



Harbour Control Tower
Demolition Works
Preliminary Construction Traffic
Management Plan

transportation planning, design and delivery

Harbour Control Tower Demolition Works

Preliminary Construction Traffic Management Plan

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21/03/14

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1. Introduction

1.1 Background

Barangaroo Delivery Authority (BDA) is intending to prepare a modification to the Main Works approval for the demolition and removal of the Harbour Control Tower located at Barangaroo, Millers Point. The Harbour Control Tower (HCT) is located within the Headland Park precinct.

A request for Director General's Requirements (DGR's) was lodged in August for the Demolition of the HCT in its entirety or retention of either part of or the whole of the tower and adaptive reuse. DGR's were received on 9 September 2013. The Scope of Works has since been defined to include the potential demolition and removal of the HCT only. The adaptive reuse will not be considered at this stage.

GTA Consultants was commissioned by BDA in October 2013 to prepare a preliminary Construction Traffic Management Plan (CTMP), including an indicative traffic control plan to specifically address Demolition Works Item 7 (Traffic) of the Director General's Requirements (DGRs), dated 9 September 2013, which is listed below:

- *Prepare a Traffic Impact Assessment that evaluates the daily and peak traffic movements likely to be generated by the demolition of the control tower and cumulative impacts associated with other construction related activities on the Barangaroo site.*
- *Prepare a Demolition Traffic Management Plan*

1.2 Purpose of this Report

This report addresses the requirements of the Demolition Works Item 7 of the DGRs related to the traffic and transport impacts of the demolition of the HCT.

The objectives of this report are:

- To provide a detailed description of the project and potential demolition activities
- To examine and consider the proposal's likely impact on traffic
- Provide mitigating measures to address any traffic and transport impacts.

It is noted that at this stage a demolition contractor has not yet been appointed. Therefore, this CTMP will be reviewed and updated accordingly by the appointed contractor in the future. The review and updating of the CTMP will need to give consideration to the adopted demolition method, any revisions to the works programme and any cumulative impacts from construction works being undertaken at the Barangaroo Headland Park site.

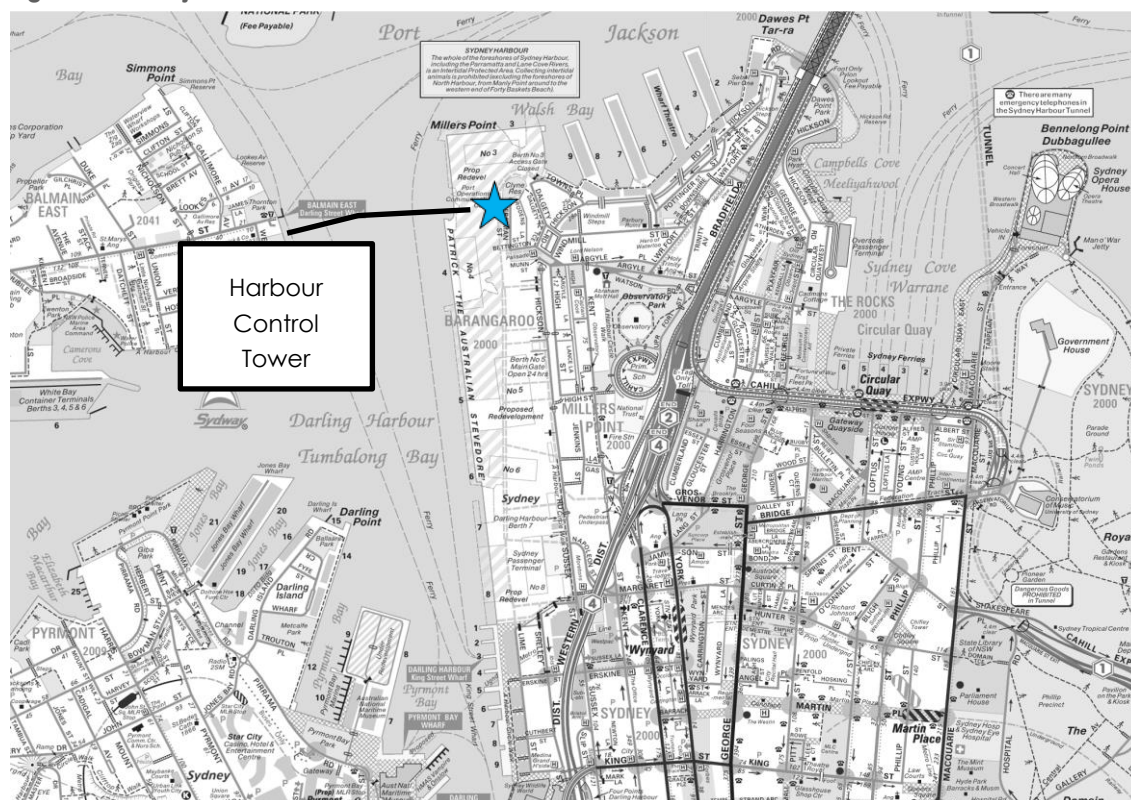
The report has been prepared and checked by engineers who hold the RMS Select/ Modify Traffic Control Plans (Red Card) and Design and Inspect Traffic Control Plans (Orange Card) certification.

