NSW/ACT Region Office

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12/07/2013

Attention – Joseph Gomes

City Of Sydney

GPO Box 1591

SYDNEY NSW 2001

Re: University Of Sydney Abercrombie Precinct Project Application Number MP07_0158, Construction Traffic Management Plan

Dear Sir,

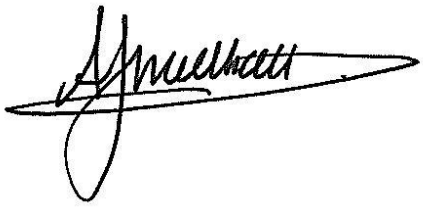
Further to our meeting to discuss the traffic requirements during the construction phase of the Abercrombie Precinct project, please find attached the Construction Traffic Management Plan.

The attached plan covers the method proposed for the earthworks and shoring phase of the project and begins to address the requirements for the remainder of the project. We understand further consultation with yourself will be required for the remainder of the works.

If further information is required please do not hesitate to contact myself or Dominic Begley.

We await your approval of the earthworks (CC1) phase traffic management plan.

Yours faithfully,



Adrian Mulhall
Project Director

Cc: Mathew Girvan (City Of Sydney)

Chris Wilson (McKenzie Group Planning)

Stephen Natilli (McKenzie Group)

Adam Goff (University of Sydney)

Geoff Cunningham (University of Sydney)

The University of Sydney
Abercrombie Precinct Redevelopment

TRAFFIC MANAGEMENT PLAN
(JH-B834-PLN-TrafficMP-018-A)

Rev	Date	Prepared by	Reviewed by	Approved by	Remarks
Rev A	28/05/13	TTW	D.Begley	A.Mulhall	For Submission to The University of Sydney

Traffic

TaylorThomsonWhitting

Abercrombie Precinct Re-Development Construction TMP – CC1

for John Holland

JH-B834-PLN-TrafficMP-018-A

11 July 2013

121784

Taylor Thomson Whitting (NSW) Pty Ltd Consulting Engineers ACN 113 578 377
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Revision Register

Rev	Date	Prepared By	Approved By	Remarks
1	09/07/13	PD	PY	Draft - For Review
2	11/07/13	PD	PY	For CC submission

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Prepared by:
TAYLOR THOMSON WHITTING (NSW) PTY LTD

PAUL DAVIDSON
Civil Engineer

Authorised by:
TAYLOR THOMSON WHITTING (NSW) PTY LTD

PAUL YANNOULATOS
Technical Director

1.0 GENERAL

1.1 Proposed Construction

The proposal is to construct a multi-storey building containing the University Of Sydney's Business School lecture threatres, offices, a single level below ground car park and an adjoining loading dock. The car park and loading dock will be accessed by a common circulation roadway that connects with Darlington Lane. Existing buildings within the development site have already been demolished.

The project will require early setup works to establish the platform for the construction program.

This will include:

Installation of two tower cranes. Crane C1 off Darlington Lane servicing the western portion of the site and Crane C2 servicing the eastern portion of the site.

Installation of a Darlington Lane Off-street construction zone and associated Work Zone and Codrington Street off-street construction zone.

Installation of fencing, hoardings and project demountable buildings.

The construction of a temporary at-grade car park for 20 cars in the northern western corner of the site adjacent to the common boundary with Darlington Public School. The car park will be used by the Child Care Centre and remain in use until December 2013.

Installation of four site access gates. Gate 3, off Darlington Lane and Gate 2, off Codrington Street to provide vehicle access, while Gate 1 and 4 will provide pedestrian access.

Following on from the early setup works phase, building works will be undertaken. This will consist of the following:

Bulk Earthworks Phase that will involve the excavation of the basement and driveway. The **Excavation Construction Plan** is contained in **Appendix B.**

Building Works Phase that will involve the construction of the building multi-storey structure, installation of services, fit out, landscaping, public domain works and Pack Down Works

During the construction program the building activity phases will generate an increase in the level of traffic using the local road network. This Construction Traffic Management Plan (CTMP) is to be implemented to mitigate against potential impacts.

1.2 Existing Immediate Road Network & Traffic Management

The Abercrombie Precinct Re-Development is located in Darlington. It can be accessed from the surrounding arterial road network.

To the northwest by King Street/City Road a north-south-west arterial road,

To the north by Cleveland Street an east-west arterial,

To the south by Erskinville Street a north-south arterial road.

To the east by Gibbons/Regent Street that are east-west arterials.

Abercrombie Street, Golden Grove Street, Butlin Avenue, Codrington Street, Darlington Road and Darlington Lane are local roads that provide immediate access to the site. These roads are designated with 3t Load Limit (R6-4) signs.

The site can only be reached by transiting the local road network from the surrounding arterial road network that connects with Abercrombie Street, Golden Grove Street, Butlin Avenue, Codrington Street, Darlington Road and Darlington Lane. As there is no alternate route to the site construction vehicles are able to pass the 3t Load Limit (R6-4) signs. In order to protect the road pavement asset a dilapidation report of the existing road condition will be documented prior to commencement of construction works and at the completion of the construction works. Any pavement damage is to be repaired to Sydney of City requirements and specification.

The local road routes accessing the site are:

Shephards Street to the north. This provides two-way access to and from its intersection with Cleveland Street and Abercrombie Street which are both controlled by traffic signals and caters for all turning movements

Abercrombie Street to the north. This provides two-way access to and from its intersection with Cleveland Street that is traffic signalled controlled with left- in and left-out movements only and, Codrington Street that is roundabout controlled.

Lawson Street to the east. This provides two-way access to and from its intersection with Gibbons Street and Abercrombie Street which are both controlled by traffic signals and caters for all turning movements

Butlin Avenue/Codrington Street to the west. This provides two-way access to and from its intersection with King Street/City Road Street that is controlled by traffic signals and caters for all turning movements.

Darlington Street and the western end of Golden-Grove Street to the southwest. This provides two-way access from the site with its intersection with King Street/City Road Street that is unsignalised and caters for all turning movements.

Wilson Street to the south. This provide two-way access to and from its intersection with Erskinville Street that is traffic signalled controlled with all turning movements and, Codrington Street that is roundabout controlled.

Figure 1.0 shows the location of the Abercrombie Work Site and Surrounding Road Network.

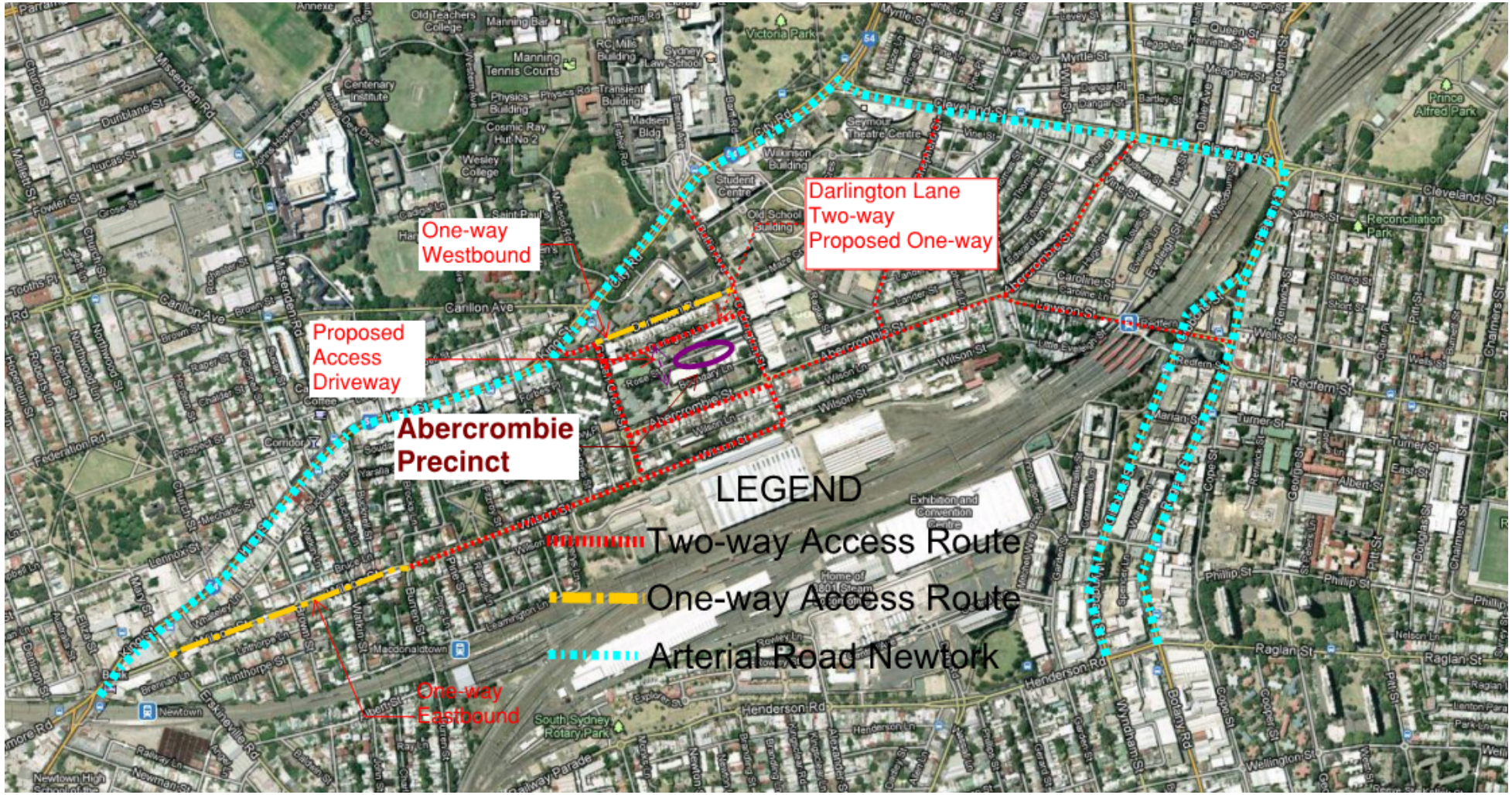

Figure 1.0 Abercrombie Work Site and Surrounding Road Networ

1.3 Existing Local Area Landuse Activity

The site is generally accessible from all directions, although the local area is bounded by mix of residential and commercial properties to the south, east and north and, the Sydney University Campus to the West. The Darlington Public School is located on the southern boundary of Abercrombie re-development.

