






TMP Title: Downer - Mountain Road, Lepperton, Taranaki

ATTACHED IS THE PROFORMA WHICH IS SUMMARISED BELOW:

Description Summary:	The Contractor will be forming a site construction access off Manutahi Road.	
Work Space Address:	Mountain Road, Bell Block, Lepperton, Taranaki, New Zealand - TTM from 03A-0000-B/4865 to 03A-0000-B/4565	
Workspace Orientation:	Berm, Shoulder	
Active Closure Type(s):	Manually Controlled Alternating Flow, Site Access	
Unattended Closure(s):	Site Access	
Night time Closure(s):	No Night Time Closure	
Speed:	Permanent Speed: 100km/h	TSL Requested: Attended: 30km/h Unattended: N/A
Road Level:	Level 1	
Approval requested from	01/11/2019 to 01/02/2020	Scheduled Start: 01/11/2019
Work Times:	7:00 to 18:00	Expected Duration:
TMP Applicant:		Bounty Senadeera 027 554 8404 bounty.senadeera@downer.co.nz
Contractor:1		Project Manager: Tim Haylock +64226572716 Tim.Haylock@downer.co.nz
On Site Traffic Management:		Site Contact: Braden Brooks 027 536 4883 braden.brooks@trafficsafe.co.nz
TMC:1		Neville Boag 0274710823 neville.boag@wspopus.co.nz
TMC:2		Greig Bosley 0275848358 greig.bosley@npdc.govt.nz

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New Plymouth District Council



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RCA consent (eg CAR/WAP) and/or RCA contract reference	
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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 practice for temporary traffic management (COPTTM), section E, appendix A for a guide on how to complete each field.

TMP Reference: 230719002

Organisations

Contractor (Working Space):  Project Manager: Tim Haylock +64226572716 Tim.Haylock@downer.co.nz	Principal (Client):  Dustin Courage 0275422547 Dustin.Courage@npdc.govt.nz
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Contractor (TTM):  Braden Brooks 027 536 4883 braden.brooks@trafficsafe.co.nz	RCA:  Neville Boag 0274710823 neville.boag@wspopus.co.nz
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RCA:  Greig Bosley 0275848358 greig.bosley@npdc.govt.nz	
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	Road names and suburb	House no./RPs <i>(From and to)</i>	Road level	Permanent speed	AADT
Location details and road characteristics	Mountain Road, Bell Block, Lepperton, Taranaki, New Zealand	03A-0000-B/4865 - 03A-0000-B/4565	Level 1	100km/h	3221
	<i>Manutahi Road, Lepperton</i>	<i>MANUTAHU ROAD/4090 - MANUTAHU ROAD/4730</i>	Level 1	100km/h	1400

Traffic details (main route)	AADT = 3221	Peak hourly flows = 322
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Description of work activity

The Contractor will be forming a site construction access off Manutahi Road. They will have a digger there to remove the topsoil, and a truck with imported material to backfill with. This will take less than a week.

New water reservoir to be constructed on the site using a combination of precast and in-situ concrete pipework, services installation and ancillary works.

Planned work programme

Start date	01/Nov/2019	Time	7:00	End date	01/Feb/2020	Time	18:00
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Consider significant stages, for example:	Manual Traffic Control will be installed to carry out their planned work as per workscope. Please see design TMD 1. Site Access will be installed to be used for construction site access. Please see design TMD 2.
<ul style="list-style-type: none"> road closures detours no activity periods. 	

Alternative dates if activity delayed	<ul style="list-style-type: none"> A time contingency within the valid date range has been allocated to allow for delays
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Road aspects affected (*delete either Yes or No to show which aspects are affected*)

Pedestrians affected?	No	Property access affected?	Yes	Traffic lanes affected?	Yes
Cyclists affected?	No	Restricted parking affected?	No	Delays or queuing likely?	Yes