2. Existing Conditions

The Harbour Control Tower (HCT) is located at the north-eastern edge of the approved Barangaroo Headland Park development site, on the west side of Merriman Street, as shown in Figure 2.1.

The HCT, located on Lot 4 DP 876514, is under the ownership of the Barangaroo Delivery Authority since taking control of the site from Sydney Ports Corporation in July 2012.

Figure 2.1: Subject Site and Its Environs



(Reproduced with permission from Sydway Publishing Pty Ltd)

2.1 Road Network

2.1.1 Adjoining Roads

Dalgety Road

Dalgety Road is a local road, between Towns Place and Argyle Place, generally aligned in the north-south direction with a speed limit of 40km/hr. It is a two-way road which varies in width between 12m and 25m and is configured with one lane in each direction.

Parallel kerbside parking is permitted, subject to 4hr time restrictions.

Dalgety Road as shown in Figure 2.2 carries approximately 300 vehicles per hour during the morning and afternoon peak periods.

Towns Place

Towns Place is a local road with a collector function that connects the Sydney foreshore roads in Barangaroo and Walsh Bay to the roads in Millers Point and The Rocks. Along with Dalgety Road and Argyle Place, it connects Barangaroo to the Sydney Harbour Bridge via Kent Street.

Angled parking is permitted along the north side of Towns Place, subject to 2hr/4hr time restrictions.

Towns Place carries approximately 300 vehicles per day during the morning and afternoon peak periods.

Argyle Place

Argyle Place is a local street which runs in the west-east direction between Millers Point and The Rocks. Within the study area, Argyle Place is a two way road between Kent Street and Dalgety Road.

Parallel kerbside parking is permitted, subject to 4hr time restrictions.

Merriman Street

Merriman Street is a Cul-de-Sac, which intersects with Bettington Street to the south, is a local road and is aligned in a north-south direction. Merriman Street, shown in Figure 2.3, is a 6.5 metre-wide two way road.

Parallel kerbside parking is permitted on the west side, subject to 2hr time restrictions.

Figure 2.2: Dalgety Road (view east)



Figure 2.3: Merriman Street (view north)



2.1.2 Surrounding Intersections

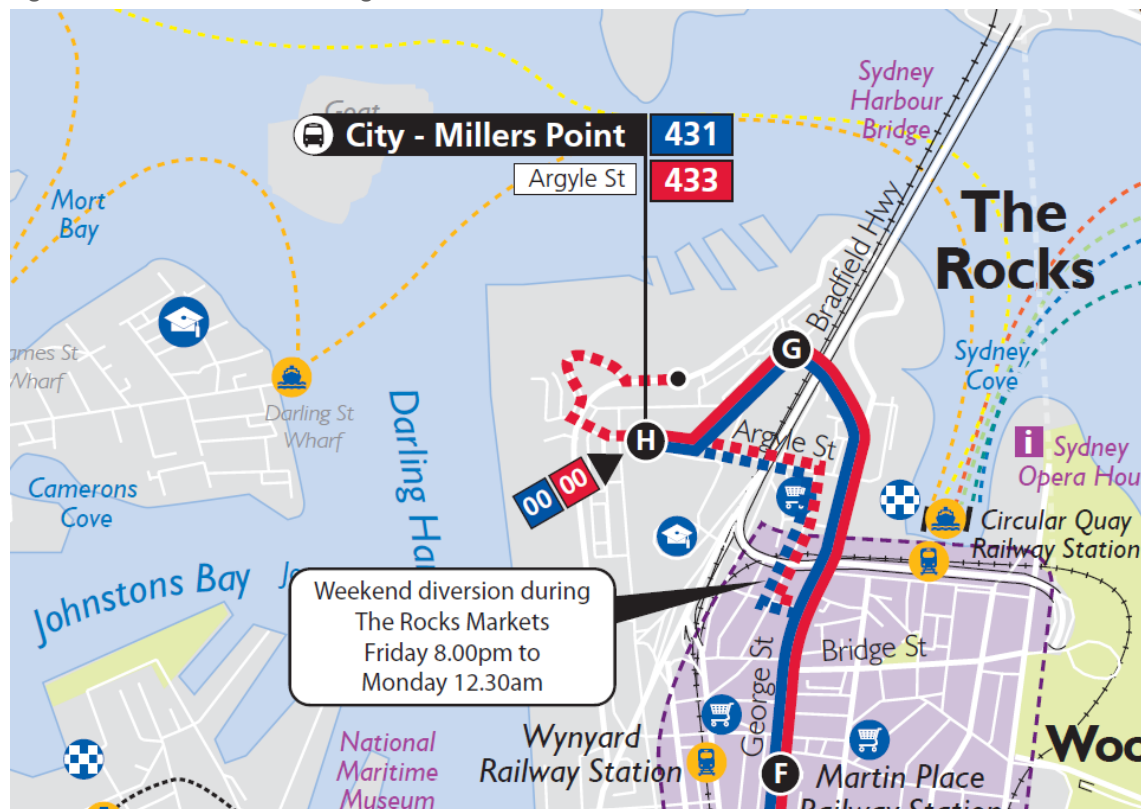
The following intersections currently exist in the vicinity of the site:

