

SL1 Industrial and Residential

Draft Construction Traffic Management Plan

04 September 2026



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Document control

Project identification	
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Job number/s	149240 / 149340
Job name	SL1 Industrial and Residential
Report name and number	Draft Construction Traffic Management Plan
File path	C:\12dS\data\10.7.120.14\149240 - SL1 South Residential_5619\10 Traffic\Project Template\02 Reports and memos\ITA Appendix E - Draft Construction Traffic Management Plan.docx

Report status			
Status	Name	Signature	Date
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Approved by	Cameron Inder		04/09/2026

Document history			
Version	Changes	Approved by (Initials only)	Approved date
V1	Draft	CI	04/09/2026
V2			
V3			
V4			



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1. Introduction

This draft Construction Traffic Management Plan (“CTMP”) has been prepared to support the Fast-track Approvals Act 2024 substantive consent application for the SL1 Industrial Development and Residential Development (“the Project”). It is intended to form an appendix to the Integrated Transport Assessment (“ITA”) and provides the construction traffic framework that will support subsequent stage-specific CTMPs and Site-Specific Traffic Management Plans (“SSTMPs”).

The Project relates to land at the south-western edge of Hamilton and seeks to enable industrial and residential development, together with associated transport infrastructure required to support that growth.

The Project comprises two distinct development areas:

- the Industrial Development, comprising approximately 60 hectares (“ha”) of land, of which about 40 ha is expected to be developable for industrial purposes; and
- the Residential Development, comprising approximately 46 ha of land, with an anticipated yield of approximately 938 residential units, a small local neighbourhood centre and supporting infrastructure.

This draft CTMP is a consent-stage framework document. It identifies the anticipated construction access strategy, haul route principles, temporary traffic management requirements, contractor responsibilities, monitoring measures and matters to be confirmed in the final CTMP before construction commences.

This draft CTMP shall be read alongside the ITA prepared for the Project. The ITA establishes the broader transport assessment, mitigation and staging framework, while this CTMP addresses construction-specific measures for managing temporary transport effects during earthworks, subdivision construction and associated transport infrastructure works.

Construction access and haul route assumptions in this draft CTMP are indicative and shall not override the ITA staging framework, approved transport infrastructure triggers, or any access restrictions confirmed through detailed design, consent conditions or RCA approvals.

1.1 Purpose

The purpose of this draft CTMP is to identify how construction-related transport effects will be managed during delivery of the Project. It focuses on consent-stage matters and identifies the information that must be confirmed in the final CTMP once a Contractor has been appointed and the construction methodology is known.

- Identify the anticipated construction access strategy for each development area.
- Identify the construction traffic issues that require management during bulk earthworks, infrastructure construction and staged development works.
- Set out principles for heavy vehicle routing, access control and construction traffic scheduling.
- Identify measures to protect pedestrians, cyclists, public transport users, adjacent residents, businesses, road assets and emergency access.
- Define the information that must be included in the final CTMP before construction commences for each relevant stage.



1.2 Draft Status and Future Certification

This draft CTMP does not replace the final CTMP, SSTMPs, CAR approvals or other road corridor approvals required before construction. These later documents shall confirm the detailed construction methodology, final traffic volumes, access layouts, haul routes, temporary traffic management layouts and site-specific controls for each stage of works.

References in this draft CTMP to construction stages are for construction traffic management purposes only. They describe the likely sequencing of construction activities, access arrangements, haul routes and temporary traffic management requirements. They are distinct from the development staging framework assessed in the ITA, which relates to the progressive release, occupation and operation of the development and the timing of associated transport infrastructure triggers.

The detailed construction sequence, earthworks quantities, final access arrangements, haulage contracts and temporary traffic management layouts are not yet confirmed. These matters will be confirmed following resource consent approval, detailed design and appointment of a Contractor. The final CTMP shall be submitted to NZ Transport Agency Waka Kotahi ("NZTA"), Hamilton City Council ("HCC"), Waipā District Council ("WDC") and any other relevant approval authority for certification or approval in accordance with the relevant consent conditions and road corridor approval requirements before construction works commence for the relevant stage.

- The final CTMP shall be prepared by the appointed Contractor, or by a suitably qualified traffic management practitioner on behalf of the Contractor, before works commence for the relevant stage.
- The final CTMP shall be generally consistent with this draft CTMP and the transport strategy assessed in the ITA.
- The final CTMP shall include confirmed construction staging, access points, haul routes, traffic volumes, truck types, staff parking, site layout, Temporary Traffic Management ("TTM") layouts and communications procedures.
- SSTMPs shall be prepared where works affect the public road corridor or require temporary changes to traffic, pedestrian, cyclist, public transport, parking or property access arrangements.
- No construction activity requiring road corridor approval shall commence until the relevant road controlling authorities ("RCAs") approvals, Corridor Access Requests ("CAR") and approved TTM documentation are in place.

2. Project Overview

The Project is located on the south-western edge of Hamilton, presently within the Waipā District but contiguous with HCC's southern boundary. The Project is intended to integrate with the existing Hamilton urban fringe and planned strategic transport corridors, including the Hamilton Southern Links ("HSL") corridor. This draft CTMP does not assume that HSL will be delivered before construction traffic associated with the Project requires management.

2.1 Industrial Development

The Industrial Development is located adjacent to the Frankton industrial area and is positioned to connect to Greenwood Street (SH1C), Kahikatea Drive and the wider strategic freight network. The development is expected to occur progressively between 2030 and 2045 and is intended to provide a mix of industrial lot sizes and industrial activities. The Industrial Development includes:



- Preloading of road and infrastructure corridors.
- Bulk earthworks for industrial lot areas, road corridors, stormwater wetlands and wastewater pumpstations.
- New wastewater and water supply infrastructure, including wastewater pumpstations.
- Stormwater conveyance systems, including grass-lined swales, piped stormwater infrastructure and stormwater wetlands.
- Transport connections through the east-west collector road and the preferred interim access arrangement (Interim Option B) at Greenwood Street / Kahikatea Drive.

