

18 December 2024
 Ref: 24136

SSD-78156221
93-107 Cecil Avenue and 9-10 Roger Avenue, Castle Hill
Demolition of Existing Structures and Construction of a New Mixed Use Development
Preliminary Construction Traffic Management Plan

Introduction

This Preliminary Construction Traffic Management Plan (CTMP) has been prepared as part of State Significant Development Application (SSDA), SSD-78156221, pertaining to the abovementioned subject site.

In summary, the SSDA involves the demolition of existing structures on the site and the construction of a new mixed use development in its place, comprising 615 residential units, 8,025m² of commercial floor space, a through site link and public open space. The development will expand the Castle Hill centre and provide increased housing in proximity to the Castle Hill Train Station.

Off-street parking is proposed for a total of 979 cars (332 commercial spaces, 524 residential spaces, and 123 visitor spaces) within a new multi-level parking area, in accordance with Council’s numerical requirements.

Vehicular access to the site is to be provided via a new entry/exit driveway located at the eastern end of the Cecil Avenue site frontage.

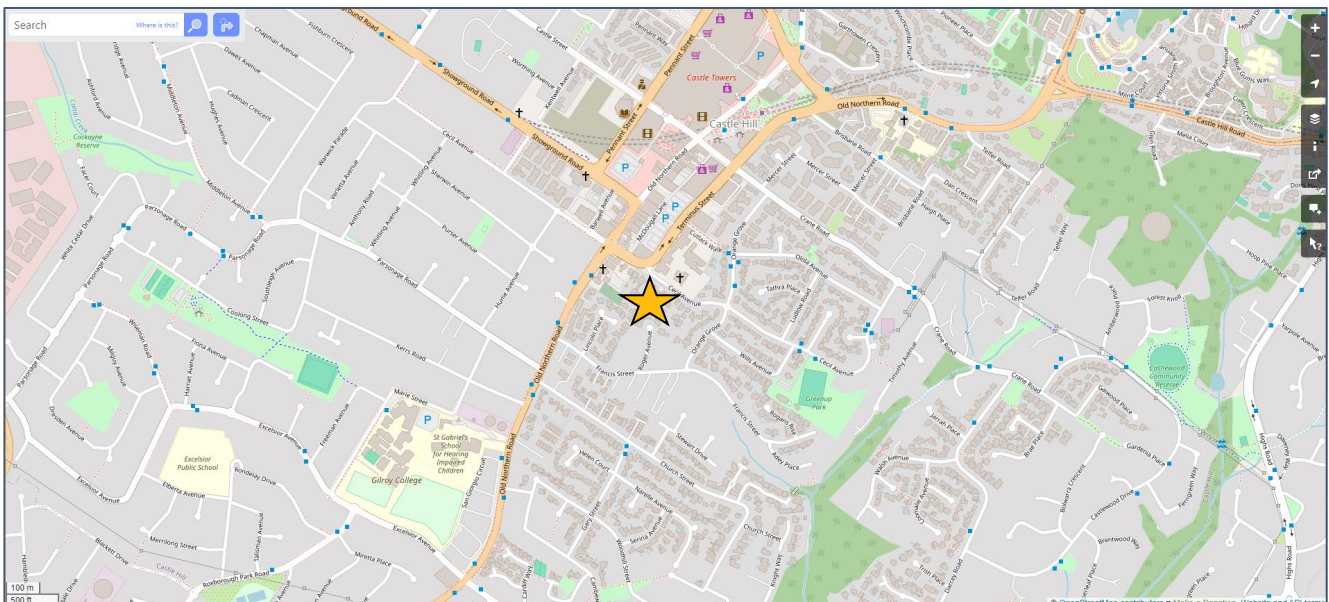


Figure 1 – Site Location (Source: www.openstreetmap.org)

It is important to note that, while CJP is tasked with the development of this Preliminary CTMP, the responsibility for its execution rests with other parties, such as the project manager and/or the builder. Furthermore, it is expected that a detailed CTMP will be required as part of a condition of consent, should the SSDA gain approval.

Purpose of this Report

The purpose of a Preliminary CTMP is to outline the traffic management principles and procedures that should be implemented during construction of a new development, in order to minimise impacts on the surrounding road network, ensure the safety and efficiency of everyone in the vicinity, and provide information on the construction vehicle access route to/from the site.