Proposed traffic management methods

	On arrival on site and following the safety and hazard briefing the STMS will instruct the crew to install the TTM equipment following the approved site diagram and in the following order: a. The first sign erected must be the advance warning sign.
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<p>Installation (includes parking of plant and materials storage)</p>	<p>b. Remaining signs are placed in order from the advance warning sign until the works end sign is reached. The vehicle then makes a loop on a single direction carriageway or simply turns around on a bidirectional carriageway to make the next run. This process is continued until the sign network is complete.</p> <p>c. Tapers and delineation devices must only be placed once all signs have been installed.</p> <p>d. Before any construction equipment or materials are brought onto the worksite a drive through check of the worksite must be made in all directions including all side roads. This check must confirm that the worksite is safe & to the minimum standard shown in the TMP and that:</p> <ul style="list-style-type: none"> - the restriction to traffic flow is reasonable - the signs and delineation devices give clear messages to road users, and - the signs and delineation devices are securely erected and will remain in their correct position under the expected traffic volumes and weather conditions. <p>All plant and material will either be within the working space for daily use or delivered to site on an 'as required' basis.</p> <p>If MTC site required, once the signage has been placed the manual traffic controllers to be placed to assist with controlling traffic flow as the remainder of the delineation is placed around the working space.</p> <p>Mobile Operation to be used to install and remove all TTM Equipment.</p> <p>- Refer to Design Number M4 and M5.</p>		
<p>Attended (day)</p>	<p>As the site will be attended at all times when equipment is on the carriageway the STMS or delegated TC will monitor the TTM regularly and maintain or make changes as necessary for the ongoing safety of the site. All site checks and or changes to be recorded on the "on site record" (attached).</p> <p>The time of installation and placement of the TSL signage is to be documented in the 'on site record'.</p> <p>The STMS or delegated TC will also monitor the MTC operation for competence, timings of traffic flow through the site and specifically the safety of cyclists passing through the controls.</p> <p>The MTC operators will maintain contact with each other and the operators within the closure at all times in case of emergency and specific site traffic or plant requirements for movement through and into the closure.</p>		
<p>Attended (night)</p>	<p>Night works are not planned for this activity.</p>		
<p>Unattended (day)</p>	<p>The STMS/TC in charge of setting the unattended site must ensure that all open trenches/excavations are fenced, plated or backfilled, and that plant, equipment or materials are located at least 5m from the live lane wherever possible. Before leaving the site the STMS/TC must:</p> <ul style="list-style-type: none"> - Reduce the size of the worksite as much as possible - Sweep any loose material from the sealed road surface - Check that all signs are ballasted and positioned correctly - Check that all cones are clean and positioned correctly 		
<p>Unattended (night)</p>	<p>The STMS/TC in charge of setting the unattended site must ensure that all open trenches/excavations are fenced, plated or backfilled, and that plant, equipment or materials are located at least 5m from the live lane wherever possible. Before leaving the site the STMS/TC must:</p> <ul style="list-style-type: none"> - Reduce the size of the worksite as much as possible - Sweep any loose material from the sealed road surface - Check that all signs are ballasted and positioned correctly - Check that all cones are clean and positioned correctly 		
<p>Detour route</p>	<p>A detour will not be required for this activity</p> <table border="1" data-bbox="272 1570 1554 1626"> <tr> <td data-bbox="272 1570 1458 1626">Does detour route go into another RCA's roading network?</td> <td data-bbox="1463 1570 1554 1626">No</td> </tr> </table> <p>Note: Confirmation of acceptance from affected RCA must be submitted prior to occupying the site.</p>	Does detour route go into another RCA's roading network?	No
Does detour route go into another RCA's roading network?	No		
<p>Removal</p>	<p>The removal of TTM measures must be in the reverse order of establishment, i.e. reverse order for removal as per (c), (b), (a). The traffic truck will be used for the removal and the amber flashing beacon will be used at all times.</p> <p>The last sign of removal will be the advance warning.</p> <p>The STMS or delegated TC to make a final check and record of the cleared site before leaving at the end of the day.</p> <p>The MTC paddle operators to assist with controlling the flow of traffic when equipment is removed from the carriageway. The time of removal of the TSL signage is to be documented in the 'on site record'.</p> <p>Mobile Operation to be used to install and remove all TTM Equipment.</p> <p>- Refer to Design Number M4 and M5.</p>		
<p>Proposed TSLs (see TSL decision matrix for guidance)</p>			

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	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	Manutahi Road, Lepperton, New Zealand : A temporary maximum speed limit of 30km/h is hereby fixed for motor vehicles travelling over the length of approximately 280 m situated between MANUTAHU ROAD/4300 House no/RP and MANUTAHU ROAD/4580 House no/RP on Manutahi Road, Lepperton, New Zealand	7:00 - 18:00	01 November, 2019 to 01 February, 2020	See design TMD 1
Unattended day/night	Not Required	Not Required	Not Required	Not Required
TSL Duration	Will the TSL be required for longer than twelve months? <i>If yes, attach the completed checklist from section I-18: Guidance on TMP Monitoring Processes for TSLs to this TMP</i>			No
Positive traffic management measures				
Side friction using cones Cones placed down the centre of the road providing side friction from the TSL to derestriction 2 x cones placed at the end of longitudinal to define safety zone				
Contingency plans				
Generic contingencies for: <ul style="list-style-type: none"> • major incidents • incidents • pre planned detours. Remove any options which do not apply to your job	Major Incident A major incidents is described as: <ul style="list-style-type: none"> • 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/ in charge person must immediately conduct the following: <ul style="list-style-type: none"> • 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. 		
	Incident <ul style="list-style-type: none"> • 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/in charge person must immediately conduct the following: <ul style="list-style-type: none"> • 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 to do so • re-establish TTM and traffic movements when it is safe to do so and when traffic volumes have reduced. 		
	Detour	Actions		
<p>Note also the requirements for no interference at an accident scene:</p> <p>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:</p> <ul style="list-style-type: none"> • save a life of, prevent harm to or relieve the suffering of any person, or • make the site safe or to minimise 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>(i.e. steel plates to quickly cover excavations)</i>	On site TTM to be used to protect victim(s), protect the accident scene, give access to emergency services if required or control traffic flow in case of unforeseen circumstance affecting the carriageway.
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Authorisations

Parking restriction(s) alteration authority	Will controlled street parking be affected?	No	Has approval been granted?	
	Not Required			

Authorisation to work at permanent traffic signal sites	Will portable traffic signals be used or permanent traffic signals be changed?	No	Has approval been granted?	
	Not Required			

Road closure authorisation(s)	Will full carriageway closure continue for more than 5 minutes (or other RCA stipulated time)?	No	Has approval been granted?	
	Not Required			

Bus stop relocation(s) – closure(s)	Will bus stop(s) be obstructed by the activity?	No	Has approval been granted?	
	Not Required			

Authorisation to use portable traffic signals	Make, model and description/number	Not Required		
	NZTA compliant?			

