Preliminary Construction Traffic Management Plan

Glenfield Industrial Precinct - Stage 1

2/07/2025

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Revision History

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1 Introduction

1.1 Overview

Ason Group has been engaged by J.C. & F.W. Kennett Pty Ltd to prepare a Preliminary Construction Traffic Management Plan (CTMP) in support of a State Significant Development (SSD) application for Stage 1 of the Glenfield Industrial Precinct, located at 2 Cambridge Avenue, Glenfield (the Site).

This Preliminary CTMP has been prepared ahead of SSD lodgement and prior to any development consent being issued. As such, specific conditions of consent are not yet available. Nonetheless, the CTMP has been prepared in line with typical requirements for SSDs of this nature and sets out the expected traffic management approach during construction, addressing the following:

a. Assessment of cumulative impacts associated with other construction activities (if any).
b. Assessment of road safety at key intersections and locations to be subject to heavy vehicle construction traffic movements and high pedestrian activity,
c. Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process,
d. Anticipated peak hour and daily construction vehicle movements to and from the site,
e. On-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle; and
f. Details of temporary cycling and pedestrian access during construction.

The purpose of this report is to outline preliminary construction traffic principles to minimise impacts on the surrounding road network, ensure the safety of road users and workers, and describe expected vehicle routes and traffic controls during the works period.

This document is preliminary in nature and is expected to be updated as the design and construction details progress. Any future special events or activities requiring separate approval (e.g. road closures or lane reconfigurations) would be subject to separate permitting outside the scope of this CTMP.

Please note that Ason Group has prepared this preliminary CTMP for planning purposes only. The final CTMP to be implemented on site must be prepared by a suitably qualified traffic management practitioner holding current TfNSW Work Zone Traffic Management Plan (WZTMP) certification. Contact details for the responsible traffic consultant are to be provided at the relevant stage of approval and construction.

1.2 Proposed Development

The proposed development comprises Stage 1 of the Glenfield Industrial Precinct, which forms part of a broader strategic redevelopment of 2 Cambridge Avenue, Glenfield. Stage 1 includes the delivery of two large-format industrial warehouse buildings with ancillary office space and a café component, supported by associated car parking, loading bays, and internal access roads.

The combined Gross Floor Area (GFA) for Stage 1 is 72,940 m², with the following warehouse components and car parking provisions:

- Warehouse 1, inclusive of:
  – 34,760 m² Warehouse GFA (excluding 3,440 m² Loading Area)
  – 1,000 m² Office GFA
  – 65 m² Dock Office GFA
  – Provision of 141 car parking spaces, including accessible spaces and provision of Electric Vehicle bays.
- Warehouse 2, inclusive of:
  – 35,750 m² Warehouse GFA (excluding 3,550 m² Loading Area)
  – 1,000 m² Office GFA-
  – 65 m² Dock Office GFA
  – 300 m² Café GFA
  – Provision of 190 car parking spaces, including accessible spaces and provision of Electric Vehicle bays.

The Stage 1 Site Plan presented below.