2.2 Residential Development

The Residential Development forms part of the wider SL1 Growth Cell and comprises approximately 46 ha of land. The development is anticipated to comprise approximately 938 residential units, together with a small neighbourhood centre and neighbourhood park. It is expected to be delivered progressively, with Stage 1 anticipated by 2030, Stages 2 and 3 by 2035, and Stages 4 and 5 by 2045. The Residential Development includes:

- Neighbourhood commercial node, neighbourhood park, open spaces and stormwater infrastructure.
- Bulk earthworks, drainage reticulation, road construction, building platform formation and retaining walls where required.
- Construction of stormwater wetlands and wastewater pumpstations.
- Access to the existing road network via Saxbys Road, MacMurdo Avenue and Forth Crescent.

Table No. 1

Indicative Residential Yield	
Residential Component	Indicative Yield / Provision
Lower density lots	347 residential units
Medium density front-loaded terrace or duplex	298 residential units
Highest density rear-loaded terrace	293 residential units
Neighbourhood centre	1,000 m ² commercial land
Neighbourhood park	3,200 m ²

3. CTMP Objectives

The objectives of this CTMP are to ensure that construction traffic is managed in a manner that maintains safe and efficient operation of the surrounding transport network and is consistent with the ITA transport strategy.

- Maintain safe and efficient operation of the surrounding road network during construction.
- Manage construction access so that vehicles enter and exit safely and do not queue on public roads.
- Direct Heavy Commercial Vehicles (“HCVs”) to appropriate routes and avoid unnecessary use of local residential streets.



- Maintain access to adjacent properties, businesses, local roads and emergency services.
- Maintain and protect pedestrian, cyclist and public transport movements wherever practicable.
- Minimise construction traffic disruption during peak periods and near sensitive locations such as schools.
- Protect road assets from construction-related damage and maintain clean road surfaces.
- Provide clear responsibilities, communication procedures, monitoring and corrective action processes.

4. Existing Transport Environment

The existing transport environment is described in the ITA. The following summary identifies the elements most relevant to construction traffic management.

4.1 Industrial Development

The transport network adjacent to the Industrial Development comprises local and collector roads connecting to the strategic freight network. Greenwood Street (SH1C), Kahikatea Drive, Kahikatea Drive Extension, Wickham Street and Higgins Road are relevant to the surrounding construction traffic environment. The Industrial Development construction access strategy is set out in Section 7.1.

Table No. 2

Adjoining Road Network – Industrial Development				
Road	ONF ¹	Posted Speed Limit ²	Average Daily Traffic ³ ("ADT")	Heavy Commercial Vehicle ⁴ ("HCV") Proportion
Greenwood St (SH1C)	Transit Corridor	80 km/h	23,860 vpd	5.4%
Kahikatea Dr	Urban Connector	60 km/h	27,200 vpd	5.4%
Kahikatea Dr Extn	Urban Connector	50 km/h	5,260 vpd	15%
Higgins Rd (north of Kahikatea Dr Extn)	Urban Connector	50 km/h	4,511 vpd	14%
Wickham St	Local Street	50 km/h	1,800 vpd	5%

4.2 Residential Development

The Residential Development is connected to the existing network primarily via residential streets that connect to Collins Road and Ohaupo Road (SH3). Ohaupo Road performs an important movement function for local and inter-regional travel and carries substantial commuter and freight traffic. The CTMP therefore requires construction activity to be planned to minimise avoidable disruption on this corridor and at its constrained intersections.

Table No. 3

¹ Based on NZTA MegaMaps

² Based on NZTA MegaMaps

³ Based on MobileRoad website

⁴ Based on MobileRoad website



Adjoining Road Network – Residential Development				
Road	ONF ⁵	Posted Speed Limit ⁶	Average Daily Traffic ⁷ ("ADT")	Heavy Commercial Vehicle ⁸ ("HCV") Proportion
Ohaupo Rd (north of Collins Rd)	Urban Connector / Activity St	60 km/h	30,996 vpd	6.6%
Ohaupo Rd (between Saxbys Rd and Lambert Ct)	Urban Connector	60 km/h	15,300 vpd	10.8%
Ohaupo Rd (between Resthill Cr and Houchens Rd)	Urban Connector	60 km/h	15,300 vpd	10.8%
Collins Rd (near SH3)	Urban Connector	50 km/h Variable speed limit = 30 km/h	6,786 vpd	3%
Saxbys Rd	Local Street	50 km/h	2,717 vpd	5%
Deanwell Ave	Local Street	50 km/h Variable speed limit = 30 km/h	2,050 vpd	5%
MacDonald Rd	Local Street	50 km/h	2,460 vpd	5%
MacMurdo Ave	Local Street	50 km/h	261 vpd	5%
Lambert Ct	Local Street	50 km/h	1,681 vpd	5%
Resthill Cres	Local Street	50 km/h	3,107 vpd	5%
Houchens Rd	Local Street	50 km/h	2,091 vpd	5%

4.3 Public Transport and Active Mode

Construction traffic management shall maintain safe and practical access for public transport users, pedestrians and cyclists. This is particularly relevant to the Residential Development, where Ohaupo Road, Deanwell Avenue, Saxbys Road and the Glenview public transport environment form part of the broader transport strategy.

- Existing and temporary pedestrian routes shall be maintained wherever practicable.
- Cyclist movements shall be protected at shared paths, on-road facilities, sealed shoulders and temporary work interfaces.
- Bus stop access and bus route operation shall be maintained wherever practicable.
- Any temporary relocation of bus stops or closure of pedestrian / cyclist routes shall be agreed with the relevant RCAs and public transport operator before implementation.

5. Construction Staging and Earthworks

Construction traffic effects will be driven primarily by the scale and staging of earthworks, the extent of imported or exported material, the location of material sources and destinations, and the timing of

⁵ Based on NZTA MegaMaps

⁶ Based on NZTA MegaMaps

⁷ Based on MobileRoad website

⁸ Based on MobileRoad website



infrastructure construction. Accordingly, this CTMP summarises earthworks information only to the extent that it is relevant to construction traffic generation and haul route management.

