Preliminary Construction Traffic Management Plan

Hurlstone Agricultural High School (Hawkesbury)

HASH-00-SD-TR-RP-180104 Preliminary CTMP

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PRELIMINARY INFORMATION

This preliminary Construction Traffic Management Plan (CTMP) addresses the proposed construction of the new Hurlstone Agricultural High School. It discusses the management of local traffic and construction vehicles related to the project. A preliminary CTMP is required to be developed for this site in accordance with the Secretary's Environmental Assessment Requirements (SEARs) for the development, specifically item 5 and the required plans and documents as follows:

> *Secretary's Environmental Assessment Requirement: In relation to construction traffic … preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact.*
>
> *In addition, the EIS must include the following: … Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures.*

A detailed CTMP cannot be developed without the involvement of a builder and consideration of all final design selections. This preliminary CTMP is intended to provide a framework within which a future CTMP can be developed and implemented, and to demonstrate the potential operation of the construction site.

A CTMP is developed to satisfy the duties of various work health and safety legislation, regulations, and codes of practice. Traffic Control Plans (TCPs) will also need to be developed for the future site to demonstrate the traffic control procedures to be implemented, and these must also be in accordance with RMS and Australian Standards requirements.

The builder shall be responsible for acquiring the necessary certificates, licences, consents, permits, and approvals relevant to the construction on this site.

1 INTRODUCTION

1.1 Site Location

The subject site is located within the Hawkesbury campus of Western Sydney University (WSU) at 2 College Street, Richmond (Lot 2 DP 1051798). The site is located within the Hawkesbury City Council LGA. The extent of the site is illustrated in Figure 1.1 below, in the context of the local major road network.

There are three access points into the Campus from the public road network;

- Vines Drive at Londonderry Drive
- College Drive at Bourke Street
- Campus Drive at Blacktown Road

The site is located close to the NSW state road network. Blacktown Road is approximately 1.8 kilometres and Londonderry Road approximately 650 metres from the site. Blacktown Road provide access to the M7 Motorway (via Richmond Road) at Dean Park. Figure 1.2 illustrates the state and regional roads in the vicinity of the site.