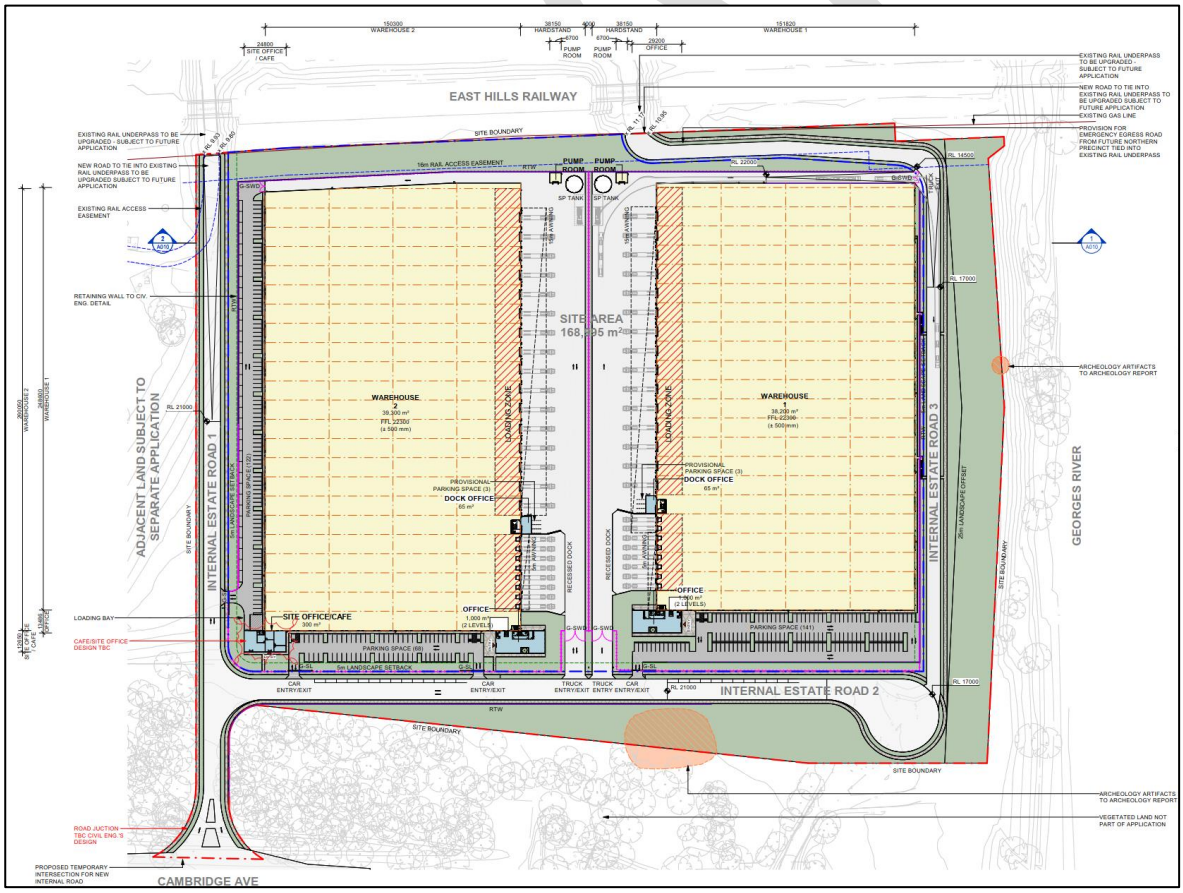

Figure 1: Stage 1 Site Plan

2 The Site

2.1 Site Location

The Stage 1 Site, legally described as Lot 14 in DP 1256895, forms part of the broader Glenfield Industrial Precinct Estate, located to the north of Cambridge Avenue, Glenfield within the Campbelltown City Council (Council) Local Government Area (LGA). It is zoned for primarily industrial uses under the Industry SEPP and has historically been used for waste disposal.

A Site Plan showing the Stage 1 and its relation to the Glenfield Industrial Precinct and Road Network is provided in **Figure 2**.