2.0 CONSTRUCTION ZONE AND VEHICULAR ACCESS

2.1 Haulage Routes

Traffic management for this project will require the maintenance of access for the day to day operations and external vehicle movement in the immediate surrounding road network. Access constraints and restrictions during day to day operations will need to be integrated in accordance with this Construction Traffic Management Plan (CTMP)and associated Traffic Control Plan (TCP).

- Firstly, ensure routine vehicle, pedestrian, cyclists and public transport (mini bus & taxi) movements are maintained or alternatives implemented, maintained and removed with staging, and

- Secondly, facilitate the orderly movement of demolition and construction vehicles to and from the site and within the road network that provides access to the site.

It is recognised that construction traffic must transit the local road network to gain access to the site. It is desirable to minimise the heavy vehicle movement impacts on residential Streets and on the Darlington Public School pedestrian and traffic environment.

Consequently construction vehicles should **travel to the site** by the turning left or right at the King Street/City Road and Bultin Avenue intersection, then travel along Butlin Avenue and Codrington Street.

To access the Darlington Lane Construction zone/Gate 3 vehicles would turn right into Darlington Street, left into northern end of Golden Grove Street and left into the western end of Darlington Lane.

The alternative would be a left turn or right turn from King Street into the western end of Darlington Street, right into the northern end of Golden Grove Street and, left into the western end of Darlington Lane.

To access Codrington Street construction zone/Gate 2 vehicles would continue south along Codrington Street and turn right into Gate 2. Trucks will not be permitted to use Abercrombie Street/Codrington Street roundabout to access the site.

Construction vehicles should **travel from the site** via the most direct route back to the arterial road network. From Gate 3, eastbound along Darlington Lane then northbound along Codrington Street and Butlin Avenue and, then left or right turn at the intersection of King Street and Butlin Avenue.

Figure 2.0 contained in Appendix A shows the construction haulage routes to and from the Abercrombie Work Site.

2.2 Darlington Lane Construction Zone/Gate 3

Darlington Lane Construction Zone and Gate3 is located mid-block in Darlington Lane and will be contained fully within the site boundaries.

Trucks will enter and exit the construction zone in an eastbound direction. i.e. vehicles will enter and exit in a forward direction.

During the construction process Darlington Lane will be temporarily made one-way eastbound. Traffic Control Plans (TCPs) have been prepared and will be implemented to direct the through movement of traffic eastbound. Inbound and outbound movements will be controlled by a traffic controller. Advisory, advanced warning, directional and regulatory signage and associated traffic control devices will be installed in accordance with Roads & Maritime Services' General Specifications (RTA Spec. part G10 'Control of Traffic and RTA Specification 3355 in Golden Grove Street , Darlington street, Darlington Lane and Butlin Avenue/Codrington Street to direct traffic and pedestrian movements.

A work zone is required in Darlington Lane adjacent the construction zone to facilitate construction work. The Darlington Lane construction zone will be approximately 95m in length and 7.5m wide. A Work Zone application and permit (95m long) is to be obtained from Sydney City Council for the duration of the construction program.

Existing access to the rear of the housing on the northern side of Darlington Lane will be maintained.

Local residents will be advised of the temporary traffic management changes via a letter box drop seven (7) days prior to commencement of construction works.

2.3 Codrington Street Construction Zone, Gate 2 & Gate 1

Codrington Street Construction Zone, Gate 2 and Gate 1 are located between Abercrombie Street and Rose Avenue along the eastern boundary of the site.

Gate 2

Gate 2 is to be located where Rose Lane is closed and will provide truck access to the eastern side of the site. An opening in the hoarding will permit 12.5m HRV and 19m articulated vehicles (AV) to enter and exit the site. A turning platform will be provided onsite so AV or HRV vehicles can enter and exit Gate 2 in a forward direction at a slow speed.

Gate 1

Smaller construction vehicles (less than 3 tonne) accessing the site office (Gate 1) will make use of the existing roundabout at the intersection of Abercrombie Street and Codrington Street. Construction vehicles would undertake a u-turn maneouvre at low speed through the roundabout. The existing roundabout prioritizes traffic control movements.

Vehicles will enter and exit the kerb side unrestricted parking in a northbound direction.

During the construction process Codrington Street will remain open to two-way traffic. Traffic Control Plans (TCPs) have been prepared and will be implemented to direct the through movement of traffic northbound. Inbound and outbound movements to the Codrington Construction Zone and Gate 2 will be controlled by a traffic controller. Advisory, advanced warning, directional and regulatory signage and associated traffic control devices will be installed in accordance with Roads & Maritime Services' General Specifications (RTA Spec. part G10 'Control of Traffic and RTA Specification 3355) in Butlin Avenue/Codrington Street and Abercrombie Street to direct traffic and pedestrian movements.

The Gate 2 entry and exit will make use of the existing intersection formed by closed Rose Street and Codrington Street and temporarily keep the existing No Stopping signs for the duration of the construction program. It is proposed to remove the existing No Stopping signs at the intersection of closed Boundary Lane and Codrington Street. Unrestricted on-street parking is proposed on the western side of Codrington Street between Abercrombie Street and the southern side of closed Rose Lane. Sydney City Council approval will be sort for the temporary modified parking changes during the construction program. ***Refer to Signage Plan SKC09, Appendix F.***

The **Abercrombie Site Traffic Control Plan-SK07 and Turning Paths for Gate 3 and Gate 2** are contained in **Appendix E.**

3.0 HOURS OF CONSTRUCTION

The hours of construction throughout the duration of the project are consistent with the DA conditions.

- Monday to Friday: 7:00am to 6:00pm
- Saturday: 8:00am to 3:00pm
- No work on Sundays or Public Holidays.

4.0 CONSTRUCTION TRAFFIC BY PHASE

During the construction program the building activity will generate an increase in the level of traffic using the local road network. The number of trucks transiting to and from the site has been estimated from excavation volumes, quantities of building materials and anticipated trade activities. The building activity is divided into the following phases:

Bulk Earthworks Phase that will involve the excavation of the basement and driveway. Approximately 80 MRV trips a day or 7 trucks per hour are anticipated.

Building Works Phase that will involve the following:

The construction of the building multi-storey structure, installation of services and fitout. Approximately 60 MRV trips a day or 5 trucks per hour are anticipated.

Finishing Phase Fit out and Public Domain Works. Approximately 25 MRV trips a day or 2 trucks per hour are anticipated.

Final Phase will be the Landscaping and Pack Down Works. Approximately 15 MRV trips a week are anticipated.

Road carriageway widths (except Darlington Lane) and existing intersection controls can accommodate the anticipated truck movements including truck turning movements (refer Appendix E).

5.0 TRAFFIC IMPACTS AND MITIGATION MEASURES

Impact on Road Authority's Assets (Movement of Trucks to and from Site)

Access roads to and from the development site are classified roads with traffic control devices. The existing road network has good connectivity with turning lanes to and from City Road /King Street. The intersection of Bultin Street and City Road that provides the main access to the Abercrombie Development is traffic signal controlled.

The construction traffic movements will make use of the existing roads and intersections functionality.

It is proposed to temporarily make Darlington Lane one-way eastbound as the lane width is narrow (4m wide) and it would not allow oncoming vehicles to pass each other. The one-way traffic flow will eliminate any potential traffic congestion that would occur due to the increase in the level of traffic caused during the construction program.

Construction vehicles will not be permitted to use Abercrombie Street or Golden Grove Street south of Darlington Lane, thus avoiding potential conflicts with the Darlington Public School traffic and pedestrian movements.

Proposed Action

Sydney City Council and Traffic Committee approval will be sort for the temporarily changing Darlington Lane from two-way to one-way eastbound during the construction program. ***Refer to Signage Plan SKC09, Appendix F.***

Local residents will be advised of the temporary traffic management changes via a letter box drop.

Truck Queuing/Waiting

During the construction process there will be unforseen occasions when truck queuing and waiting may occur.

Proposed Action

The site works supervisor will manage the delivery and removal of materials, plant and equipment. The work supervisor shall maintain two-way communication with drivers.

Drivers will be instructed how to enter and exit the work site safely and the routes to follow between the work site gates and their origins or destinations.

If a queue forms the site works supervisor shall immediately deployed additional end-of queue signs in advance of the already established transition zone.

External Roadworks

External road, drainage and footpath works are required at the closed intersections of Rose Street/Codrington Street and Boundary Lane and between Rose Street and Abercrombie Street. This work will impact on pedestrian, cyclist and vehicle movements in Codrington Street.

Likewise road and verge works will be required in Darlington Lane along the sites northern boundary.

Proposed Action

Site specific TCPs will be prepared and implemented prior to commencing construction works.

Public Domain Pedestrian Movements

The construction program activities will potentially impact on pedestrian movements along Golden Grove Street between Darlington Lane and Darlington Street, Darlington Lane, Butlin Avenue, Codrington Street and Abercrombie Street.

- Construction traffic movements when approaching the site from the west will cross pedestrian movements at the intersection of Darlington Street and Golden Grove Street. Darlington Street is one-way westbound and its junction with Golden Grove Street is priority controlled by a Give-way sign. The roadway vertical and horizontal alignments are linear and there are clear lines of site within the road formation.

- Construction traffic movements when approaching the site form the west will cross pedestrian (including school children) movements at the intersection of Darlington Lane and Golden Grove Street. The statutory 10m No Stopping restrictions apply either side of Darlington Lane. This provides approaching drivers sight lines to pedestrians crossing Darlington Lane. As a precautionary measure regulated truck movements will be managed at the intersection of Darlington Lane and Golden Grove Street between 8:00AM to 9:00AM and between 2:30PM to 3:30PM school days.

