GTAconsultants

University of Sydney Engineering & Technology Precinct

Stage 1

Transport and Accessibility Assessment

Client // Laing O'Rourke Australia
Office // NSW
Reference // N139960
Date // 11/01/18

University of Sydney Engineering & Technology Precinct

Stage 1

Transport and Accessibility Assessment

Issue: A-Dr 11/01/18

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Reference: N139960
GTA Consultants Office: NSW

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	01/12/17	Final	Will Croagh	Hilary Papps	Kane Williams	
B	11/01/18	Final – including revised loading	Will Croagh	Hilary Papps	Kane Williams	

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Table of Contents

Appendices

Figures

Tables

1. Introduction

1.1 Background

The University of Sydney (USYD) is proposing to develop the Engineering and Technology Precinct within the University of Sydney Darlington campus.

Stage 1 of the works includes the refurbishment of Electrical Engineering Building, the addition of a new 10-storey building on vacant land to the north of the Electrical Engineering Building and the conversion of an at grade car park to a courtyard with landscaping. This submission seeks approval for the Stage 1 development only.

1.2 Purpose of this Report

The University of Sydney has requested and received the Secretary's Environmental Assessment Requirements (SEARs) for the proposal. The SEARs set out the assessment requirements for the project, including the preparation of a Transport and Accessibility Assessment.

In October 2017, GTA was engaged by Laing O'Rourke to undertake this Transport and Accessibility Impact Assessment. This report presents the findings of that assessment and in particular addresses the SEARs requirements related to Transport and Accessibility.

Table 1.1 on the following page lists the SEARs requirements and the corresponding sections of the report where these are addressed.

1.3 References

In preparing this report, reference has been made to the following:

- plans prepared for the proposal by Cox Architects
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2002
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- the University of Sydney Campus Improvement Program Pedestrian and vehicle movement summary report by Arup 2016
- the Access Strategy Assessment prepared by Arup (December 2013)
- the SEARs requirements relating to the proposal as outlined above
- other documents and data as referenced in this report.

Table 1.1: SEARs and Relevant Report Sections

SEARs comment	GTA Response
Accurate details of the current daily and peak hour vehicle, public transport, pedestrian and cycle movement and existing traffic and transport facilities provided on the road network located adjacent to the proposed development;	Section 3.1
An assessment of the operation of existing and future transport networks including the bus network and their ability to accommodate the forecast number of trips to and from the development;	Section 3.2.4
Details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips;	Section 3.2
The adequacy of public transport, pedestrian and bicycle networks and infrastructure to meet the likely future demand of the proposed development;	Section 3.2
The impact of the proposed development on existing and future public transport infrastructure within the vicinity of the site in consultation with roads and maritime services and transport for NSW and identify measures to integrate the development with the transport network;	Section 3.2.7
Details of any upgrading or road improvement works required to accommodate the proposed development;	N/A
Details of travel demand management measures to minimise the impact on general traffic and bus operations and to encourage sustainable travel choices and details programs for implementation	Section 3.2.4
The impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for upgrading or road improvement works, if required (note: traffic modelling is to be undertaken with scope to be agreed by tfNSW and RMS in advance)	N/A
The proposed active transport access arrangements and connections to public transport services;	Section 3.2.4 – 3.2.6
The proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones	N/A
Measures to maintain road and personal safety in line with CPTED principles;	N/A
The proposed car and bicycle parking provision, including end-of-trip facilities, which must be taken into consideration of the availability of public transport and the requirements of council's relevant parking codes and Australian standards;	Section 3.2.6
Proposed bicycle parking facilities in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance	Section 3.2.6
Details of the proposed number of car parking spaces and compliance with appropriate parking codes and justify the level of car parking provided onsite	N/A
Details of emergency vehicle access arrangements	Section 3.2.7
An assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures	Section 3.2.5
Service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times)	Section 3.2.2
During the preparation of the EIS, you must consult with the relevant local, State, or Commonwealth Government authorities, services providers, community groups and affected landowners. In particular you must consult with: ○ Transport for NSW (incl. the Sydney Coordination Office) ○ Roads and Maritime Services The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues.	Section 3.2.7

2. Overview

2.1 Site Location

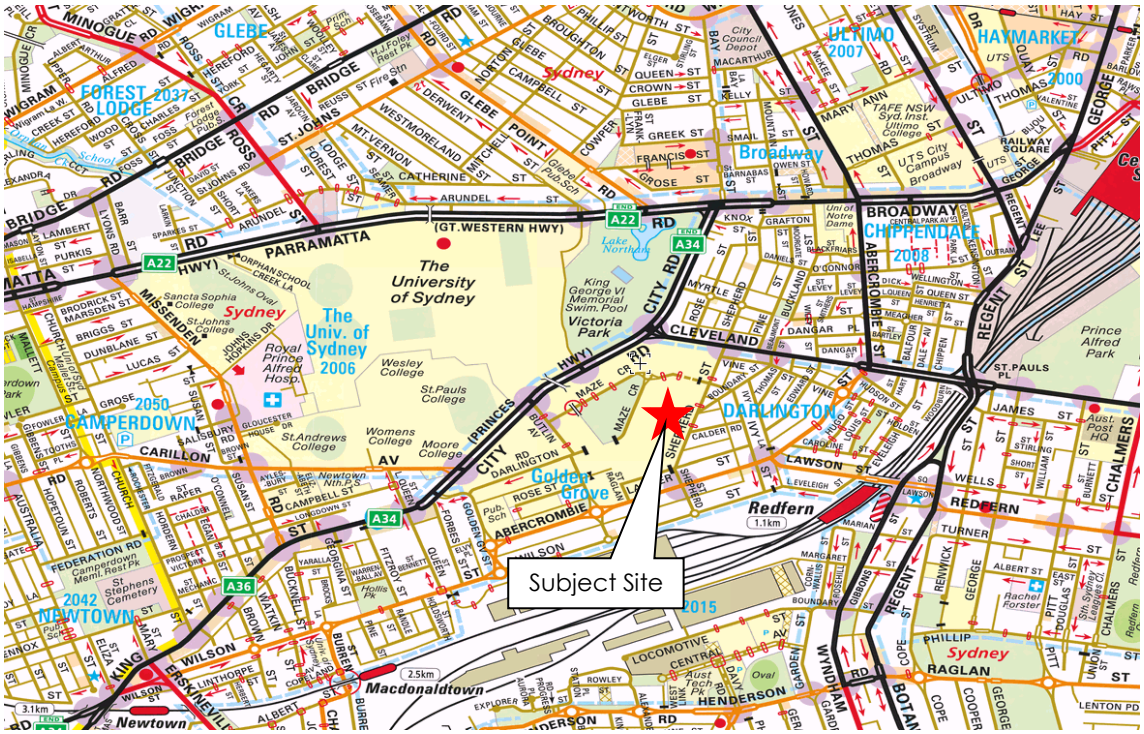
The subject site is located on the eastern end of the University's Darlington campus.

The site of approximately 6,500sq.m has a land use classification as an education establishment and is currently occupied by the University of Sydney Engineering and Technology Precinct.

To the south of the Electrical Engineering Building is the Centre for Sustainable Energy Development, School of Civil Engineering and the Peter Nicol Russel Building, these buildings as well as the Link Building (which is connected to the Electrical Engineering Building) will comprise Stage 2 of the Optimum Precinct Redevelopment. To the north east of the Electrical Engineering Building is the Mechanical Engineering building and the School of Aeronautical Engineering, these will comprise Stage 3 of the redevelopment.

The location of the subject site and its surrounding environs is shown in Figure 2.1, Figure 2.2 and Figure 2.3.