- Hickson Road/ Towns Place (priority-controlled)
- Dalgety Road/ Argyle Place/ Bettington Street (priority-controlled)
- Bettington Street/ Dalgety Road (priority-controlled)
- Bettington Street/ Rodens Lane (priority-controlled)
- Dalgety Road/ Windmill Street (priority-controlled)
- Argyle Place/ High Street (priority-controlled)
- Argyle Place/ Windmill Lane (priority-controlled)
- Argyle Place/ Argyle Lane (priority-controlled)
- Argyle Place/ Argyle Street/ Kent Street (priority-controlled).

2.2 Public Transport

The existing bus routes operating within the Millers Point precinct are Bus Service No. 431 and Bus Service No. 433. These routes start and terminate at Argyle Street, Millers Point and travel to George Street via Lower Fort Street as shown in Figure 2.4. On The Rocks Markets weekends, the routes are diverted along Harrington Street to Argyle Street, and extend to Hickson Road via Dalgety Road and Towns Place.

Figure 2.4: Millers Point - Existing Bus Routes No. 431 and No. 433



Source: Sydney Buses

2.3 Pedestrian Infrastructure

The existing footpaths along Towns Place, Dalgety Road and Argyle Place are relatively narrow. The footpath on the western side of Dalgety Road includes stairs and is unsuitable for pedestrians that require assistance (e.g. a wheelchair or a walking cane) or pedestrians with prams. In some locations, the Dalgety Road footpath (west side) is 500mm wide and includes street furniture.

Along Merriman Street and Bettington Street, the predominantly paved footpath extends from the building edge or retaining wall edge to the top-of-kerb on both sides.

2.4 Cycle Infrastructure

There are currently no dedicated cycle paths along Towns Place, Dalgety Road and Argyle Place. Towns Place, Dalgety Road and Argyle Place is currently a 'mixed use' cycling amenity with cyclists sharing the road with traffic. Cyclists are able to share the road with traffic as the lanes are wide enough to permit vehicles to comfortable pass.

Figure 2.5: Dalgety Road – Mixed Use Cycling Facility



3. Overview of Demolition Activities

This section of the report summarises the preliminary methodology and details pertaining to the demolition of the Harbour Control Tower. A detailed methodology is to be developed by the appointed demolition contractor after planning approval.

3.1 Description and Duration of Works

The proposed demolition methodology involves dismantling the tower into components suitable to be lifted down to ground level by using a crane.

The works are expected to be undertaken in five stages. The stages and key associated activities are summarised below.

Stage 1 – Site Establishment

- Establishment of the work area including hoardings, fencing and isolation zones and installation of building compounds.
- Erection of tower crane within 20m radius of the HCT.
- Installation of perimeter screens and scaffolding to enclose the perimeter around the tower working level.

Stage 2 – Lifting and Access Equipment

- Establish crane and truck loading locations.
- Establish isolation zones for crane loading into disposal trucks.
- Establish works zones and/ or road closures for truck loading locations.
- Establish traffic management controls for crane and truck loading locations.

Stage 3a – Working Level Removal (Roof Removal)

- Removal and disposal of all existing internal carpets, ceilings and wall linings.
- Removal of all roof structure, high level windows and cladding to concrete floor level.

Stage 3b – Working Level Removal (Floor and Upper Core Removal)

- Removal of all concrete floor, beams and shaft walls back to the diameter of the tower core.

Stage 4 – Concrete Tower and Core Removal

- Removal of sections of the steel fire stair flights, tower core and lift panels until the tower core is approximately 8 metres above ground level or 10 metres below Merriman Street.

Stage 5 – Concrete Tower Base Removal

- Demolition and disposal of the remaining 8 metres of the tower core and the raised plinth base.
- Removal of all remaining material by crane up to Merriman Street.
- Restoration of the area to approved design.