The construction stages referred to in this CTMP are indicative construction sequencing stages used to identify construction access arrangements, haul route requirements, earthworks traffic generation and temporary traffic management controls. They are separate from the ITA development staging framework, which relates to the progressive release, occupation and operation of the development and associated transport infrastructure triggers.

5.1 Industrial Development Earthworks

The Industrial Development includes large-scale earthworks, road corridor preloading, stormwater wetlands, wastewater pumpstations and related infrastructure works. The traffic-relevant earthworks issue is the overall fill shortfall, which has the potential to generate a substantial number of import truck movements depending on the material source, timing and internal material balancing.

Table No. 4

Industrial Development Earthworks	
Parameter	Quantity
Approximate earthworks area	54.7 ha
Approximate cut volume	790,603 m ³
Approximate fill volume	1,112,585 m ³
Overall material balance	Approximately 321,982 m ³ fill shortfall
Topsoil stripping	164,206 m ³ . Final CTMP to confirm whether topsoil is retained, reused, screened, sold or exported.

Based on the current civil earthworks information, the Industrial Development is expected to require approximately 321,982 m³ of imported fill. If this import is spread broadly across the indicative 10-year Industrial Development construction period, this would equate to an average of approximately 30,000 m³ of imported fill per year. The actual annual import volume and associated HCV movements will depend on the confirmed construction staging, material source, truck payload, haulage methodology, opportunities for internal material balancing and contractor programme.

The overall material balance is based on the latest civil earthworks information available at the time of preparing this draft CTMP and may change as the design and construction methodology are refined. The final CTMP shall confirm the traffic-generating imported fill quantities and translate them into daily and peak-hour HCV movements once the material source, haulage methodology, truck type, payload and construction programme are confirmed.

5.2 Residential Development Earthworks

The Residential Development includes staged bulk earthworks, stormwater wetlands, wastewater pumpstations, road formation and associated infrastructure. The whole-site earthworks balance indicates a relatively modest surplus of cut, although individual stages may still generate internal haulage or export movements depending on the contractor methodology.



Table No. 5

Residential Development Earthworks	
Parameter	Quantity
Approximate earthworks area	43.34 ha
Approximate cut volume	290,010 m ³
Approximate fill volume	227,375 m ³
Overall material balance	Approximately 17,160 m ³ surplus cut
Topsoil stripping	86,690 m ³ . Final CTMP to confirm whether topsoil is retained, reused, screened, sold or exported.

The final CTMP shall confirm whether surplus material will remain within the Residential Development, be transferred to other parts of the Project, screened or exported. Any external movements shall be reflected in the construction traffic calculations and haul route maps.

The overall material balance is based on the latest civil earthworks information available at the time of preparing this draft CTMP. The reported surplus cut may not equal the simple difference between cut and fill volumes where allowances have been made for topsoil, unsuitable material, bulking, compaction, reuse within landscaping or other material management assumptions. The final CTMP shall confirm the traffic generating import and export quantities once the material balance assumptions are confirmed.

6. Transport Infrastructure Construction Works

The ITA identifies transport infrastructure upgrades that are required to support the Industrial Development and Residential Development. These works are relevant to this CTMP because they may be constructed within or adjacent to live road corridors and may require lane closures, temporary pedestrian or cyclist diversions, temporary bus stop management, property access management, temporary speed management, road opening permits and stage-specific SSTMPs.

The final CTMP shall identify the construction traffic and temporary traffic management requirements for each transport infrastructure upgrade. Where works affect a live road corridor, a stage-specific SSTMP and any required CAR or RCA approval shall be obtained before works commence.

6.1 Industrial Development Transport Infrastructure

The transport infrastructure listed in Table No. 6 reflects the Interim Option B pre-HSL staging framework identified in the ITA. Construction access arrangements for these works are addressed in Section 7.1 and shall be confirmed through the final CTMP / SSTMP process.

Table No. 6

Industrial Development Transport Infrastructure		
Infrastructure Upgrade	Potential construction traffic implications	Final CTMP / SSTMP requirements
Greenwood St / Kahikatea Dr interim four-arm roundabout (Interim Option B)	Upgrade works may affect Greenwood Street (SH1C), Kahikatea Drive and existing turning movements at a key strategic access location. The roundabout is expected to form	Prepare detailed SSTMP, construction staging plan, temporary lane arrangements, HCV routing, pedestrian / cyclist management, temporary speed or off-peak /



Table No. 6

Industrial Development Transport Infrastructure		
Infrastructure Upgrade	Potential construction traffic implications	Final CTMP / SSTMP requirements
	the primary construction access interface for the Industrial Development once available and approved.	night work controls where required, and obtain relevant RCA approvals. The final CTMP shall confirm how construction access will be managed through the interim roundabout and how queuing on Greenwood Street and Kahikatea Drive will be avoided.
North-south access road between Greenwood St / Kahikatea Dr and east-west collector road	The north-south access road is expected to operate as the primary internal construction access and haul route between the interim Greenwood Street / Kahikatea Drive roundabout and the Industrial Development. Initial construction may be limited to a two-lane carriageway, with final cross-section and staging to be confirmed through detailed design and NZTA review / approval.	Confirm staged road formation, temporary access controls, internal haul route operation, construction vehicle tracking, gate locations, wheel wash provision, queue storage, and transition to permanent operation.
East-west collector road	The east-west collector road may be used for internal construction access and movement within the Industrial Development once available. Construction of the road and its intersections may require staging to maintain internal access within the Industrial Development and manage any interface with Wickham Street / ROW.	Confirm staged road formation, internal haul route operation, temporary access controls, intersection construction methodology and transition to permanent operation.
Wickham Street / ROW interface, including walking and cycling connection	Works may interface with existing pedestrian, cyclist and property access movements on or near Wickham Street and the ROW, including where the corridor is used for secondary construction access.	Prepare SSTMP where works affect the live road corridor, ROW, pedestrian routes, cyclist movements, property access or secondary construction access. Confirm temporary pedestrian / cyclist protection, detours, property access management, work area separation, access controls, vehicle restrictions and relevant approvals.