Figure 2.1: Subject Site and Its Environs



(Reproduced with permission from http://www.street-directory.com.au/nsw)

Figure 2.2: Existing Land Zoning

Source: https://www.planningportal.nsw.gov.au/find-a-property/property/3501734_96-148_City_Road_1_Darlington_DP790620, accessed 14 11 2017

Figure 2.3: Aerial Photo of Subject Site and Its Environs

(Reproduced with permission from NearMap)

2.2 Road Network

City Road

City Road is classified as a State Road in the Roads and Maritime Schedule of Classified Roads. It is the major road west of the site.

City Road is aligned in a north-east to south-west direction and is configured with three lanes in each direction in the vicinity of the site with two right turn lanes into Cleveland Street. It has a speed limit of 60km/hr and is estimated to carry approximately 15,000 vehicles per day in each direction[1].

Kerbside parking is permitted outside of clearway times, between 6am-10am (northbound) and 3pm-7pm (southbound), subject to four-hour time restrictions.

City Road is shown in Figure 2.4.

Cleveland Street

Cleveland Street is classified as a State Road in the Roads and Maritime Schedule of Classified Roads. It is the major road north of the site.

Cleveland Street is aligned in an east-west direction and is configured with two lanes in each direction in the vicinity of the site with additional turn lanes at key intersections. It has a speed limit

of 50km/hr and is estimated to carry approximately 38,000 vehicles per day including both directions.

Kerbside parking is not permitted at any time.

Cleveland Street is shown in Figure 2.5.

Shepherd Street

Shepherd Street is classified as a Major Local Road and is aligned in a north-south direction. It is a two-way road configured with one lane in each direction that is to be shared with cyclists.

Kerbside parking is permitted, subject to one and two hour time restrictions or residential permits.

Shepherd Street is shown in Figure 2.6.

Figure 2.4: City Road (looking north)

Figure 2.5: Cleveland Street (looking east)

Figure 2.6: Shepherd Street (looking north)

2.3 Stage 1 Development Proposal

2.3.1 Land Uses

Stage 1 of the works includes the refurbishment of Electrical Engineering Building, the addition of a new 10-storey building on vacant land to the north of the Electrical Engineering Building and the conversion of an at grade car park to a courtyard with landscaping.

The new building will connect to the existing Electrical Engineering Building, with the combined buildings accommodating 88 staff and 1384 students.

The site is zoned for education use with no changes to zoning planned as part of the works.

2.3.2 Parking Arrangements

The Stage 1 works include the removal of 27 on-site parking spaces from the Electrical Engineering car park located off Maze Crescent, as well as the three on-site spaces adjacent to Blackwattle Creek Lane. There is no provision to add any additional car spaces to the site as part of these works.

2.3.3 Loading and Waste Collection Arrangements

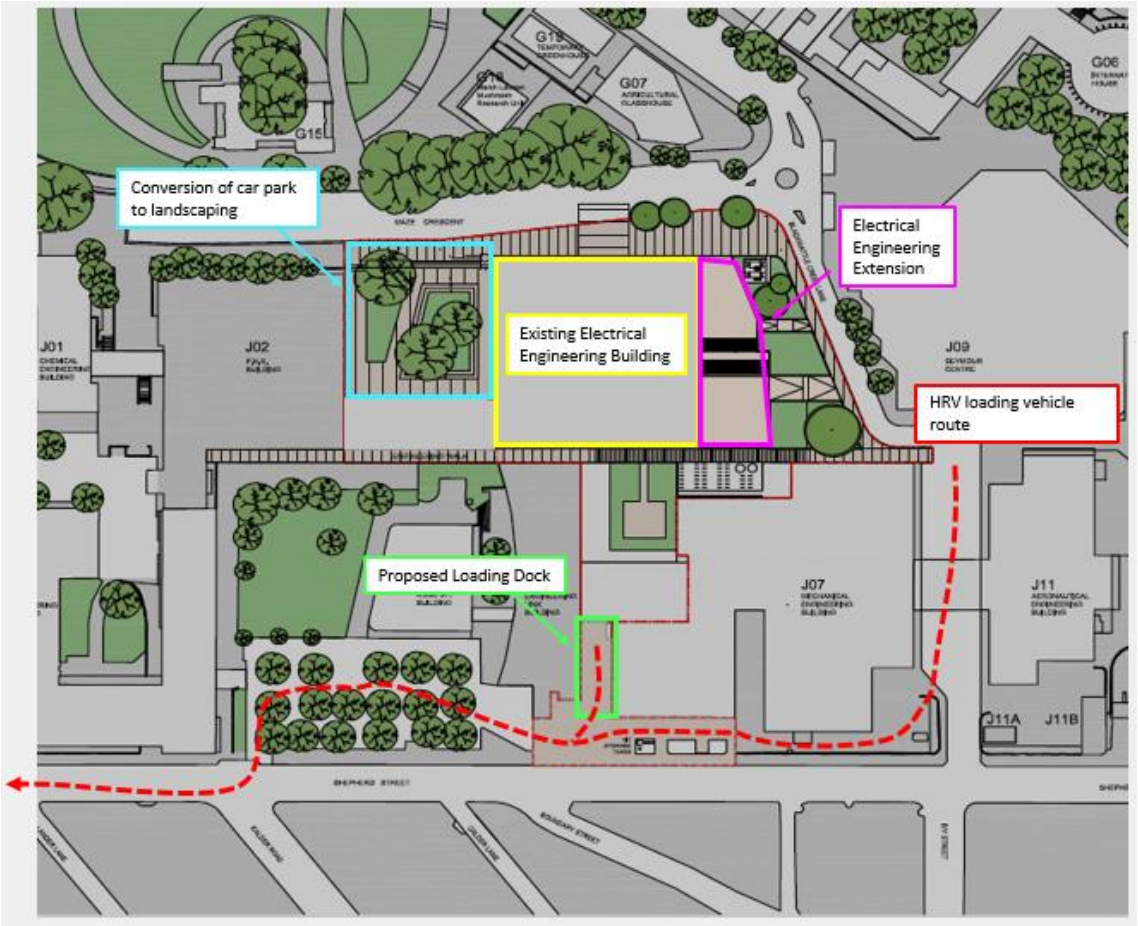
The works also include the provision of a new loading dock to service the facility. The loading dock is to be located adjacent to the Link Building and the Mechanical Engineering Building. Access to the loading dock is to be provided from Blackwattle Creek Lane, with egress from the loading dock via Shephard Street near the School of Civil Engineering. The loading dock will cater for the vehicles shown in Table 2.1.

Table 2.1: Stage 1 Loading Dock Vehicles and Frequency

Vehicle Type	Frequency
Heavy Vehicle (HRV – 12.5m)	3-4 Per Week
Medium Rigid Vehicle (MRV – 8.8m)	10-15 Per Week
Light Vehicle (Car/Van)	10 Per Day

The proposed loading dock and route is shown in Figure 2.7.