It is expected that the works would be completed in an 8 month period.

Staging diagrams for the aforementioned five stages of work are provided in Appendix A.

3.2 Indicative Work Details

3.2.1 Isolation Zone

The extent of the isolation zone is expected to include Merriman Street, Clyne Reserve and a portion of Headland Park.

3.2.2 Plant and Equipment

Construction vehicles expected to be generated during the site establishment and access equipment stage include 12.5m twin steer rigid trucks and 19.0m semi-trailers. A 20 tonne crane would be transported to the site by a 19m semi-trailer and erected by a 200 tonne mobile Link-Belt crane at the commencement of the works. The tower crane would be removed at the completion of the works.

During the demolition period, 12.5m – 15m semi-trailer tippers would be used for the transportation of material from the site. It is expected that the tower would be cut into segments that would be solely contained within the standard width and height of a semi-trailer.

Other vehicles expected throughout the demolition works include small rigid vehicles, delivery vans, utilities, staff vehicles and traffic control vehicles.

Swept paths provided in Appendix B illustrate a 12.5m heavy rigid vehicle and a 19.0m semi-trailer accessing the work area.

Based on a mobile Link-Belt crane having a turning circle less than a 12.5m heavy rigid vehicle/ 19.0m semi-trailer, the mobile crane would be able to adequately access a work area in Merriman Street.

3.2.3 Work Hours

Work activities would generally be undertaken between 7:00am - 6:00pm Monday to Fridays and 8:00am to 3:00pm on Saturdays with no work on Sundays or public holidays.

3.2.4 Loading and Site Access

The construction access is expected to be from Bettington Street.

It is expected that Merriman Street would be closed to general traffic and all unloading/ loading of construction vehicles would occur within the Merriman Street work area subject to approval from the City of Sydney Construction Regulation Unit (CRU).

3.2.5 Staff Parking

The works are expected to generate a maximum of 20 site personnel per day during the site establishment and restoration stages and 10 to 15 personnel per day during the demolition period.

Staff would be encouraged to utilise the existing public transport network servicing the site. No parking for construction staff would be provided.

The traffic impact of construction staff is considered to be negligible given the north-western CBD location of the site.

4. Construction Impact Assessment

This section of the report outlines specific tasks expected to occur during the demolition of the Harbour Control Tower and the associated works that would require traffic control.

4.1 Truck Volumes

It is expected that construction traffic generation would primarily be associated with the following construction activities:

- Delivery of crane components
- Transportation of demolition material and tools using a mixture of small rigid to heavy vehicles
- Traffic control vehicles
- Trade deliveries and services using vans and utilities.

Over the demolition period, it is expected that the works would generate the following vehicle movements per day:

- 5 staff, delivery/ service vehicles a day – small rigid vehicles/ vans/ cars
- 2 traffic control vehicles – small rigid vehicles
- 3 heavy rigid vehicles
 - 12m twin steer rigid truck – 15m semi-trailer tipper to deliver and export material
 - 19m semi-trailer for site establishment and removal of tower crane.

Therefore, the works are expected to generate a peak of approximately 10 vehicles per day with an average of 8 vehicles per day.

