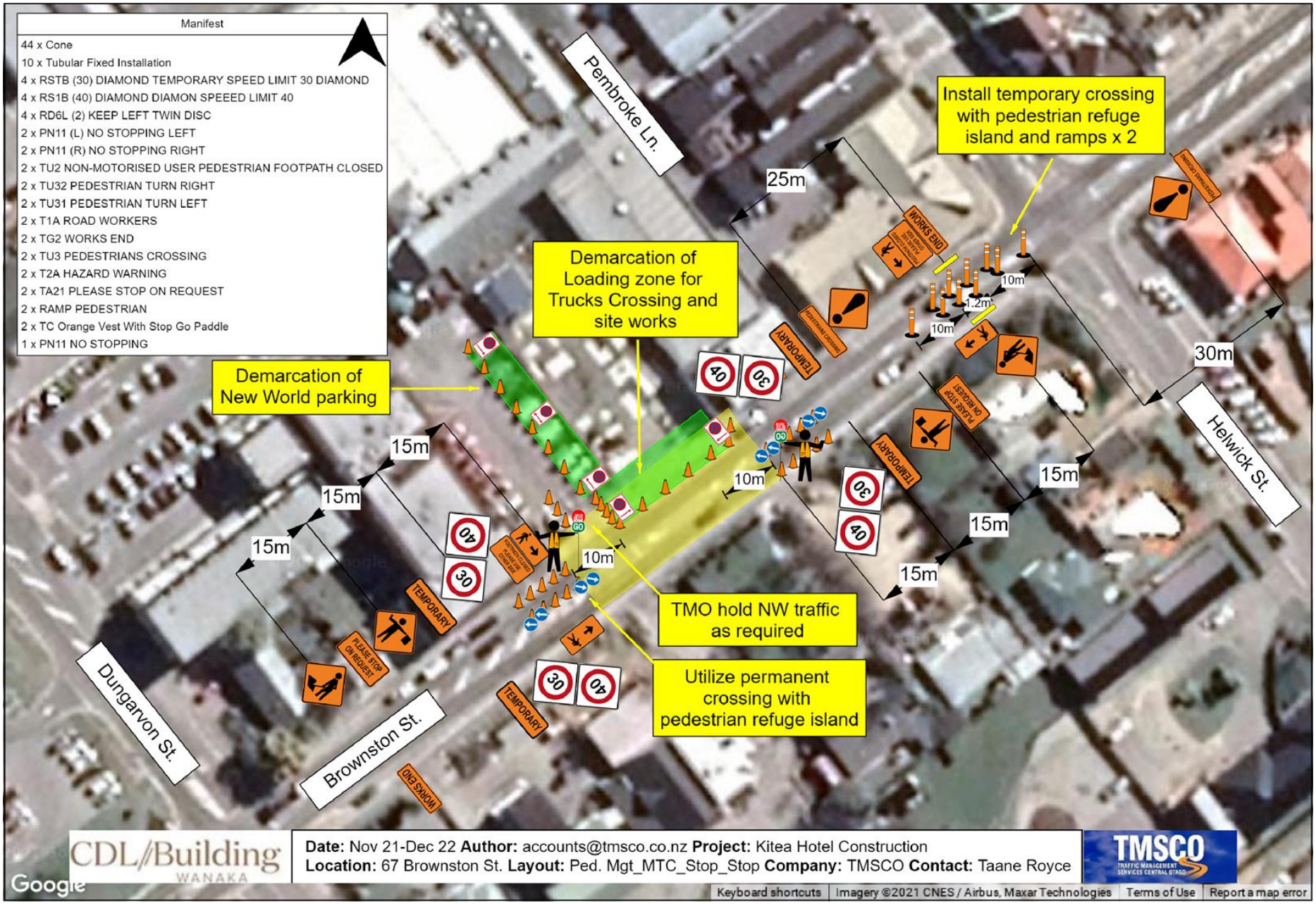
CLEAR SIGHT DISTANCE:
Either: 3 x permanent speed limit
Or: 75m on L1 non-SH roads with permanent speed limit <55km/h



TMP or generic plan reference	

TMP or generic plan reference	




Manifest
44 x Cone
10 x Tubular Fixed Installation
4 x RSTB (30) DIAMOND TEMPORARY SPEED LIMIT 30 DIAMOND
4 x RS1B (40) DIAMOND DIAMON SPEEED LIMIT 40
4 x RD6L (2) KEEP LEFT TWIN DISC
2 x PN11 (L) NO STOPPING LEFT
2 x PN11 (R) NO STOPPING RIGHT
2 x TU2 NON-MOTORISED USER PEDESTRIAN FOOTPATH CLOSED
2 x TU32 PEDESTRIAN TURN RIGHT
2 x TU31 PEDESTRIAN TURN LEFT
2 x T1A ROAD WORKERS
2 x TG2 WORKS END
2 x TU3 PEDESTRIANS CROSSING
2 x T2A HAZARD WARNING
2 x TA21 PLEASE STOP ON REQUEST
2 x RAMP PEDESTRIAN
2 x TC Orange Vest With Stop Go Paddle
1 x PN11 NO STOPPING
Pembroke Ln.
Install temporary crossing with pedestrian refuge island and ramps x 2
Demarcation of Loading zone for Trucks Crossing and site works
Demarcation of New World parking
TMO hold NW traffic as required
Utilize permanent crossing with pedestrian refuge island
Dungarvon St.
Brownston St.
Helwick St.
25m
30m
15m
10m
1.2m
Date: Nov 21-Dec 22 Author: accounts@tmsco.co.nz Project: Kitea Hotel Construction
Location: 67 Brownston St. Layout: Ped. Mgt_MTC_Stop_Stop Company: TMSCO Contact: Taane Royce
CDL//Building WANAKA
TMSCO
Google
Keyboard shortcuts
Imagery ©2021 CNES / Airbus, Maxar Technologies
Terms of Use
Report a map error


Manifest
38 x Cone
10 x Tubular Fixed Installation
6 x TDA1 DETOUR SQUARE LEFT
4 x PN11 (L) NO STOPPING LEFT
4 x PN11 (R) NO STOPPING RIGHT
4 x TC Orange Vest
4 x T1A ROAD WORKERS
4 x TD5 DETOUR ENDS
4 x TD1 ROAD CLOSED AHEAD
4 x TD3A DETOUR AHEAD FOLLOW SQUARE
2 x TU2 NON-MOTORISED USER PEDESTRIAN FOOTPATH CLOSED
2 x TU31 PEDESTRIAN TURN LEFT
2 x RAMP PEDESTRIAN
2 x T135 ROAD WORKERS ON SIDE ROAD
2 x RD3 ROAD CLOSED
2 x TDA6 DETOUR SQUARE AHEAD
2 x T135 ON SIDE ROAD
1 x TU32 PEDESTRIAN TURN RIGHT
1 x PN11 NO STOPPING
Dunmore St.
Pembroke Ln.
Install temporary crossing with pedestrian refuge island and ramps x 2
Dungarvon St.
No parking signage in advance of Road
TMO in position to monitor Road Closure and pedestrians. Facilitate departure of delivery trucks from Pembroke Ln. as required.
Helwick St.
Brownston St.
15m
30m
CDL/Building WANAKA
Date: Nov 21-Dec 22 Author: accounts@tmsco.co.nz Project: Kitea Hotel Construction
Location: 67 Brownston St. Layout: Ped. Mgt_Road Closure Company: TMSCO Contact: Taane Royce
TMSCO
Google

TMP or generic plan reference