Figure 2.7: Development Proposal and Loading Route



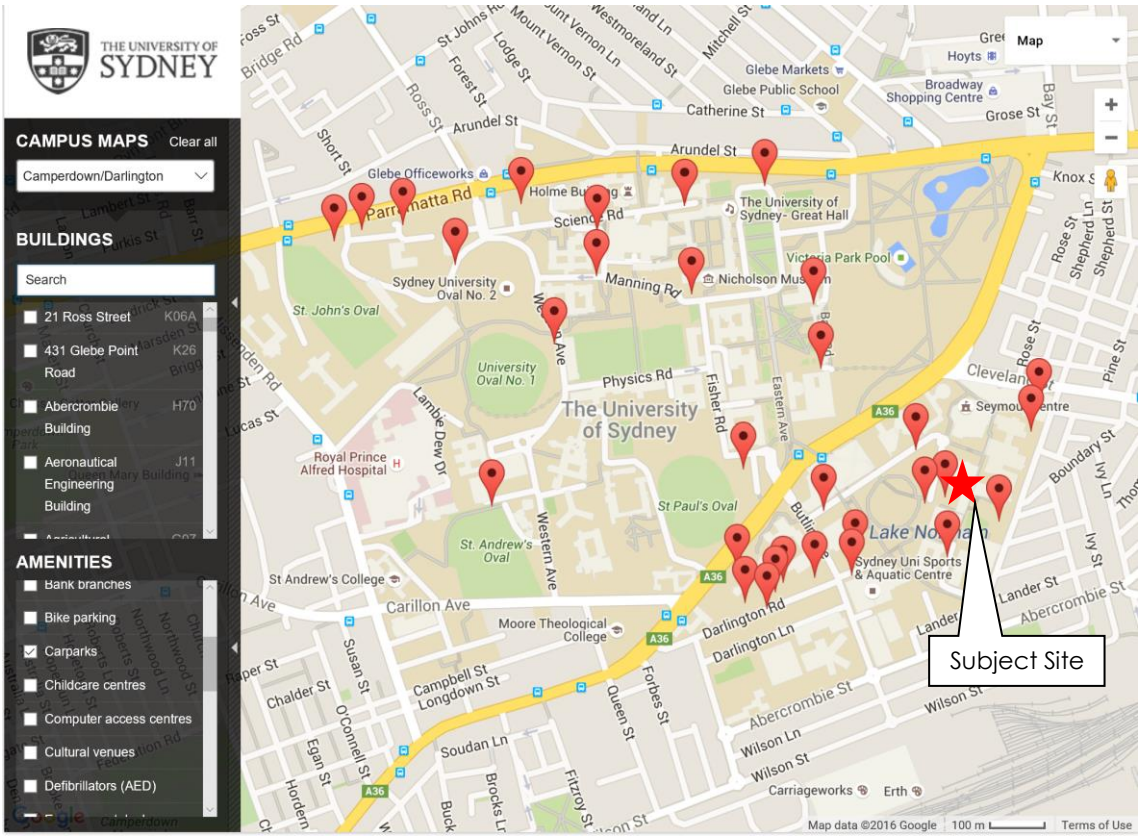
3. Transport and Accessibility Assessment

3.1 Existing Conditions

3.1.1 Car Parking

As outlined in the Sydney University Sustainable Transport & Mobility Plans (STAMP), there are 2,227 car parking spaces at the Camperdown-Darlington Campus with an additional 200 spaces to be provided as part of Transformational projects underway. These car spaces are located in various areas across the Campus, as shown in Figure 3.1.

Figure 3.1: Existing Car Park Locations



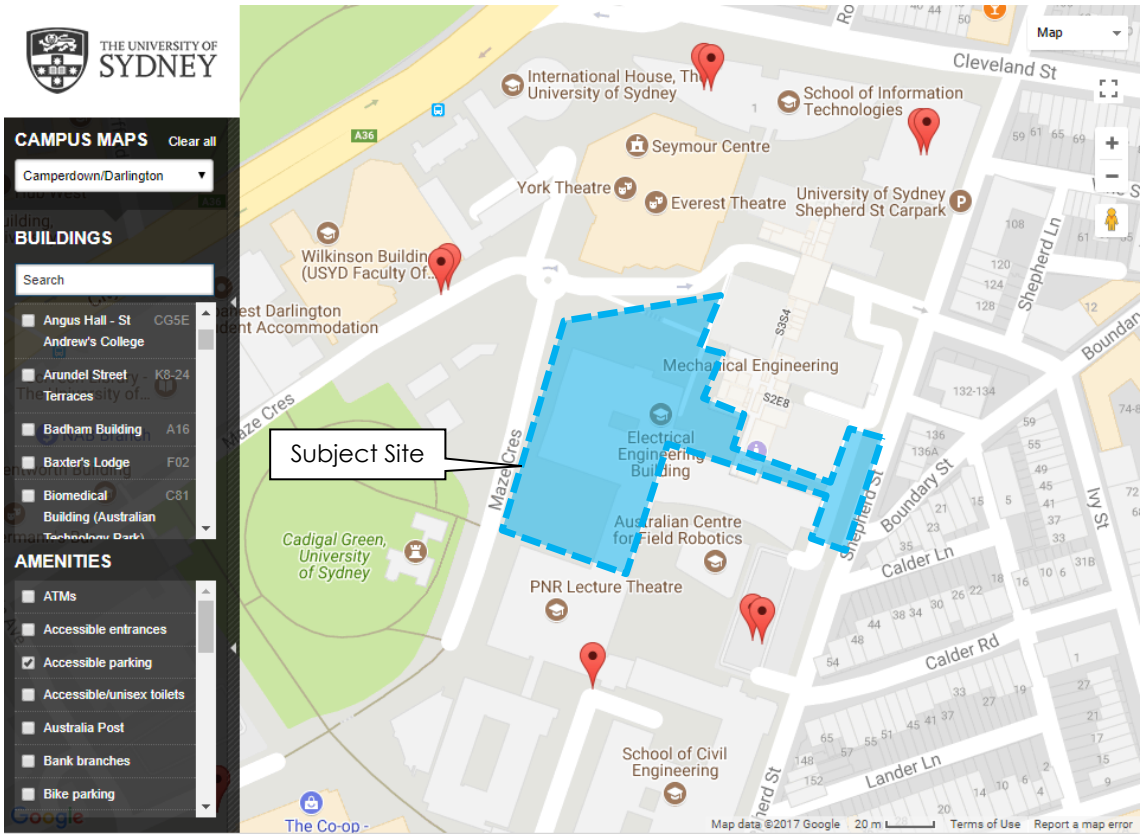
Source: http://sydney.edu.au/maps/campuses/?area=CAMDAR (accessed 14/11/17)

The USYD Campus Improvement Plan (CIP) aims to change the distribution of car parking facilities by consolidating car parking facilities in defined precinct areas. In general, car parking areas will be relocated to peripheral locations in basement car parking facilities.

This plan outlines a precinct approach to the management of car parking.

There is also a number of disabled parking spaces in the vicinity of the site shown in Figure 2.2.

Figure 3.2: Accessible Car Park Locations



Source: http://sydney.edu.au/maps/campuses/?area=CAMDAR (accessed 14/11/17)