- Construction traffic movements when approaching the site form the east will cross pedestrian movements at the eastern end of Darlington Street, along Codrington Street and eastern end of Darlington Lane. The statutory 10m No Stopping restrictions apply at these intersections and at the existing pedestrian crossings. This provides approaching drivers sight lines to pedestrians crossing the roadway. Although the turning path of trucks exiting Darlington Lane will impact on through traffic. To maintain the flow of traffic and pedestrians in Codrington Street traffic control is to be implemented at Darlington Lane and Codrington Street to manage the northbound turning movement of trucks from Darlington Lane.

In addition to the existing traffic management in place immediately surrounding the site it is proposed to detour pedestrians around the construction site.

- In Codrington Street pedestrians movements north-south between Darlington Street and Abercrombie Street will be directed to use the eastern side of Codrington Street

- In Abercrombie Street pedestrians movements east-west between Darlington Public School and Codrington Street will be directed to use the south side of Abercrombie Street.

- In Darlington Lane pedestrians movements east-west will be restricted between Golden Grove Street and the Economics and Business School building.

Proposed Action

Traffic Control Plans are to be implemented to:

a. Control trucks turning left from Darlington Lane into Codrington Street and pedestrian movements across Darlington Lane.
b. Control trucks turning left into Darlington Lane from Golden Grove Street and pedestrian movements during school zone times.

Temporary Changes to On-street Car Parking Western Side of Codrington Street

Temporary changes to parking along the western side of Codrington Street between Abercrombie Street and closed Rose Lane will be required (eastern boundary of the site with Codrington Street) to accommodate access to Gate 2 vehicle entry and exit.

Proposed Action

Sydney City Council and Traffic Committee approval will be sort to retain No Stopping signs at closed Rose Street and remove No stopping Signs either side of Boundary Lane. This will provide unrestricted parking on the western side of Codrington Street between Abercrombie Street and closed Rose Street. ***Refer to Signage Plan SKC09, Appendix F.***

Temporary Loss of On-street Car Parking Eastern Side of Codrington Street

When 12.5m trucks undertake the left-turn from Darlington Lane into Codrington Street the swept path of the truck will need to occupy part of the parking lane on the eastern side of Codrington Street. At present there is unrestricted parking located between the designated motorbike parking and care share parking where the swept path will encroach into the parking lane. To facilitate vehicle turning movements at the intersection of Darlington Lane and Codrington Street temporary removal of four (4) of the unrestricted parking spaces is proposed. This parking is located directly outside the University of Sydney's Sports and Aquatic Centre and therefore only directly impacts on the University of Sydney patrons.

Proposed Action

Sydney City Council and Traffic Committee approval will be sort to temporarily implement No Parking restrictions to facilitate vehicle turning movements at the intersection of Darlington Lane and Codrington Street. ***Refer to Signage Plan SKC09, Appendix F.***

Work Zones

Work zones are required for Darlington Lane to facilitate the day to day construction processes to and from the site.

Proposed Action

A work zone application and permit for Darlington Lane (95m long) is to be obtained from Sydney City Council for the duration of the construction program.

Construction Workers - Car Parking

An ongoing issue for the site will be parking for contractor's staff, sub-contractors staff, trades persons, visitors and deliveries. There is a high utilization of long-term on-street parking.

Proposed Action

The site will temporarily provide on-site parking for 20 vehicles in the north western corner of the site, off Darlington Lane.

Vehicle parking is available within the Shepherd Street car park which is within walking distance of the development.

The site has good access to public transport. The construction staff will be encouraged to utilise public transport.

Stand Plant and Equipment within Public Domain

There may be occasions during the construction process were contractors plant and equipment may need to occupy the public domain for a period of time.

Proposed Action

John Holland's Project Manager will submit all applications to Sydney of Council for approval to stand plant and equipment in the public domain prior to occupying public space.

6.0 COMMUNICATING TRAFFIC CHANGES

Prior to the commencement of the works notification of the works will need to be distributed to local residents and Sydney University via sign boards and newspaper advertisements.

As part of the Site Induction procedures all staff and contractors will be made aware of the Construction Traffic Management Plan (CTMP) and their responsibility to adhere to the plan.

7.0 IMPLEMENTING THE TMP

The Sydney City Council's Construction Management Proforma and responses is contained in Appendix D.

It will be the responsibility of the Project Manager and Worksite Site Manager to ensure that the provisions of this CTMP are implemented and complied with prior to the commencement of the works. The TCP's are to be implemented by authorised RMS accredited personnel only.

The Work Site Manager will ensure that:

- the truck route plan is communicated to all drivers
- the reversing of vehicles will be limited and supervised by accredited traffic controllers
- permits are obtained before standing plant and equipment in the public domain.

8.0 IMPLEMENTATION, REVIEW & REPORTING PROCEDURES

Certified personnel will be used on site to implement, monitor and carryout the Traffic Control Plan.

During construction, the Contractor shall each morning ensure all signage is erected in accordance with the site TCP and clearly visible. Any variation from the approved plan is to be authorised by RTA accredited personnel only and recorded.

9.0 CONTACT OF EMERGENCY SERVICES

In the event of an emergency related construction traffic incident on the public road network it will be the responsibility of the Site Manager to ensure that Emergency Services are notified. The emergency services include but are not limited to:

- Fire
- Ambulance
- Police

Phone “000” in cases of emergency.

It is the responsibility of the Work Site Manager to advise the Emergency Services of any restriction to buildings, services, vehicular access or the surrounding road network (1) one week prior to its implementation.

10.0 RESPONSIBILITIES

The Site Manager is responsible for, but not limited to:

- Implementing the TMP and TCP
- Informing contractors of the requirements of the TMP
- Undertaking site inspections to ensure all signage is clearly visible and not damaged
- Monitoring the TMP and TCP
- Report on Incidents
- Keeping records
- Obtaining permits

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APPENDIX A

Abercrombie Construction Haulage Routes – SK05

APPENDIX B

Abercrombie Site – Excavation Plan – SK03

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT NOTES ON DRAWING S0001

LEFT OR RIGHT TURN OFF KING STREET

POSSIBLE ALTERNATE INBOUND APPROACH

DARLINGTON ROAD

DIRECT PEDESTRIANS TO USE EASTERN SIDE OF BUTLIN AVENUE AND CODRINGTON STREET

BUTLIN AVENUE

MAZE CRESCENT

UNIVERSITY H66 DARLINGTON HOUSE

DARLINGTON LANE RESIDENCE AND STUDENT HOUSING

TRAFFIC CONTROLLED INTERSECTION

OBTAIN WORK ZONE APPROVAL FROM COUNCIL FOR DURATION OF PROJECT

DIRECT PEDESTRIANS TO USE EASTERN SIDE OF GOLDEN GROVE STREET

DARLINGTON LANE

GATE 3

CONSTRUCTION ZONE

EXISTING KIOSK

SUBSTATION

UNIVERSITY H07 HOUSE

UNIVERSITY H69 ECONOMICS AND BUSINESS SCHOOL

UNIVERSITY NOEL MARTIN RECREATIONAL CENTRE

C1

TEMPORARY CAR PARK

TEMPORARY PARKING: 20 SPACES, 5.4m LONG x 2.4m WIDE, AISLE WIDTH 6.2m WIDE

ROSE STREET

CONSTRUCTION VEHICLES TO ENTER AND EXIT IN A FORWARD DIRECTION

POTENTIAL TO MAINTAIN ACCESS GATE TO SCHOOL

GOLDEN GROVE STREET

GATE 2

CONSTRUCTION VEHICLES TO ENTER AND EXIT GATE 2 IN A FORWARD DIRECTION

CODRINGTON STREET

DARLINGTON PUBLIC SCHOOL

R74.0

MAINTAIN TEMPORARY VEHICLE AND PEDESTRIAN ACCESS BETWEEN DARLINGTON LANE AND CHILD CARE CENTER

EXISTING SYDNEY BLUE GUM

CAMPUS INFRASTRUCTURE AND SERVICES

NO CONSTRUCTION VEHICLE ACCESS >3 TONNE BEYOND BOUNDARY LANE

INDUCTION ROOM

SITE OFFICE

GATE 1

OBTAIN WORK ZONE APPROVAL FROM COUNCIL FOR BUILDWORKS PHASE

CHILDCARE CENTRE

SHEPHERD CENTRE

MANDELBAUM HOUSE

C2

PEDESTRIAN ACCESS TO SITE

FIRST AID

EXISTING KIOSK

GATE 4

DIRECT PEDESTRIANS TO USE SOUTHERN SIDE OF ABERCROMBIE STREET

AMBERCROMBIE STREET

DIRECT PEDESTRIANS TO USE EASTERN SIDE OF CODRINGTON STREET

HOTEL

RESTAURANT

AMBERCROMBIE STREET RESIDENCES

LEGEND

- JERSEY BARRIER
- SHORING
- FENCE BOUNDARY
- EXCAVATION ZONE
- SUPERSTRUCTURE FOOTPRINT
- EXISTING EDUCATION BUILDINGS
- TEMPORARY PARKING
- PARKING ACCESS ROUTE
- CONSTRUCTION ACCESS ROUTE
- PEDESTRIAN ACCESS ROUTE
- C1 TOWER CRANE 74m
- C2 TOWER CRANE 74m

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PRELIMINARY

Rev	Description	Eng	Draft	Date
P1	ISSUE FOR INFORMATION	PD	JW	09.07.13

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Project: ABERCROMBIE PRECINCT STAGE 1 BUSINESS SCHOOL 21-23 CODRINGTON STREET DARLINGTON

Sheet Subject: EXCAVATION STAGING PLAN

Scale : A1 | 1:500 | Drawn: AC | Authorised:

Job No: 121784 | Drawing No: SK03 | Revision: P1

Plot File Created: Jul 09, 2013 - 11:55am

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APPENDIX C

Abercrombie Site – Site Traffic Control Plan – SK07

APPENDIX D

Abercrombie Site – SCC Construction Traffic Management Proforma Responses

1) *DESCRIBE CONSTRUCTION VEHICLE ROUTE - Trucks must use the State and Regional roads and must not use any local roads in the area.*

The haulage routes are shown in Appendix A SK05 and Appendix B SK03. The site is located within 250m of the City Road and King Street which are classified as arterial roads. Trucks will take the most direct route to and from the development site either via Bultin Street, Darlington Road and /or Codrington Street or, to the site via Golden Grove Street and Darlington Lane.