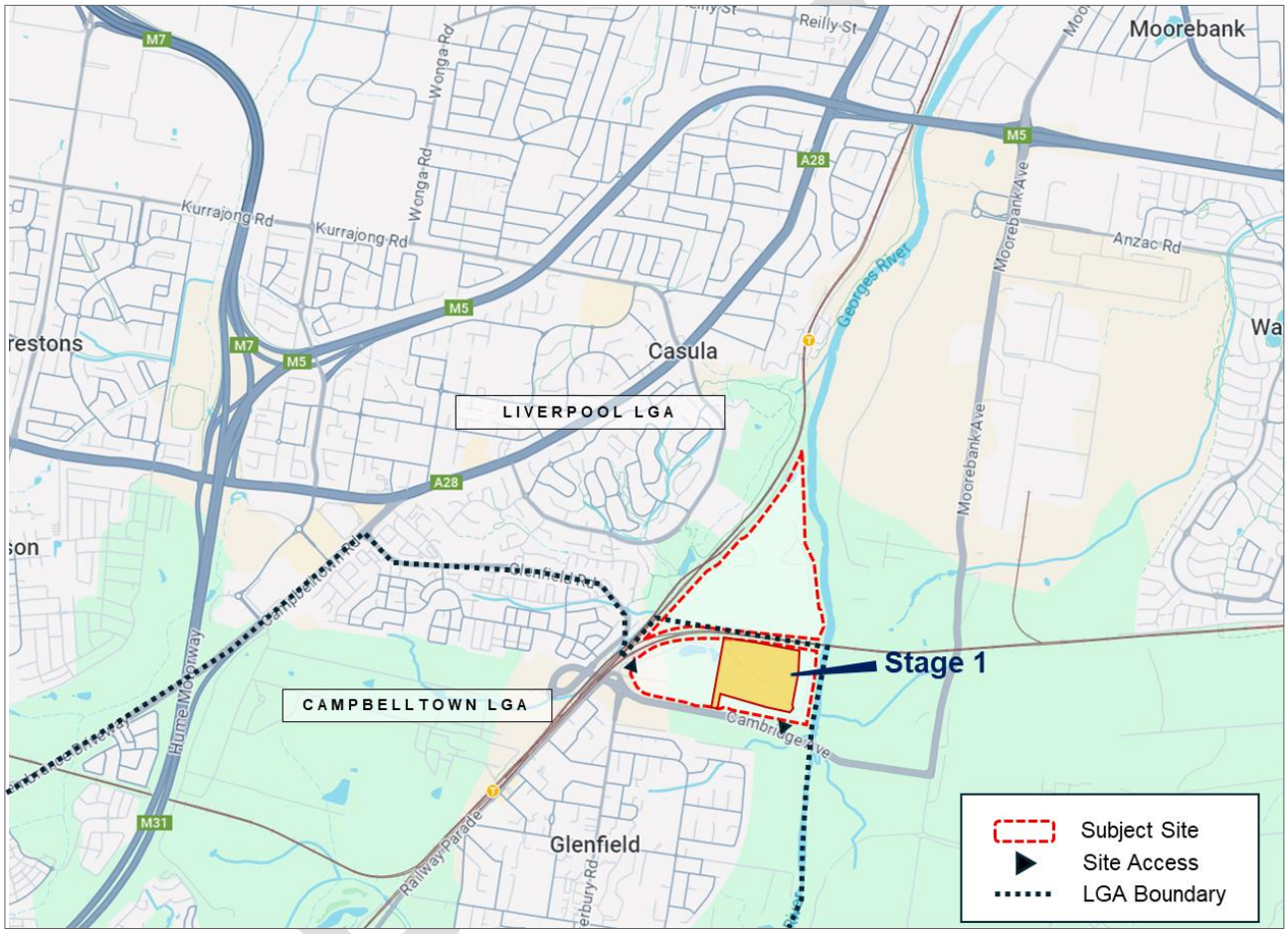

Figure 2: Site Context

2.2 Road Network

2.2.1 Road Hierarchy

Key roads in the vicinity of the Site are shown in Figure 3, and include:

- Cambridge Avenue: A sub-arterial road providing a key east–west link between Moorebank Avenue and Glenfield. It currently operates as a two-lane single carriageway (one lane in each direction) with a posted speed limit of 60 km/h. Traffic surveys indicate it carries approximately 15,000 vehicles per day and is nearing capacity in peak periods. TfNSW has identified Cambridge Avenue for future upgrades to four lanes.
- Glenfield Road: An arterial road running north–south, connecting to Campbelltown Road and the M5 Motorway corridor. It carries approximately 15,000 vehicles per day and provides part of the existing heavy vehicle access route to the site.
- Canterbury Road: An arterial link located east of the site, with traffic volumes around 18,000 vehicles per day. It connects to key north–south routes in the area.
- Railway Parade: A collector road that connects to Glenfield Station, with daily volumes around 7,500 vehicles. It has lower speeds (50–60 km/h) and services surrounding residential areas.