EED

Is an EED applicable?	No	EED attached?	Not Required
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Delay calculations/trial plan to determine potential extent of delays

AADT= 3221 Divide by 2 lanes = 1610 divide by 8 hours to estimate peak flow = 322 /hr. If we apply a calculation test of 5 minute delays resulting in queue lengths of up to 1 vehicles (est. 10m), and subsequent delay times of up to 0 minutes:seconds. Therefore queue lengths are maintainable and delays will be less than 5 minutes.

Public notification plan

Public notification plan attached?	No
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On-site monitoring plan

Attended <i>(day and/or night)</i>	The attended site shall be monitored (self audited) by the STMS or delegated TC a minimum of 2 hourly, which will be documented on the attached form
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Unattended <i>(day and/or night)</i>	Where a closure is required to be in place for no activity periods the STMS will visit the site(s) once every 24 hours to check the equipment remains in place as per the approved closure.
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Method for recording daily site TTM activity *(eg CoPTTM on-site record)*

As per CoPTTM on site record

Site safety measures

All persons traveling on the back of a moving Traffic Control Truck MUST wear full harnesses attached to sliding lanyards
 High Viz uniform must be worn by Traffic Safe people at all times.
 Hard hats and safety eye wear are to be worn whenever outside of a vehicle
 2.5KG Fire Extinguishers and First Aid Kits are to be stowed in the Traffic Control Truck available for all people at all times
 Sand bags from the Traffic Control Truck shall be used to contain toxic spills if needed.

Other information	Greig Bosley STMS Number 48770 New Plymouth District Council
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Site specific layout diagrams

Number	Title
M4 - L1 - Mobile Operation - Within Edgeline - 65km over.pdf	
M5 - L1 - Mobile Operation - In Live Lane - 65km over.pdf	
TMD 1 - MTC.pdf	
TMD 2 - Site Access.pdf	

Contact details

	Name	24/7 contact number	CoPTTM ID	Qualification	Expiry date
Principal	New Plymouth District Council, Dustin Courage	0275422547			
TMC	NZTA Taranaki, Neville Boag	0274710823	47422	STMS L1	16/11/2021
	New Plymouth District Council, Greig Bosley	0275848358			
Contractor	Downer, Tim Haylock	+64226572716			
STMS	Traffic Safe NZ Ltd, Braden Brooks	027 536 4883	104868	L1 STMS	17/08/2020
	Traffic Safe NZ Ltd, Badinlee Munro-Smith	027 536 4883	100061	L1 STMS	26/10/2021
	Traffic Safe NZ Ltd, David Antill	027 541 6291	83643	L1 STMS	24/05/2021
	Traffic Safe NZ Ltd, Eric Ayala	027 226 3787	115765	L1 STMS	22/06/2021
	Traffic Safe NZ Ltd, Grant Morrison	027 202 5376	114367	L1 STMS	16/04/2021
	Traffic Safe NZ Ltd, James Bovaird	027 240 0913	122671	L1 STMS	21/03/2022
	Traffic Safe NZ Ltd, James mckoy	0273495916			
	Traffic Safe NZ Ltd, James McKoy		119302	L1 STMS	09/11/2021
	Traffic Safe NZ Ltd, Jessica Horton	027 300 5935	123184	L1 STMS	21/03/2022
	Traffic Safe NZ Ltd, John Laurie	027 303 2674	95800	STMS L1	16/05/2022
	Traffic Safe NZ Ltd, Kaleb Hitchcock	022 171 4946	78480	L1 STMS	04/07/2022
	Traffic Safe NZ Ltd, Phillippa Spring		75973	L1 STMS	14/06/2020
	Traffic Safe NZ Ltd, Richard (Rjay) Jansen	027 254 8946	86793	L1 STMS	30/11/2020
	Traffic Safe NZ Ltd, Ricky Penhall	027 212 2576	120637	L1 STMS	31/01/2022
	Traffic Safe NZ Ltd, Steven Beldham		102897	L1 STMS	29/06/2020
TC					

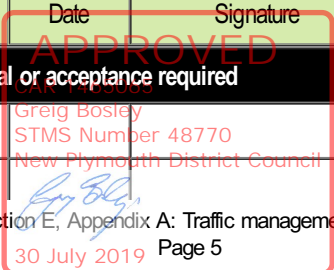
TMP Preparation

Preparation	Bounty Senadeera	30/07/2019		105956	STMS L1	21/03/2022
	Name (STMS qualified)	Date	Signature	ID no.	Qualification	Expiry date

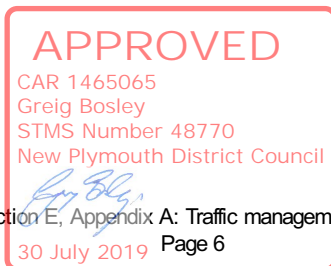
This TMP meets CoPTTM requirements	Number of diagrams attached	4
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TMP returned for correction (if required)	Name	Date	Signature	ID no.	Qualification	Expiry date

Engineer/TMC to complete following section when approval or acceptance required

Approved by TMC/engineer	Neville Boag				
	Greig Bosley				

<i>(delete one)</i>	Name	Date	Signature	ID no.	Qualification	Expiry date
Acceptance by TMC <i>(only required if TMP approved by engineer)</i>						
	Name	Date	Signature	ID no.	Qualification	Expiry date
Qualifier for engineer or TMC approval						
<p>Approval of this TMP authorises the use of any regulatory signs included in the TMP or attached traffic management diagrams.</p> <p>This TMP is approved on the following basis:</p> <ol style="list-style-type: none"> 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