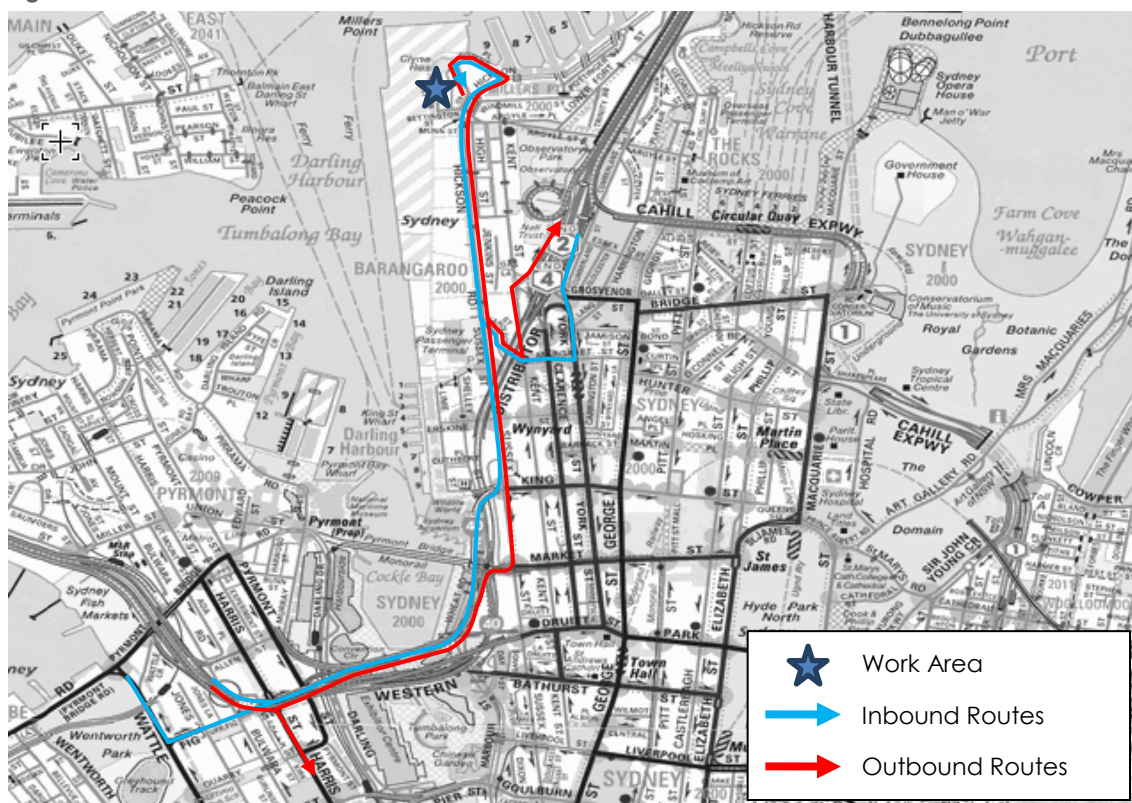
The volume of construction traffic generated by the demolition works would vary throughout the construction period depending upon the particular activities undertaken on-site at any one time.

4.2 Construction Vehicle Routes

Generally, construction vehicles would have origins and destinations throughout Sydney. All processing is expected to occur in concrete recycling facilities at either St Peters or Botany. All construction vehicles would be restricted to the arterial road network as much as practical.

As such, dedicated construction vehicle routes have been developed to provide the shortest distances to/ from the arterial road network as shown in Figure 4.1.

Figure 4.1: Construction Traffic Routes



Basemap Source: Sydway Publishing

The designated truck routes for construction vehicles travelling to and from the work area are as follows:

- inbound from south or east – Wattle Street, Fig Street Western Distributor, Sussex Street/ Hickson Road and Towns Place
- inbound from west – Western Distributor, Sussex Street/ Hickson Road and Towns Place
- inbound from north - Sydney Harbour Bridge, York Street, Margaret Street, Napoleon Street, Hickson Road and Towns Place (Outside of AM Peaks 6:30am – 9:30am)
- outbound to north - Towns Place, Hickson Road, Napoleon Street, Kent Street and Sydney Harbour Bridge
- outbound to west– Towns Place, Hickson Road/ Sussex Street and Western Distributor
- outbound to south or east – Towns Place, Hickson Road/ Sussex Street, Western Distributor and Harris Street.

All building contractors shall be notified of the truck routes and are required to adhere to the nominated routes when accessing the site. Construction vehicles would radio the site office on approach to the site to ensure access to the work area is available.

4.3 Public Transport Services

No adverse impacts on existing public transport services or facilities would be expected.

4.4 Pedestrian and Cyclist Access

It is expected that pedestrians and cyclists access would be limited along Merriman Street as a result of the construction works. As shown on the Indicative Traffic Control Plan (TCP) provided in Appendix C, it is expected that hoarding would be provided to protect Merriman Street residents from activities within the work area.

Hoarding would also be used along the remainder of the work area including the northern perimeter of Clyne Reserve to close public access. As such no pedestrian access would be provided on the west side of Merriman Street.

Traffic controllers and site personnel would manage the interaction of pedestrians and construction vehicles at the site access, including stopping pedestrians whilst construction vehicles egress or ingress the work area.

4.5 On-Street Car Parking

The expected closure of Merriman Street and potential closure of Bettington Street would result in the loss of on-street car parking for up to 20 vehicles. The spaces are 2P '8am – 10pm Seven Days Authorised Residents Vehicles Excepted Area 16' in nature.

At present on-street car parking in the vicinity of Merriman Street is generally close to capacity during the weekend evening period when shows are held at the Sydney Theatre and Dance Companies in Walsh Bay. Outside of the weekend evening period there is spare parking capacity.

During the demolition of the Harbour Control Tower, Merriman Street residents would be able to park in Dalgety Road/ Argyle Street and Towns Place as the resident area code permit is the same, Area 16.

However to ensure Merriman Street residents have access to parking during the demolition works, temporary parking could to be provided for Merriman Street residents in Munns Reserve prior to the completion of the Barangaroo Integration Works.

4.6 Emergency Vehicle Access

Emergency vehicle access to, from and around the work area would be maintained at all times.

