Construction Traffic Management Plan

Peacockes to Whatukooruru Drive

Contract Number: HCC 1298-2022

Document Preparation and Control	**Document Review**
Jacob Dickson – Bid Lead	Craig Lingard – Project Manager
Document Approval	**Signature**
Toby Davies – Project Director	
Customer Approval	**Signature**
Ivan Kottaiya– Engineers Representative (BBO)	
Traffic Management Company:	

Revision Status

Issue/ Version Date	Summary of Section Changes	Reviewed By	Approved By
01	Draft		
02	For Approval		
03	Revised	Nairy Yaghobian	
04	Revised	Nairy Yaghobian	

TABLE OF CONTENTS

1 PURPOSE AND SCOPE

The purpose of the plan is to document the approach and processes required to provide traffic management during the contract is conducted safely, and in accordance with contract and regulatory requirements.

The scope of this Traffic Management Plan (TMP) includes all traffic management activities required to carry out works under the Peacockes to Whatukooruru Drive Project.

2 DESCRIPTION OF PROPOSED WORKS

The Contract Works include the following activities:

- Two new bridge (approx. 85m long each) carrying two lanes of traffic over the Mangakotukutuku Stream and an associated tributary ephemeral gully;
- A new, greenfield section of arterial road extending over a distance of around 1.3km from Hall Road in the west to Peacockes Road in the east. The road carriageway will comprise a two lane road with a flush median strip, separated cycle lanes and pedestrian footpaths on either side;
- The installation of service infrastructure including a stormwater management network extending along the road and into adjacent areas of drainage reserve with specific stormwater management devices including 1 x's stormwater wetland, 3 x's rain gardens, 1 x's attenuation basin and lengths of roadside swales;
- Upgrade of an existing section of Peacockes Road comprising a 450m stretch of existing rural road carriageway extending northward from the planned intersection with the new Whatukooruru Drive carriageway, back towards Hamilton City..
- Approximate volume of earthworks for road formation is described as 30,000m3 including a topsoil strip of around 22,000m3 , cut/fill of around 8,000m3 and importation of around an additional 40,000m3 of structural fill material.
- Relocation of utility services;
- Landscaping and landscape planting and maintenance;

3 CONSENT CONDITIONS

	Designation
12.0	CONSTRUTION TRAFFIC MANAGEMENT PLAN
12.1	A Construction Traffic Management Plan (CTMP), shall be prepared by a suitably qualified and experienced person in accordance with the NZTA Code of Practice for Temporary Traffic Management and after consultation with the Territorial Authority Chief Executive or nominee. The CTMP shall be submitted to the Territorial Authority Chief Executive or nominee, for certification that the plan satisfies this condition no later than forty (40) working days prior to the commencement of any stage during Construction Works. Construction of any relevant stage of the Project shall not commence until the Requiring Authority has received the Chief Executive's or nominee's written certification of the CTMP for that stage of works.
12.2	The objective of the CTMP is to provide a framework to be adopted by the Requiring Authority to ensure that the adverse traffic and access related effects of the construction of the Project will be avoided, remedied or mitigated.
12.3	When requesting certification of a CTMP, the Requiring Authority shall provide the certifying Territorial Authority with a letter from each other Territorial Authority whose roads are affected by the Project's construction traffic confirming that the Requiring Authority has adequately consulted with that Territorial Authority in relation to Condition 12.5(i) and any effects on that Territorial Authority's road network and included adequate measures to manage such effects.

12.4	The CTMP shall have regard to and where appropriate implement any relevant actions identified in the minutes arising from Community Liaison Group meetings (Conditions 3.3 and3.14).
12.5	The CTMP shall describe the measures that will be undertaken to avoid, remedy or mitigate the local and network wide construction traffic effects of construction of the Project. In particular (but not limited to), the CTMP shall describe: a) Measures to maintain vehicle access to roads and property to defined and approved levels of service. The CTMP shall identify notification thresholds and processes for communicating with affected parties and shall consider whether there are specific user needs that require specific responses. b) Measures to maintain access for emergency vehicles, and methods to ensure that emergency service providers are regularly informed of the timing and sequencing of works, road closures and alternative routes. c) The manner in which service providers are regularly informed of the timing and sequencing of works, road closures and alternative routes. d) The timing and sequencing of any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions; e) Measures to ensure safe interaction between Project-related construction traffic and local road traffic where any temporary or existing local roads cross the Southern Links corridor. f) Measures to ensure safe access to the Project site. g) Measures to monitor the performance against agreed levels of service of all access points to the Project site, and all keystate highway and arterial local road intersections used by Project-related construction traffic, and the procedures to be followed where intervention is deemed necessary in order to maintain acceptable and reasonable operating conditions on local roads and on the State Highway network. h) Measures to ensure that any staging of Construction Works will adequately avoid, remedy or mitigate traffic-related adverse effects. i) Measures to be adopted to identify routes to be used (and roads to be specifically avoided) for Project-related Heavy Commercial Vehicles (HCVs) for shifting bulk materials (such as earth fill or pavement materials or water) (Bulk HCVs) and implement temporary traffic management controls in accordance with the Code of Practice for Temporary Traffic Management (COPTTM). j) Measures to ensure the use and reinstatement (to a mutually agreed standard) of local roads to be used as haul roads. The CTMP shall also describe the assessment and monitoring of road conditions and implementation of mitigation works.
13.0	GENERAL CONSTRUCTION TRAFFIC
13.1	The Requiring Authority shall ensure there is no off-site Project-related Bulk HCV traffic: a) On Sundays; or b) On public holidays or after 4.00 pm on working days prior to long weekends.
13.2	The maximum hours of work for off-site Project-related Bulk HCVs shall be 7.00am –7.00pm.

