DRAFT – Construction Traffic Management Plan

Lodestone Energy Limited

July 2025 – Haldon Station

Construction Traffic Management Plan – Haldon Solar Project

1. Purpose

This Construction Traffic Management Plan (CTMP) has been prepared to support the safe and effective movement of vehicles and personnel associated with the construction of the Haldon Solar Project. It establishes the controls necessary to minimise disruption to the local road network, protect the safety of road users and site personnel, and comply with relevant regulatory requirements, including the Code of Practice for Temporary Traffic Management (CoPTTM), Environment Canterbury expectations, and Mackenzie District Council guidelines.

2. CTMP Objectives

The CTMP will set out the controls required to manage and mitigate the traffic effects arising during the construction phase of the project.

The objectives of the CTMP are to:

- Maintain safe use of the road network affected by the site works for the general public and for site workers such that:
    - construction traffic volumes are safely accommodated within the existing road network;
    - so far as is reasonable, congestion or traffic delays are avoided;
    - any traffic effects associated with construction are no more than minor;
- Ensure that access to and from the site is undertaken in accordance with the management protocols of this CTMP and in accordance with the final CTMP to be developed by the Contractor(s) once appointed;
- Set the parameters for the final CTMP to meet the specific requirements for construction traffic management as required by the resource consent for the works and in accordance with the relevant By-Laws, Acts, Regulations and Mackenzie District Plan Rules, Objectives and Conditions in addition to any specifications outlined by NZTA;
- Set the parameters for the development of Temporary Traffic Management (TTM) to manage changes to normal operating conditions in accordance with the NZTA Guide to Temporary Traffic Management (NZGTTM) as part of the final CTMP;
- Undertake positive and constructive liaison with Mackenzie District Council, NZTA, and other stakeholder groups as appropriate to understand and reflect the needs these parties; and
- Adopt a flexible and proactive approach to TTM to respond to the construction activities being undertaken and the needs of other stakeholder groups, or temporary major events, as appropriate.

3. Project Description

The Haldon Solar Project is a utility-scale photovoltaic generation facility located on Haldon Station, approximately 15 km southeast of Twizel. The site spans approximately 320 hectares and will include solar panels mounted on piles, internal access roads, a substation, a battery energy storage system (BESS), cable trenches, fencing, and laydown areas.

4. Duration and Construction Phasing

The construction period is expected to span 14 to 18 months. Key phases include:

- Site establishment and compound setup
- Internal road and access upgrades
- Piling and solar array installation
- Cable trenching and electrical works
- Substation and BESS installation
- Commissioning and demobilisation

5. Control of Construction Activities

Contractors will provide details of proposed dates and working hours for undertaking construction activities in accordance with any restrictions imposed by the resource consent. The contractor will also provide a construction programme to Mackenzie District Council and NZTA outlining timing of the expected construction stages and highlighting any periods where construction traffic activity is anticipated to be higher than average e.g. large concrete pours.

Significant deliveries or over dimension vehicle access should be programmed, where possible, to arrive outside of peak staff arrival and departure times or the network peak hours.

6. Traffic Control on Public Roads

All TTM required to manage access to the site is to be undertaken in accordance with the NZGTTM. The TTM is to be flexible and will respond to changing intensities of construction activities and prevailing road conditions. This is includes ensuring that any major local events are taken into account as appropriate.

The contractor will appoint a Site Traffic Management Supervisor (STMS) and will maintain that role for the duration of the works. This may be a specialist sub-contractor.

Detailed TTM measures and layout plans will be provided by the Contractor to Mackenzie District Council /NZTA for approval in accordance with the consent conditions.

It is expected that Level 1 (<10,000vpd) TTM will be required for all roads.

No changes will be made to the approved TTM layouts unless agreed in advance with Mackenzie District Council unless considered necessary to do so by the STMS or NZ Police to maintain the safe operation of the road network. Any such changes will be reported to Mackenzie District Council.

While construction traffic is expected to have limited interaction with the public road network, the following temporary traffic management measures may be employed during delivery or access activities impacting Haldon Arm Road:

- Advance warning signage (in accordance with CoPTTM)
- Traffic controllers or spotters
- Restricted delivery windows to avoid peak farming or tourism times
- Coordination with Mackenzie District Council for any required approvals

7. Site Access Points

The primary access point will be via an upgraded farm entrance off Haldon Arm Road, located at the southern boundary of the site. The entrance will include:

- Stabilised entry with aggregate and silt controls
- Setback gate to avoid queuing on public roads
- Security fencing and manned gate access
- Signage in accordance with CoPTTM

8. Vehicle Types and Traffic Volumes

Expected traffic during peak construction includes:

- Up to 80 vehicle movements per day (round trip count)
- Heavy vehicles: deliveries of piles, panels, transformers, BESS units, cable drums, and aggregate
- Light vehicles: staff and subcontractor utes and vans (up to 150 workers)
- Heavy vehicle deliveries will be managed to avoid peak conflict periods and minimise overlap with staff arrival/departure.

9. Onsite Traffic Management

The following controls will be implemented within the construction site:

- Site speed limit: 15 km/h
- Directional signage and designated haul routes
- Separation of light and heavy vehicles where practical
- Turning bays and one-way loops to avoid reversing
- Dedicated pedestrian walkways and crossings
- High-visibility clothing for all personnel

10. Parking and Laydown Areas

Designated parking areas will be located adjacent to the main compound. Laydown zones will be established for material storage and unloading near the construction zones. Only authorised vehicles will access active work areas.

11. Dust, Mud and Environmental Controls

- Water carts will be deployed during dry and windy conditions
- Stabilised site entrances will reduce sediment tracking
- Wheel wash facilities will be used if sediment transport becomes problematic
- Vehicle movements will be monitored as part of the site's erosion and sediment control plan

12. Emergency Access

Unimpeded access for emergency services will be maintained at all times. Site induction will include emergency egress routes and contact protocols. Emergency vehicle assembly points will be clearly marked on site plans.

13. Inductions and Driver Responsibilities

- All drivers entering site will undergo induction covering speed limits, right-of-way rules, and site-specific hazards
- All delivery drivers will receive a pre-arrival briefing or written instructions
- Spotters will be used when manoeuvring in congested areas
- Drivers must hold appropriate licences and adhere to fatigue management requirements

14. TMP Monitoring and Updates

The TMP will be reviewed at least monthly or upon any major construction phase transition. Daily toolbox talks will include traffic safety topics, and regular inspections will be conducted by the site supervisor or delegated HSE staff.

15. Stakeholder and Community Considerations

Lodestone will engage with neighbours and local stakeholders to inform them of construction activities. Any works that could impact local traffic, farming operations, or tourism will be communicated in advance. A contact phone number will be posted at the site entrance for community enquiries.

Appendix A: Access and Site Layout Plan (to be inserted following design completion)

Appendix B: Example Delivery Schedule (To be inserted following design completion)

Appendix C: CoPTTM Compliant Signage Templates (To be inserted following design completion)

Appendix D: Driver Induction Form (To be inserted following design completion)

Appendix E: Emergency Contact and Response Chart (To be inserted following design completion)