6.2 Residential Development Transport Infrastructure

Table No. 7

Residential Development Transport Infrastructure		
Infrastructure Upgrade	Potential construction traffic implications	Final CTMP / SSTMP requirements
Ohaupo Rd / Saxbys Rd / Tomin Rd roundabout – southbound dual exit lanes on Ohaupo Rd from Saxbys Rd roundabout to Lambert Ct signalised intersection	Works may affect through traffic, turning movements, pedestrian and cyclist movements, and bus operations on Ohaupo Road, Saxbys Road and Tomin Road.	Prepare detailed SSTMP, construction staging plan, temporary lane arrangements, HCV routing, pedestrian / cyclist management, bus stop / bus route management, temporary speed or off-peak / night work controls where required, and obtain relevant RCA / NZTA approvals.
Ohaupo Rd / Saxbys Rd / Tomin Rd roundabout – four-laning of Ohaupo Rd between Saxbys Rd and Lambert Ct, additional lanes on Saxbys Rd and Tomin Rd approaches, and Ohaupo Rd southbound approach signal metering	Works may involve more substantial construction activity on Ohaupo Road and its approaches, with potential effects on capacity, turning movements, access, active mode movements and bus operations.	Prepare detailed SSTMP and construction staging plan addressing temporary lane arrangements, pedestrian / cyclist management, bus stop / bus route management, access management, temporary speed or off-peak / night work controls where required, and relevant RCA / NZTA approvals.
Ohaupo Rd / Lambert Ct signalised intersection	Signal upgrade works may affect Ohaupo Rd operation, local commercial access, active mode users and bus operations.	Prepare detailed SSTMP, construction staging plan, temporary lane arrangements, signal staging / commissioning plan, pedestrian / cyclist management, bus stop / bus route management, property access management, temporary speed or off-peak / night work controls where required and obtain relevant RCA approvals.
Ohaupo Rd / Resthill Cres movement restriction	Works may alter intersection operation, access patterns, turning movements and signage / delineation requirements.	Prepare SSTMP where works affect the live road corridor, and confirm construction staging, temporary and permanent movement controls, signage, delineation, property access management, pedestrian / cyclist provision, resident / business



Table No. 7

Residential Development Transport Infrastructure		
Infrastructure Upgrade	Potential construction traffic implications	Final CTMP / SSTMP requirements
		notification and obtain relevant RCA approvals.
Ohaupo Rd / Houchens Rd signalised T-intersection	Signal upgrade works may affect Ohaupo Rd operation, turning movements, active mode users, property access and bus operations.	Prepare detailed SSTMP, construction staging plan, temporary lane arrangements, signal staging / commissioning plan, pedestrian / cyclist management, bus stop / bus route management, property access management, temporary speed or off-peak / night work controls where required and obtain relevant RCA approvals.
MacMurdo Ave extension and Forth Cres extension	Road extension works may affect existing local street access, construction access, pedestrians and residential frontages.	Prepare SSTMP where works affect the live road corridor, and confirm construction staging, road tie-in methodology, local resident access, construction access controls, temporary turning arrangements, temporary pedestrian / cyclist provision and resident notification.
MacMurdo Ave / MacDonald Rd / Lambert Ct walking and cycling infrastructure improvements	Shared path / separated cycle path construction may affect footpaths, cycle movements, parking and property access.	Prepare SSTMP where the road corridor is affected, and confirm temporary pedestrian / cyclist protection, detours, crossing arrangements, safe work area separation, driveway / parking management and notification to affected users or properties.
Saxbys Rd shared path and crossing facilities	Shared path and crossing facility construction may affect footpaths, cycle movements, parking, property access and local traffic movements.	Prepare SSTMP where the road corridor is affected, and confirm temporary pedestrian / cyclist protection, detours, crossing staging, safe work area separation, driveway / parking management and notification to affected users or properties.
Deanwell Ave / Saxbys Rd bi-directional cycle path	Cycle facility works may affect road width, parking, turning	Prepare SSTMP where the road corridor is affected, and confirm temporary pedestrian



Table No. 7

Residential Development Transport Infrastructure		
Infrastructure Upgrade	Potential construction traffic implications	Final CTMP / SSTMP requirements
	movements, pedestrians and school-period activity.	/ cyclist protection, detours, safe work area separation, parking / driveway management, resident notification and school-period controls where required.
Prisk St / Mount View Rd sharrow markings	Line marking works may require short-duration mobile or static TTM.	Confirm low-impact TTM, temporary lane / shoulder occupation where required, safe implementation timing, resident notification if required and relevant RCA approvals.

6.3 General Requirements for Transport Infrastructure Works

- Transport infrastructure works shall be staged to maintain safe movement for general traffic, pedestrians, cyclists, public transport users and emergency services.
- The final CTMP shall identify which transport infrastructure works will be delivered before, during or after each subdivision / construction stage.
- Where works occur within a live road corridor, SSTMPs shall be prepared by a suitably qualified practitioner and approved before implementation.
- Temporary changes to bus stops, lane arrangements, parking, footpaths, shared paths, cycle facilities or property access shall be approved by the relevant RCA and communicated to affected parties.
- Temporary works shall not undermine the ITA staging framework or prematurely rely on future transport upgrades that are not yet available.

7. Construction Access Strategy

Construction access arrangements shall align with the approved construction programme, available road connections, surrounding network capacity and relevant RCA approvals. The final CTMP shall confirm the access points for each stage and demonstrate that each access can safely accommodate the largest construction vehicle expected to use it.