3.1 Works Location

Approximate site address: 430 Peacockes Road, Hamilton

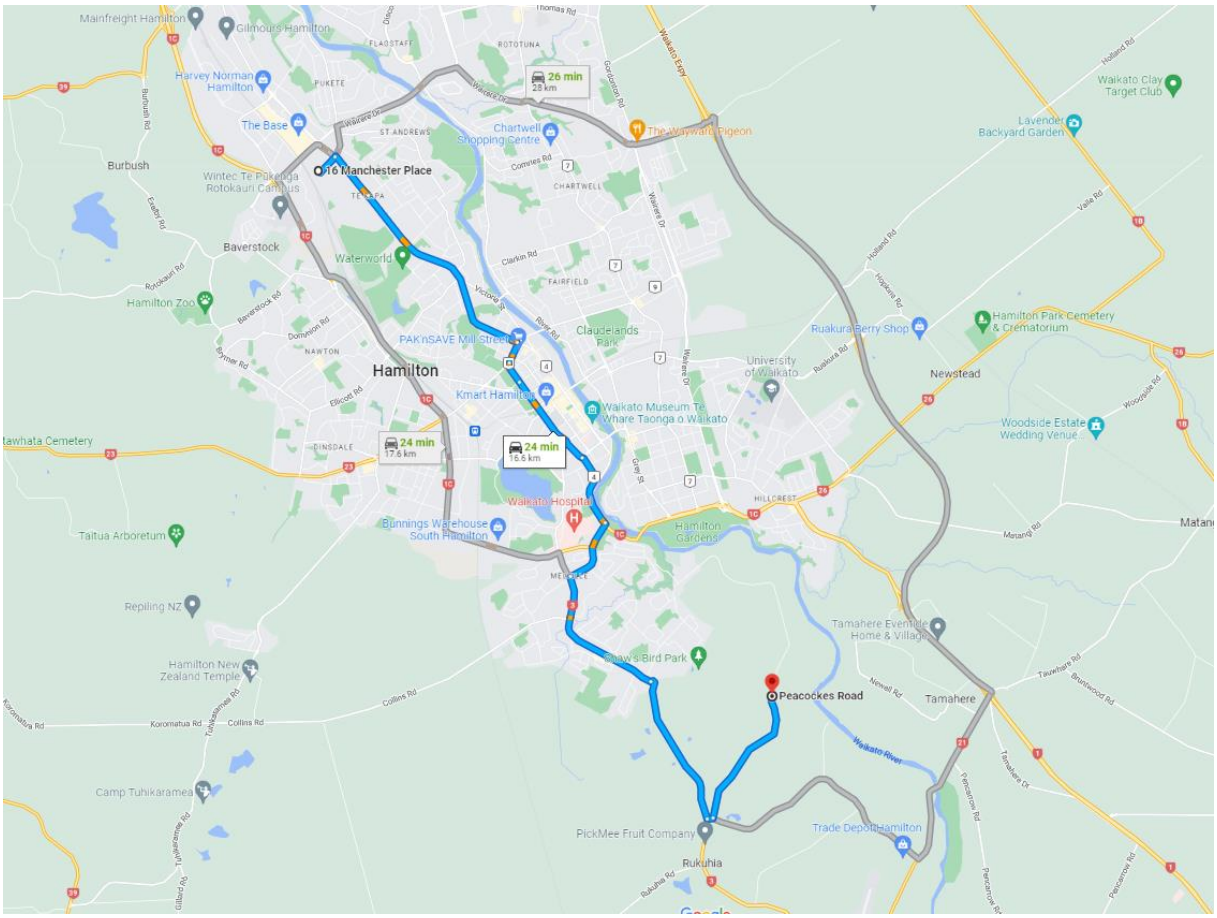


Figure 1: Project location from Downer Hamilton Main Offices

3.2 Description of Site

Peacockes Road and Hall Road are existing rural roads, the main site access is based near 435 Peacockes Road and has the potential to impact with cyclists, vehicles and other road users during SP1. During SP2, the contract works will interface directly with road users requiring active TTM at key times.

3.3 Works Details

3.3.1 Period of Works

Contract Milestone	Start Date	End Date
SP1	3 October 2022	6 January 2025
SP2	2 October 2023	6 January 2025
SP3	3 October 2022	6 January 2025

3.3.2 Schedule of Works

- Peacockes Road Shoulder Closure
- Hall Road Shoulder Closure
- Peacockes Road East
- Peacockes Road West
- Peacockes Road General
- Hall Road General

3.3.3 Road Asset Owner Information

Hamilton City Council

3.3.4 Specific Community Group Requirements

Significant cyclist volumes could be present within the work area, Cycling Advocate Groups and Community Messaging Boards to be addressed prior to the commencement of TTM as detailed within the Construction Communication and Consultation Plan.