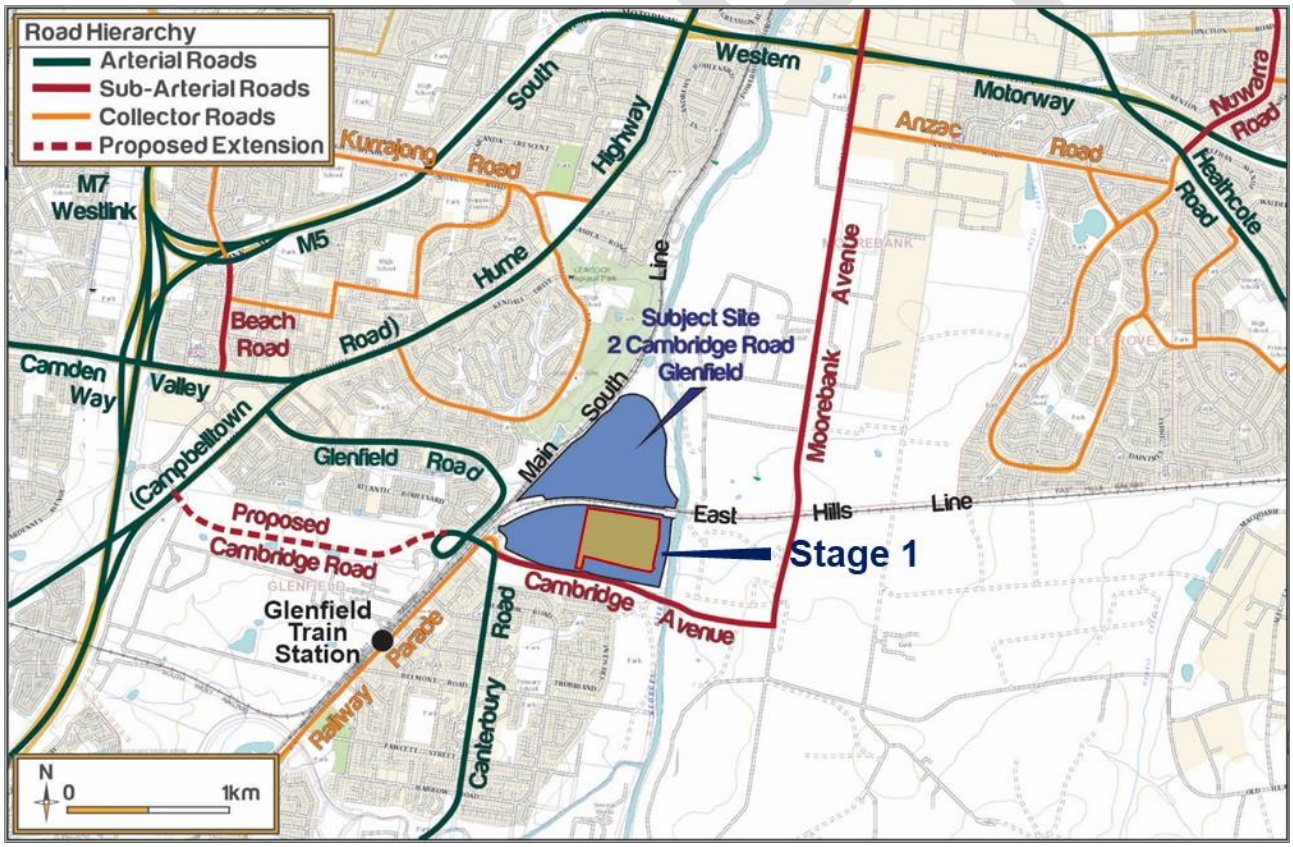

Figure 3: Road Hierarchy

2.2.2 Heavy Vehicle Routes

Approved heavy vehicle routes around the study area are illustrated in **Figure 4**.

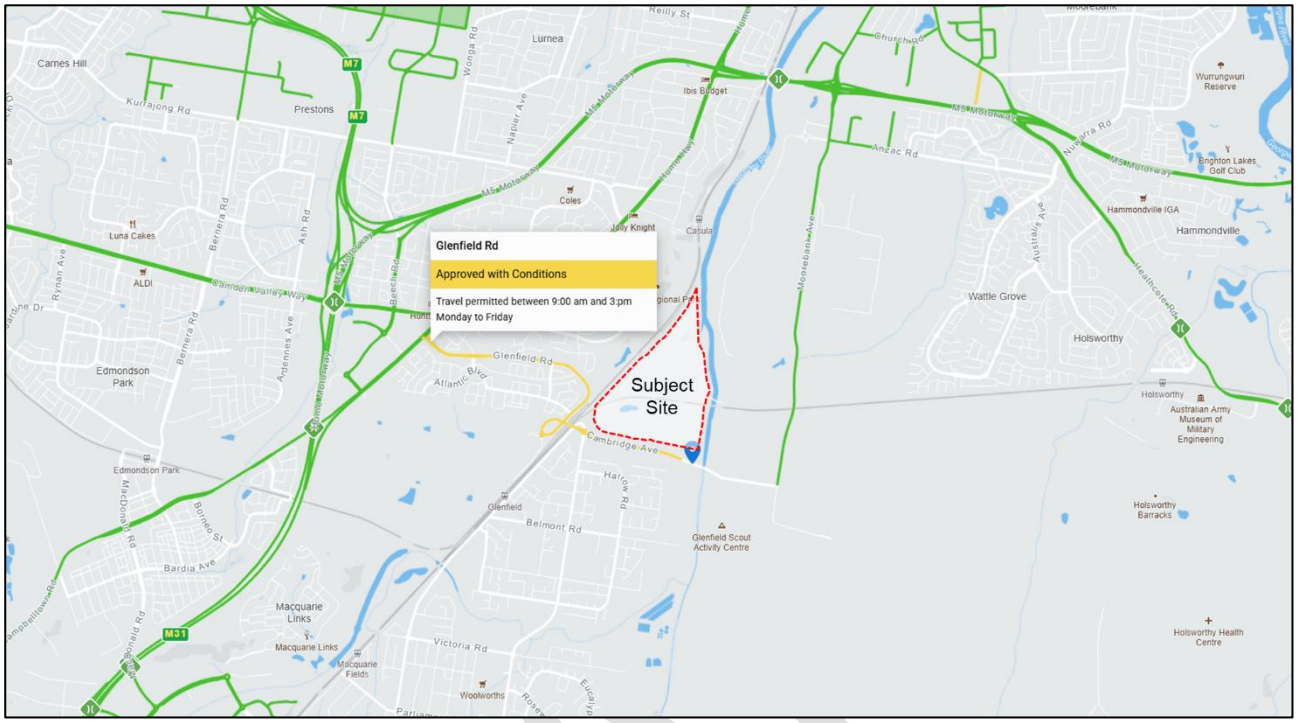

Figure 4: Approved Heavy Vehicle Map (19.0m B-double Routes)