CTMPs are intended to provide procedural information on regular day-to-day activities during the construction programme, including:

- ensuring the safety of workers, members of the public and road users in the vicinity of the site
- details on the loading and unloading arrangements during demolition and construction works
- details on the construction vehicle route between the arterial road network and the subject site
- estimates of construction vehicular movements during the various stages
- maintaining vehicular and pedestrian access to neighbouring properties
- ensuring all works are carried out in accordance with The Hills Shire Council's approved working hours

In addition, CTMPs provide information on, but not limited to, the following:

- description of the existing site and its location
- existing road network and traffic conditions
- construction programme
- construction vehicle access route
- construction/works zone details
- loading/unloading details
- construction traffic generation estimates and its impacts on the surrounding road network
- hoarding
- site amenities
- sediment control
- neighbour notification
- contractor parking
- site inductions

Relevant Policies & Guidelines

In preparing this Preliminary CTMP, reference has been made to the following policies and guidelines:

- TfNSW Traffic Control at Work Sites Technical Manual (Issue 6.1 – 28 February 2022)
- Australian Standards AS1742.3:2019 Manual of uniform traffic control devices, Part 3: Traffic control for works on roads
- Planning Proposal for 93-107 Cecil Avenue and 9-10 Roger Avenue, Castle Hill

This Preliminary CTMP has been prepared and reviewed by engineers who hold the Prepare a Works Zone Traffic Management Plan accreditation.

Subject Site

The subject site lies at the southern edge of the Castle Hill Strategic Centre, approximately 600m south-west of Castle Hill Metro station, and is located on the southern side of Cecil Avenue, opposite Terminus Street, extending through to Roger Avenue. The site has street frontages of approximately 161m in length to Cecil Avenue, 36m in length to Roger Avenue, and occupies a total site area of approximately 17,623m². The site is currently occupied by 18 free-standing dwelling houses, including a number of battle-axe lots, all with off-street parking and accessed via respective driveways located off either Cecil Avenue or Roger Avenue.

Extracts of the survey plan prepared by SDG Land Development Solutions are reproduced below.