4 ROAD USER INFORMATION

4.1 Traffic Volumes

Peacockes Road anticipated vehicles per hour.

Time Period	Monday to Friday		Saturday		Sunday	
	NB	SB	NB	SB	NB	SB
AM Peak	5-10	5-10	5-10	5-10	5-10	5-10
PM Peak	5-10	5-10	5-10	5-10	5-10	5-10

4.2 Additional Traffic Data Information

Traffic management activities must be considered against third-party TTM operations within the nearby network. Other projects have the potential to influence Downer TTM.

5 PLANT AND ONSITE VEHICLE PARKING

The primary site accesses are located on Peacockes Road and Hall Road, refer to the Access Management Sub Plan in the Construction Management Plan for site specific access requirements.

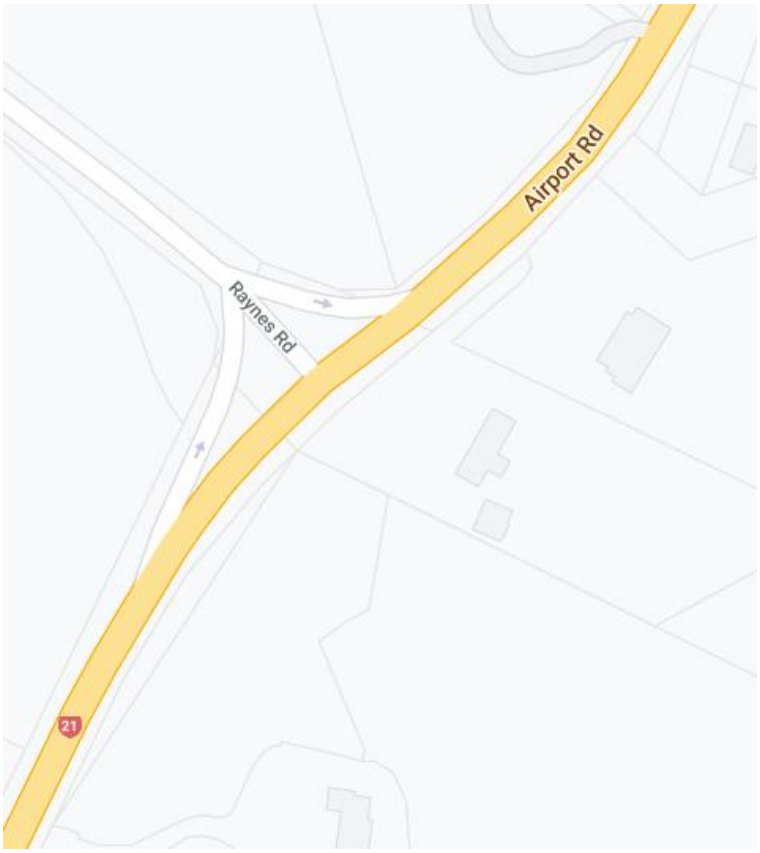
6 KEY INTERSECTIONS

Three key intersections have been identified for the Peacockes Project including:

- Hall Road & SH3

- Peacockes Road & Raynes Road

- Raynes Road & SH21 (Airport Rd)



7 STANDARDS & LEGISLATION

7.1 Legislation & Regulatory Requirements

Temporary traffic management (TTM) is governed by New Zealand legislation, in particular, the Land Transport Act 1998. Land Transport Rules made pursuant to that Act which relate to TTM include:

- Land Transport (Road User) Rule 2004
- Land Transport Rule: Traffic Control Devices 2004
- Land Transport Rule: Setting Of Speed Limits 2003.

The Project will adopt the following standards and guidelines:

- NZTA Traffic Control Devices (TCD) Manual
- NZTA Cope of Practice for Temporary Traffic Management (COPTTM).

New Zealand Traffic Authority's (NZTA's) Traffic Control Devices (TDC) Manual provides guidance on industry good practice, including where necessary, practice mandated by law in relation to the use of traffic control devices.

This Plan, and the various Site Specific Traffic Management Plans (SSTMPs), will be consistent with the applicable version of the COPTTM. Where it is not possible to adhere to this standard, the COPTTM's prescribed Engineering Exception Decision (EED) process will be followed. This will include appropriate mitigation measures agreed with the relevant RCA prior to any associated TTM being implemented.

The design and construction team will undertake preliminary liaison with Hamilton City Council (HCC) and provide an outline of the basic construction staging and proposed methodologies. The development of detailed SSTMPs, including temporary design packages covering lighting, drainage, and carriageway geometrics information, will be advanced during the construction phase.