7.1 Industrial Development Construction Access

Construction access to the Industrial Development is expected to be based on the interim access strategy assessed in the ITA. Primary construction access is expected to be via the proposed interim four-arm roundabout at Greenwood Street / Kahikatea Drive and the north-south access road. Wickham Street and the existing ROW may be used as secondary construction access where required, subject to confirmation through the final CTMP / SSTMP process, vehicle restrictions and relevant RCA / property approvals. Higgins Road is not assumed to provide Industrial Development construction access or haul routing.



For the purpose of this draft CTMP, Stage 1A, Stage 1B, Stage 2 and Stage 3 refer to indicative Industrial Development construction access stages. These stages describe how construction access may be managed as different parts of the site and associated road connections become available. They are construction sequencing stages only and do not replace or redefine the development staging framework assessed in the ITA. On this basis, the indicative Industrial Development construction access arrangements are expected to be as follows:

- The main construction access is expected to be located via the Greenwood Street extension at the proposed interim four-arm roundabout, where that access is available and approved.
- Secondary access via Wickham Street / ROW may be used where required to support construction sequencing, subject to final CTMP / SSTMP confirmation, appropriate vehicle restrictions, access controls, property access management and relevant approvals.
- All construction accesses shall be fenced, gated, monitored and restricted to authorised construction vehicles, nominated visitors and emergency vehicles.
- Construction access arrangements shall avoid unnecessary HCV circulation through residential frontages and shall be reviewed when internal roads become available.

7.2 Residential Development Construction Access

Construction access to the Residential Development is expected to be managed through MacMurdo Avenue, Forth Crescent and Saxbys Road, subject to the final construction programme, detailed design and approved traffic management arrangements.

- MacMurdo Avenue and Forth Crescent are expected to be used as the primary construction access points for Stages 1 and 5.
- Saxbys Road is expected to be used as the main construction access point for Stages 2 to 4.
- All accesses shall be fenced, gated and monitored by the Contractor.
- The final CTMP shall identify entry and exit movements, vehicle tracking, sight distance, queue storage and any restrictions required for each access.
- The use of local residential streets shall be managed to minimise disturbance, protect vulnerable road users and avoid unnecessary HCV circulation through existing neighbourhoods.

7.3 Internal Haul Roads and Temporary Crossings

Internal haul roads shall be established to provide controlled movement of vehicles within the site and to reduce the need for construction vehicles to manoeuvre on public roads.

- Internal haul roads are expected to be formed as metal roads approximately 3 m to 5 m wide, with drainage swales beside the road formation where required.
- Internal haul roads shall be maintained in a safe and serviceable condition and shall be removed or reinstated when no longer required.
- Construction access pavements suitable for industrial vehicle use and wheel wash facilities shall be provided at active site accesses where there is a risk of debris or sediment being tracked onto public roads.
- Temporary bridges may be required in the Residential Development where haul roads cross existing streams.



- Temporary culverts may be required in the Industrial Development where works cross the existing northern drain corridor or other internal drainage corridors.
- Temporary structures shall be designed, certified and protected from traffic impacts where required.

8. Heavy Vehicle Routes and Construction Traffic Volumes

Heavy vehicle routes shall be confirmed in the final CTMP for each stage of works. Routes shall use the highest appropriate road hierarchy available and shall avoid unnecessary use of local residential streets. The route selection shall consider road function, intersection capacity, road safety, active mode facilities, bus routes, school activity, sensitive receivers and road asset condition.

The final CTMP shall confirm whether HPMVs are required and, if so, shall identify permitted routes (Figure No. 1⁹), permit conditions, bridge or pavement constraints and any route-specific restrictions that apply at the time of construction. HPMV routes shall be shown in the final CTMP once the contractor confirms the haulage methodology, vehicle types, payloads, material sources and destinations.

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⁹ Hamilton City Council Heavy Traffic Prohibitions Register Part 6B