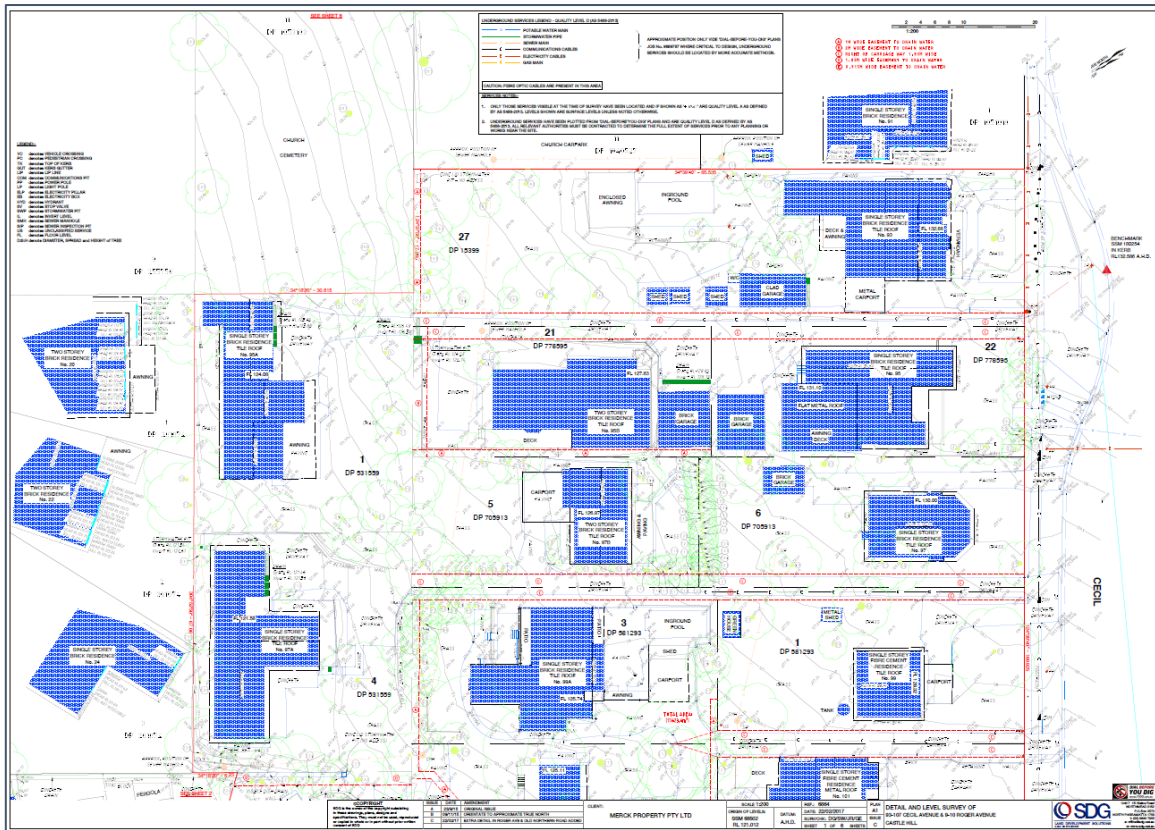


Figure 2 – Part 1 of the survey plan (Source: SDG Land Development Solutions)

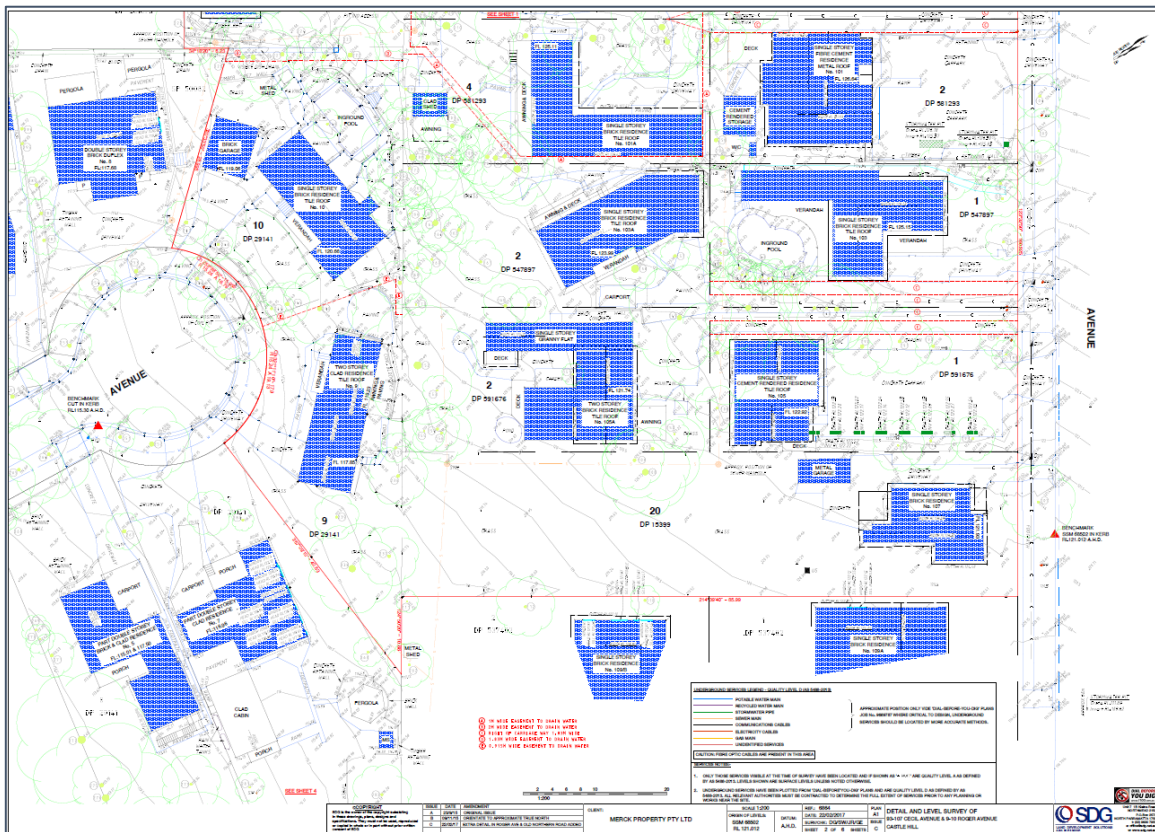


Figure 3 – Part 2 of the survey plan (Source: SDG Land Development Solutions)

A recent aerial image of the site and its surroundings is reproduced below, followed by a series of Streetview images.