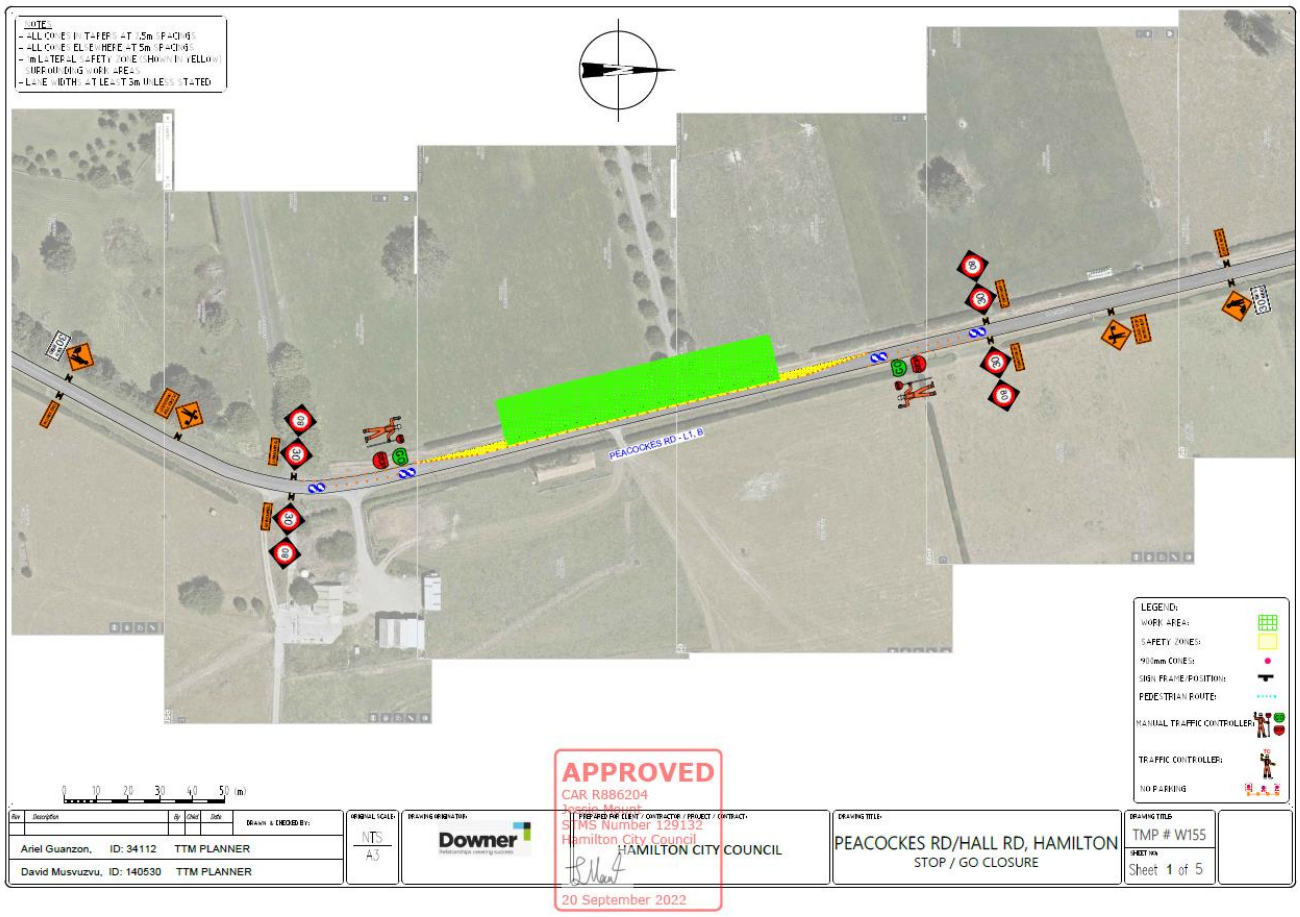
Each SSTMP will be developed in a managed timeframe with appropriate liaison and consultation with representatives of affected RCAs, particularly in instances where proposed traffic control measures represent a significant change to carriageway alignment or traffic operation.

8 EMERGENCY VEHICLE ACCESS

Access for emergency vehicles will be maintained at all times, emergency services will be provided a copy of the Access Management Plan and Emergency Response Plan. Additionally, emergency service providers will be notified of any significant changes to the normal operation of the road network.

A copy of the weekly reports, will be made available via email to emergency service providers so that they are informed of the timing and sequencing of works at all times.