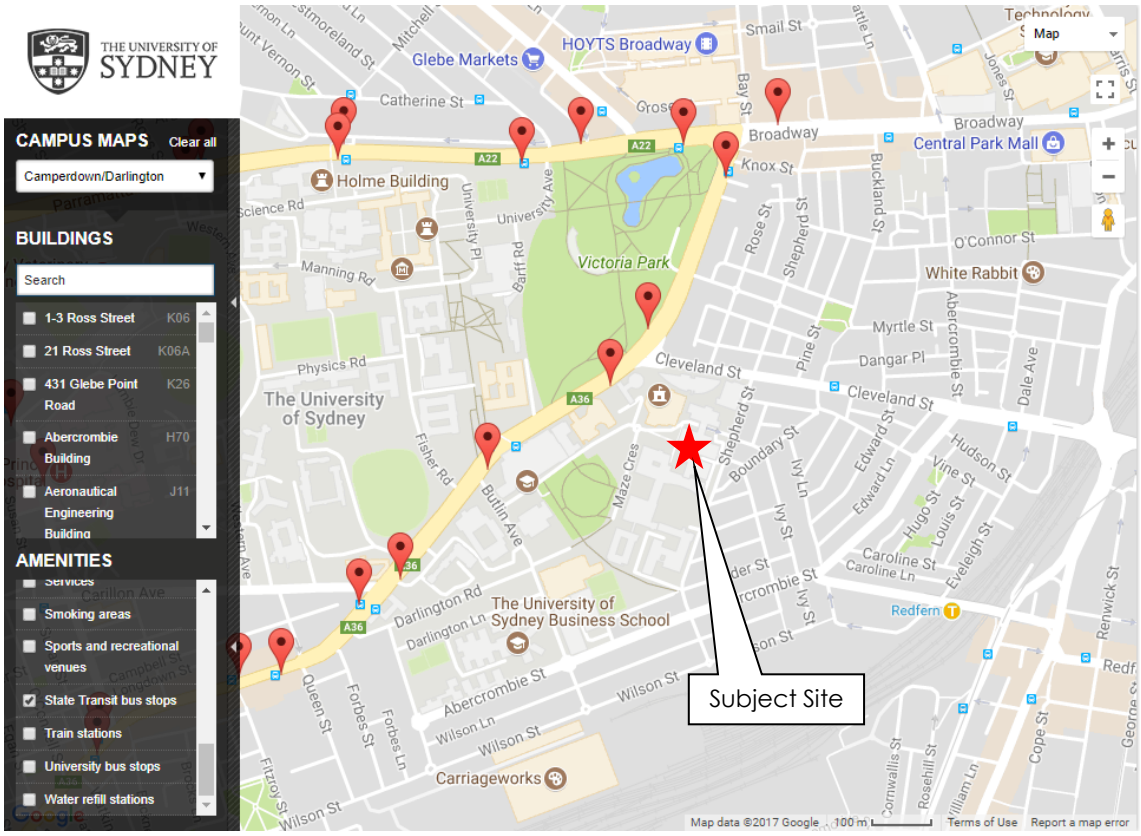
3.1.2 Public Transport Accessibility

Public transport to the Campus is primarily provided by bus and train services.

The Arup Access Strategy report (December 2013) indicates that some 53% of the Campus' mode share is via public transport.

In the vicinity of the site, access to public transport is largely reliant on the high frequency bus route services along the City Road corridor. There are many bus stops along City Road and Parramatta Road within walking distance of the site which provide high frequency connecting services between the western suburbs and the CBD. The bus stops in the vicinity of the site are shown in Figure 3.3.

Figure 3.3: Bus Stop Locations



Source: http://sydney.edu.au/maps/campuses/?area=CAMDAR (accessed 14/11/17)

A review of the public transport available in the vicinity of the site is summarised in Table 3.1.

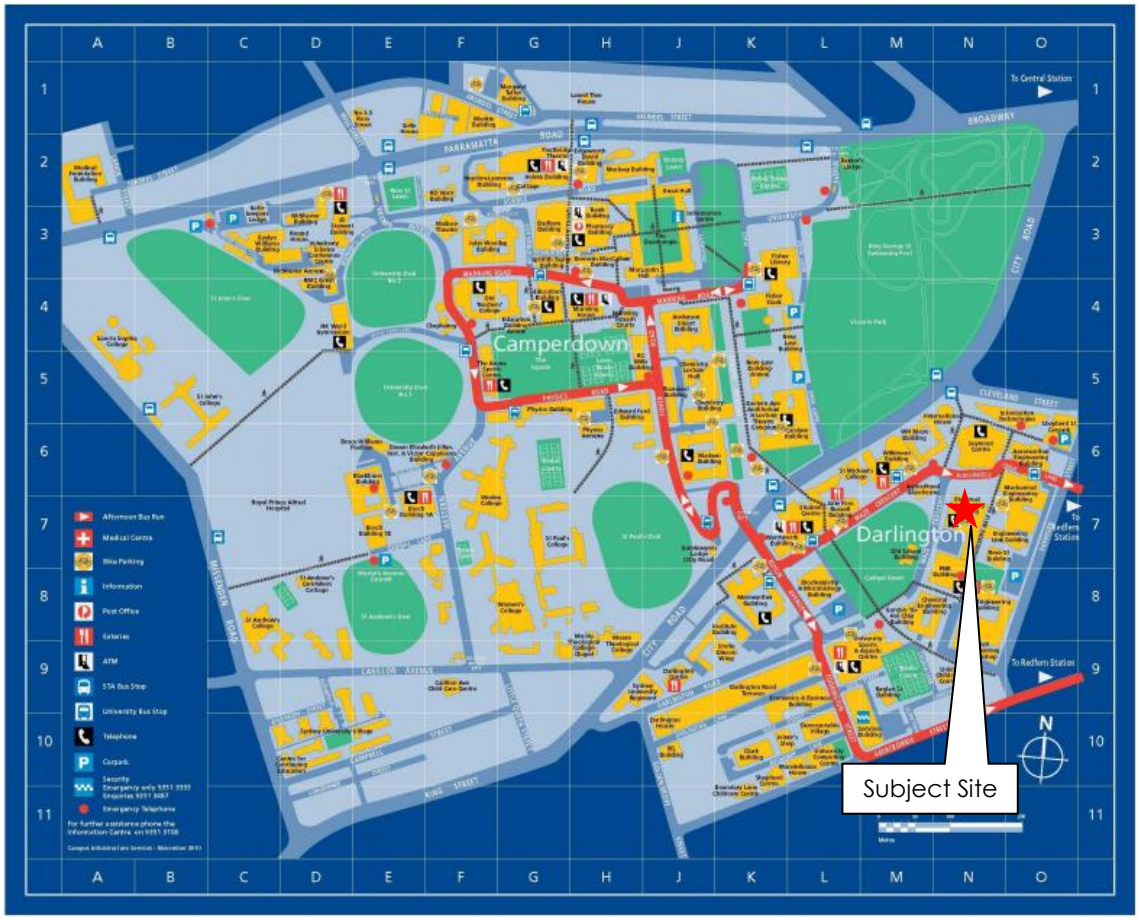
Table 3.1: Public Transport Provision

Service	Route #	Route Description	Location of Nearest Stop	Distance to Nearest Stop	Frequency On/Off Peak
Bus	352	Bondi Junction to Marrickville Metro via Oxford Street	City Road after Cleveland Street (adjacent to International House)	100m	20 minutes peak / 30 minutes off peak
	370	Leichardt Marketplace to Coogee			10 minutes peak / 20 minutes off peak
	422	City to Kogarah			5-10 minutes peak / 20 minutes off peak
	423	City to Kingsgrove via central station and Newtown			Every 10 minutes
	426	City to Dulwich Hill			10 minutes peak / 20 minutes off peak
	428	City to Dulwich Hill			5-10 minutes peak / 15 minutes off peak
	M30	Sydenham to Mosman			10 minutes peak / 15 minutes off peak
	L23	City to Kingsgrove	City Road (adjacent to Scholaresque)	230m	Every 15 minutes 4:30pm – 6:30pm
	L28	City to Canterbury			Every 15 minutes 4:30pm – 6:30pm
	N10	City to Sutherland			Hourly 1am – 5am
	N30	City to Macarthur			Every Half Hour 1am-5am
	N40	City to East Hills			Every Half Hour 12am-5am

Service	Route #	Route Description	Location of Nearest Stop	Distance to Nearest Stop	Frequency On/Off Peak
Train		All except airport branch of the Airport, Inner West & South Line and the Cumberland Line	Redfern Station	600m	Frequency is less than 5 minutes
		All Lines	Central Station	1400m	Frequency is less than 5 minutes

As shown in Figure 3.4 there is also a free bus that is provided to staff and students that allows them to travel free throughout the campus. This bus travels within 150m of the site.