Figure 4 – Aerial view of the site location (Source: Nearmap)

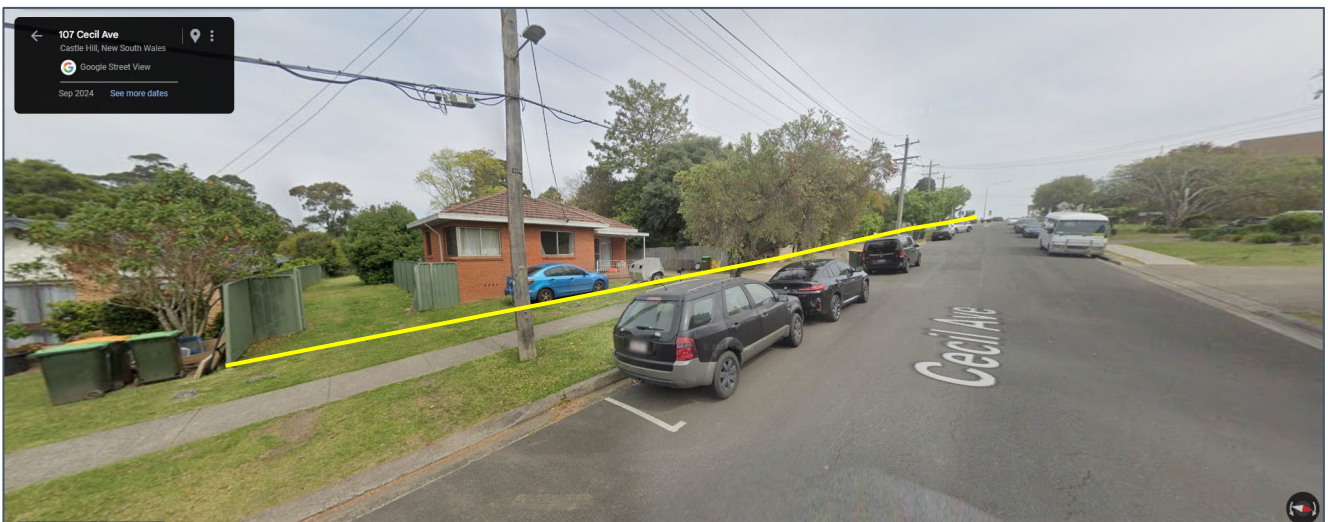


Figure 5 – Streetview of Cecil Avenue site frontage, looking north-west (Source: Google Maps)



Figure 6 – Streetview of Cecil Avenue site frontage, looking south-east (Source: Google Maps)



Figure 7 – Streetview of Roger Avenue site frontage, looking north (Source: Google Maps)

Construction Programme & Duration of Works

The construction programme is expected to require approximately 5 years to complete. The following are the estimated durations of the various activities:

- Site establishment & demolition works: 3 months
- Full site basement construction: 6 months
- Construction and fitout of Stage 1: 18 months
- Construction and fitout of Stage 2: 18 months
- Construction and fitout of Stage 3: 12 months

Approved Hours of Work

Working hours will be in accordance with The Hills Shire Council’s standard working hours (typically at 7:00am to 5:00pm, inclusive Monday to Saturday), including no work on Sundays or Public Holidays. Where it is necessary for works to occur outside the above hours, approval for such activities will be subject to application and approval of an “Outside of Hours Works Permit” from Council, as well as notification of the surrounding properties likely to be affected by the out-of-hours works.

Hoarding

In order to protect public space and the general public, secure fencing with suitable mesh cover will be installed along the front boundary of the site, prior to the commencement of works. The site must be fenced prior to the commencement of demolition and throughout construction and must comply with Safework NSW requirements and be a minimum of 1.8m in height. Furthermore, hoarding must be installed and removed as follows:

- a hoarding or fence must be erected between the work site and any adjoining public space
- any hoarding, fence or awning erected pursuant to this consent is to be removed when the work has been completed
- B-Class hoarding may be required above the footpath area along the Cecil Avenue frontage

Vehicle Types

There are expected to be a range of construction vehicles visit the site during the course of the project, with the largest truck up to approximately 18.5m in length, including:

- mini-tippers and utilities (standard B99 design vehicle)
- bogey trucks for demolition (up to 12.5m in length)
- concrete agitator trucks (up to approximately 9m in length)
- concrete pump truck (up to approximately 11m in length)
- truck and dog trailers for bulk excavation (up to approximately 18.5m in length)
- flat-bed trucks will be used to deliver miscellaneous building material (up to approximately 12.5m in length)

Construction Vehicle Access Route

All trucks approaching the site will be instructed to do so from the north via Old Northern Road – straight onto Terminus Street – left into Cecil Avenue – right into the site in a forward direction via the proposed site access driveway at the eastern end of the site frontage. During the demolition and excavation stages, the trucks will be able to loop around within the site, such that they can exit in a forward direction. Upon exiting, trucks will turn left out of the site and head west along Cecil Avenue – left onto Old Northern Road.