TfNSW currently identifies Campbelltown Road and Moorebank Avenue as 19.0m B-double truck routes. Cambridge Avenue is approved as a heavy vehicle route with travel restrictions to the west of the current primary Site access, which provides access to Campbelltown Road via Glenfield Road. The section of Cambridge Avenue between the site access and Moorebank Avenue does not currently permit heavy vehicles (such as 19.0m B-doubles).

It is noted that Cambridge Avenue is currently restricted for B-double travel west of the Site access, with the segment between the Site and Moorebank Avenue not approved for regular 19.0m B-double operations.

3 Overview of Construction Works

3.1 Staging and Duration of Works

While there is no Contractor currently engaged for the project, for the purposes of this Draft CTMP, construction staging and duration assumptions have been informed by comparable industrial developments in Western Sydney.

It is anticipated that preliminary construction works could commence in 2025, subject to relevant authority approvals and weather conditions. The full construction program is expected to occur over a period of approximately 1 to 2 years, noting this duration may vary depending on procurement, staging, and site-specific considerations.

The following outlines the indicative staging of works:

- Demolition works: 6 to 10 weeks
- Excavation activities: 6 to 12 months
- General construction works: 12 months, running concurrently with excavation during early stages

3.2 Construction Hours

Construction activities are expected to occur during standard hours consistent with the NSW EPA guidelines and typical SSD conditions. The proposed hours of work are:

- Monday to Friday (other than Public Holidays): 7:00am – 6:00pm.
- Saturday: 8:00am – 1:00pm
- Sunday & Public Holidays: No works to be undertaken.

Any work to be undertaken outside of the standard construction hours will be required to obtain an Out of Hours (OOH) approval; any such works would necessarily be undertaken in accordance with the appropriate OOH protocols and approval processes.

3.3 Site Access

3.3.1 Construction Vehicle Access

During early works, construction vehicles will access the Site via the existing eastern driveway on Cambridge Avenue. Once the new roundabout is constructed and operational, all movements will transition to that intersection in line with the permanent access strategy endorsed under the Planning Proposal.

To ensure safe and compliant access during the interim period, the following turning arrangements will apply:

- Vehicles under 19.0 m in length (e.g. rigid trucks, small plant vehicles) will operate on a left-in / left-out basis only, avoiding all right-turn movements across Cambridge Avenue.

- Vehicles 19.0 m and over (e.g. 19.6 m truck and dog combinations) will enter the Site via left-in movements and depart via right-out, with all right turns actively managed by a certified traffic controller to ensure safe exit conditions.

This access strategy is designed to align with existing heavy vehicle restrictions on Cambridge Avenue. As identified in Section 2.2.2 and shown in Figure 4, the section of Cambridge Avenue between the Site and Moorebank Avenue is not approved for 19.0 m+ vehicle access.

These arrangements will remain in place until the permanent roundabout is constructed, at which point full-movement access will be enabled in accordance with the long-term design.

Figure 5 details the likely key access strategy into the routes between the Site and the regional road network.

3.3.2 Emergency Vehicle Access

Emergency vehicle access to and from the Site will be available at all times while the Site is occupied by construction workers; emergency protocols during the works will be developed by the Project Manager for inclusion within the final CTMP.

3.3.3 Pedestrian Access

There are currently no formal pedestrian facilities or footpaths provided along Cambridge Avenue adjacent to the Site. However, the existing grass verge on both sides of the carriageway remains accessible for occasional pedestrian use.

While pedestrian activity is expected to be minimal—given the industrial nature of the precinct and the availability of on-site parking for all construction personnel—pedestrian safety will nonetheless be managed through appropriate site signage, temporary barriers, and secure gated access. All construction workers will be instructed to access the Site internally, with no pedestrian movements anticipated across the construction access point. This arrangement ensures that potential pedestrian-vehicle conflicts are minimised during the works period.

3.4 Construction Vehicle Access Routes

All construction traffic will continue to enter and exit the Site via Cambridge Avenue. The haulage paths have been revised to reflect the new project location while retaining the same document structure.

