

University of Technology, Sydney

LRS and Storage Building

**Construction Traffic Environmental
Management Plan**

REP1

Issue | March 2011

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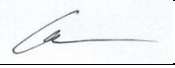

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Job number 221189

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Document Verification

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Job title		LRS and Storage Building		Job number	
				221189	
Document title		Construction Traffic Environmental Management Plan			File reference
Document ref		REP1			
Revision	Date	Filename	Construction Traffic Environmental Management Plan.docx		
Draft 1	4/03/11	Description	First draft		
			Prepared by	Checked by	Approved by
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Issue	10/03/11	Filename	Construction Traffic Environmental Management Plan.docx		
		Description	Issue		
			Prepared by	Checked by	Approved by
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		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			
Issue Document Verification with Document					<input checked="" type="checkbox"/>

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Figure 1: Truck Routes for Work off Thomas Street

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1 Introduction

This Construction Traffic Environmental Management Plan has been prepared by Arup for the University of Technology, Sydney for approvals purposes for the proposed development located at the current Alumni Green at the Broadway Campus at the corner of Jones and Thomas Streets. The proposed development occupies a 4900 square meter site. The proposed Library Retrieval System (LRS) and storage building is an underground building, with turf covering planned after completion. The contractor will prepare a detailed Traffic Management Plan (TMP) prior to the commencement of works.

2 Construction

2.1 Early works

The adjacent sports hall project is currently underway and all measures will be taken to ensure that any concurrent operations minimise disruption and potential damage to the LRS building from later building works.

2.2 Excavation

Excavation of the site is expected to take 6 months and requires:

- Perimeter bored piling
- removal of existing substructures
- Bulk excavation of basement

2.3 Construction

Construction phase is expected to take 8 months. Work includes:

- Construction of basement
- Construction of building

2.4 Finishing work

Finishing work is expected to take 6 months and includes:

- Public domain works and adjacent footpaths

2.5 Landscaping

Upon the completion of construction, the area above the building will be landscaped to look as before until construction starts on the future Thomas Street building.

2.6 Work Programme and working hours

The following information has been obtained from the CEMP completed by the University of Technology, Sydney.

Construction working hours are to comply with any Authority approvals and with any hours stipulated in the Construction Contract. For the purpose of the construction programme the working week shall be six (6) days per week. Non working days are Sundays and NSW Public Holidays.

The anticipated working hours of construction and work on the development would be as per City of Sydney (CoS) standard conditions, and are quoted below for clarity:-

“The hours of construction and work on the development must be as follows:

(a) All work, including demolition, excavation and building work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (e.g. loading and unloading of goods, transferring of tools, etc) in connection with the proposed development must only be carried out between the hours of 7.00am and 7.00pm on Monday to Fridays, inclusive, and 7.00am and 5.00pm on Saturdays, and no work must be carried out on Sundays or Public Holidays.

(b) All work, including, demolition, excavation and building work must comply with the City of Sydney Code of Practice for Construction Hours/ Noise 1992 and Australian Standard 2436-1981 ‘Guide to Noise Control on Construction, Maintenance and Demolition Sites’.”

With these hours, the following is a summary of the Works Program:-

- Excavate for Basements – 6 months
- Construct Structures – 8 months
- Finishing works to buildings – 6 months
- Hard and soft landscapes – 2 months

Some work activities noted above will be occurring concurrently, and it is anticipated that the construction period will be approximately 24 months. Construction is currently anticipated to commence in December 2011.