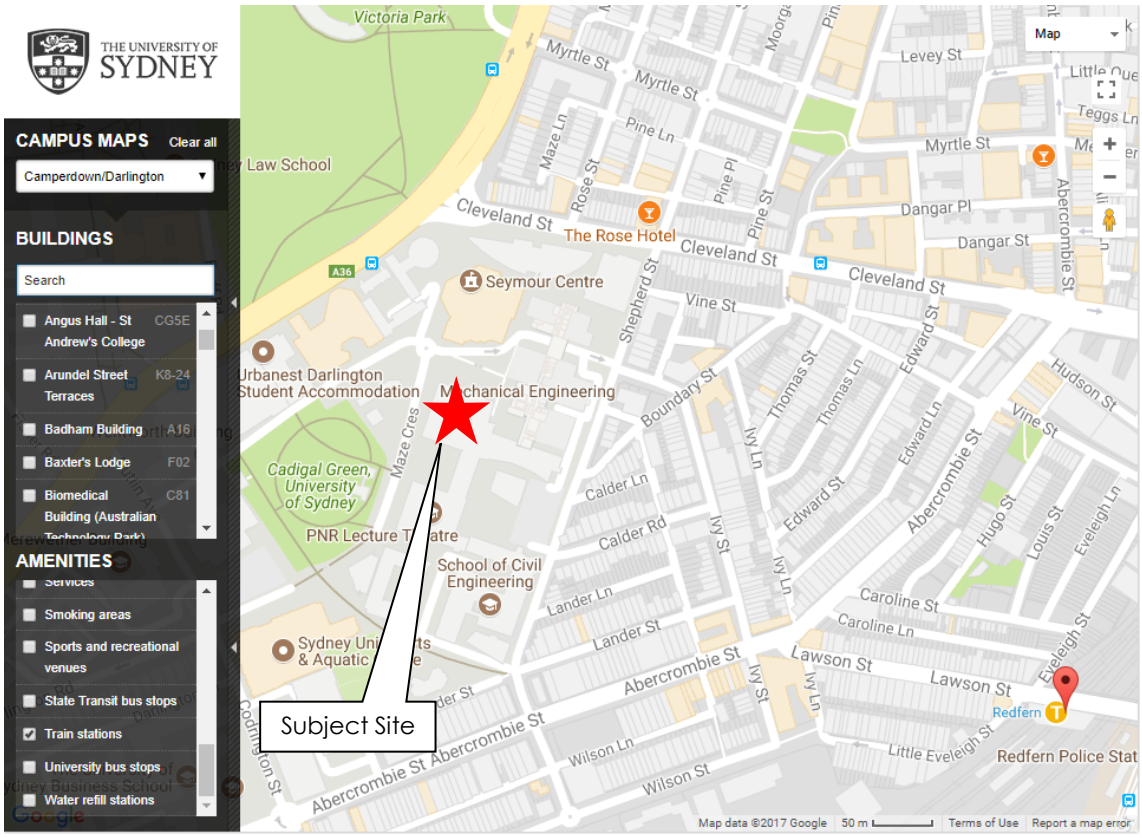
Figure 3.4: Camperdown and Darlington Campus, Bus Route



[Source: http://sydney.edu.au/dam/corporate/documents/campus-life/travel-campus/Camperdown-Darlington.pdf (accessed 14/11/17]

Train usage is a key public transport mode for the Campus. The site is located a 600 metre walk from a Redfern railway station, it is expected that people commuting to the site will utilise this station. Redfern Station is shown in relation to the site in Figure 3.5.

Figure 3.5: Redfern Station in Relation to the Site



Source: http://sydney.edu.au/maps/campuses/?area=CAMDAR (accessed 14/11/17)

3.1.3 Pedestrian Movements

The Access Strategy Assessment prepared by Arup (December 2013) reported a campus wide mode share of active travel (pedestrians and cyclists) of 26%.

USYD has adequate pedestrian footpaths throughout the campus and within the precinct linking the site to the rest of the surrounding infrastructure.

Pedestrian paths are located as follows:

- City Road (2 sides) - 3m wide path
- Cleveland Street (2 sides) – 2m wide path
- Shepherd Street (2 sides) – 1.5m wide path.

There are also numerous pedestrian paths within the precinct providing linkages between buildings and to pedestrian paths linking to the wider campus.

Safe crossing points in vicinity of the site include the following pedestrian crossings:

- Signalised crossing and a pedestrian bridge across City Road adjacent to Scholarsqaure
- Signalised crossings at the intersection of City Road and Cleveland Street
- There are also a number of pedestrian crossings on Maze Crescent in close proximity to the site.

3.1.4 Cycling Movements

Cycling as a mode of transport has gained popularity in recent years at the Campus.

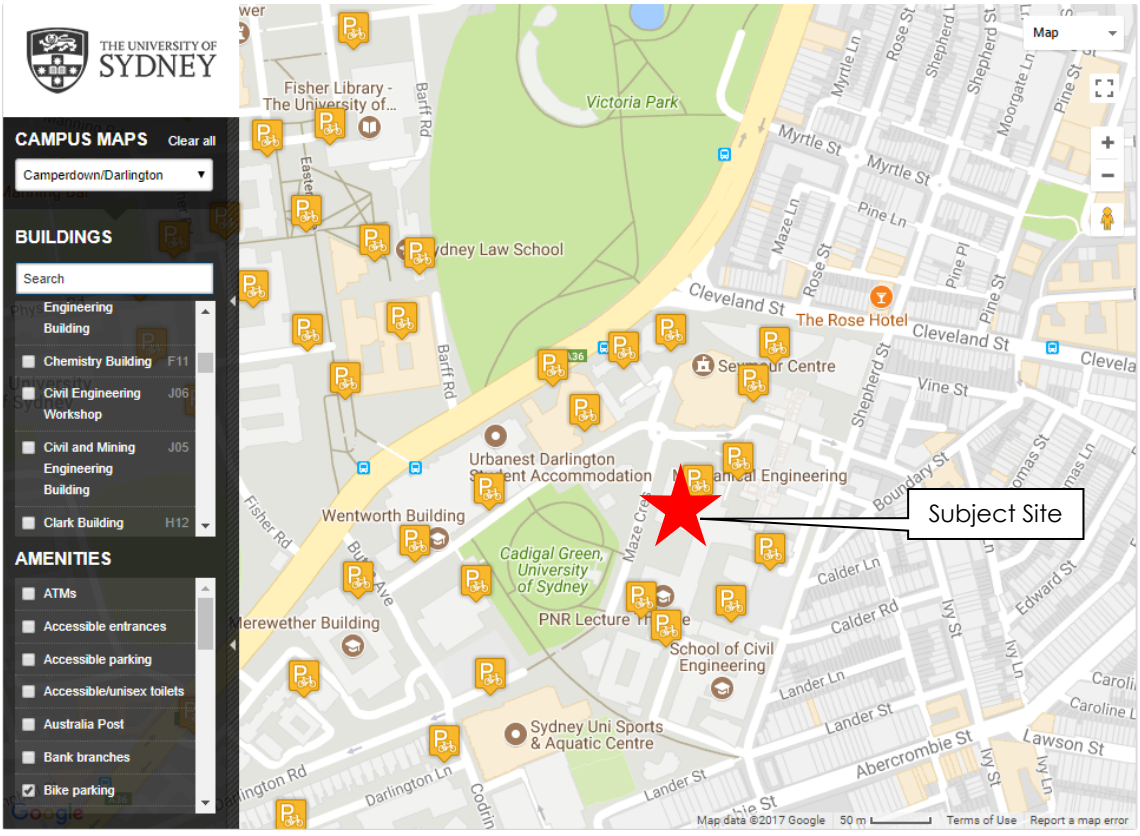
It is understood that this is largely a reflection of implementing site specific policies and measures to promote and achieve mode shifts to cycling. The University promotes of bicycle usage on their website, which includes details on:

- Where to ride
- How to ride safely
- Where to park
- Where to shower and change
- Discounts for Bicycle usage

The existing bicycle parking facilities at the Campus is shown in Figure 3.6 and illustrates that bicycle parking is provided extensively in the vicinity of the site.