Liaison would be maintained with the police and emergency services agencies throughout the demolition period and a 24-hour contact would be made available for 'out-of-hours' emergencies and access.

Emergency protocols on the site would include a requirement for the Principal Contractor to assist with emergency access of Merriman Street via Bettington Street.

Thus there would be no adverse impacts to the provision of existing emergency vehicle access to other neighbouring properties as a result of the proposed demolition works.

5. Mitigation Measures

5.1 Traffic Management Measures

An indicative site specific traffic control plan has been prepared and is provided in Appendix C.

Advisory road signage would be installed in accordance with AS 1742.3 Manual of uniform traffic control devices - Traffic control devices for works on roads and the RMS Traffic Control at Worksites Manual. Signs would be installed and maintained throughout the demolition period.

The following construction traffic management mitigation measures are expected be applied during the demolition of the Harbour Control Tower.

5.1.1 Vehicle Access

- Merriman Street would be closed to general traffic and all unloading/ loading of construction vehicles would occur within the Merriman Street work area (subject to CRU approval).
- Two traffic controllers located on Dalgety Road and one on Rodens Lane would manage traffic and pedestrians while trucks access the work area.
- All trucks reversing into Merriman Street would be under the guidance of traffic controllers/ site personnel.
- Construction vehicles would radio the site office on approach to the site to ensure access to the site is available.
- General vehicle access along Dalgety Road would be maintained at all times.
- Local access along Rodens Lane would be maintained and managed when trucks access the site.
- If there are any materials spilt onto the road, site personnel and equipment should rectify, subject to appropriate OH&S provision.

5.1.2 Truck Routes

Site induction would include procedures for accessing the site from Bettington Street. This would include:

- Drivers must adhere to the nominated truck routes, as shown in Figure 4.1.
- Drivers must be aware of pedestrians and cyclists in the vicinity of the site.
- Drivers should be aware that the local area is signposted as 40km/h.

5.2 Site Inspections and Record Keeping

A daily inspection before the start of work activity should take place to ensure that conditions accord with those stipulated in the plan and that there are no potential hazards. Any possible adverse impacts would be recorded and dealt with if they arise.

5.3 Site Induction

All staff employed on the site by the Principal Contractor would be required to undergo a site induction.

The induction should include permitted access routes to and from the work area for site staff and delivery vehicles as well as standard environmental, OH&S, driver protocols and emergency procedures.

6. Conclusion

This report has been prepared to document the potential demolition activities and associated construction traffic management measures necessary to facilitate the proposed demolition of the Harbour Control Tower.

Based on the findings of the report presented above, it is concluded that:

- Approximately 10 – 15 site personnel would be involved with the demolition of the Harbour Control Tower during the normal operation. A maximum of 20 site personnel would be involved during the site establishment.
- The demolition of the Harbour Control Tower is expected to generate the following volume of vehicle movements:
 - 5 staff, delivery/ service ancillary vehicles a day – small rigid vehicles/ vans/ cars
 - 2 traffic control vehicles – small rigid vehicles
 - 3 heavy rigid vehicles/ semi articulated vehicles
 - 12m twin steer rigid truck – 15m semi-trailer tipper to deliver and export material
 - 19m semi-trailer for site establishment and removal of tower crane.
- Having regard for the above, the works are expected to generate a peak of approximately 10 vehicles per day with an average of 8 vehicles per day.
- As such, the construction vehicle movements to and from the site are low and as such, can be satisfactorily accommodated by the surrounding road network.
- Merriman Street would be closed to general traffic and all unloading/ loading of construction vehicles would occur within the Merriman Street work area (subject to CRU approval).
- Temporary parking could be provided for Merriman Street residents in Munns Reserve prior to the completion of the Barangaroo Integration Works.
- The footpath on the east side of Merriman Street would be protected by hoarding and would be available for Merriman Street residents to use. The footpath on the west side of Merriman Street would be closed.
- An indicative traffic control plan has been prepared to assist vehicles entering and exiting the site and alert other drivers, pedestrians and cyclists that construction movements are taking place.
- Vehicles associated with the demolition of the Harbour Control Tower would enter and exit the work area via Hickson Road, Towns Place and Bettington Street.
- The movement of trucks to/ from the Merriman Street work area would be managed and controlled by qualified site personnel.
- A number of driver protocols would be established as part of the site induction procedure for drivers to ensure the safety of motorists, pedestrians and cyclists.