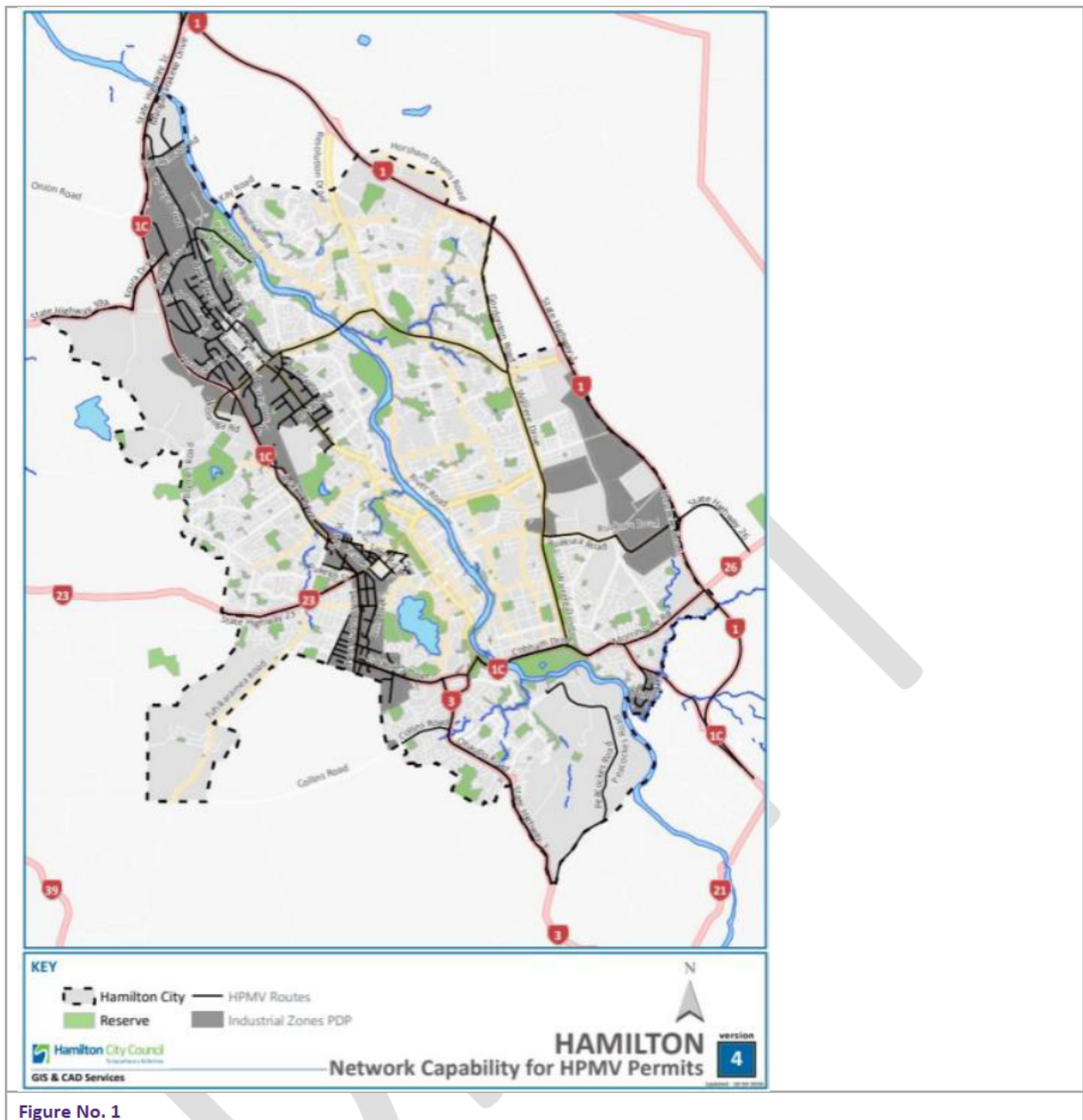


Figure No. 1

8.1 Industrial Development Haul Routes

- Use Greenwood Street (SH1C), Kahikatea Drive, the Greenwood Street / Kahikatea Drive interim four-arm roundabout and the north-south access road where available and approved.
- Use Wickham Street / ROW only as secondary construction access, subject to the controls set out in Section 7.1. Higgins Road is not assumed as an Industrial Development construction access or haul route.
- Confirm the source of imported fill and the destination of surplus cut before earthworks commence.
- Confirm whether stage-to-stage material balancing will reduce external HCV movements.
- Apply peak period, route or access restrictions where required to maintain safe and efficient operation of the surrounding network, particularly at the Greenwood Street / Kahikatea Drive interim four-arm roundabout, Kahikatea Drive, the north-south access road interface and any approved Wickham Street / ROW secondary access.



8.2 Residential Development Haul Routes

- Use Ohaupo Road (SH3) as the primary higher-order route for residential construction traffic where practicable.
- Use Saxbys Road, MacMurdo Avenue and Forth Crescent only as required to access the relevant construction stage.
- Avoid unnecessary HCV circulation through Deanwell, Glenview and adjoining local streets.
- Consider timing controls near school travel periods, peak commuter periods, bus stop activity and high pedestrian / cyclist activity.
- Confirm whether surplus material will be retained, reused, screened, sold or exported before bulk earthworks commence.

8.3 Construction Traffic Volume Calculation

The final CTMP shall calculate construction traffic volumes using the confirmed earthworks balance, transport infrastructure construction methodology, truck types and haulage methodology. The calculations shall include daily and peak hourly construction vehicle movements for each stage.

1. Confirm the trip generating cut, fill, topsoil and import / export quantities for the relevant stage.
2. Confirm the transport infrastructure works occurring in the same period as bulk earthworks or subdivision construction.
3. Confirm the material source, destination and intended material balancing strategy.
4. Confirm the truck type, payload and expected number of working days.
5. Calculate total one-way and two-way truck movements by stage.
6. Calculate peak hourly movements and confirm the capacity, geometry and queue storage requirements for each proposed construction access.
7. Identify whether peak period restrictions, shuttle operation, traffic controllers or temporary access controls are required.

Table No. 8

Construction Traffic Volume		
Final CTMP Input	Industrial Development	Residential Development
Material Balance	Confirm import fill source, surplus cut destination and opportunities for internal balancing between stages.	Confirm surplus cut destination and whether topsoil is retained, screened, sold or exported.
Transport infrastructure works	Confirm whether the Greenwood Street / Kahikatea Drive interim four-arm roundabout, north-south access road, east-west collector road, or walking and cycling connection are being constructed during the stage.	Confirm whether Ohaupo Rd works, intersection upgrades, local road extensions or active mode works are being constructed during the stage.



Table No. 8

Construction Traffic Volume		
Final CTMP Input	Industrial Development	Residential Development
Truck type and payload	Confirm rigid truck, truck and trailer, semi-trailer, HPMV or other vehicle configuration.	Confirm truck type and any restrictions appropriate for local residential streets.
Daily and peak hour HCV movements	Calculate for each stage, with particular focus on fill import and road corridor works.	Calculate for each stage, with particular focus on local road access and road corridor works.
Route maps	Show inbound and outbound routes using the approved construction access points.	Show inbound and outbound routes using the approved construction access points.
Timing controls	Identify any restrictions required for strategic and local road interfaces.	Identify any restrictions required for peak periods, school periods and bus stop interfaces.

9. Temporary Traffic Management

TTM shall be designed, implemented, monitored and removed in accordance with the New Zealand Guide to Temporary Traffic Management ("NZGTTM"), any applicable Code of Practice for Temporary Traffic Management ("CoPTTM") transition requirements, and the requirements of NZTA, HCC, WDC and any other relevant RCA at the time of construction. SSTMPs shall be prepared for all works that affect the road corridor or temporarily alter traffic, pedestrian, cyclist, public transport or property access arrangements.