It is further noted that the Arup Access Strategy report indicates that the University of Sydney currently caters for some 1,300 bicycles' parking/storage across the campus. It is understood that these bike racks are currently heavily utilised during the term and represents approximately, 3% of student's mode share and 10% of staff's mode share.

Figure 3.6: Existing Bicycle Parking Locations



Source: http://sydney.edu.au/maps/campuses/?area=CAMDAR (accessed 14/11/17)

3.1.5 Loading Movements

There are multiple locations within the precinct where the Engineering and Technology Precinct loading and unloading occurs. The Electrical Engineering Building currently has approximately 4-5 deliveries a day which occur via the car park adjacent to the Electrical Engineering Building.

3.2 Development Impacts

3.2.1 Car Parking Impacts and Provision

The Stage 1 works include the removal of 27 on-site parking spaces from the Electrical Engineering car park located off Maze Crescent. To facilitate access to the new loading dock three on-site spaces adjacent to Blackwattle Creek Lane will also be removed.

The removal of these 30 car parking spaces is consistent with the USYD Campus Improvement Plan (CIP) which aims to change the distribution of car parking facilities by consolidating car parking facilities in defined precinct areas.

The removal of these spaces is also consistent with a number of NSW State Government and City of Sydney transport related policies which set out key strategic transport objectives for new developments. These include, but are not limited to, the NSW Long Term Transport Master Plan, Sydney's Cycling Future 2013 and Sydney's Walking Future, as well as City of Sydney's LEP (2012).

The City of Sydney designates districts with one of three categories (A, B or C), which is consistent with the level of transport provided to an area, as well as the broader transport and land use objectives.

Under the City of Sydney's 2012 Local Environment Plan, the site is located within land designated Category B. Under such a provision, car parking provision is outlined as a maximum rate; resulting in no minimum car parking requirement. In this instance, no on-site car parking is proposed and therefore the proposal is consistent with the LEP requirements.

3.2.2 Loading Movements

To facilitate loading and unloading to the Electrical Engineering Building, a loading dock is proposed to be located adjacent to the Link Building and the Mechanical Engineering Building. Access to the loading dock is to be provided from Blackwattle Creek Lane, with egress from the loading dock via Shephard Street near the School of Civil Engineering.

The loading dock will cater for vehicles up to a 12.5m HRV. For the HRV to enter the site, three on-site car spaces are proposed to be removed. To exit the site via the Civil Engineering car park, two trees will need to be removed and additional pavement will be required at the crossover to facilitate the egress movement. HRVs will be required to exit along Shephard Street to the south as egress to the north is not possible at this location due to existing road geometry.

To access the loading dock, vehicles are required to drive in southbound direction along the service road and then reverse into the loading dock. Whilst it is not expected the service road to attract pedestrians, to minimise conflict between reversing vehicles and pedestrians, it is recommended that 'no pedestrian' signs and 'trucks' warning signs be installed at either end of the laneway. It is noted, there are pedestrian footpaths provided on Shephard Street (adjacent to the laneway) to cater for pedestrians wanting to travel in a north-south direction in the southern portion of the engineering precinct.

In addition, it is recommended that convex mirrors are placed within the loading dock to maximise visibility within the loading dock.

A swept path assessment of the 12.5m HRV entering and exiting the loading dock is shown in Appendix A.

The frequency of loading/unloading proposed to use the loading dock is shown in Table 2.1.

Table 3.2: Stage 1 Loading Dock Vehicles and Frequency

Vehicle Type	Frequency
Heavy Vehicle (HRV – 12.5m)	3-4 Per Week
Medium Rigid Vehicle (MRV – 8.8m)	10 - 15 Per Week
Light Vehicle (Car/Van)	10 Per Day[1]

Table 3.2 shows that there is expected to be an increase in loading movements to and from the site of up to approximately 10 vehicles a day (taking into account the existing 4-5 deliveries to the Electrical Engineering Building).

3.2.3 Traffic Impacts

The proposed development is expected to result in a decrease in vehicle movements associated with vehicles parking in the vicinity of the site given the removal of 30 car spaces, and an increase of up to 10 loading vehicles per day. This represents an overall reduction in vehicle movements in the vicinity of the site, therefore the development is not expected to have an impact on the surrounding road network.

3.2.4 Public Transport Accessibility

As outlined earlier, the proposal has excellent access to nearby public transport services, with bus and train services in particular located within a short walk of the site.

It is further noted that the University of Sydney is very pro-active with regard to travel demand management and undertakes the task of encouraging the use of public transport on a campus wide approach. It is expected that the travel demands associated with the Engineering and Technology Precinct will be included in and addressed by the University's broader travel demand management policies (i.e. future Sustainable Transport & Mobility Plans (STAMP)).

3.2.5 Pedestrian Movements

The USYD Engineering and Technology Precinct already has strong pedestrian links through the precinct and over the road to the rest of the campus on the other side of City Road. The proposed Stage 1 works will not alter any of the existing pedestrian links through the site.

3.2.6 Cycling Movements

The STAMP specifies a minimum requirement for bicycle parking provision which is 5% of the total student population and 10% of the staff population. The development is proposed to accommodate approximately 88 full time building staff and 1384 students which equates to a requirement for 9 staff bicycle parking spaces and 52 student bicycle parking spaces (assuming 75% capacity of the building as per the STAMP).

It is proposed to provide bicycle parking at the eastern end of the new Electrical Engineering Building. Details of the number and type of bicycle parking has not been provided at this stage, however it is recommended that it be provided in accordance with the STAMP requirements and AS2890.3:2015.

[1] The expected frequency of light vehicle movements has increase since consultation occurred with RMS and TfNSW.

End of trip facilities are provided within the refurbished Electrical Engineering Building. It is recommended that the facilities accommodate 3 lockers for staff, and 18 lockers for students to meet the STAMP requirements.

3.2.7 Other Relevant Considerations

Stakeholder Consultation

As per the SEARs requirement, RMS and TfNSW have been consulted regarding the proposed development. RMS has provided preliminary approval of the development subject to the preparation of a Construction Traffic Management Plan.

TfNSW have yet to provide a response to the proposed development.

The correspondence with RMS and TfNSW is shown in Appendix B.

Emergency Vehicle Access

The proposed development does not propose to change vehicle access to the site, with emergency vehicles able to access the site as per the current arrangements.

Construction Traffic Management Arrangements

It is understood that a Construction Traffic Management Plan (CTMP) is being prepared by Laing O'Rourke.

4. Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

- The proposed development results in a loss in 30 car spaces from the precinct. This is consistent with the USYD Campus Improvement Plan and transport policies relevant to the site and is considered to be appropriate.
- A new loading dock is proposed to facilitate vehicles up to a 12.5m HRV and will increase loading movements to and from the site by up to 10 vehicles a day.
- It is recommended to provide bicycle parking and end of trip facilities in accordance with the Sydney University Sustainable Transport and Mobility Plan requirements.
- Traffic volumes associated with the proposed development are not expected to have an impact on the surrounding road network.