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 TTM?							
Conflicting signs covered?							
Correct delineation as per TTM?							
Lane widths appropriate?							
Appropriate positive TTM used?							
Footpath standards met?							
Cycle lane standards met?							
Traffic flows OK?							
Adequate property access?							
<i>Add others as required</i>							
Time inspection completed:							
Signature:							

Comments:

Time	Adjustment made and reason for change

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NZ Transport Agency
Minimum Requirements - Workplace Personal Protective Equipment

Work done to investigate, construct and maintain the State Highway network carries inherent risks. All practical steps should be taken to ensure that all NZTA employees, all suppliers (consultants, contractors, subcontractors) and all visitors are protected from hazards (through the use of controls that eliminate, isolate or minimise their exposure). Regardless Personal Protection Equipment (PPE) remains a necessary mitigation measure in most work types, and is designed to compliment other controls.

This table sets out the main situations, by exposure type, where the NZTA requires PPE to be provided by employers and used by employees, suppliers and visitors.

Exposure Type	Activity/ Place of Work	Safety Eyewear	Safety Footwear	High Visibility Clothing	Long Sleeves & Long Pants	Safety Helmet	Sunhat	Gloves	Hearing Protection	Comments
1	On a construction / repair site on a State Highway	✓	✓	✓	✓	✓	-	Carried and worn when manual handling	Available and used when working in close proximity to noisy equipment and in all underground environments.	Includes significant repair work that involves plant use eg re-sealing, rehabilitation, major drainage activities.
2	Simple maintenance activities on a State Highway	Carried	✓	✓	✓	R/A	✓	Carried and worn when handling cutting / grinding power tools and hazardous materials	Available and used when working in close proximity to noisy equipment.	Activities such as mowing, marker post cleaning, litter collection, etc.
3	In a vehicle or plant on a construction / repair site on a State Highway	Carried	✓	✓	✓	Carried	-	Carried	Carried	
4	Working outside a vehicle on the State Highway Network	-	✓	✓	✓	R/A	✓	R/A	R/A	This is for Inspection work only, not on a Construction or maintenance site. Includes private property and Crown land where construction of SH infrastructure is planned. For example during design of a new Greenfield site, if mobile plant (eg excavator) is present or if personnel are within 20m of fixed plant (eg drilling rig), then treat as a construction site (exposure type 1).
5	Visitors to a construction site / community open days / Sod Turnings, Ribbon Cuttings, Site Blessings	R/A	R/A	R/A	R/A	R/A	R/A	R/A	R/A	Risks to be assessed depending on number of visitors and where they will be on site. In general small groups to be treated as exposure type 1, 2 or 3 but large groups (for example 50 visitors on a bus), could be treated based on a risk assessment. Ie. it is not likely to be practical to require large numbers of people to wear PPE so all risks are mitigated by only allowing visitors access to areas where there are no hazards.
6	In a vehicle on the State Highway Network. In an office environment	-	-	-	-	-	-	-	-	This includes being outside vehicle for routine stops whilst travelling. Any inspection / physical work undertaken is covered by exposure types 3 & 4. Includes in the site office, public meeting venues, private (landowners) residence etc.

Key:

- ✓ = PPE Requirement.
- = No PPE requirement.
- Carried = PPE required to be readily available at all times and used where appropriate.
- R/A = Risk Assessment to be completed.

Note:

1. These minimum requirements apply to all NZTA staff, suppliers and visitors when they are on official work related duties.
2. Any departure from these minimum requirements will need a documented, task specific, Risk Assessment justifying the exemption and approved by a nominated individual within that employer's organisation.
3. Other types of PPE may be required in certain circumstances in addition e.g. waterproofs, restraint harnesses, safety gumboots, sun shade cover for Safety helmet, dust masks, respirators etc.
4. These minimum requirements may be exceeded by the requirements of a particular company, place of work or activity.

	Safety Eyewear	Safety Footwear	High Visibility Clothing	Long Sleeves & Long Pants	Safety Helmet	Sunhat	Gloves	Hearing Protection
Definition of particular PPE requirement	Impact resistance eyewear, tinted if required. Not required when operating plant with closed operator enclosure. Full face shields to be considered for certain activities.	Ankle length lace-up with steel toe, sole and heel, to comply with appropriate standard. Plant operators may use slip on boots to allow ankle flexibility.	Complying with COPTTM. Consideration should be given to use of 3 part pull apart vests to reduce snagging hazard	Suitable for operation, cognisance taken of any extreme hot / cold environments. Flame proof overalls to be worn as appropriate	Complying to appropriate standard, with provision for sun protection as necessary	Any suitable hat that provides sun protection. Outside in summer on sunny days. Not when driving vehicles, trucks and plant with covered cabs.	Suitable for specific operation	Earplugs or ear muffs in accordance with industry standards
Risks that PPE will partially or wholly mitigate	Physical injury to eye; dust; dazzle causing internal eye injury or failure to see hazards.	Physical Injury through slips, trips, falls; falling materials.	Injury from moving Plant / vehicles.	Some physical injuries, cuts & scrapes. Minimisation of health risks from excessive sun exposure.	Injury from falling objects /moving plant /protruding hazards	Minimisation of health risks from excessive sun exposure	Physical injury from sharp or heavy objects. Loss of grip causing fall.	Long term hearing loss

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		
<p>* 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.</p> <p>+ 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.</p> <p># 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).</p> <p>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).</p> <p>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.</p> <p>## LV roads: double the cone spacing alongside working space (eg 5 = 10, 10 = 20).</p>									
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.