- Arrival Trips: All heavy vehicles will converge on Camden Valley Way, then follow a common final approach:
  - Camden Valley Way → right onto Campbelltown Road → left onto Glenfield Road → right onto Cambridge Avenue → left into the Site.
  - Feeder routes to Camden Valley Way
    - From the north: southbound on the Hume Highway (M31), exit to Camden Valley Way.
    - From the east / north-east: westbound on the M5 Motorway, take the Camden Valley Way off-ramp and proceed south.

- From the west: travel eastbound along Camden Valley Way.
- From the south: northbound on the Hume

- Departure Trips for Vehicles under 19.0m in length: Vehicles will turn left out of the Site onto Cambridge Avenue, then:
  - Left onto Moorebank Avenue, followed by:
  - Left to the M5 Motorway eastbound ramps for destinations to the CBD and eastern suburbs; or
  - Right to the M5 Motorway westbound ramps for connections to the Hume Highway, M7 and western Sydney.
- Departure Trips for Vehicles over 19.0m in length (under traffic controller supervision):
  - Left onto Glenfield Road, followed by:
  - Right onto Campbelltown Road for:
    - Westbound trips continuing on Camden Valley Way.
    - Northbound trips via right turn onto the M7.
    - North-east trips via right turn onto the M5.
  - Left onto Campbelltown Road for southbound trips, continuing to the Hume Highway (M31).

These routes are shown in Figure 5.

Figure 5: Construction Vehicle Routes (Rigid Vehicles)

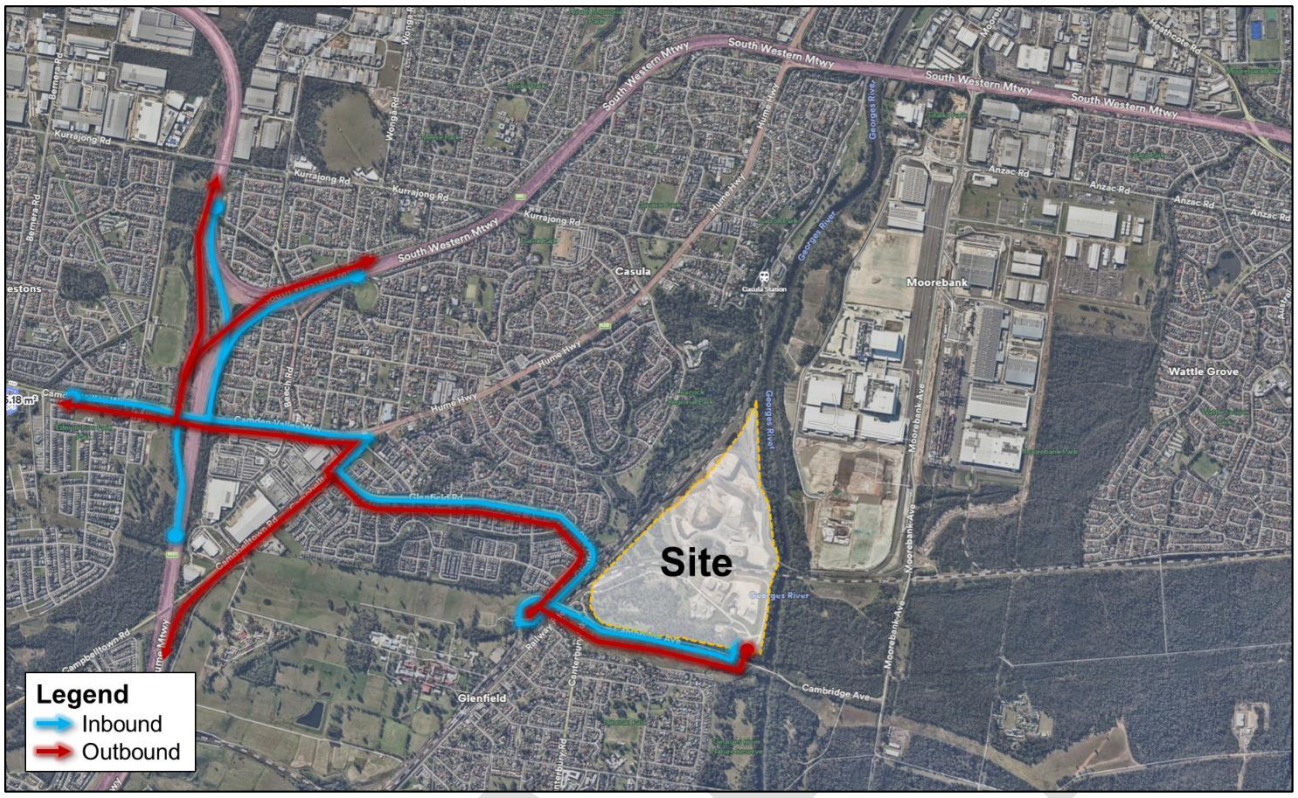

Figure 6: Construction Vehicle Routes (Articulated Vehicles)

A copy of the approved routes will be distributed by the Project Manager to all drivers as part of their induction process.