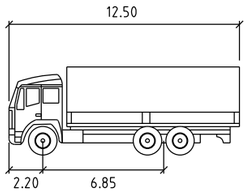
Appendix A

Swept Path Assessment

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 500mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



SU TRUCK

	metres
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.6

ELECTRICAL ENGINEERING BUILDING

AUSTRALIAN CENTRE FOR FIELD ROBOTICS

LINK BUILDING

SCHOOL OF AEROSPACE, MECHANICAL AND MECHATRONIC ENGINEERING

SHEPHERD STREET

SU TRUCK AUSTROADS 2015 (AU)

MAP REF 65/D7

PLOTTED BY : DraftingHotdesk ON 16/11/2017 AT 2:22:09 PM

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Perth	08 6169 1000

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED W. CROAGH	DESIGN CHECK K. WILLIAMS
APPROVED BY K. WILLIAMS	DATE ISSUED 8 JULY 2016

SCALE A3 — 0 5 10 — 1:500

CAD FILE NO. N139960 - AT02 -P2 .dgn

UNIVERSITY OF SYDNEY
ENGINEERING AND TECHNOLOGY PRECINT
STAGE 1 REDEVELOPMENT
LOADING DOCK ACCESS REVIEW

DRAWING NO. N139960 - AT02 SHEET 1 OF 1 ISSUE P2

Appendix B

Correspondence with Stakeholders

From: JEGATHESAN Jana <Jana.JEGATHESAN@rms.nsw.gov.au>
Sent: 7 December, 2017 11:33 AM
To: Hilary Papps
Subject: RE: University of Sydney - Engineering and Technology Precinct Stage 1 Development CRM:0064341

Hi Hilary,

Roads and Maritime undertook a preliminary review of the email correspondence dated 14 November 2017 in preparation of the traffic impact assessment report and is satisfied with information provided below. Furthermore, Roads and Maritime would require a Construction Traffic Management Plan(CTMP) to be submitted as part of the traffic impact assessment outlining truck movements and layovers (if any) associated with the development that may affect the State Road network. Thanks and much appreciated.

Regards,

Jana Jegathesan
Land Use Planner
CBD & East Precinct, Network Safety
T 02 8849 2313
www.rms.nsw.gov.au
Every journey matters

Roads and Maritime Services
Level 7 27 Argyle Street Parramatta NSW 2150

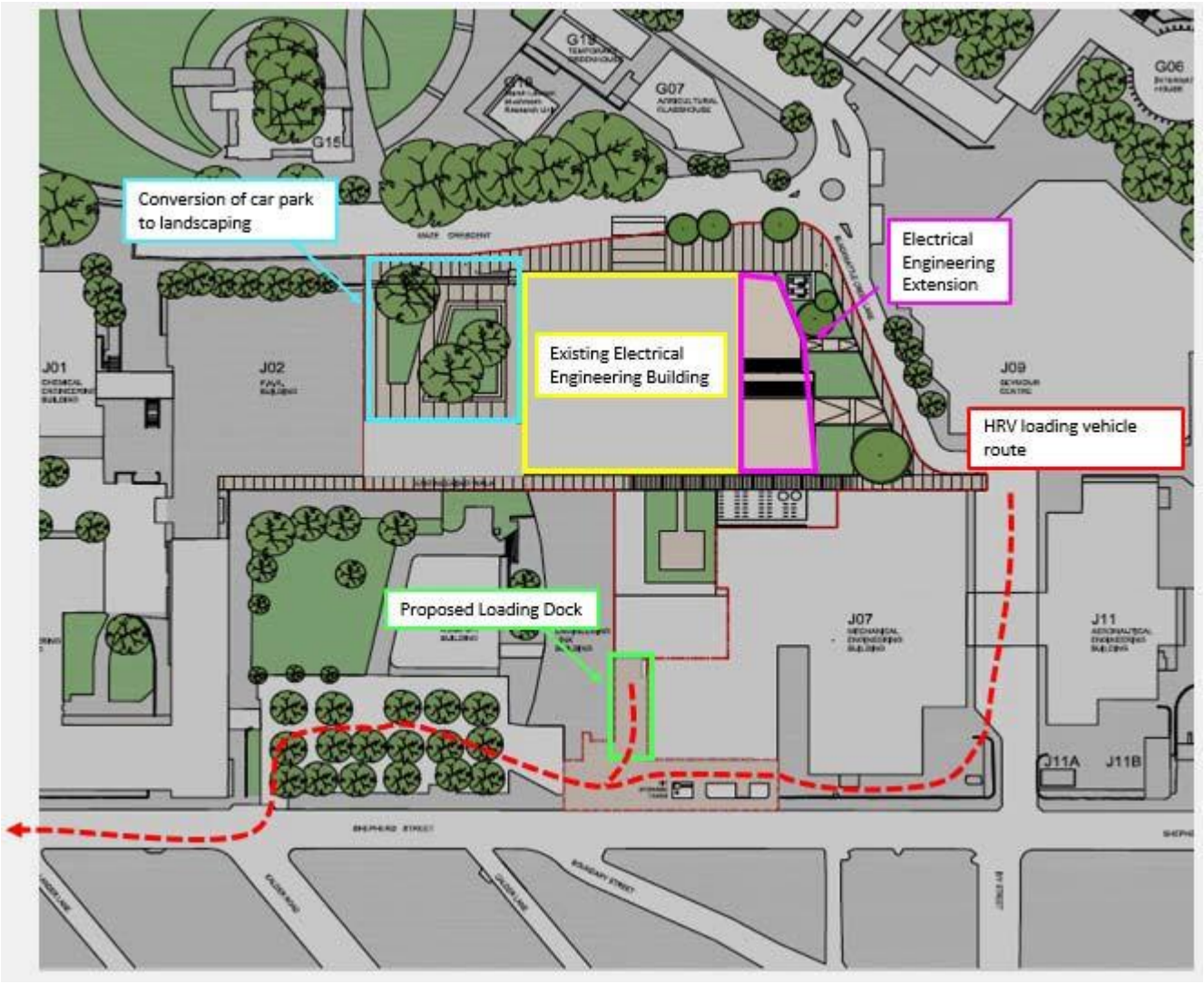
From: Hilary Papps [mailto:hilary.papps@gta.com.au]
Sent: Tuesday, 14 November 2017 10:26 AM
To: Development Sydney
Cc: Kane Williams
Subject: University of Sydney - Engineering and Technology Precinct Stage 1 Development CRM:0064341

Good morning,

GTA Consultants has been engaged to prepare a Traffic Impact Assessment of the proposed Stage 1 development of the University of Sydney Engineering and Technology Precinct revitalisation project within their Camperdown campus.

The University of Sydney has requested and received the Secretary's Environmental Assessment Requirements (SEARs) for the proposal. The SEARs set out the assessment requirements for the project, including the requirement to consult with Transport for NSW (incl. the Sydney Coordination Office) and Roads and Maritime Services. As such, the following email outlines the development and anticipated impact of the development on the surrounding road network for your review and approval.

Stage 1 of the works includes the refurbishment of Electrical Engineering Building, the addition of a new 10-storey building on vacant land to the north of the Electrical Engineering Building and the conversion of an at grade car park to a courtyard with landscaping.



The works also include the provision of a new loading dock to service the facility. The loading dock is to be located adjacent to the Link Building and the Mechanical Engineering Building. Access to the loading dock is to be provided from Blackwattle Creek Lane, with egress from the loading dock via Shephard Street near the School of Civil Engineering. The loading dock will cater for the following vehicles:

Vehicle Type	**Frequency**
Heavy Vehicle (HRV - 12.5m)	3-4 per week
Medium Vehicle (MRV – 8.8m)	2-3 per week
Light Vehicle (Car/Van)	2-3 per day

Swept path analysis of a HRV entering and exiting the loading dock is attached. Noting, that for the vehicle to enter the site, three on-street car spaces on Blackwattle Creek Lane and three on-site car spaces are proposed to be removed. To exit the site via the Civil Engineering car park, two trees will need to be removed and additional pavement will be required at the crossover to facilitate the egress movement. HRVs will be required to exit along Shephard Street to the south as the an egress to the north is not possible at this location due to existing road geometry.