- SSTMPs shall show signs, cones, barriers, lane arrangements, temporary pedestrian / cyclist routes, access controls, traffic controller positions and temporary speed management where required.
- Traffic controllers and restricted construction periods may be used during peak periods or at sensitive interfaces.
- Temporary changes to bus stops, footpaths, cycle facilities, lanes, parking or property access shall be approved before implementation.
- Where transport infrastructure upgrades are being constructed, SSTMPs shall identify the stage-by-stage arrangement for the permanent works, temporary lanes, tie-ins, surfacing changes, markings, signs and access transitions.
- TTM shall be inspected and maintained by an appropriately qualified STMS.
- Emergency access shall be maintained at all times unless otherwise agreed with emergency services and the relevant RCA.

10. Working Hours and Scheduling

Construction activities are expected to be undertaken within the working hours set out below, subject to consent conditions and any road corridor restrictions imposed by the relevant RCA.



Table No. 9

Working Hours	
Day	Draft Construction Working Hours
Monday to Friday	7:30 am to 6:00 pm
Saturday	8:30 am to 4:30 pm
Sunday and public holidays	No works, unless separately approved

Works within the road corridor may require different timing where required for safety, network efficiency or RCA approval. Any such works shall be addressed through the relevant SSTMP and approval process.

- HCV movement peaks shall be scheduled to avoid unnecessary queuing at site accesses.
- Large concrete pours, plant mobilisation, asphalt deliveries, road surfacing, pavement tie-ins, signal works and over-dimension movements shall be scheduled and managed through the final CTMP.
- Where construction traffic or road corridor works could materially affect school, commuter, bus or pedestrian peak periods, timing controls shall be considered.

11. Parking, Loading and Site Controls

The Contractor shall manage parking, loading and site controls to prevent construction activities from adversely affecting adjoining roads and land uses.

- Contractor and staff parking shall be accommodated on site wherever practicable.
- Visitor access shall be controlled through nominated entry points only.
- Site compounds, laydown areas, material storage and loading zones shall be located within the site.
- Deliveries shall be scheduled to avoid truck queuing on public roads.
- Gates shall be managed so that trucks can enter the site without obstructing traffic lanes, footpaths, cycle facilities or bus stops.
- Emergency vehicle access shall be retained at active site accesses.

12. Pedestrian, Cyclist and Public Transport Management

The Contractor shall maintain safe movement for pedestrians, cyclists and public transport users throughout the construction period.

- Footpaths, shared paths and cycle facilities shall remain open wherever practicable.
- Where temporary closure or diversion is required, the alternative route shall be safe, direct, accessible and clearly signed.
- Temporary pedestrian routes shall provide appropriate surfacing, width, lighting and protection from construction activity where required.
- Construction access points shall be managed to minimise conflict with pedestrians and cyclists.
- Transport infrastructure works that affect shared paths, cycle lanes, crossings, bus stops or footpaths shall include dedicated pedestrian, cyclist and public transport provisions within the relevant SSTMP.
- Any temporary bus stop closure, relocation or route impact shall be coordinated with the relevant public transport operator, Waikato Regional Council ("WRC") and RCA.



- Particular attention shall be given to Ohaupo Road, Saxbys Road, Deanwell Avenue, MacMurdo Avenue, Forth Crescent, Greenwood Street, Kahikatea Drive, Kahikatea Drive Extension and Wickham Street / ROW where construction access or transport infrastructure works interface with existing road users.

13. Road Cleanliness, Dust, Debris, and Wheel Wash

The Contractor shall implement measures to prevent mud, sediment, aggregate, dust and debris from being tracked or blown onto the public road network.

- Construction access pavements suitable for industrial vehicle use shall be provided before active construction accesses are used.
- Wheel wash or wheel cleaning facilities shall be provided where there is a risk of material being tracked onto public roads.
- Receiving roads shall be inspected regularly, particularly during earthworks, road corridor works and wet weather.
- Road sweeping shall be undertaken as required to maintain a clean and safe road environment.
- Loads shall be covered or secured where there is a risk of material loss, dust or debris.
- Internal haul road speeds shall be managed to reduce dust generation and improve safety.

14. Road Asset Protection

Construction traffic and road corridor works have the potential to affect pavement, kerb and channel, berms, footpaths, signs, road markings, drainage assets and other existing transport infrastructure. The Contractor shall protect road assets and reinstate any construction-related damage.

- Undertake pre-construction surveys for roads and assets expected to be used by construction traffic.
- Monitor road condition during construction, particularly on roads used by HCVs or affected by temporary traffic staging.
- Record, investigate and repair road damage attributable to construction activities.
- Undertake post-construction condition surveys and agree reinstatement requirements with the relevant RCA.
- Maintain all road surfaces, footpaths, cycle facilities and access points in a safe condition during construction.

15. Community and Stakeholder Engagement

A communications protocol shall be implemented before construction begins. The protocol shall provide clear contact channels and ensure affected parties are notified of significant construction traffic activities and transport infrastructure works.

- A pre-construction letter drop shall be undertaken by the Contractor before construction works commence.
- Notification shall identify the construction programme, access points, likely traffic effects and key contact details.
- Project contact details shall be displayed at active site entrances.



- A Site Liaison Officer shall be appointed to manage complaints and queries.
- A complaints register shall be maintained throughout construction.
- Complaints shall be acknowledged within 24 hours.
- Where required, relevant RCAs shall be notified and a follow-up / action plan provided within 72 hours.
- Significant truck movements, temporary traffic works, road corridor changes, intersection works, active mode detours and bus stop impacts shall be communicated in advance to affected parties where practicable.

16. Monitoring, Reporting and Corrective Action

The Contractor shall monitor CTMP implementation and review the effectiveness of construction traffic management measures throughout construction.

- Active site accesses, haul roads and receiving roads shall be inspected regularly.
- TTM layouts shall be inspected in accordance with the approved SSTMP and NZGTTM requirements.
- Wheel wash facilities, construction access pavements and road cleanliness shall be inspected during active earthworks, road corridor works and following rainfall.
- HCV route compliance, driver behaviour, site access queuing and road corridor construction staging shall be monitored during peak construction periods.
- Complaints, incidents and near misses shall be reviewed and corrective actions implemented where required.
- The final CTMP and SSTMPs shall be updated if construction methodology, transport infrastructure staging, access arrangements, haul routes or traffic effects materially change.