2) The approved truck route plan shall form part of the contract and must be distributed to all truck drivers.

Section 7.0 of the CTMP requires that the Work Site Manager implements the approved truck route plan.

3) All vehicles must enter and exit the site in a forward direction. i.e. no reversing of trucks into or out of the site.

Appendix E provides turning path movements showing that the design vehicles 12.5m heavy rigid vehicle (HRV)and 19m articulated vehicle (AV) can enter and exit the site in a forward direction.

4) All Traffic Control Plans associated with this Construction Traffic Management Plan must comply with Australian Standards and RTA's Traffic Control at Work Sites Guidelines.

All Traffic Control Plans associated with this Construction Traffic Management Plan do comply with Australian Standards and RTA's Traffic Control at Work Sites Guidelines.

5) The applicant must provide Council with details of the largest truck that will be used during the demolition, excavation and construction, prior to the start of any work on site and obtain approval from City's Construction Regulation Unit for the use of this vehicle. NOTE: No dog trailers to be used without City's Construction Regulation Unit approval.

- *Bultin Street, Darlington Road & Codrington Street Route - 19m articulated vehicle and 12.5m Heavy Rigid Vehicle*
- *Golden Grove Street and Darlington Lane Route - 12.5m Heavy Rigid Vehicle*

Refer Appendix E

6) The developer must obtain a permit from the City's Construction Regulation Unit regarding the placing of any plant/equipment on public ways.

John Holland is the University of Sydney's principal Builder for the project. John Holland's project Manager will submit all applications to Sydney of Council for approval to stand plant and equipment in the public domain prior to occupying public space.

7) No queuing or marshalling of trucks is permitted in any public road.

No queuing or marshalling of trucks is envisaged in any public road. Appendix E provides turning path movements showing that the design vehicles; 12.5m HRV and 19m AV vehicle can enter and exit the site in a forward direction.

8) All vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off street area, no staff are to park on the street.

Construction staff will be encouraged to park in the nearby Shepherd Street car park station and use Public Transport.

9) All loading and unloading must be within the development site or at an approved "Works Zone".

Off -street construction zones are shown in Appendix B Abercrombie Site – Excavation Plan – SK03. There will be one implemented off Darlington Lane and another implemented off Codrington Street where Rose Street is now closed. Tower cranes will load and unload within the site.

10) The applicant must comply with development consent for hours of construction.

The hours of operation are outlined in Section 3.0. Truck movements will be controlled between 8:30 AM and 9:00AM and between 2:30PM to 3:30PM school days.

11) Traffic Controllers are NOT to stop traffic on the public street(s) to allow trucks to enter or leave the site. They MUST wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site - the vehicles already on the road have right-of-way.

Traffic Controllers will implement traffic management in accordance with the Traffic Control Plans. The Traffic Control Plans will be duly noted.

12) Trucks are not (at no time) allowed to reverse into the site from the road for safety reasons (unless specific approval is obtained from the City's Construction Regulation Unit).

Traffic Controllers will implement traffic management in accordance with the Traffic Control Plans. The Traffic Control Plans will be duly noted.

13) Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT you must NOT stop pedestrians in anticipation i.e. at all times the pedestrians have right-of-way on the footpath not the trucks. The footway must not be closed.

Traffic Controllers will implement traffic management in accordance with the Traffic Control Plans. The Traffic Control Plans will be duly noted.

14) Physical barriers to control pedestrian or traffic movements need to be determined by the Construction Regulations Unit prior to commencement of work.

Barrier Boards on A – frame leg pairs are to be implemented on the western footway of Codrington Street to encourage pedestrians to use the eastern footway.

15) The developer must apply to the Construction Regulations Unit to organise appropriate approvals for cranes and barricades etc. Will they use a crane?

The site will make use of two tower cranes as shown in Appendix B Abercrombie Site – Excavation Plan – SK03. There will be one tower crane implemented off Darlington Lane and another tower crane implemented off Codrington Street. John Holland is the University of Sydney's principal Builder for the project. John Holland's Project Manager will submit applications to Sydney City Council for approvals for cranes and barricades.

16) The developer must apply to Building Compliance Unit to organise appropriate approvals for hoarding prior to commencement of works.

John Holland is the University of Sydney's principal Builder for the project. John Holland's Project Manager will submit applications to Sydney City Council for approvals for hoardings prior to the commencement of works.

17) The developer must apply to the Work Zones Co-ordinator to organise appropriate approvals for the Work Zones. Will they need a WZ?

A Work Zone will be required in Darlington Lane. Appendix F contains a proposed On-street Signage Plan during Construction. John Holland is the University of Sydney's principal Builder for the project. John Holland's Project Manager will submit applications to Sydney City Council for Work zone approval.

APPENDIX E

Design Vehicle Turning Paths – SKC100, SKC101, SKC102, SKC103, SK08

FileName: SKC100.dwg - USER: jennye - Plot File Created: Jul 09, 2013 - 10:10am

A1 0 1 2 3 4 5 6 7 8 9 10

PRELIMINARY

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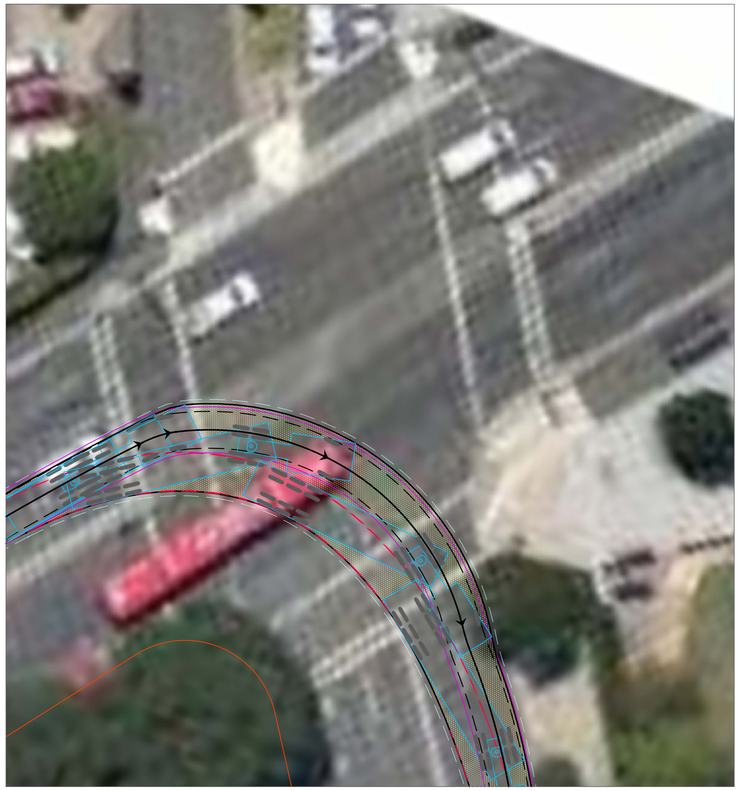
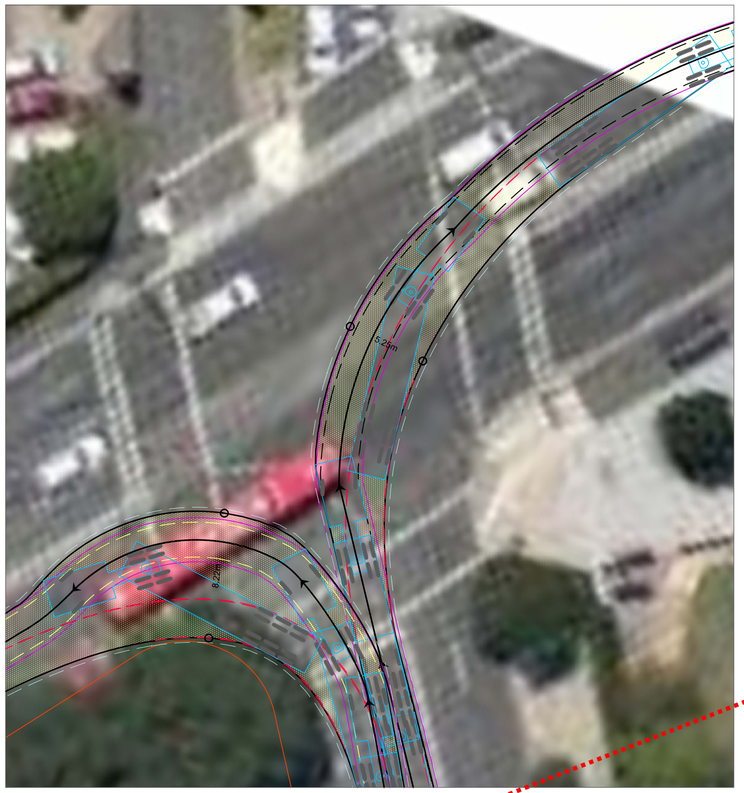
Project
ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

Sheet Subject
PROPOSED TURNING PATHS LOCATIONS DURING CONSTRUCTION

Scale : A1 | Drawn PK | Authorised
1:500
Job No 121784 | Drawing No SKC100 | Revision P1
Plot File Created: Jul 09, 2013 - 10:10am