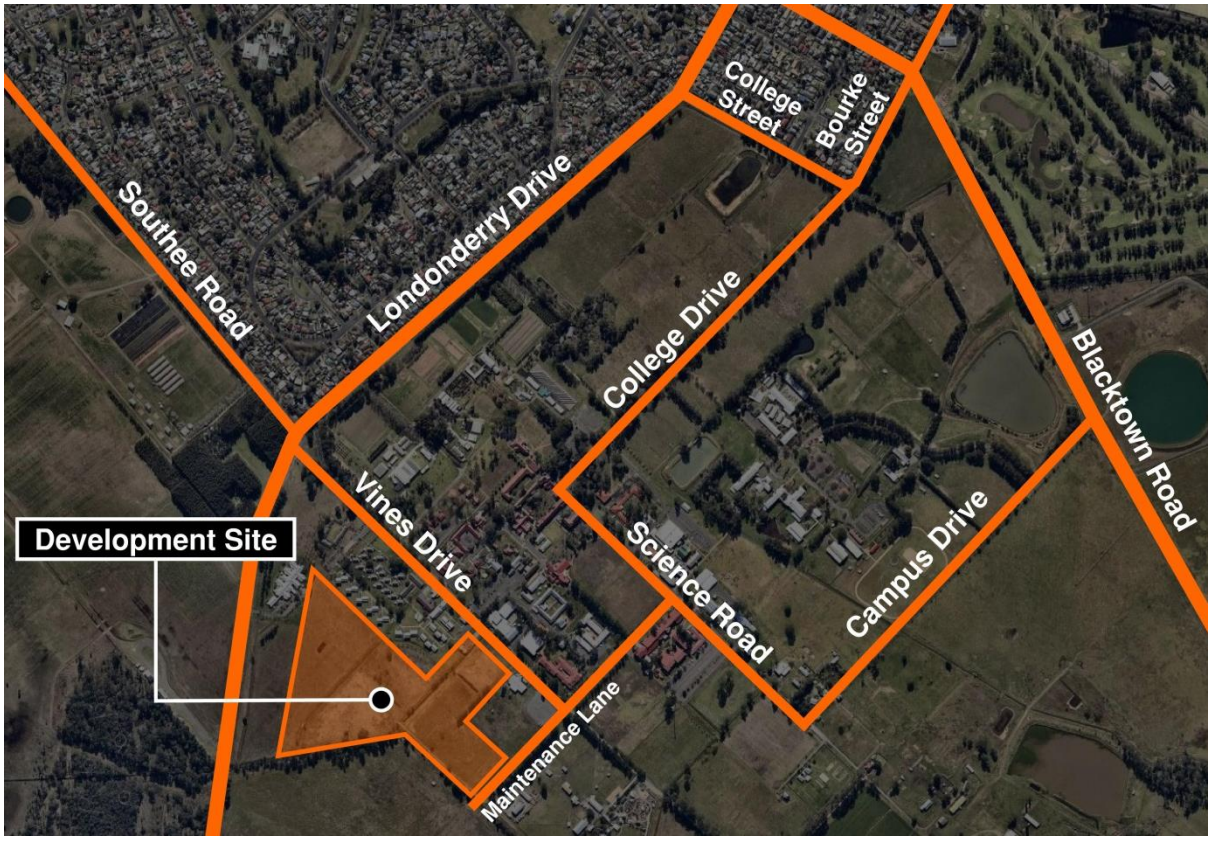

Figure 1.1: Site location
Image source: Nearmap (dated 9th July 2017)

Figure 1.2: State and regional roads
Image source: Nearmap (dated 9th July 2017)

1.2 Scope of Works

The proposed development includes construction of a complex of 5 buildings to accommodate a secondary school with a capacity for 1,500 students. Associated play and recreational areas are also expected to be constructed, along with ancillary facilities including service and loading areas and changes to an external car park.

1.3 Construction Activities

It is proposed that access for all construction activities take place via a future school service driveway off Maintenance Lane. This shall include excavation and removal of material, delivery of new materials, and all provision of equipment and machinery.

Access to all adjacent properties within and external to the WSU campus shall be maintained throughout the construction of the site. Construction activities are not expected to cause adverse impact on university operations or users, excepting typical construction noise within regulatory limits.

2 TRAFFIC ENVIRONMENT

2.1 Road Network

Vines Drive is a private roadway internal to the Western Sydney University campus which runs along the north-eastern boundary of the school site. The road allows for two-way traffic with a single travel lane in each direction separated by a double centreline. The current carriageway width is approximately 5.8 metres, with parking provided in specified locations outside this carriageway. The speed limit within the University campus is 40 km/hr. Pedestrian facilities such as marked zebra crossings and raised pedestrian crossings are provided across the road.

Maintenance Lane is a private campus roadway running along the south-eastern boundary of the school site. The road currently allows for two-way traffic along a single unmarked carriageway.

Londonderry Road is a state road (ID 630) and the closest public roadway to the site. The road is a two-lane two-way road running from Richmond in the north toward Penrith in the south via The Northern Road. The speed limit at the intersection of Vines Drive is 60 km/hr, and is 80 km/hr further to south. The roadway continues to the Great Western Highway and the M4 Motorway.

Blacktown Road is a state road (ID 537) providing additional arterial connections through the northwest region. Access between Blacktown Road and the construction site is available directly through the university campus, via Londonderry Road and The Driftway, or via the Richmond town centre. The road is generally a two-way two-lane road with a speed limit of 80 km/hr. Further to the southwest, the roadway continues to the M7 Motorway.

2.2 Transport Facilities

2.2.1 Public Transport

Public bus services operate along Londonderry Road and Blacktown Road. Route 677 services Londonderry Road at a bus stop around 600 metres from the site, while route 675 services College Street around 1.4 kilometres from the site. All services are operated by Busways, and have a low frequency. The availability of services is shown in Table 2.1 below.