During the construction and concrete pouring stages, there will be periods where on-site loading/unloading will be difficult due to the size of the basement footprint. During those periods, it may be necessary to load/unload material via a Works Zone along the Cecil Avenue site frontage. In this regard, the approach route of the trucks would be same as the above, however, trucks would need to perform a three-point-turn using the proposed site access driveway, before pulling into the kerbside Works Zone. The three-point-manoeuvre is necessary as there are limited options available due to the surrounding residential streets and the need to keep trucks off them. Upon exiting, trucks will simply depart the Works Zone and head west along Cecil Avenue – left onto Old Northern Road.

The site manager will ensure that the route map is provided to all contractors, employees, suppliers and delivery drivers and they understand their obligations. Trucks servicing the site shall be carried out during the approved construction hours only.

Construction Vehicle Movement Summary

The number of construction vehicle movements will vary depending on the stage, however, is expected to range between 10 per day during the demolition stage and 60 during the concrete pouring stage. The traffic impact on the surrounding local and broader arterial road network associated with construction vehicles will be carefully managed to ensure as little impact as possible.

Sediment & Dust Control

No sediment, dust, soil or similar material shall leave the site during construction work. All practicable measures will be taken to ensure that vehicles leaving the site do not deposit mud or soil on the road. If any mud or soil does end up accidentally on the road, the road must be cleaned up immediately in a manner that does not pollute the waterway (e.g. sweeping or vacuuming).

Similarly, all vehicles transporting loose materials will have their entire load covered and secured to prevent any large items, excess dust or dirt particles depositing onto the road during travel to/from the site.

Protection of Trees

All trees that are specifically nominated to be retained must be maintained and protected during demolition, excavation, and construction on the site. No trees on public property (footpaths, roads, reserves, *etc.*), unless specifically approved by Council, shall be removed or damaged during construction, including for the erection of any fences, hoardings or other temporary works.

Neighbouring Properties

All neighbouring properties are to have their pedestrian and vehicular access maintained at all times. All adjacent residents and businesses will be advised by way of letterbox drop of the intention to commence works. A minimum of 7 days notification should be provided to adjoining property owners prior to the implementation of any traffic control measures.

Queuing

It is expected that the schedule of deliveries will be established prior to the commencement of a new day. The site manager will ensure that all deliveries will be co-ordinated such that their arrival is staggered, and idling is not permitted, nor is any queuing permitted on the public road network.

Works Zone

In order to facilitate loading/unloading activities, a Works Zone will be required to be installed directly outside the site along Cecil Avenue. Works Zone time restrictions will apply during construction hours only, and are provided specifically for the set down and pick up of materials, not for the parking of private vehicles associated with the site.

An application must be made to The Hills Shire Council to install the Works Zone, noting a Works Zone permit is required to be issued by the Council prior to the issue of any Construction Certificate. The process generally takes approximately 10 to 12 weeks.

Site Access & Materials Handling Arrangements

Prior to works commencing on site, secure fencing will be installed to the site boundaries as well as A-Class Hoarding along the boundary outside the site in Cecil Avenue.

Larger vehicles up to and including 18.5m in length will be able to enter and exit the site via the Cecil Avenue site access gate/driveway or stand within the proposed Works Zone directly outside the site along Cecil Avenue.

Equipment, materials and waste will be kept within the construction site's boundaries. No building materials, plant or the like are to be stored on the road or footpath without written approval being obtained from Council beforehand.

The site manager will also ensure that multiple deliveries do not occur at the same time unless they can all be accommodated on site or within the proposed Works Zone.

Truck movements at the site access will be managed by traffic controllers to ensure the safe and efficient movement of all passing pedestrians and cyclists. All truck movements will be undertaken with the assistance of traffic controllers with appropriate TfNSW/Safework NSW accreditation.