8.1 Stage One – Peacockes Road Shoulder Closure (SP1)



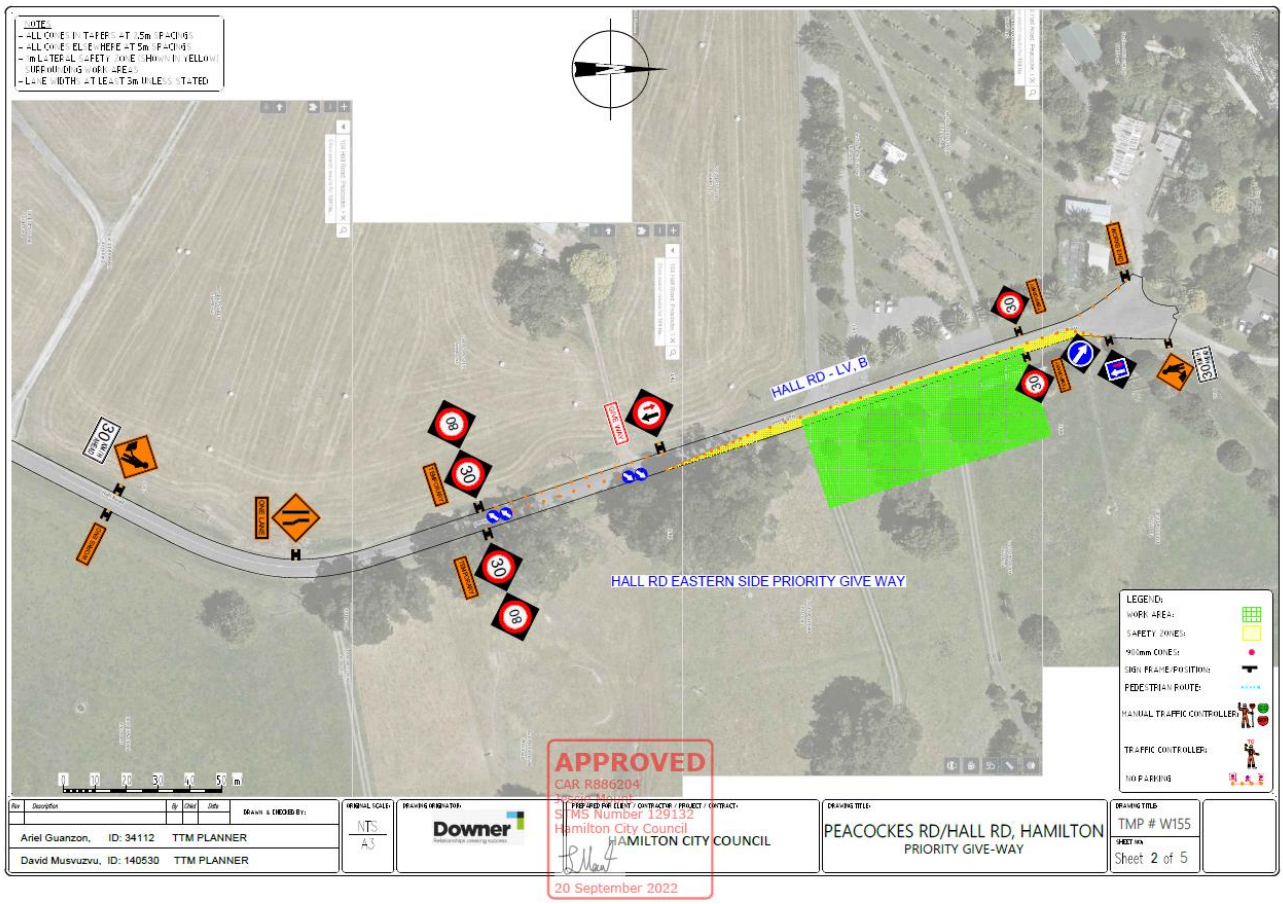
Cyclists (& Mobility Scooters)

Option		Features	Comment
Cyclists on road	Leave on road	▪ **Primary Control**	
	Transition to footpath (riding)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**
	Transition to footpath (walking)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**

Property Access

All property access will be identified and provisions made to ensure continuous access throughout this stage of works.

8.2 Stage Two – Hall Road Shoulder Closure (SP1)



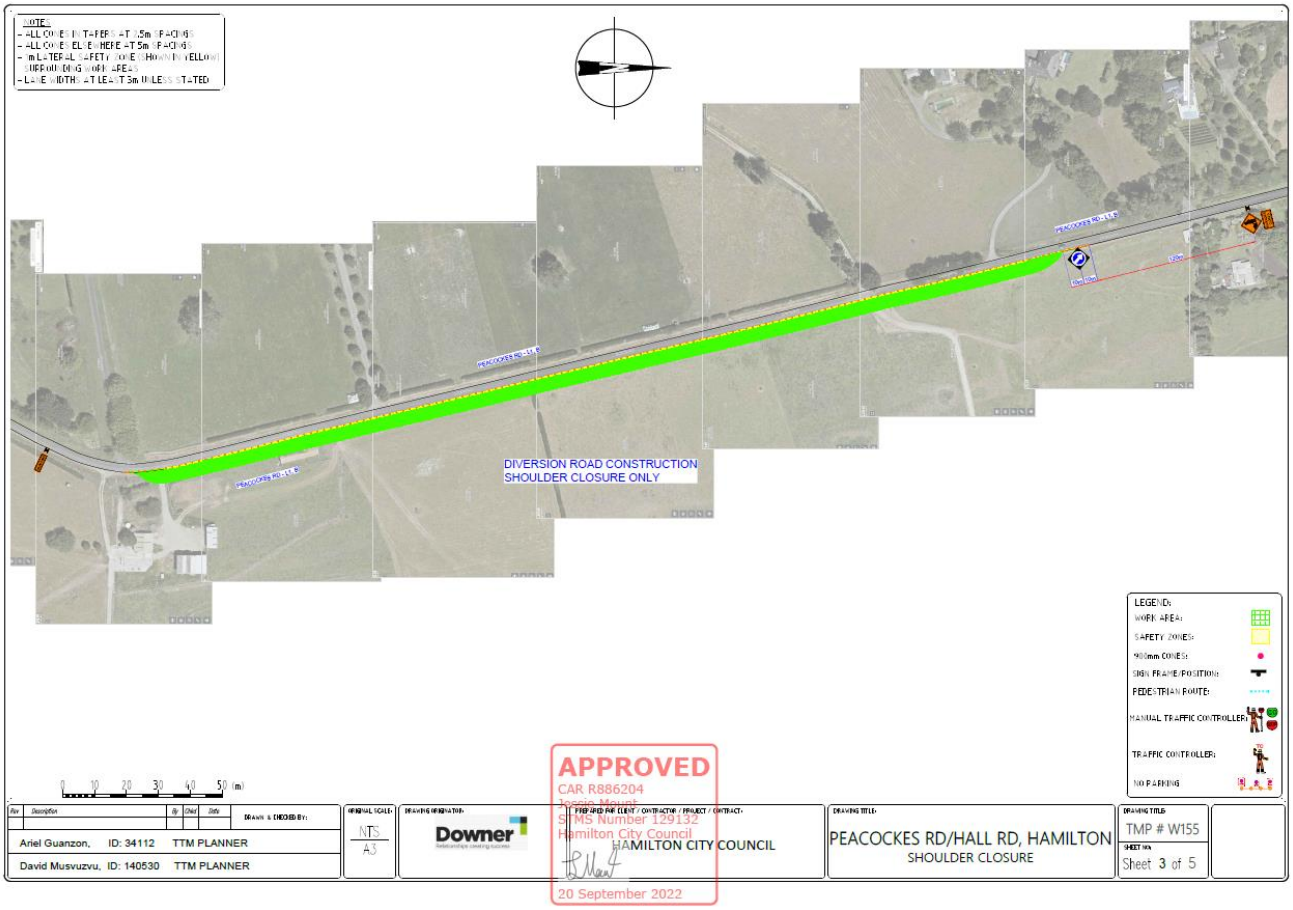
Cyclists (& Mobility Scooters)