This CTMP addresses general construction vehicle activity only. Should any oversize or overmass vehicle movements be required, they will be undertaken in accordance with existing freight route restrictions and supported by separate permit applications where necessary.

3.5 Fencing Requirements

Security fencing will be erected along the entire boundary of the Site and will be maintained for the duration of the construction works to ensure that unauthorised persons are kept out of the Site.

Site access gates would be provided at the access driveway which would remain closed at all times outside of the permitted construction hours.

3.6 Materials Handling

All material loading will be undertaken wholly within the Site, and all construction equipment, materials and waste will similarly be strictly kept within the Site.

While not anticipated, should any materials handling (or other constructed related activity) be required from the public roadway (i.e. Cambridge Avenue) then prior approval shall be sought and obtained from the appropriate authorities.

3.7 Additional Site Management

Although it is not expected, in the event that any Site construction traffic management outside of that described in the implemented CTMP is required, the Project Manager will be required to notify adjacent properties of any temporary traffic restrictions (or the like) at least fourteen (14) days in advance.

3.8 Road Occupancy

The potential exists for future road occupancy requirements to facilitate construction activities along Cambridge Avenue, particularly in relation to the delivery of the proposed roundabout access or any temporary service connections (e.g. utilities, drainage, etc.).

Any works that may impact the operation of Cambridge Avenue or require temporary traffic control measures will be subject to Road Occupancy Licences (ROLs) issued by Transport for NSW (TfNSW) and/or Campbelltown City Council, as appropriate.

Prior to the commencement of any works involving partial lane closures or traffic diversions, a detailed road-specific CTMP will be prepared. This CTMP will outline staging, traffic control measures, pedestrian and cyclist provisions, and coordination with relevant authorities to ensure traffic flows along Cambridge Avenue are maintained and safety risks are minimised.

All road occupancy works will be planned to occur outside peak periods where possible and will incorporate community and stakeholder notification in accordance with the Communications Strategy outlined in **Section 6.2**.

3.9 CTMP – Monitoring & Review Process

This CTMP has been prepared referencing the existing Site conditions. Consultation with Council, TfNSW and neighbouring developments will continue to be undertaken to ensure that the cumulative traffic impacts of construction within the area do not adversely impact the operations of the neighbouring developments or the local road network.

4 Assessment of Traffic & Transport Impacts

4.1 Construction Vehicle Traffic Generation

Table 1 provides a breakdown of potential vehicle movements throughout the proposed works (to be confirmed by Contractor once appointed, based on similar projects in area):

TABLE 1: MOVEMENT OVERVIEW

Stage	Demolition Works	Excavation Works	General Construction
Period	Weeks 1–10	Months 2–12	Months 4–18
Maximum on-site at any one time	25 - 30	25 - 100	25 - 200
Truck Frequency (Maximum movements per day)	50 (25 in / 25 out)	300 (150 in / 150 out)	300 (150 in / 150 out)
Peak Hour Heavy Vehicle Movements	25 (12 in / 13 out)	60 (30 in / 30 out)	60 (30 in / 30 out)
Largest Vehicle Size	19.6m Truck & Dog	19.6m Truck & Dog	19.6m Truck & Dog

4.1.1 Light Vehicle Movements

The construction workforce is expected to peak at up to 200 workers on-site at any one time, depending on the stage of construction. Light vehicle traffic would primarily be associated with trade staff, site supervisors, and other personnel accessing the site.

Staff arrival and departure movements would be concentrated during 6:30am–7:00am and 6:00pm–6:30pm, outside of the local road network's commuter and school peak periods. Accordingly, the light vehicle component of construction traffic is not expected to conflict with surrounding peak traffic conditions.

4.1.2 Heavy Vehicle Movements

As indicated in **Table 1,** general construction and excavation works may generate up to 300 truck movements per day (150 in / 150 out), with peak hour volumes estimated at 60 truck movements per hour (30 in / 30 out).

Where excavation overlaps with building construction, there may be short periods where vehicle volumes approach the daily maximum. However, truck movements will be actively managed to avoid network peak periods and ensure minimal impact to local traffic operations.

During the busiest periods of construction activity throughout the day, the vehicle mix will be managed to prioritise rigid vehicles under 19.0 m, which will operate under a Left-In / Left-Out (LILO) arrangement to minimise turning conflicts along Cambridge Avenue. Larger vehicles, such as truck and dog combinations, may be scheduled outside of these high-construction periods and outside the surrounding road network peak times, helping to limit localised congestion and support safer access under traffic controller supervision.