Special Permits

Unless otherwise specifically approved in writing by Council, all works, processes, storage of materials, loading and unloading associated with the development must occur entirely on the property.

The developer, owner or builder may apply for specific permits available from Council's Customer Service Centre for the following activities on Council's property:

- on-street mobile plant
- hoardings
- storage of materials and building waste containers (skips) on Council's property
- kerbside restrictions, construction zones

A minimum of forty-eight (48) hours' notice is required for any permit.

Construction Staff

The number of construction staff on site will vary depending on the stage, however, is expected to range between 10 during the demolition stage and 100 during the fitout stage.

Contractor Parking

Due to site constraints, no on-site parking for site personnel will be possible. During the fitout stage, however, site personnel will be able to park within the basement. Staff and sub-contractors will also be encouraged to utilise nearby public transport for their commute to/from work, noting the site is located 300m to/from the nearest bus stop on Old Northern Road. For staff and sub-contractors that must drive to the site, they must be advised to avoid parking in local residential streets as much as possible.

Such information is to be provided to employees through their contract engagement and Toolbox Talks. The following measures must also be implemented to encourage staff to utilise public transport:

- provision of an on-site tool storage facility to allow tradespeople to safely store tools required for the project
- during site inductions and regular management meetings, staff are to be reminded to use public transport when commuting to/from work and be provided with public transport timetables, if requested

Traffic Guidance Schemes

TfNSW's Traffic Control at Work Sites Technical Manual (Issue 6.1 – 28 February 2022) contains standard Traffic Guidance Schemes (TGSs) for a range of work activities. The manual's objective is to maximise safety by ensuring traffic control at worksites complies with best practice.

Site-specific TGSs will ultimately be prepared as part of a comprehensive CTMP should the SSDA be approved, to illustrate the traffic arrangements and signage to be implemented throughout the construction programme. A brief description of any future TGS during the demolition, excavation, & construction works is provided below:

- advisory road signage alerting approaching drivers and cyclists along Cecil Avenue in the vicinity of the site of a speed reduction to 40km/h, and possible road works and traffic controllers ahead
- warning signs alerting pedestrians to watch their step as they walk along the Cecil Avenue site frontage

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- traffic controllers located outside the site on Cecil Avenue with appropriate TfNSW/Safe Work NSW accreditation, who will control local traffic movements and assist trucks accessing the site and Works Zone to load/unload material, ensuring the safety of pedestrians and prioritising their movements at all times

Road Reserve Safety

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works, with no obstructions caused to the said footways and roadways. Construction materials and plant must not be stored in the road reserve without approval of Council.

A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site.

If any work is to be undertaken within a public road, adequate precautions shall be taken to warn, instruct and guide road users safely around the work site. Traffic control devices shall satisfy the minimum standards outlined in Australian Standard AS1742.3:2019 Manual of uniform traffic control devices, Part 3: Traffic control for works on roads.

Conclusion

This Preliminary CTMP has been prepared to provide high-level details of any future traffic management, cyclist and pedestrian measures to be implemented during any future demolition, excavation, and construction works on the site located at 93-107 Cecil Avenue and 9-10 Roger Avenue, Castle Hill.

Any future comprehensive CTMP will take into account TfNSW's Traffic Control at Work Sites Technical Manual, AS1742.3:2019 Manual of uniform traffic control devices, Part 3: Traffic control for works on roads, as well as any relevant consent conditions, should the SSDA be approved.

Based on the findings contained within this report, the following conclusions are made, along with the following measures which are to be implemented as part of any approved works:

- traffic activity during the demolition, excavation, and construction works will be carefully managed and will not result in any unacceptable implications
- all loading and unloading of materials will occur wholly within the site or within a Works Zone located directly outside the site on Cecil Avenue
- during construction vehicle movements, traffic controllers are required to ensure the safe and efficient movement of pedestrians and cyclists
- all vehicles transporting loose material will have their loads covered and/or secured in order to prevent any items depositing onto the road on approach/departure to/from the site
- contractors will be encouraged to utilise nearby public transport for their commute to/from work

In summary, the construction traffic management measures contained within this Preliminary CTMP are considered acceptable, noting a comprehensive CTMP will be prepared for Council's review and approval prior to any construction certificate being issued, should the SSDA be approved.