Option		Features	Comment
Cyclists on road	Leave on road	▪ **Primary Control**	
	Transition to footpath (riding)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**
	Transition to footpath (walking)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**

Property Access

All property access will be identified and provisions made to ensure continuous access throughout this stage of works.

8.3 Stage Three – Peacocks Road East (SP2)



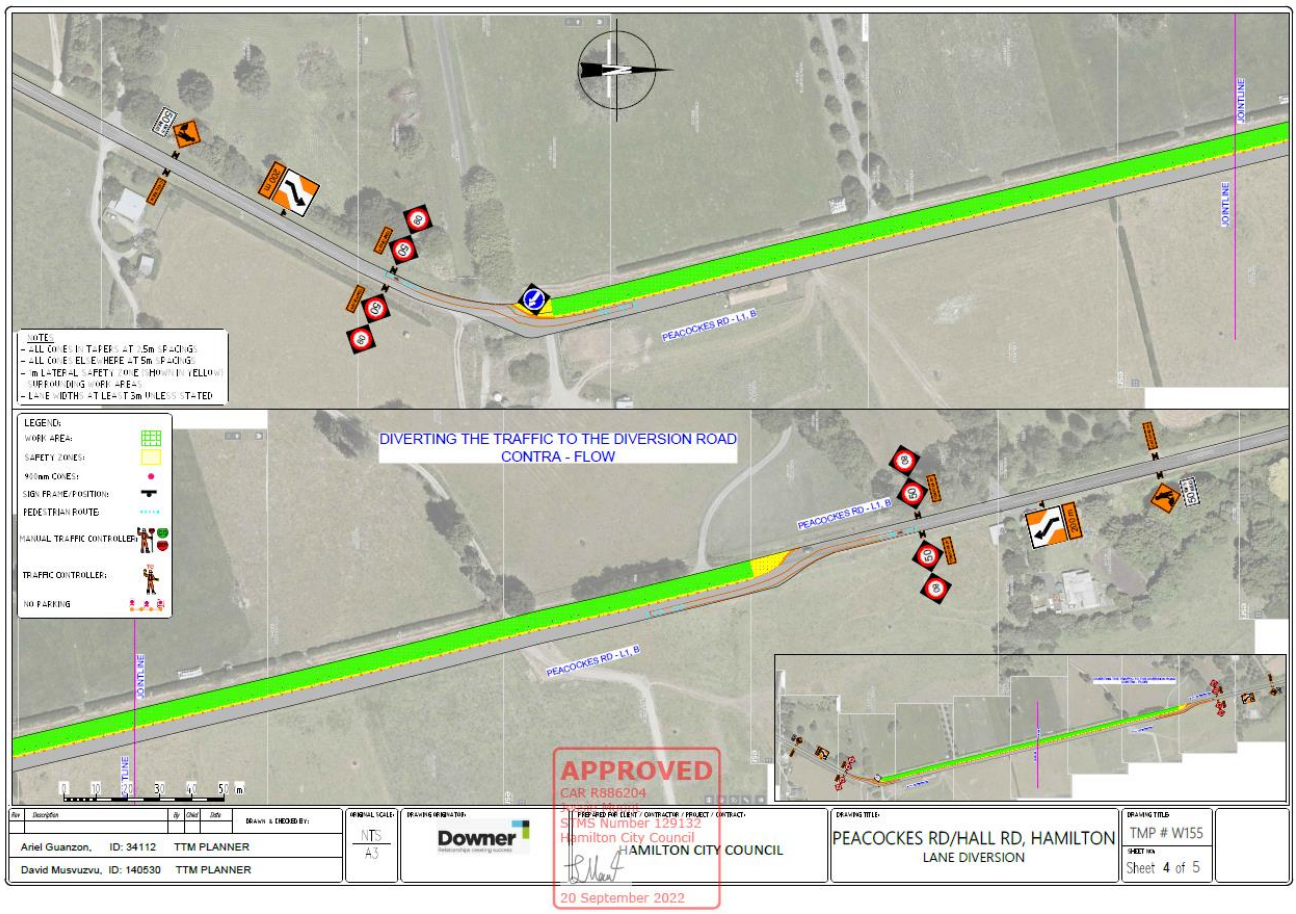
Cyclists (& Mobility Scooters)

Option		Features	Comment
Cyclists on road	Leave on road	▪ **Primary Control**	
	Transition to footpath (riding)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**
	Transition to footpath (walking)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**

Property Access

All property access will be identified and provisions made to ensure continuous access throughout this stage of works.