3 Impact of Proposed Works

3.1 Existing Site Traffic

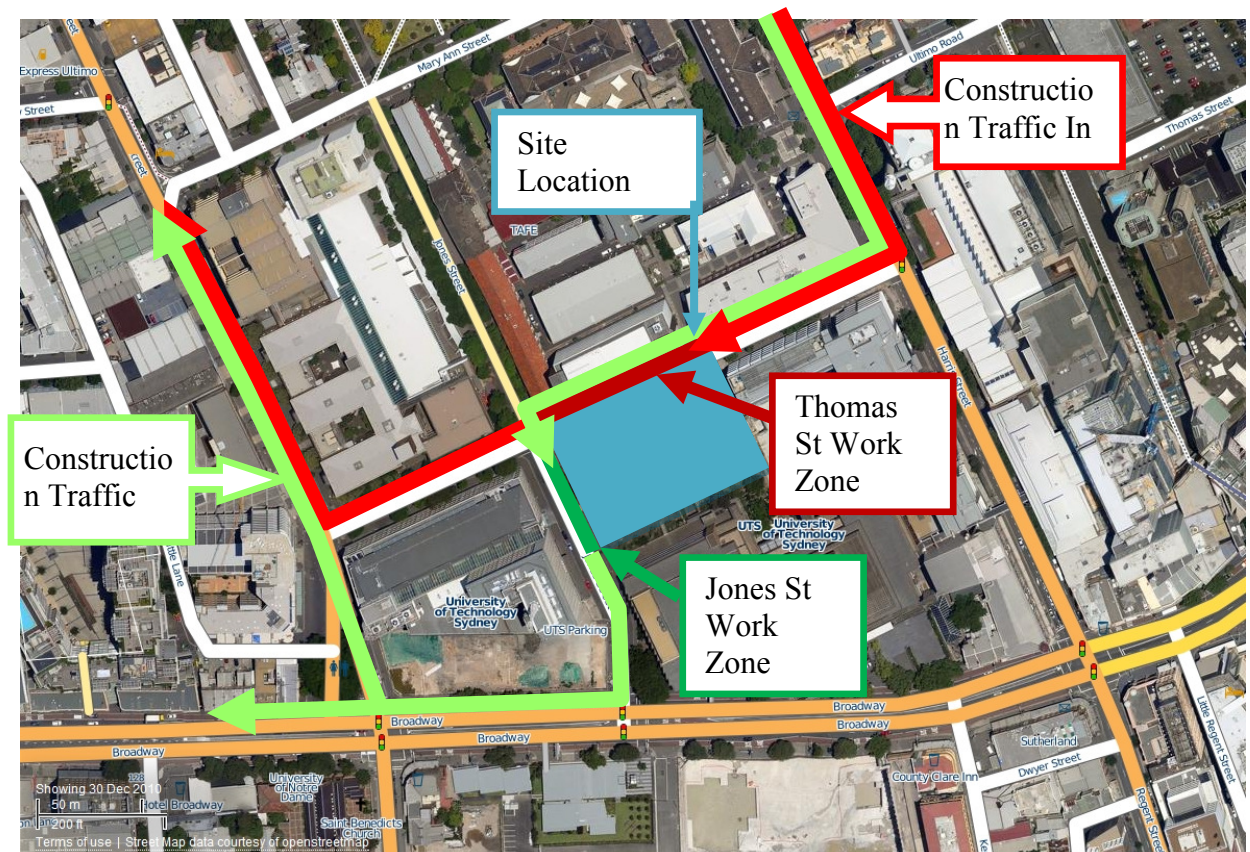
Existing traffic on Thomas and Jones Streets would be predominantly University and TAFE traffic, with increased traffic in the AM and PM peaks. There are several ticketed parking areas on these streets including motorcycle parking on Thomas Street adjacent to the site. Also on Thomas Street are two ramps to the UTS basement, the eastern ramp to the basement of CB01 and the western ramp to the basement of CB02.

3.2 Construction Traffic

Construction will generate traffic around the site, ranging from workers making their way to site, to large, heavy vehicles such as concrete trucks. The number of trucks needed at each stage has been estimated based upon the gross excavation volume and assumptions on the building traffic requirements.

- Excavation for 6 months Approx. 40 truck movements a day or 4-6 trucks per hour
- Construction for 8 months Approx. 20 truck movements a day or 3-5 trucks per hour
- Finishing for 6 months Approx. 15 truck movements a day or 2-4 trucks per hour
- Landscape Approx. 15 truck movements a week for two months

Figure 1: Truck Routes for Work off Thomas Street



As shown in Figure 1, construction traffic would access the site according to the main routes into the city, from the west via the Anzac bridge and from the north via the Sydney Harbour Bridge onto the Western Distributor, which has exits onto Harris Street from both directions. Construction traffic leaving the site can either use Wattle Street which leads to the Western Distributor in the north or down Broadway onto Parramatta Road.

3.3 Cumulative Impact

Construction traffic will add to the existing traffic, however, as the additional construction traffic volumes are low and Thomas and Jones Streets are local roads, construction traffic is not likely to have any significant impact.

3.4 Parking Impact

The parking area adjacent to the works on both Thomas and Jones Streets will be marked as Works Zones between the hours specified in Section 2.6 above and be used for construction related activities only. This reduces on-street parking on Thomas Street by approximately seven car spaces and 20 motorcycle spaces and on Jones Street by six spaces. UTS would ensure that motorcycle parking is retained by re-allocating three car spaces to motorcycle parking on Thomas Street.

3.5 Driver Code of Conduct

The contractor will need to manage access to the site, providing instructions to vehicles accessing the site, including the following:

- Designated transport routes to and from the site
- Times for scheduled vehicle movements
- Parking instructions (if any)

4 Measures to Ameliorate Impacts

The contractor shall prepare a Traffic Management Plan (TMP) prior to the commencement of works. Traffic will generally be managed at the site in the following way:

- Designated transport routes shall be communicated to all personnel
- Strict scheduling of vehicle movements is to occur to minimize vehicles waiting off the site
- Site workers are to utilize local public transport and car sharing wherever possible

The following issues will be considered in the TMP;

- Traffic Impact
- Parking Impact
- Pedestrian Activity at/ near the Site
- Impact to Adjacent Businesses/ Properties
- Construction Traffic Management

5 Public Transport Services Affected

The site is adjacent to Sydney Buses Route 501 West Ryde to the City via Pyrmont that performs a G-turn using Jones Street, Thomas Street and Harris Street and turn right from Broadway (See Figure 2 below).

During the AM and PM peak, this movement occurs five times an hour. As part of the TMP, construction vehicle drivers will be notified of the bus route and ensure that bus movements are not affected by managing truck movements at peak bus times.

Figure 2: Bus Route 501