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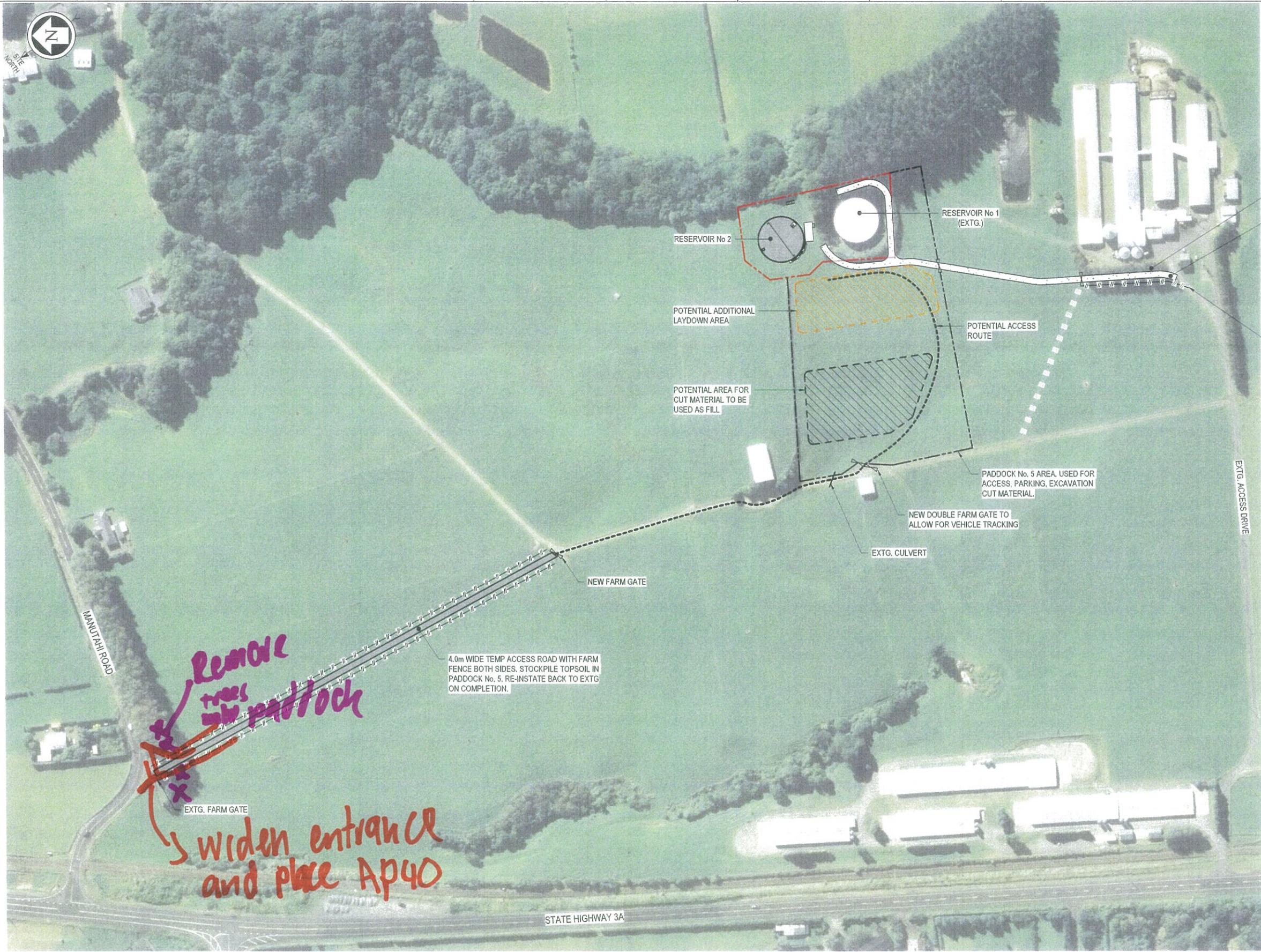
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Section F

20 July 2018



PREP + WIDEN TO ALLOW SMOOTH, EASY TRUCK ACCESS

NEED TMP to ^{include} drop a lane to dig out and compact
APUD for access ramp



- NOTES**
- 1.0 GENERAL:
- 1.1 AERIAL IMAGERY (2017) SUPPLIED BY NPDC.
- LEGEND**
- BOUNDARY (ADJACENT PROPERTIES)
 - - - SITE BOUNDARY
 - ⊗ GATE
 - /— FENCE

Remove trees into paddock

widen entrance and place AP40

APPROVED

CAR 1465065
 Greig Bosley
 STMS Number 48770
 New Plymouth District Council

Greig Bosley

30 July 2019

SITE ESTABLISHMENT PLAN
 1:1250

FOR CONSTRUCTION

REV	FOR CONSTRUCTION	BY	CHK	APPD	DATE
1	FOR CONSTRUCTION	BJFS	MGY	WE	26.07.19
	REVISION DETAILS				

DESIGNED	MGY 24.06.19
DRAWN	BJFS 24.06.19
DESIGN CHECK	MJL 26.07.19
DRAWING CHECK	CFS 26.07.19
CONSTRUCTION APPROVAL	
DOUG STIRPAT	
DATE	26.07.19
JOB / CONTRACT No.	8514520