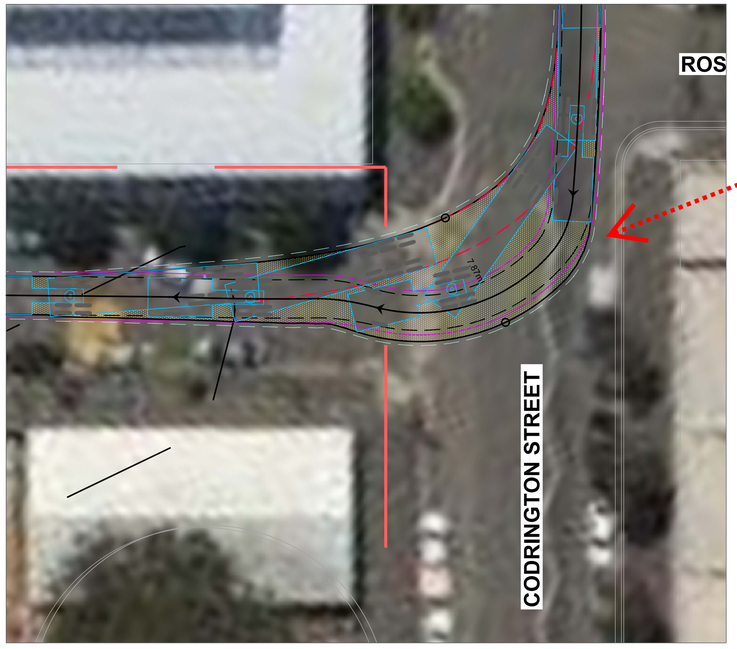


PROPOSED 19m SEMI ENTERING
BUTLIN AVE VIA CITY RD

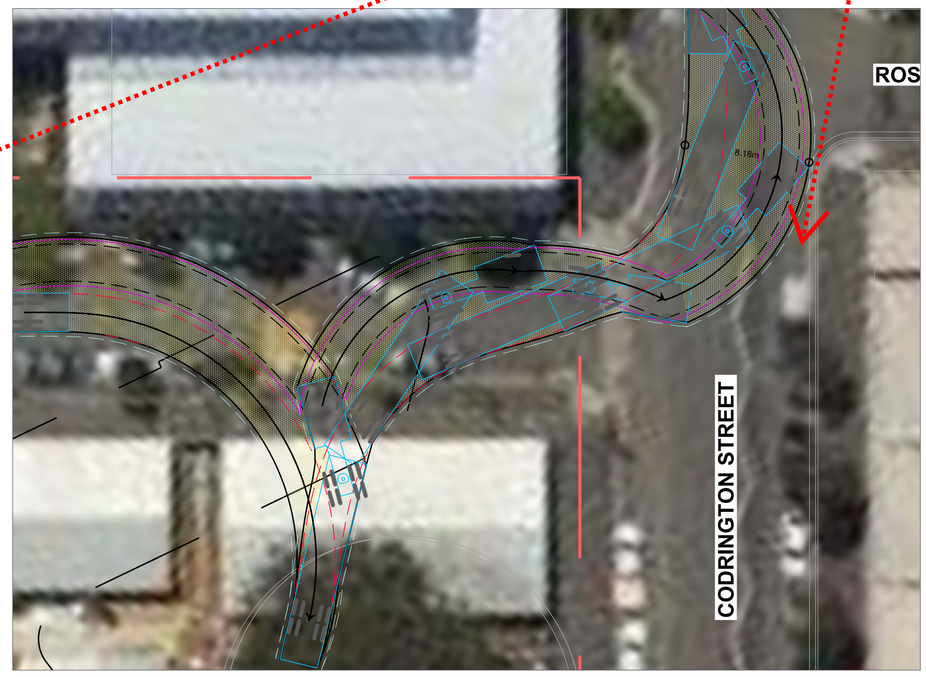


PROPOSED 19m SEMI EXITING
BUTLIN AVE TO CITY RD

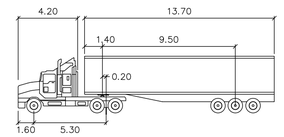
POTENTIAL
IMPACT ON PARKING



PROPOSED 19m SEMI ENTERING
WORK SITE VIA CODRINGTON ST



PROPOSED 19m SEMI EXITING
WORK SITE TO CODRINGTON ST



S ARTICULATED 19M meters

Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

FileName: SKC101.dwg - USER: jennyw - Plot File Created: Jul 09, 2013 - 10:47pm

A1 0 1 2 3 4 5 6 7 8 9 10

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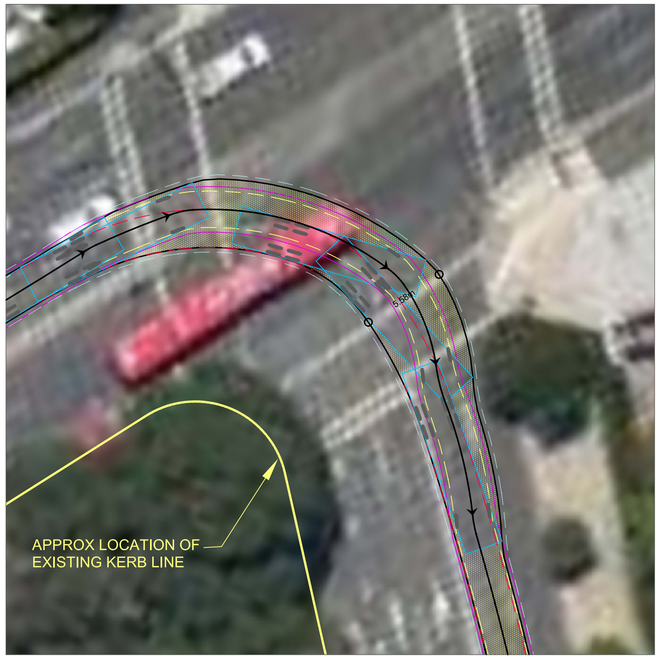
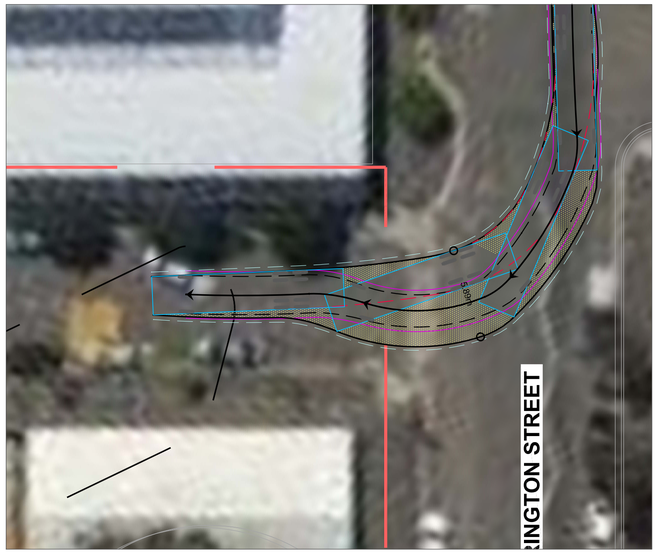
Project
ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

Sheet Subject
PROPOSED 19m SEMI
TRAILER IN & OUTBOUND
TURNING PATHS
DURING CONSTRUCTION

Scale : A1 | Drawn | Authorised
1: 50 | PK |
Job No 121784 | Drawing No SKC101 | Revision P1
Plot File Created: Jul 09, 2013 - 10:47am

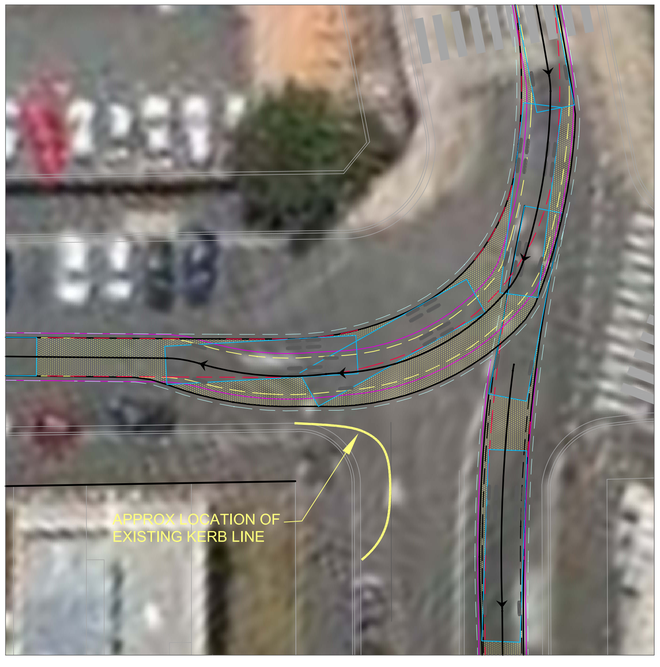


PROPOSED 12.5m TRUCK ENTERING
BUTLIN AVE VIA CITY RD



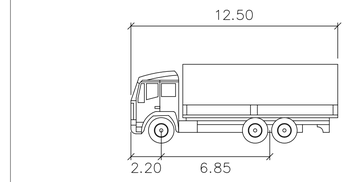
PROPOSED 12.5m TRUCK ENTERING
WORK SITE VIA CODRINGTON ST

PROPOSED 12.5m TRUCK
ENTERING DARLINGTON
ST VIA CITY ROAD



PROPOSED 12.5m TRUCK ENTERING
DARLINGTON STREET VIA BUTLIN RD

PROPOSED 12.5m TRUCK
ENTERING DARLINGTON
LANE VIA DARLINGTON ST



HRV TRUCK meters

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

PRELIMINARY

FileName: SKC102.dwg - USER: jenny - Plot File Created: Jul 09, 2013 - 2:08pm

A1 0 1 2 3 4 5 6 7 8 9 10

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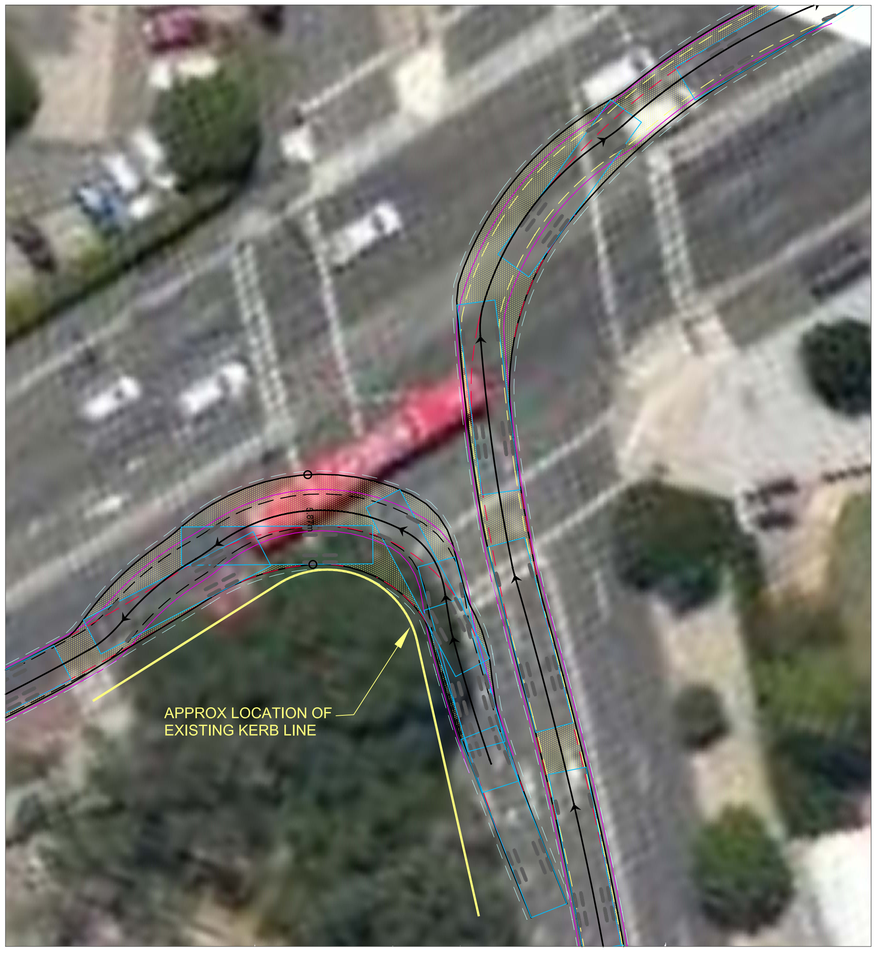
Project
ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