There is expected to be an increase in loading movements to and from the site of up to 5 vehicles a day, however, this is not expected to have a material impact on the surrounding road network.

The Stage 1 works include the removal of 27 on-site parking spaces from the Electrical Engineering car park located off Maze Crescent, as well as the three on-site spaces adjacent to Blackwattle Creek Lane and three on-street spaces on Blackwattle Creek Lane. The removal of these 33 car parking spaces is consistent with the overall campus car parking strategy which aims to change the distribution of car parking facilities by consolidating car parking facilities in defined precinct areas. The approval of the overall campus car parking strategy is part of a separate project and is therefore not considered as part of this development.

The proposed development is expected to result in a decrease in vehicle movements associated with vehicles parking in the vicinity of the site, and a minor increase in loading vehicles to the site. Given the proposed minor change in vehicle movements, the development is not expected to have an impact on the surrounding road network.

Giving consideration to the above, we request that you please undertake a preliminary review of the above material and provide an email response summarising any queries / concerns / comments on the proposal. As noted, above, this will be considered prior to the DA submission and is a requirement of the SEARs. We request that you provide a response by the 21 November 2017 at the latest as we need to submit shortly after this. If we can expedite the review in any way please do not hesitate in giving me a call on 02 8448 1800. We look forward to your response.

Kind regards,
Hilary

Hilary Papps
Senior Consultant
GTA Consultants
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hilary.papps@gta.com.au
www.gta.com.au

Before printing, please consider the environment

From: McCray, Katherine <Katherine.McCray@transport.nsw.gov.au>
Sent: 20 November, 2017 10:37 AM
To: Hilary Papps
Cc: Kane Williams
Subject: RE: University of Sydney - Engineering and Technology Precinct Stage 1 Development CRM:0064341

Hi Hilary,

The SCO will review the preliminary information and provide comment, however this will not be possible by 21st November. We will get comments back to you next week.

Kind Regards,

Katherine McCray
Principal Transport Planner
Sydney Coordination Office
Transport Coordination
Transport for NSW

P 02 8265 7753 **M** 0466 350 083
Level 44, 680 George Street, Sydney NSW 2000

From: Hilary Papps [mailto:hilary.papps@gta.com.au]
Sent: Friday, 17 November 2017 10:17 AM
To: McCray, Katherine
Cc: Kane Williams
Subject: FW: University of Sydney - Engineering and Technology Precinct Stage 1 Development CRM:0064341

Good morning Katherine,

Kane Williams has passed on your details as a contact within Transport for NSW.

As part of the SEARS requirements for the Stage 1 development of the University of Sydney Engineering and Technology Precinct revitalisation project, we are required to consult with TfNSW.

Please see the project details below as sent to RMS.

Are you the correct person to contact regarding this project? If not, can you please pass on the appropriate contact details.

Kind regards,
Hilary

Hilary Papps
Senior Consultant
GTA Consultants
P 03 9851 9600 **D** 03 9851 9651 **M** 0457 486 645
Level 25, 55 Collins, Melbourne, VIC 3000

hilary.papps@gta.com.au
www.gta.com.au

From: Hilary Papps
Sent: Tuesday, 14 November 2017 10:26 AM
To: development.sydney@rms.nsw.gov.au
Cc: Kane Williams <kane.williams@gta.com.au>
Subject: University of Sydney - Engineering and Technology Precinct Stage 1 Development CRM:0064341

Good morning,

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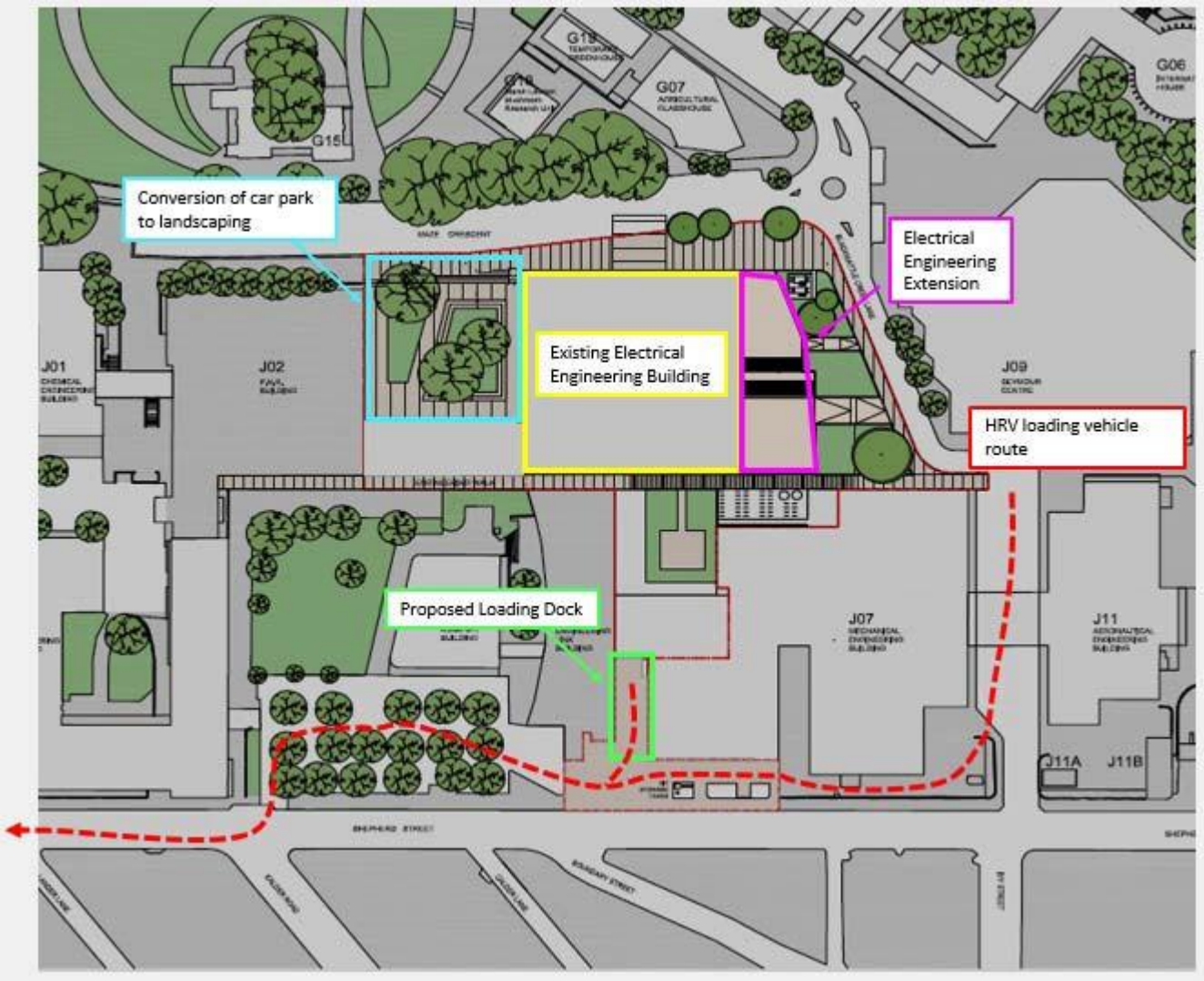

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