DRAWING TITLE	
SITE ESTABLISHMENT PLAN	
DISCIPLINE	
CIVIL	

CLIENT

NEW PLYMOUTH DISTRICT COUNCIL
 newplymouthnz.com

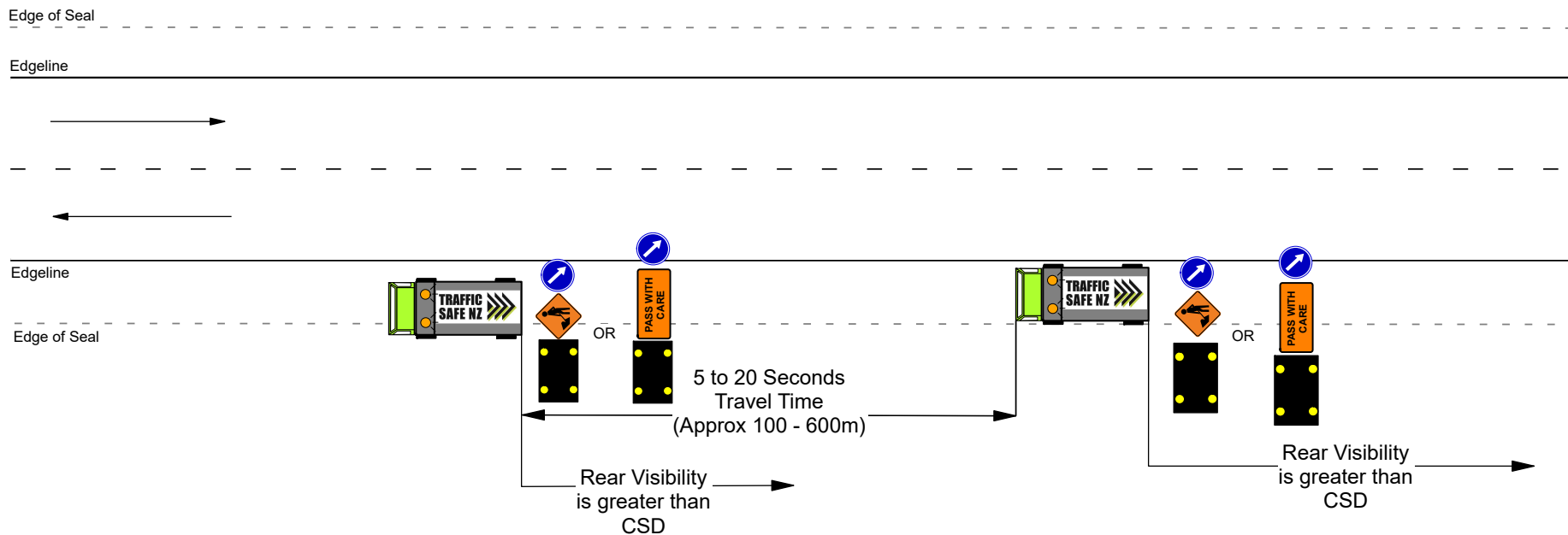
JOB / LOCATION	
LTP RESERVOIRS PROJECT CONTRACT No: 17/PP02 MOUNTAIN ROAD	

ORIGINAL	A1 SCALE	A3 SCALE
	1:1250	1:2500
NPDC DRAWING No.		
CONSULTANT DRAWING No.		
6514520-300-CA-0901		
SHEET	REV.	
	1	

MOBILE OPERATION

TWO LANE - TWO WAY CARRIAGEWAY LEVEL 1

Work Vehicle is within 5m of the Edgeline
Speed Limits over 65km/h



TITLE: Mobile Operation for TTM Installation and Removal
ADDRESS: Various Locations

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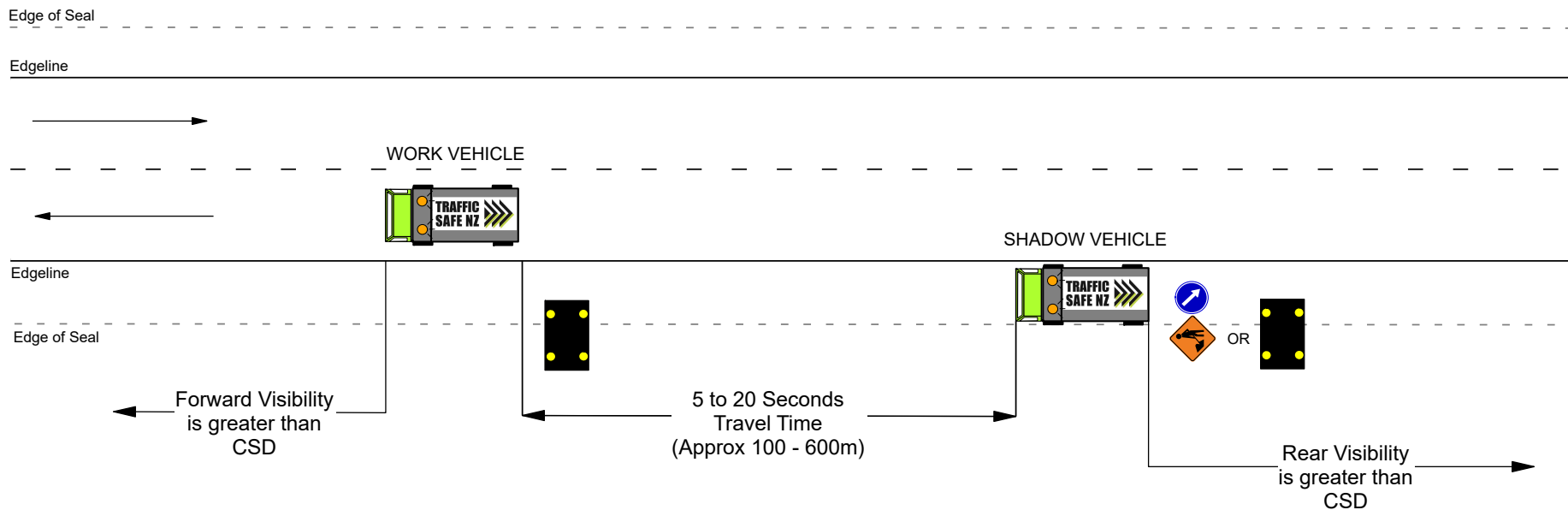
DESIGN NUMBER
M4
 NOT TO SCALE