Sheet Subject
PROPOSED 12.5m HRV
TRUCK INBOUND TURNING
PATHS
DURING CONSTRUCTION

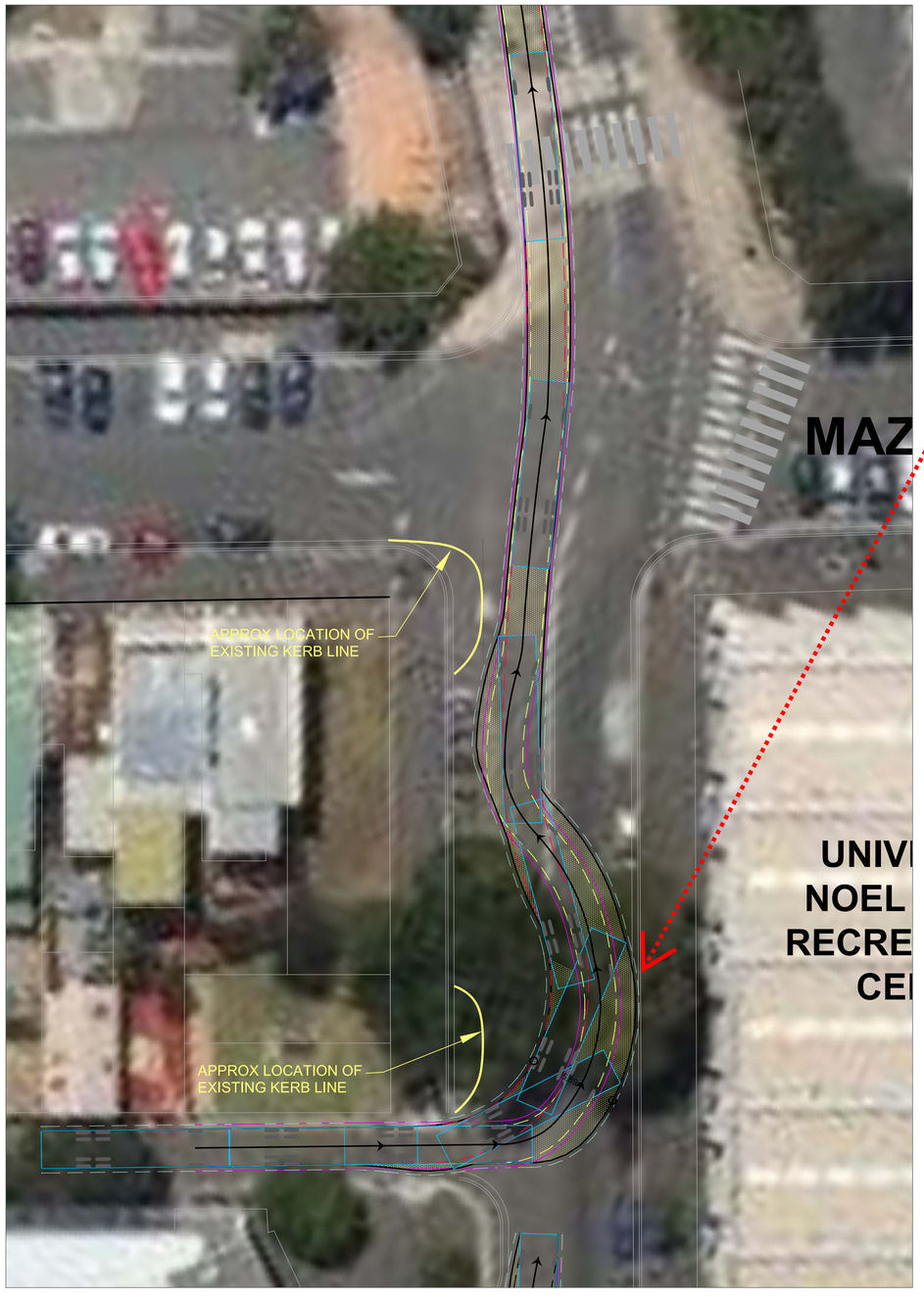
Scale : A1 | Drawn PK | Authorised
1:50

Job No 121784 | Drawing No SKC102 | Revision P1

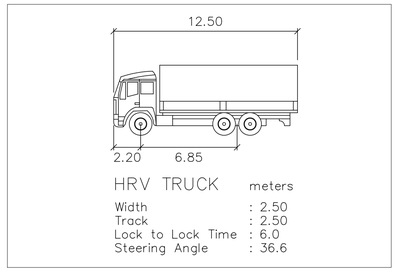
Plot File Created: Jul 09, 2013 - 2:08pm



PROPOSED 12.5m TRUCK EXITING
BUTLIN AVE TO CITY RD



PROPOSED 12.5m TRUCK EXITING
DARLINGTON STREET & DARLINGTON
LANE TO BUTLIN RD



FileName: SKC103.dwg – USER: jenny – Plot File Created: Jul 09, 2013 - 11:18am

A1 0 1 2 3 4 5 6 7 8 9 10

PRELIMINARY

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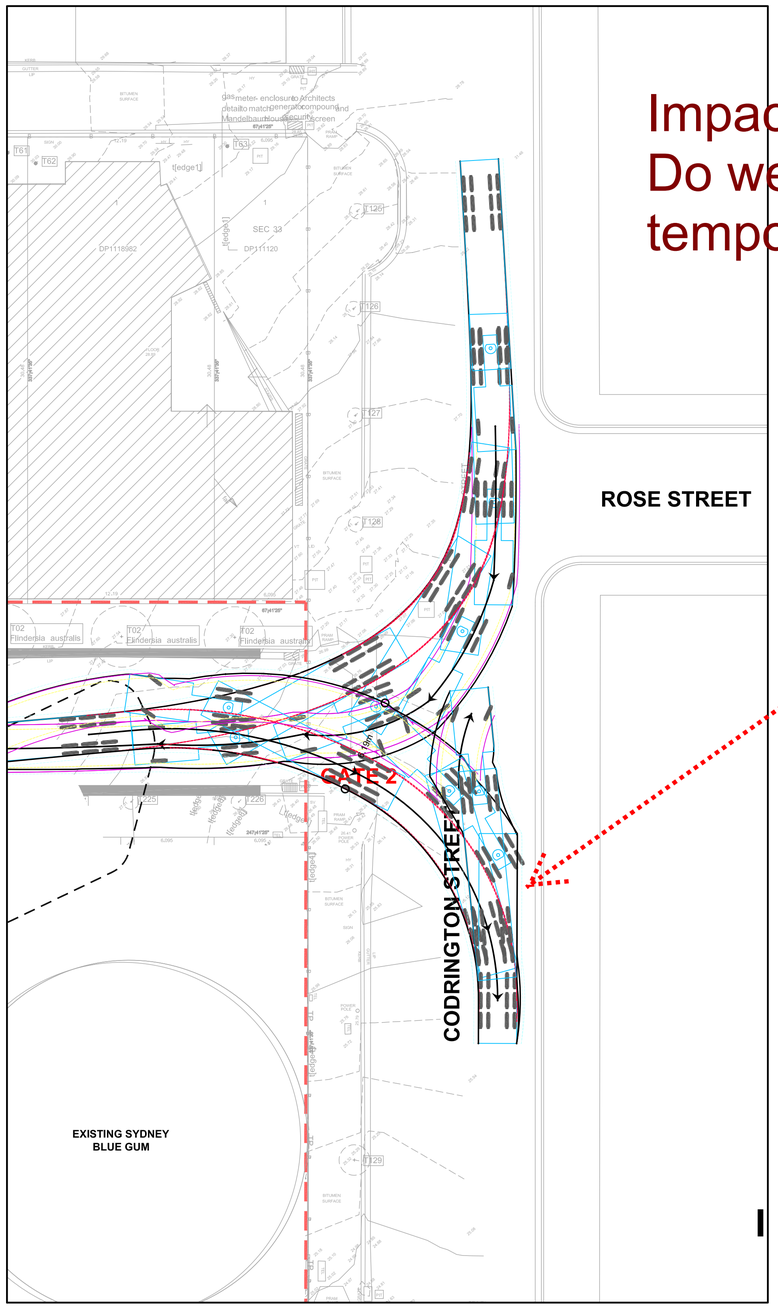
Project
ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