The nearest train stations to the site are East Richmond (2.0km) and Richmond (2.5km). Walking distances are approximately 24 minutes and 30 minutes respectively. Route 677 also connects Richmond Station to Londonderry Road and could be used to access the site.

Table 2.1: Public bus frequencies

Data source: Sydney Buses

Route	Destinations	Daily Services (8am – 5pm)
677	Penrith to Richmond via Londonderry	5 services
675	Windsor to Richmond via RAAF Base & Bligh Park	8 services

2.2.2 Pedestrian Movements

There is currently no pedestrian footpath provided along the site frontage at Vines Drive. A footpath is provided along the opposite (northern) side of the road. A number of crossing facilities are located along the road to provide access to specific areas and buildings.

3 MANAGEMENT OF CONSTRUCTION VEHICLES

3.1 Heavy Vehicle Routes

It is proposed that construction vehicle access to the site take place via a future school service driveway along the southern boundary of the site from Maintenance Lane. Construction vehicles will access Maintenance Lane from Vines Drive, which is assumed to be modified prior to commencement of works to cater for appropriate heavy vehicle traffic. Given the extensive space available within the construction site, it is anticipated that all vehicles will be able to manoeuvre on-site, entering and exiting in a forward direction and returning along the approach route.

To minimise the disruption to the university operation and users, travel within other parts of the campus shall be restricted to minor vehicles (such as utes) only where appropriate.

Recommended regional access routes are described below and illustrated in Figure 3.1.