The construction methodology is expected to place greater reliance on smaller rigid-type vehicles during daytime operations to reduce local impacts.

4.2 Vehicle Management

4.2.1 Principles

In accordance with TfNSW requirements, all vehicles transporting loose materials would have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the Site.

Further to covering/securing the load to prevent deposits onto the roadway, a Shaker Grid is proposed and installed at the point of vehicle egress to minimise the risk of dirt tracking out onto Cambridge Avenue.

4.2.2 Construction Staff Parking

All construction staff and contractors will be required to park wholly within the Site, noting that there will be significant area available (at all times) to meet the peak parking demand.

5 Traffic Control

5.1 Traffic Control

The TfNSW guide “Traffic Control at Worksites” (TCAW) manual contains standard traffic control plans (TCPs) for a range or work activities. The manual’s objective is to maximise safety by ensuring traffic control at worksites complies with best practice.

The TfNSW TCAW outlines the requirements for a Vehicle Movement Plan (VMP) for construction works such as proposed; a VMP is a diagram showing the preferred travel paths for vehicles associated with a work site entering, leaving or crossing the through traffic stream. A VMP should also show travel paths for trucks at key points on routes remote from the work site such as places to turn around, accesses, ramps and side roads.

Regarding construction work on roads with an average daily total (ADT) in excess of 1,500 vehicles, approach speeds of between 60 km/hr and 80 km/hr, with truck movements > 20 veh/shift, and sight distance is less than 2d, (where d equals the posted speed limit and in this instance the sight distance is required to be up to 120 metres), it would be expected for the following to be required by the TfNSW TCAW:

- A detailed Traffic Control Plan (TCP) with Traffic controllers.
- A VMP.
- Warning Signs required during shifts.

5.2 Authorised Traffic Controller

An authorised Traffic Controller(s) is to be present on-site throughout the proposed works. Responsibilities of the Traffic Controller will include:

- The supervision of all construction vehicle movements into and out of site at all times,
- The supervision of all loading and unloading of construction materials during the deliveries in the construction phase of the project, and
- Pedestrian management, to ensure that adverse conflicts between vehicle movements and pedestrians do not occur, while maintaining radio communication with construction vehicles at all times.
- Traffic controllers must also manage all right-turn departures from the Site for vehicles 19.0 metres or longer.

6 Monitoring & Communication Strategies

6.1 Development of Monitoring Program

The development of a program to monitor the effectiveness of this CTMP shall be established by the Project Manager and should consider scheduled reviews as well as additional reviews should construction characteristics be substantially changed. All and any reviews of the CTMP should be documented, with key considerations expected to include:

- Tracking heavy vehicle movements against the estimated heavy vehicle flows during the works.
- The identification of any shortfalls in the CTMP, and the development of revised strategies / action plans to address such issues.
- Ensuring that all TCPs are updated (if necessary) by “Prepare a Work Zone Traffic Management Plan” card holders to ensure they remain consistent with the set-up on-site.
- Regular checks to ensure all loads are departing the Site covered as outlined within this CTMP.

6.2 Communications Strategy

A Communications Strategy shall be established by the Project Manager for implementation throughout the construction works; this strategy will outline the most effective communication methods to ensure adequate information within the community and assist the Project Team to ensure the construction works have minimal disruption on the road network. The Communications Strategy will include:

- The erection of appropriate signage providing advanced notice of works and any traffic control measures to be implemented.
- Written notices to surrounding landowners (and tenants) likely to be directly affected by the works, prior to commencement.
- Ongoing communication is also required so that all stakeholders are kept up to date of works and potential impacts.

7 Summary

This Draft CTMP has been prepared to ensure appropriate traffic management is undertaken during construction of the industrial development.

Ultimately, this CTMP report has been prepared with regard to the management principles outlined in the TfNSW Traffic Control at Worksites Manual (2018) and AS1742.3, and per the detailed strategies outlined in the Draft CTMP are recommended for adoption at the Site.

In summary the following measures are recommended:

- Traffic control would be required to manage and regulate construction vehicle traffic movements to and from the Site during construction.
- All vehicles transporting loose materials will have the load covered and/or secured to prevent any items depositing onto the roadway during travel to and from the Site.
- All vehicles are to enter and depart the Site in a forward direction, with reverse movements to occur only within the Site boundary.
- All contractor parking is to be contained wholly within the Site, and.
- Pedestrian and cyclist traffic along the Site frontage will be managed appropriately at all times.

In summary, the Draft CTMP report is proposed in accordance with the TfNSW TCAW.