Sheet Subject
PROPOSED 12.5m TRUCK
OUTBOUND TURNING
PATHS
DURING CONSTRUCTION

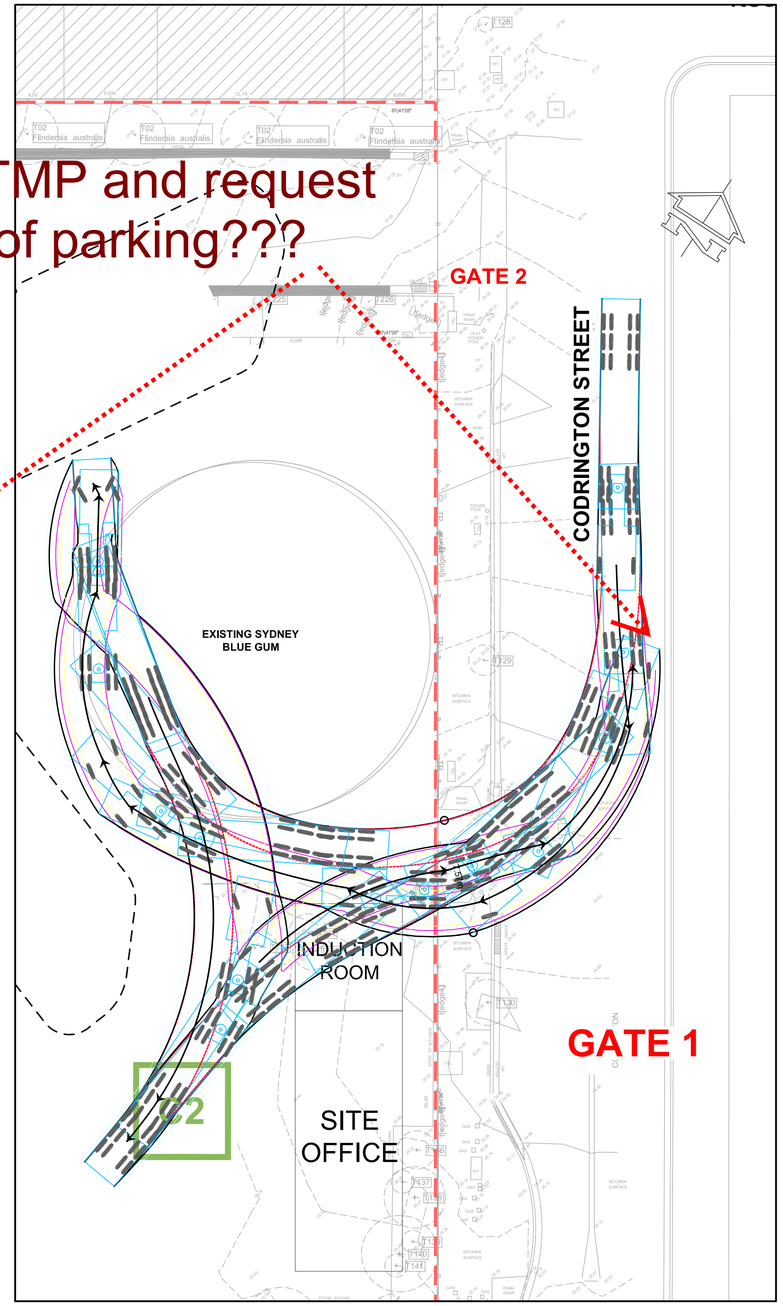
Scale : A1 | Drawn | Authorised
1: 50 | PK |
Job No 121784 | Drawing No SKC103 | Revision P1
Plot File Created: Jul 09, 2013 - 11:18am

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT NOTES ON DRAWING S0001

Impact on parking.
Do we include in CTMP and request temporary removal of parking???



19m SEMI TRUCK TURN PATHS
REVERSE OUT
CODRINGTON STREET - GATE 2



19m SEMI TRUCK TURN PATHS
FORWARD OUT
CODRINGTON STREET - GATE 1

FileName: SKC104.dwg – USER: jennyw – Plot File Created: Jul 12, 2013 - 11:03am

A1 0 1 2 3 4 5 6 7 8 9 10

PRELIMINARY

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Project
ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

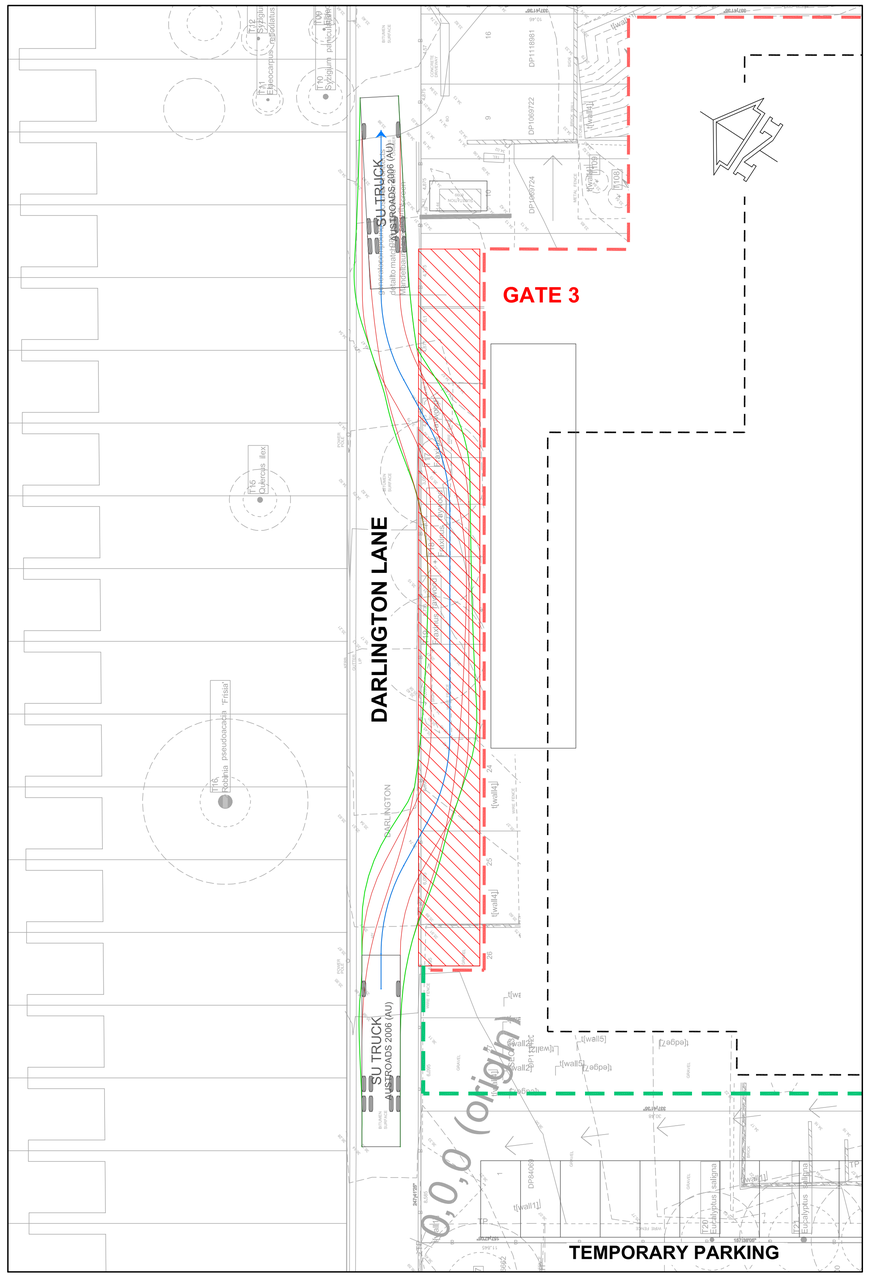
Sheet Subject
19m SEMI TRUCK TURNING PATHS IN & OUT OF CONSTRUCTION SITE

Scale : A1	Drawn	Authorised
1:200	AC	

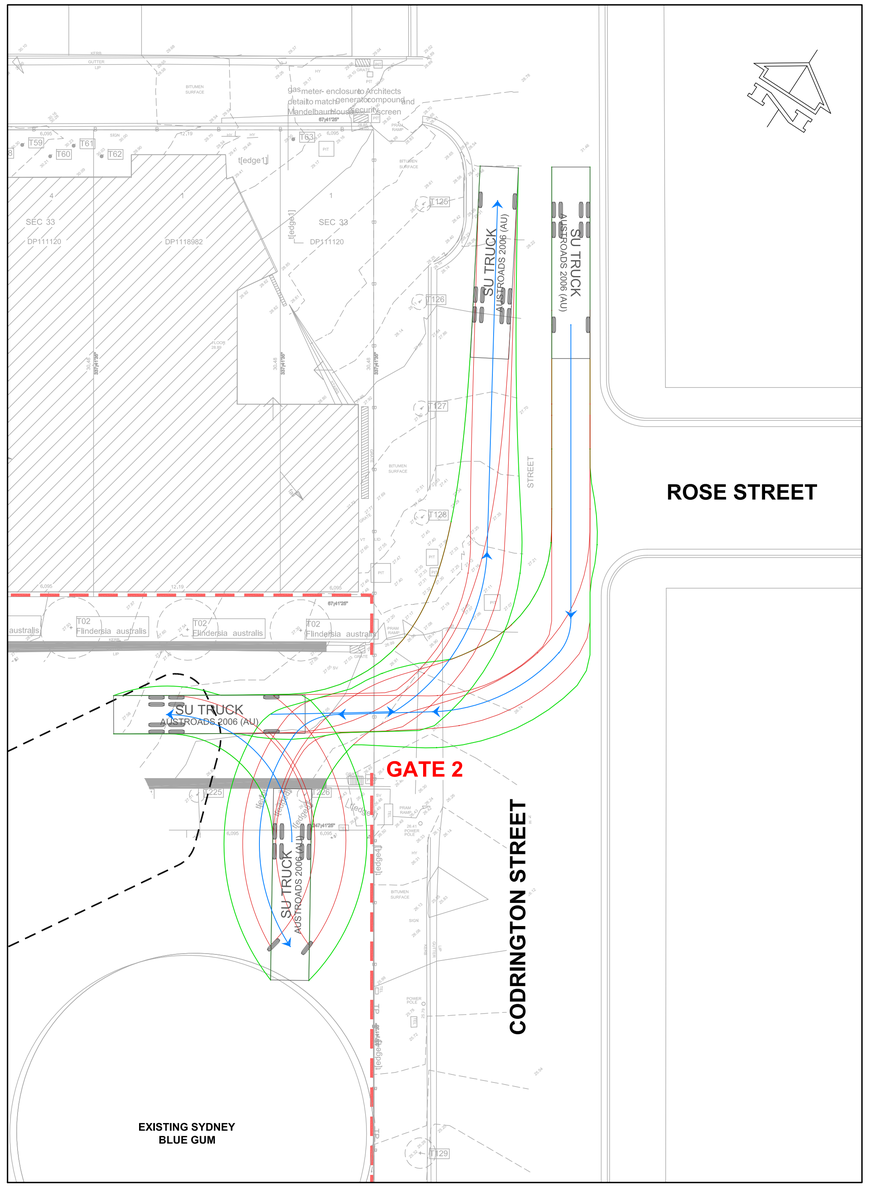
Job No	Drawing No	Revision
121784	SKC104	P1