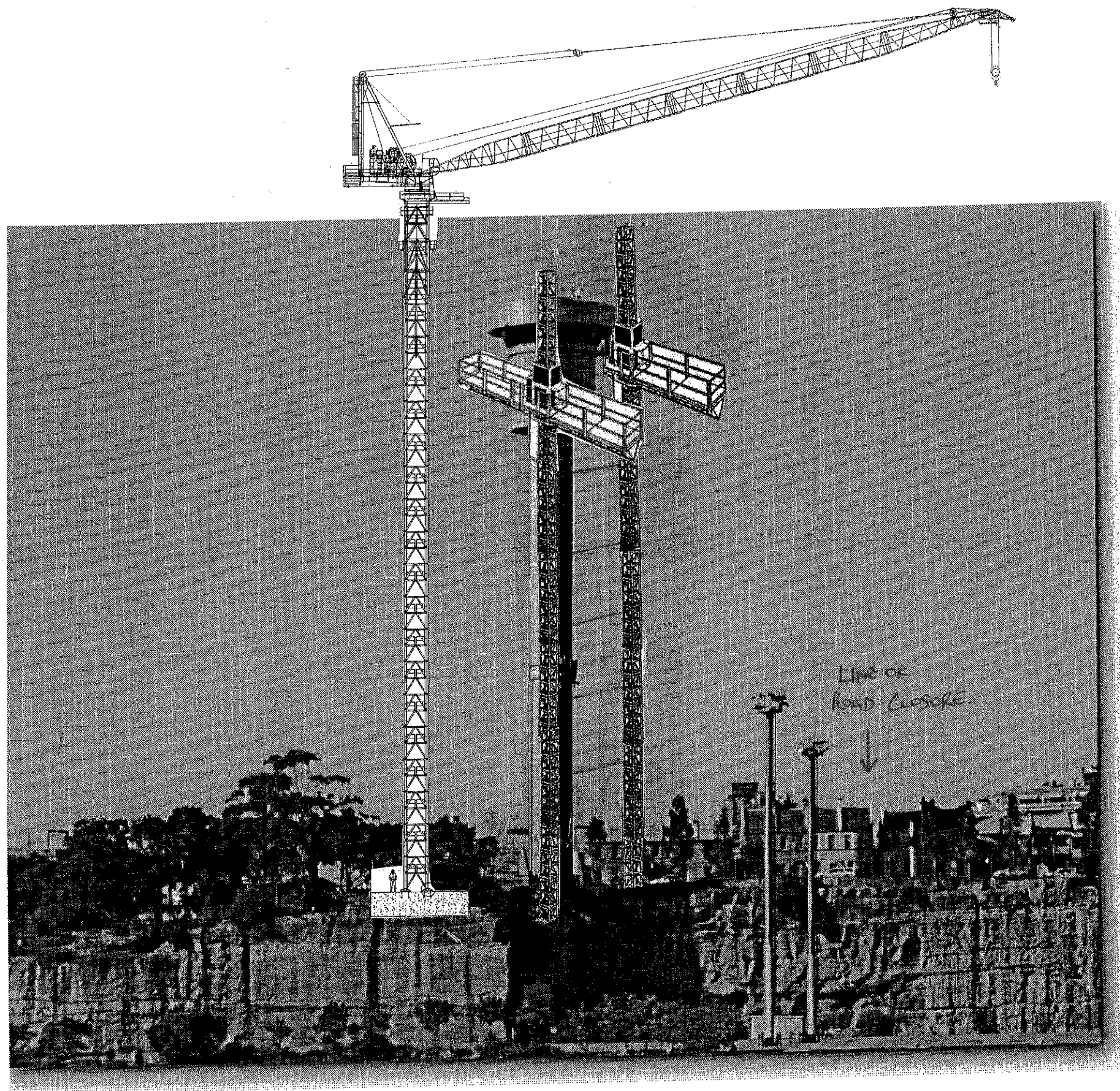
The appointed contractor would update and modify this CTMP accordingly to better suit any proposed changes to the construction methodologies and staging etc.

In summary, it is concluded that the proposed measures would adequately address potential traffic related implications associated with the proposed demolition of the Harbour Control Tower.