17. Final CTMP Requirements

Before construction commences for each relevant stage, the final CTMP shall include sufficient detail to manage the construction traffic effects of that stage. At a minimum, the final CTMP shall include the items listed below.

The final CTMP shall confirm the detailed construction methodology, access arrangements, haul routes, traffic volumes, temporary traffic management layouts and communications procedures for the relevant construction stage. Any material departure from the construction traffic assumptions in this draft CTMP shall be identified, assessed and justified.

Table No. 10

Final CTMP Requirements		
No.	Final CTMP Item	Minimum Requirement
1	Construction programme	Relevant construction stage timing, working hours, expected duration and sequencing of major traffic-generating activities, including earthworks, road corridor works and transport infrastructure upgrades.
2	Transport infrastructure staging plan	Identify which ITA transport infrastructure upgrades are being constructed in each stage and whether SSTMPs, CARs or RCA approvals are required.



Table No. 10

Final CTMP Requirements		
No.	Final CTMP Item	Minimum Requirement
3	Site layout plans	Site compounds, access gates, haul roads, laydown areas, worker parking, wheel wash facilities, loading areas and internal traffic circulation.
4	Construction access plans	Access points by relevant construction stage, including residential construction access via MacMurdo Avenue, Forth Crescent and Saxbys Road, and Industrial Development access via the Greenwood Street / Kahikatea Drive interim four-arm roundabout, north-south access road and any approved secondary access via Wickham Street / ROW. Higgins Road is not assumed as an Industrial Development construction access point.
5	Truck movement calculations	Import / export quantities relevant to traffic generation, transport infrastructure material deliveries, truck type, payload, daily and peak hourly HCV movements by relevant construction stage.
6	Haul route maps	Inbound and outbound routes, restricted routes, route signage and timing controls for all approved construction access points.
7	Temporary haul road plans	Internal haul roads, surfacing, drainage swales, temporary bridges, temporary culverts and reinstatement approach.
8	SSTMPs	TTM drawings for works in or affecting the public road corridor, including intersections, active mode facilities, bus stops, lane closure and road tie-in works.
9	Pedestrian / cyclist / PT management	Temporary routes, bus stop management, school-period controls and active mode protection
10	Sensitive receiver controls	Identify any schools, early childhood centres, bus stops, high pedestrian areas, commercial accesses and residential frontages that may be affected by construction traffic and shall specify any timing, route or access controls required to manage those interfaces.
11	Parking and loading plan	Staff parking, visitor management, loading areas, marshalling and queuing controls.
12	Road cleanliness controls	Construction access pavements, wheel wash, road sweeping, inspection frequency and corrective actions.
13	Community engagement protocol	Letter drop, site signage, Site Liaison Officer, complaint register, 24-hour acknowledgement and 72-hour follow-up process.
14	Monitoring and review	Inspection programme, incident reporting, meeting review and CTMP update process.

18. Matters to Confirm Before Construction

The following matters require confirmation by the Contractor and design team before the final CTMP is certified.



Table No. 11

Matters to Confirm Prior to Construction	
Item	Required Confirmation
Construction access by stage	Confirm the access point or points to be used for each stage, including any transition between temporary and permanent arrangements.
Greenwood St extension at interim Greenwood St / Kahikatea Dr 4-arm roundabout	Confirm whether and when the Greenwood Street extension, north-south access road and interim Greenwood Street / Kahikatea Drive four-arm roundabout are available for Industrial Development construction access, including any staging, temporary traffic management, queue storage, approval or access restrictions required before use.
Wickham Street / ROW secondary access	Confirm whether Wickham Street / ROW is required as secondary Industrial Development construction access, including timing and duration of use, vehicle types, movement restrictions, access controls, property access requirements and relevant RCA / property approvals.
Transport infrastructure staging	Confirm when each ITA transport infrastructure upgrade will be constructed and how it interacts with subdivision staging and construction traffic access.
Traffic-generating earthworks quantities	Confirm import / export quantities that generate external truck movements, including any material balancing between stages.
Truck movements	Calculate daily and peak hour HCV movements by relevant construction stage based on confirmed material source, destination, truck type, transport infrastructure works and construction programme.
Haul route maps	Confirm inbound and outbound haul routes and any restricted routes.
Temporary crossings	Confirm locations, designs and approvals for temporary bridges and culverts.
Working hours	Confirm final working hours under consent conditions and any road corridor restrictions.
TTM framework	Confirm the applicable TTM standard and RCA requirements at the time of construction.
Public transport	Confirm any bus stop, route or pedestrian access impacts and required operator approvals.
Road condition surveys	Confirm roads requiring pre and post-construction condition surveys.

19. Conclusion

This draft CTMP establishes the framework for managing construction traffic effects associated with the SL1 Industrial Development and Residential Development. It addresses construction access, heavy vehicle routing, traffic-generating earthworks quantities, transport infrastructure works, TTM, pedestrian and cyclist protection, public transport interfaces, parking, loading, road cleanliness, road asset protection, communications and monitoring.



The Industrial Development involves substantial earthworks and infrastructure construction, including a material fill shortfall that will require careful management of HCV movements, import routes and access controls. It also includes construction of transport infrastructure such as the Greenwood Street / Kahikatea Drive interim four-arm roundabout, north-south access road, east-west collector road and active mode facilities

The Residential Development involves staged earthworks and infrastructure delivery in an existing residential transport environment, including local road extensions, active mode works and Ohaupo Road corridor / intersection upgrades.

Subject to implementation of this CTMP framework, preparation and certification or approval of the final stage-specific CTMP and SSTMPs, and confirmation of construction access, transport infrastructure staging, truck movement calculations, haul routes and RCA approvals, construction traffic effects are expected to be capable of being appropriately managed.

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