PREPARED BY:
 NAME: Shelley Winiana
 STMS: L 2/3 NP
 ID: 98266
CHECKED BY: Isaiah Moore

MOBILE OPERATION

TWO LANE - TWO WAY CARRIAGEWAY LEVEL 1

Work Vehicle is in Live Lane
Speed Limits over 65km/h - CSD Forward Visibility to Work Vehicle



TITLE: Mobile Operation for TTM Installation and Removal

ADDRESS: Various Locations

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DESIGN NUMBER

M5

NOT TO SCALE

PREPARED BY:

NAME: Shelley Winiana

STMS: L 2/3 NP

ID: 98266

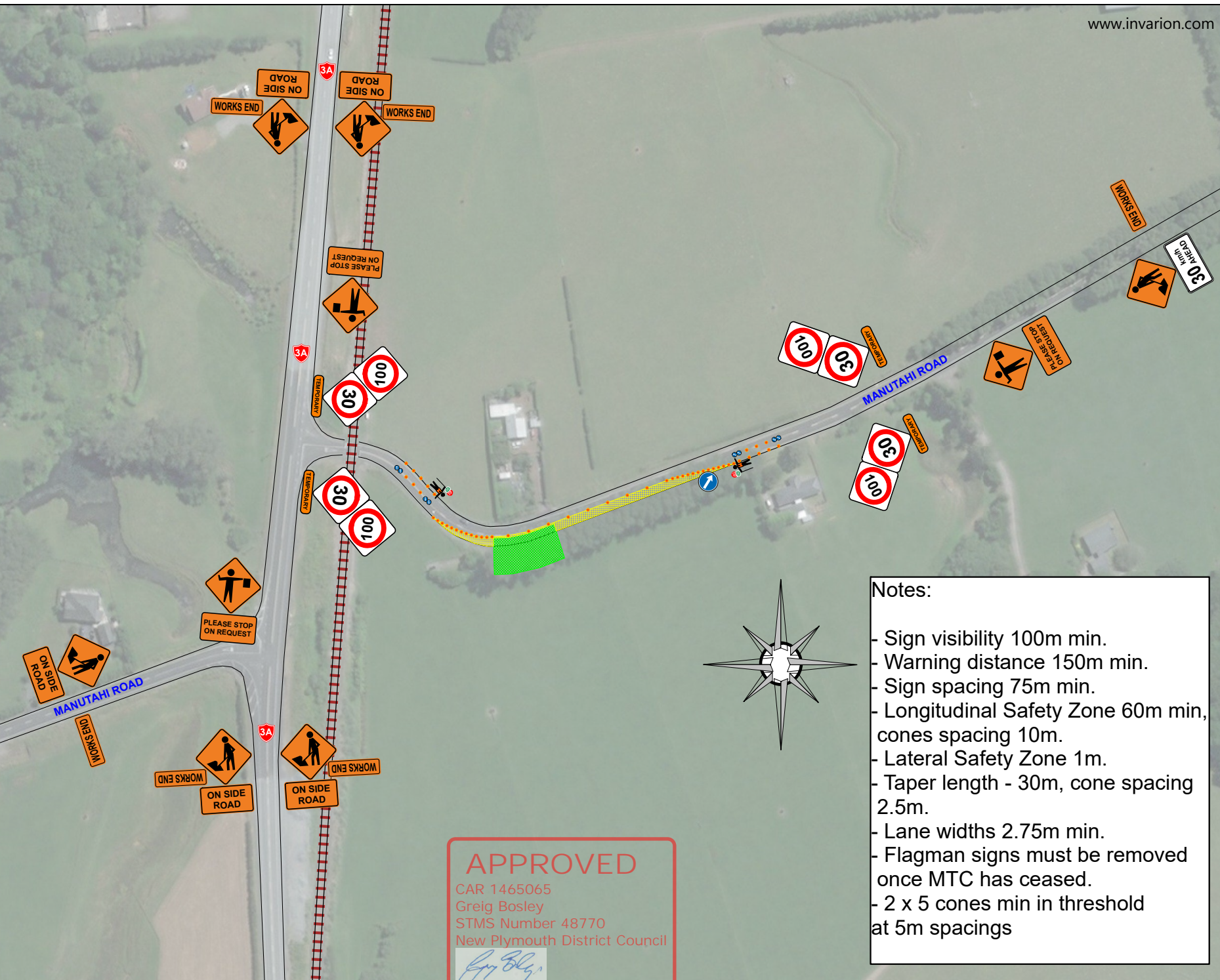
CHECKED BY: Isaiah Moore



TITLE: MANUAL TRAFFIC CONTROL
ADDRESS: MOUNTAIN ROAD, LEPPERTON, TARANAKI

DESIGN NUMBER
TMD 1
 NOT TO SCALE

PREPARED BY:
 NAME: LLOYD TAN
 STMS: LEVEL 2/3 NP
 ID: 90147
CHECKED BY: ISALAH MOORE



- Notes:**
- Sign visibility 100m min.
 - Warning distance 150m min.