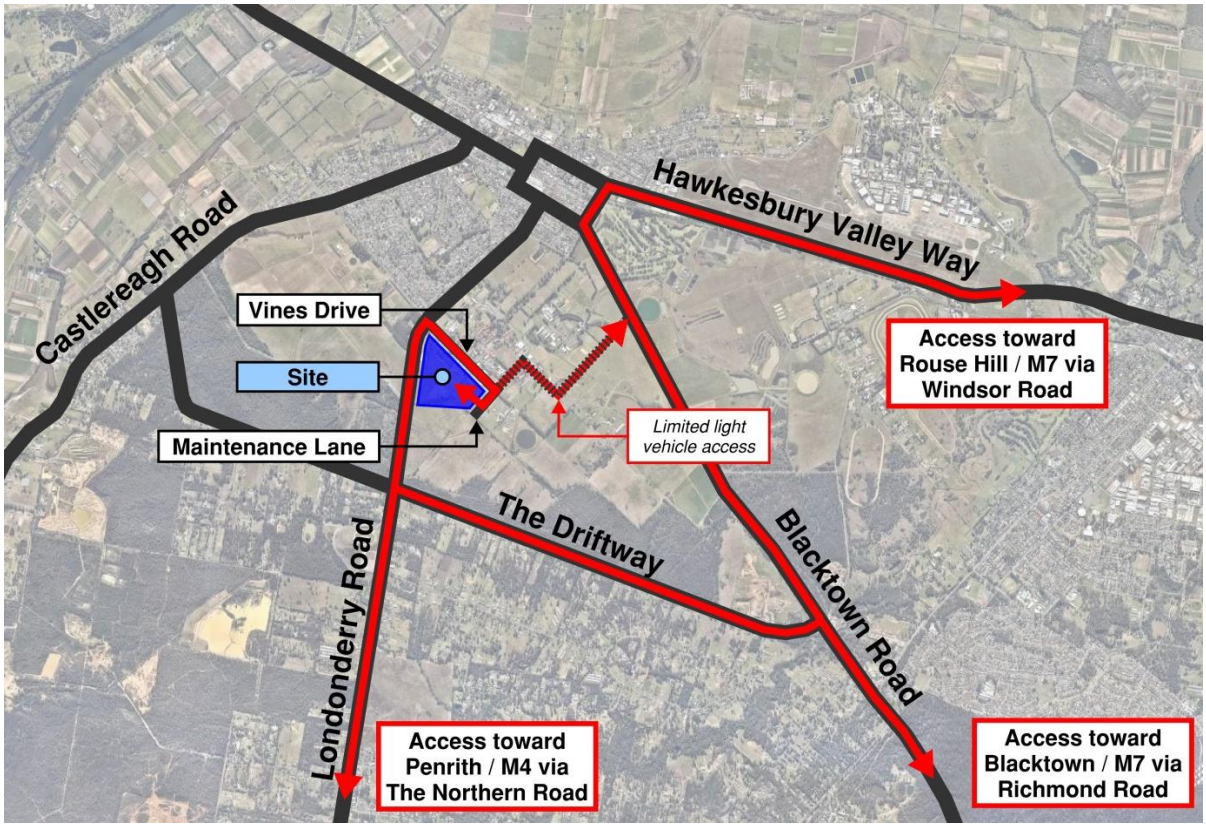

Figure 3.1: Recommended construction vehicle routes
Image source: Nearmap (dated 9th July 2017)

Northeast (note: unsuitable for largest vehicles due to route through Richmond town centre)

- Approach via Hawkesbury Valley Way; then
- Turn left onto Bourke Street;
- Turn left onto Blacktown Road; then
  - *(Light vehicles enter WSU campus at Campus Drive if appropriate)*
- Exit right onto The Driftway; then
- Turn right onto Londonderry Road; then
- Turn right into Vines Drive and continue to site via Maintenance Lane.
- Return via the same route.

Southeast

- Approach via Richmond Road; then
- Continue onto Blacktown Road; then
- Turn left onto The Driftway; then
- Turn right onto Londonderry Road; then
- Turn right into Vines Drive and continue to site via Maintenance Lane.
- Return via the same route.

South

- Approach via The Northern Road; then
- Continue onto Londonderry Road; then
- Turn right into Vines Drive and continue to site via Maintenance Lane.
- Return via the same route.

4 IMPACT OF PROJECT

4.1 Traffic Flow

Traffic impacts from the construction works are expected to be limited to the truck routes detailed in this report. These routes are likely to experience only minor impacts due to the presence of additional truck movements. These truck movements are not expected to cause delays on local roads, or create flow-on impacts to other streets.

There shall be no changes to local public transport routes and services as a result of the construction. Access to all adjoining properties both internal and external to the university campus will be maintained throughout the works.

Manoeuvring of heavy vehicles exiting the site is to be managed carefully such that traffic safety is maintained. Due to the relatively quiet nature of the roads surrounding the site, it is expected that vehicles exiting the site will be able to use suitable gaps in traffic (excepting some delays for right-turns out of the Blacktown Road access).

Light vehicle traffic volumes (from construction workers and minor deliveries / equipment) will be less than the operational volumes of the school and shall therefore not cause excessive impacts to the local road network.

4.2 Parking Impacts

Site sheds and material storage areas are expected to be located within the site and at the P47 Car Park near to the site. The car park area is also to provide parking for construction workers to avoid any impacts to the broader university campus.

Given that the P47 Car Park will be allocated to school usage upon opening of the site, construction impacts to parking availability shall be equivalent to that during operation.

Some portions of the P47 Car Park may be available for use during construction pending exact construction requirements. Once a Contractor has been appointed, a detailed Construction Management Plan and Construction Traffic Management Plan shall be developed including the requirements and impacts to parking.

5 FURTHER INFORMATION

5.1 Construction Traffic Management

Once a Contractor has been appointed to the site, a detailed Construction Traffic Management Plan will be developed and submitted to the appropriate authorities including RMS and Council prior to occupation of the site or any site works taking place.

5.2 Overall Impacts

The construction traffic impacts and requirements of this project are deemed to be manageable within the site constraints. With access via a new service road between Londonderry Road and Maintenance Lane, there is expected to be minimal construction traffic impacts to the University campus. Full access will be retained to all adjacent properties and buildings. Appropriate hoarding, protection, and traffic management measures will need to be implemented to ensure safety of all users of the area at all times.

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