8.4 Stage Four – Peacocks Road West (SP2)



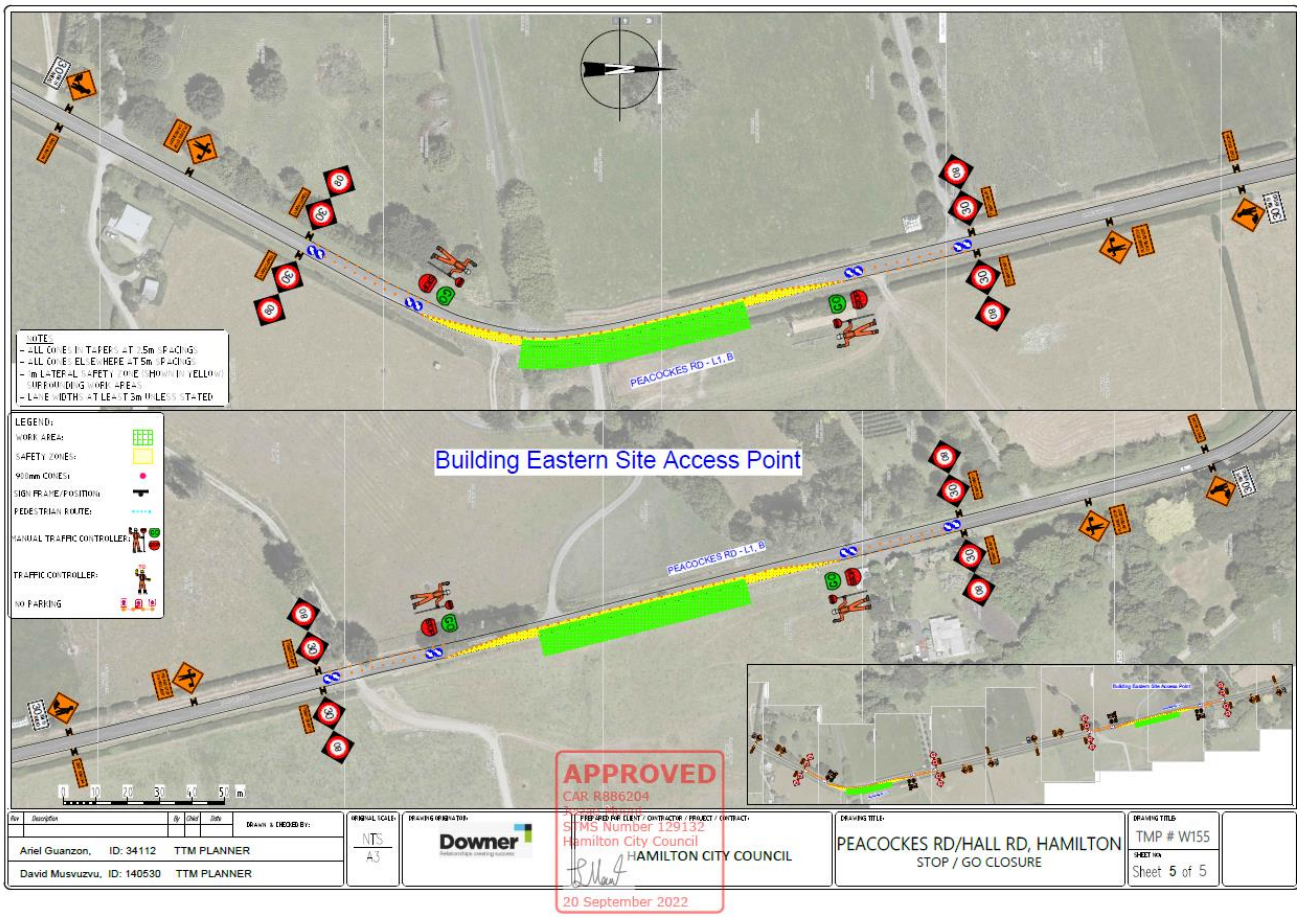
Cyclists (& Mobility Scooters)

Option		Features	Comment
Cyclists on road	Leave on road	▪ **Primary Control**	
	Transition to footpath (riding)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**
	Transition to footpath (walking)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**

Property Access

All property access will be identified and provisions made to ensure continuous access throughout this stage of works.

8.5 Stage Five – Peacocks Road Eastern Site Access (SP2)



Cyclists (& Mobility Scooters)

Option		Features	Comment
Cyclists on road	Leave on road	▪ **Primary Control**	
	Transition to footpath (riding)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**
	Transition to footpath (walking)	▪ **To be reviewed for suitability**	**If additional control is required during higher HV movements from the site entrance.**

Property Access

All property access will be identified and provisions made to ensure continuous access throughout this stage of works.