 - Sign spacing 75m min.
 - Longitudinal Safety Zone 60m min, cones spacing 10m.
 - Lateral Safety Zone 1m.
 - Taper length - 30m, cone spacing 2.5m.
 - Lane widths 2.75m min.
 - Flagman signs must be removed once MTC has ceased.
 - 2 x 5 cones min in threshold at 5m spacings

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 CAR 1465065
 Greig Bosley
 STMS Number 48770
 New Plymouth District Council

Greig Bosley
 30 July 2019

Notes:

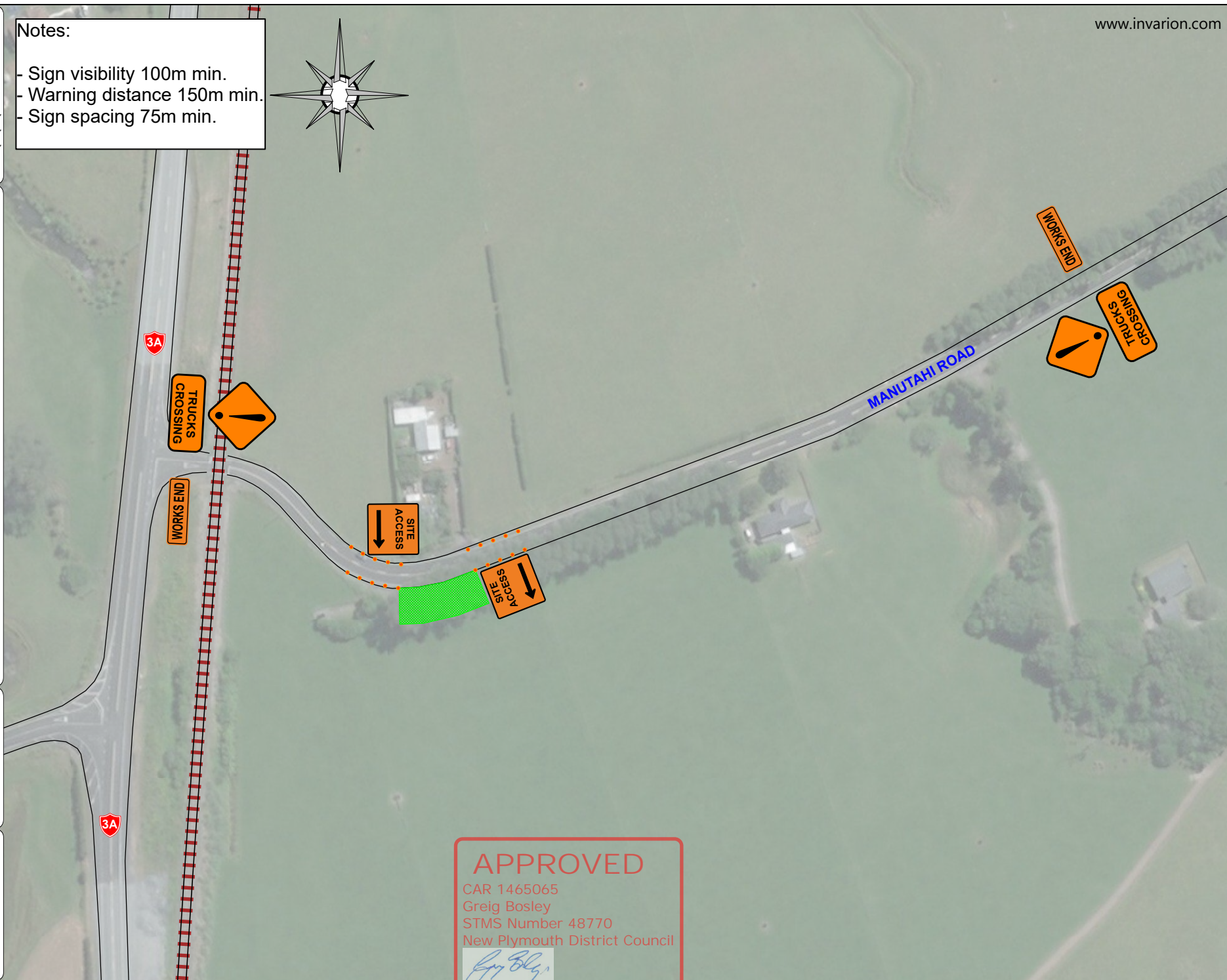
- Sign visibility 100m min.
- Warning distance 150m min.
- Sign spacing 75m min.



TITLE: SITE ACCESS
ADDRESS: MOUNTAIN ROAD, LEPPERTON, TARANAKI

DESIGN NUMBER
TMD 2
 NOT TO SCALE

PREPARED BY:
 NAME: LLOYD TAN
 STMS: LEVEL 2/3 NP
 ID: 90147
CHECKED BY: ISALAH MOORE



APPROVED
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 30 July 2019