Plot File Created: Jul 12, 2013 - 11:03am

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT NOTES ON DRAWING S0001



12.5m SINGLE UNIT TRUCK TURNPATHS
DARLINGTON LANE - GATE 3



12.5m SINGLE UNIT TRUCK TURNPATHS
CODRINGTON STREET - GATE 2

FileName: SK08.dwg – USER: jenny – Plot File Created: Jul 09, 2013 - 11:57am

A1 0 1 2 3 4 5 6 7 8 9 10

PRELIMINARY

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Project
ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

Sheet Subject
12.5m SINGLE UNIT
TRUCK TURNPATHS

Scale : A1	Drawn	Authorised
1:200	AC	

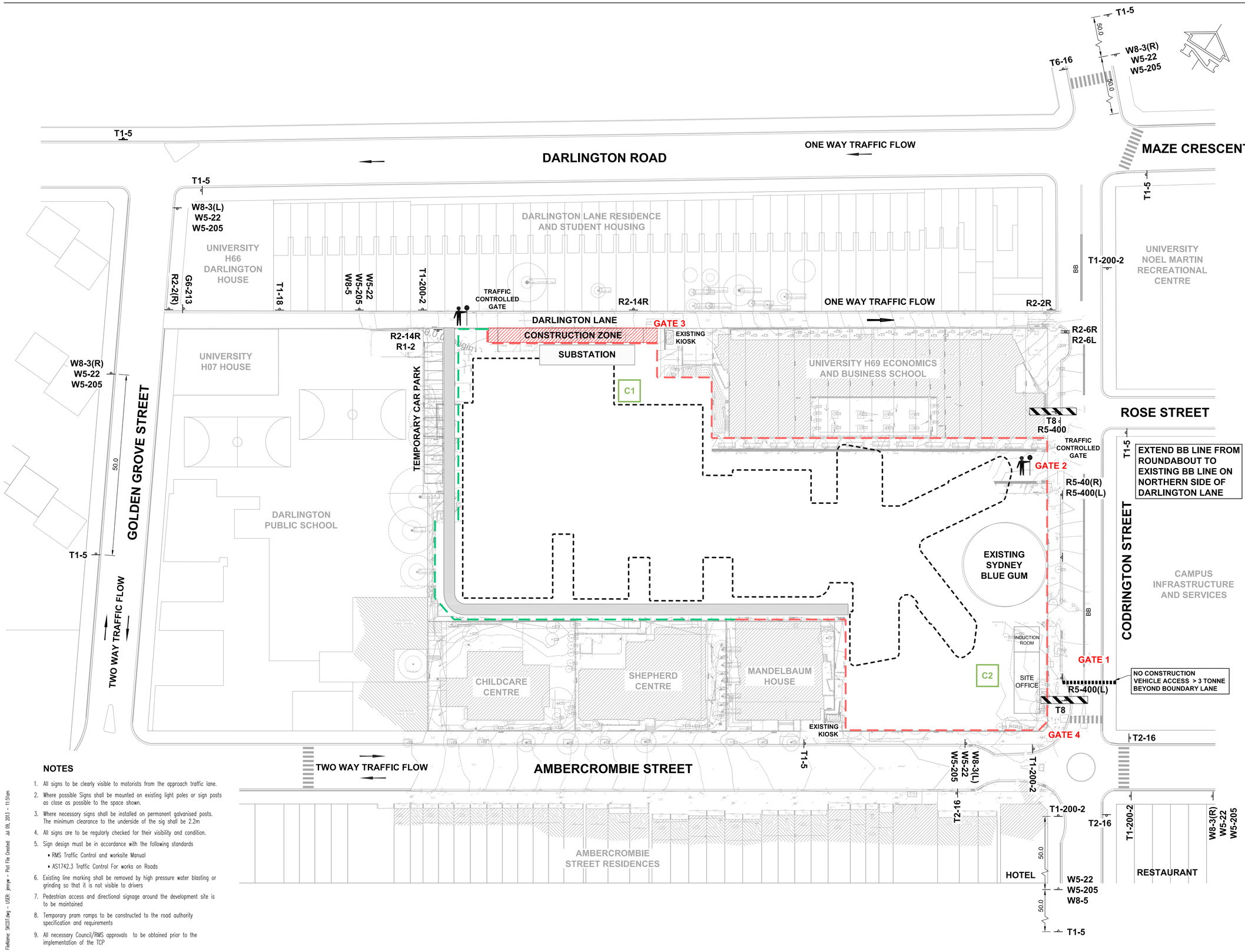
Job No	Drawing No	Revision
121784	SK08	P1

Plot File Created: Jul 09, 2013 - 11:57am

Appendix F

Proposed Signage Plan During Construction – SK07

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT NOTES ON DRAWING S0001



LEGEND

	T1-200-2	TRAFFIC CONTROLLER
ON SIDE ROAD	W8-3(R)	ON SIDE ROAD (RIGHT)
ON SIDE ROAD	W8-3(L)	ON SIDE ROAD (LEFT)
	W5-22	TRUCK (SYMBOLIC)
TRUCKS TURNING	W5-205	TRUCK TURNING
	T1-5	WORKER (SYMBOLIC)
PREPARE TO STOP	T1-18	PREPARE TO STOP
40m	W8-5	TRUCK TURNING 40m
ONLY	R2-14(R)	ALL TRAFFIC RIGHT TURN
ONLY	R2-14(L)	ALL TRAFFIC LEFT TURN
ONE WAY	R2-2(R)	ONE WAY
GIVE WAY	R1-2	GIVEWAY
WORKS ZONE	R5-25(L)	WORKZONE LEFT
WORKS ZONE	R5-25(R)	WORKZONE RIGHT
NO RIGHT TURN	R2-6(R)	NO RIGHT TURN
NO LEFT TURN	R2-6(L)	NO LEFT TURN
NO STOPPING	R5-400(L)	NO STOPPING (LEFT)
NO STOPPING	R5-400(R)	NO STOPPING (RIGHT)
NO STOPPING	R5-400(L&R)	NO STOPPING (LEFT AND RIGHT)
USE OTHER FOOTPATH	T8-3	USE OTHER FOOTPATH
FOOTPATH CLOSED	T8-4	FOOTPATH CLOSED
NO PEDESTRIAN ACCESS	G6-213	NO PEDESTRIAN ACCESS
END ROADWORKS	T2-16	END ROADWORKS
		BARRIER BOARD WITH A-FRAME LEG PAIR

NOTES

1. All signs to be clearly visible to motorists from the approach traffic lane.
2. Where possible Signs shall be mounted on existing light poles or sign posts as close as possible to the space shown.
3. Where necessary signs shall be installed on permanent galvanised posts. The minimum clearance to the underside of the sig shall be 2.2m
4. All signs are to be regularly checked for their visibility and condition.
5. Sign design must be in accordance with the following standards
   - RMS Traffic Control and worksite Manual
   - AS1742.3 Traffic Control For works on Roads
6. Existing line marking shall be removed by high pressure water blasting or grinding so that it is not visible to drivers
7. Pedestrian access and directional signage around the development site is to be maintained
8. Temporary pram ramps to be constructed to the road authority specification and requirements
9. All necessary Council/RMS approvals to be obtained prior to the implementation of the TCP

PREPARED BY :
S/M TRAFFIC CONTROL PLAN
CERTIFICATE No._____
D/I TRAFFIC CONTROL PLAN
CERTIFICATE No._____

PRELIMINARY

FileName: SK07.dwg – USER: jennyw – Plot File Created: Jul 09, 2013 - 11:51am

A1 0 1 2 3 4 5 6 7 8 9 10

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Project: ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

Sheet Subject: TRAFFIC CONTROL PLAN

Scale : A1	Drawn	Authorised
1:500	AC	

Job No	Drawing No	Revision
121784	SK07	P1

Plot File Created: Jul 09, 2013 - 11:51am

LEGEND

- EXISTING SIGN TO REMAIN
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN

DARLINGTON ROAD

GOLDEN GROVE STREET

CODRINGTON STREET

AMBERCROMBIE STREET

DARLINGTON LANE

UNIVERSITY H66
DARLINGTON HOUSE
C9-57

DARLINGTON PUBLIC SCHOOL

CHILDCARE CENTRE

SHEPHERD CENTRE

MANDELBAUM HOUSE

AMBERCROMBIE STREET RESIDENCES

HOTEL

CONSTRUCTION ZONE

EXISTING LIGHT POLE TO BE RELOCATED CLEAR OF TRUCK TURNING PATH INTO DARLINGTON LANE

NO RIGHT TURN R2-6A R

NO STOPPING R5-400R

TWO WAY R2-11A

KEEP LEFT R2-3A L

GIVE WAY R1-2A

NO ENTRY R2-4A

ONLY R2-14A L

ONE WAY R2-2A R

NO LEFT TURN R2-6A L

R3-1A

R1-3A

Rev	Description	Eng	Draft	Date
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Project
ABERCROMBIE PRECINCT
STAGE 1 BUSINESS SCHOOL
21-23 CODRINGTON STREET
DARLINGTON

Sheet Subject
PROPOSED SIGNAGE PLAN
DURING CONSTRUCTION

Scale : A1 1:500 | Drawn PK | Authorised

Job No 121784 | Drawing No SKC09 | Revision P1

Plot File Created: Jul 09, 2013 - 11:31am

FileName: SKC09.dwg - USER: jimmyw - Plot File Created: Jul 09, 2013 - 11:37am