8.6 Project Working Hours

The hours of construction work are limited by compliance with Construction Noise Limits and Traffic Management restrictions. Typically as follows:

- 7:00am to 7:00pm Monday to Saturday
- No work on Sundays
- No works after 1600h on the day prior to New Zealand Public Holidays.

Isolated works may require works outside the normal working hours to avoid traffic disruptions etc. These works will be approved by the Engineer prior to commencement.

9 OPERATIONAL REQUIREMENTS

9.1 Coordination Meetings

A Temporary traffic management plan (TMP) and corridor access request (CAR) will be submitted to the Engineer (BBO) for review and approval.

The Engineer is to confirm the TMP meets the Contract requirements, sign the box “Accepted by TMC/engineer” and return to the Contractor.

The TMP and CAR shall then be formally submitted to the appropriate road controlling authority for approval.

The approved corridor access request (CAR) and temporary traffic management plan (TTMP) must be sent to the Engineer within 10 Working Days following Contract award or 5 Working Days before commencement of work affecting traffic, whichever comes sooner. The approved CAR and TMP must be submitted to the Engineer not less than 5 working days prior to its intended use.

Additionally, to assist the preparation of the TMP and CAR, Downer shall participate in, and contribute to, any Principal-arranged (local) Temporary Traffic Management (TTM) forum and/or discussions about overlapping PCBU issues/responsibilities.

9.2 TTM Maintenance Requirements

These requirements cover all areas within the project site being in possession of the contractor, plus an additional 50m length beyond the extent of works:

Activity	Requirement / description
Incident response (construction caused)	The Contractor shall be responsible to attend all incident responses caused by Construction activities. This includes: - Protection of road users by making the road and adjacent area safe for all users. - Undertaking emergency patrols as requested by the Engineer. - Undertaking repair works to re-establish safe access for all road users to at least a single lane status. The Contractor shall have an incident response vehicle sufficiently equipped and personal adequately trained to deal with a range of incidents, including but not limited to: - Signage and cones. - Normal array of hand tools. - Communication equipment. - Comprehensive first aid kit and water.
Traffic management	The contractor shall be responsible for all traffic management within the site extents and as required by the Contractor's Traffic Management Plan.

Damage to existing road ➢ Surfacing ➢ Dig-outs ➢ Depressions ➢ Edge breaks ➢ Shoulder maintenance ➢ Potholes	• Weekly inspections of all publicly used roads within the Site shall be undertaken by the Contractor. • Any damage that renders the road unsuitable for the New Zealand 85th percentile vehicle to travel at 50 km/h shall be repaired by the Contractor within 1 week. • Materials, and construction shall be as per relevant sections of the RITS and this specification. • The design life of the pavement repair is to be at least 10 years, unless in an area that is to be made redundant by the Contract Works; in this case the design life shall be at least two times the period of time until works in that area are to be undertaken. • Any damage caused by the Construction activities shall be remedied by the Contractor.
Traffic services ➢ Signs ➢ Edge marker posts Raised pavement markers Lighting	• At a minimum the Contractor shall inspect all traffic services within the Works area on a monthly basis for the duration of the Contract. • The Contractor shall be responsible for any maintenance required as a result of the Contract Works. • The Contractor shall notify the Road Controlling Authority of any items needing repair or replacement and make provision for the required works to be carried out within the Works area. • Signs shall be inspected and maintained in accordance with RSMA Compliance standard for Traffic Signs (2008).
Pavement markings	• The Contractor shall be responsible for maintaining all pavement markings within the Site for the duration of the Contract. • Any requirements to remark shall be in accordance with the RITS and relevant section of this specification.

9.3 TGS Monitoring and Management Following Implementation

Weekly reports shall be prepared for the duration of the Contract Works and submitted to the Engineer. Each report shall include:

- Summary of locations and description of work activity carried out during the previous week, including an estimate of the progress achieved on major work items.
- Issues requiring follow-up by the Engineer.
- Forward Weekly programme.
- Projected heavy traffic movements for the week ahead.
- Cumulative heavy traffic volumes for the project to date and for the season.
- GPS based speed exceedance reporting, including speed and location.
- Haul route weekly inspection identifying any new or emerging road defects or issues that may affect safety.
- Any other information agreed between the Contractor and Engineer.

9.4 Variable Message Signs (VMS Boards)

The contractor shall allow for the placing of portable variable message signs on three approaches to the site (two on Peacockes Road and one on Hall Road) for:

- A minimum of five days in advance of any change to the traffic management layout, and;
- Two weeks in advance, and for the full duration, of any road closure.

9.5 Project Sign Boards

Construction information signs to be installed at each Road Access Point at the start of the works. Signs to be placed in clear view of traffic with positions agreed by the Engineer.

The format and layout of the signs shall be in accordance with the HCC Brand Manual “Project On Road Sign Template” on page 80 of the manual.

The size shall be at least 2.0m wide by 1.0m deep. Sign construction and mounting details shall be in accordance with MOTSAM requirements for a similarly sized sign.

Downer shall submit a proof of the exact wording and layout of the signs to the Engineer before they are produced.