Appendix A

Appendix A

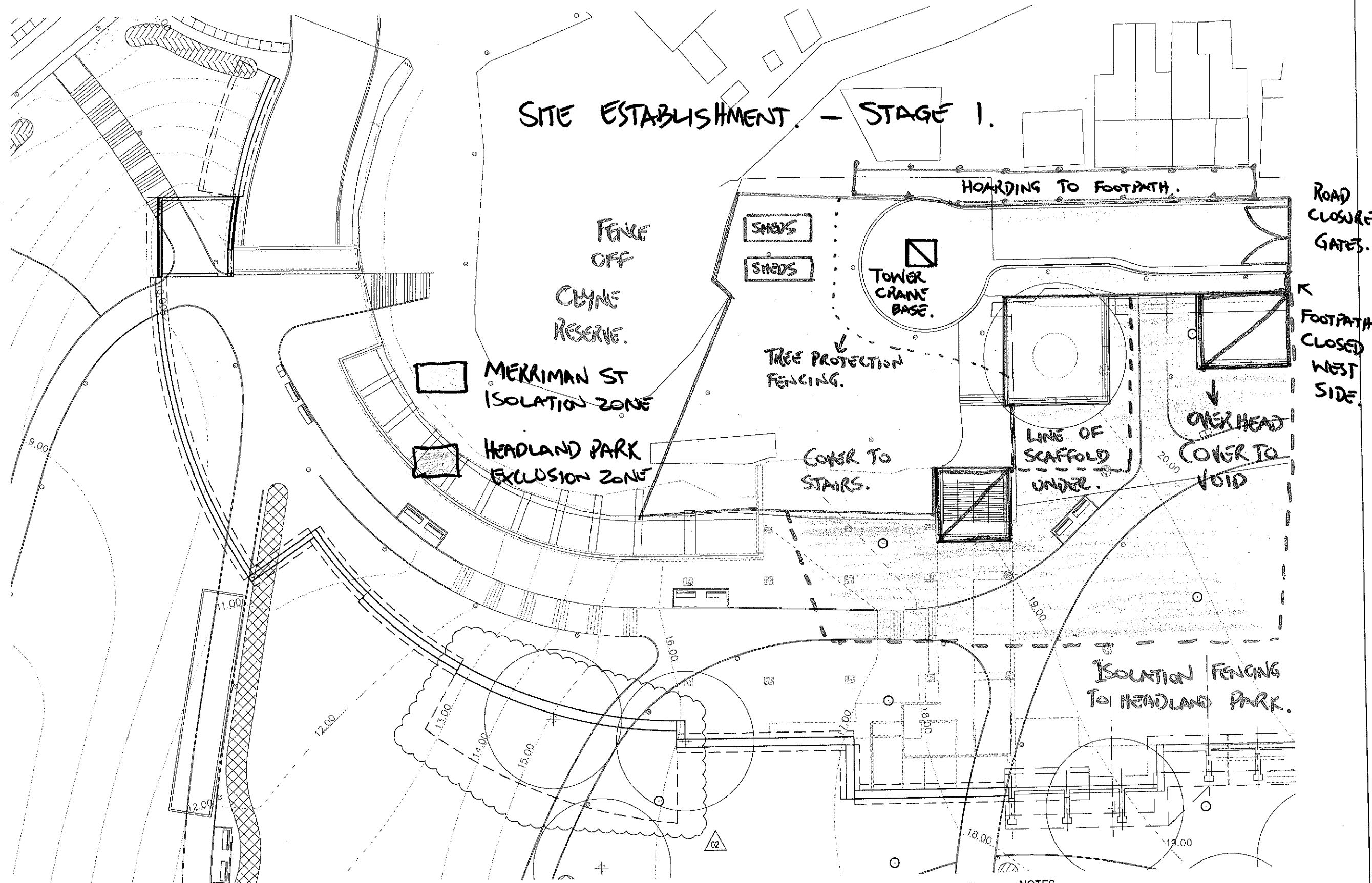
Harbour Control Tower Staging Diagrams



HARBOUR CONTROL TOWER.

DEMOLITION STAGING.

- STAGE 1 - SITE ESTABLISHMENT
- STAGE 2 - LIFTING & ACCESS EQUIPMENT.
- STAGE 3 - TOWER - WORKING LEVELS
- STAGE 4 - TOWER SHAFT - UPPER
- STAGE 5 - TOWER SHAFT - LOWER.



RETAINING WALL NORTH LAYOUT PLAN
1:200

NOTES
1. REFER TO DRAWING No DRG-AUR-S-S3-1701 FOR GENERAL NOTES

Rev	App	Ckd	Revision or reason for issue	Date
01			FINAL DESIGN	15/03/2013
02			WALL OUTLINE AMENDED	28/03/2013

Rev	App	Ckd	Revision or reason for issue	Date

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SCALE 1:200



DRAWN
C. MACPHERSON
DESIGNED
K. O'NEILL
CHECKED

APPROVED

Consultant
Aurecon Australia Pty Ltd
Level 2, 119 Military Road
Neutral Bay NSW 2089 Australia

Telephone: +61 2 9495 5599
Facsimile: +61 2 9495 5598
www.aurecongroup.com

Contractor

Boulderstone Pty Ltd
Triton Business Campus Level 4
39 Delhi Rd
North Ryde NSW 2113 Australia

Telephone: +61 2 9935 7100
Facsimile: +61 2 9935 7080
www.boulderstone.com.au

Project Name
**BARANGAROO HEADLAND PARK
PUBLIC DOMAIN MAIN WORKS**

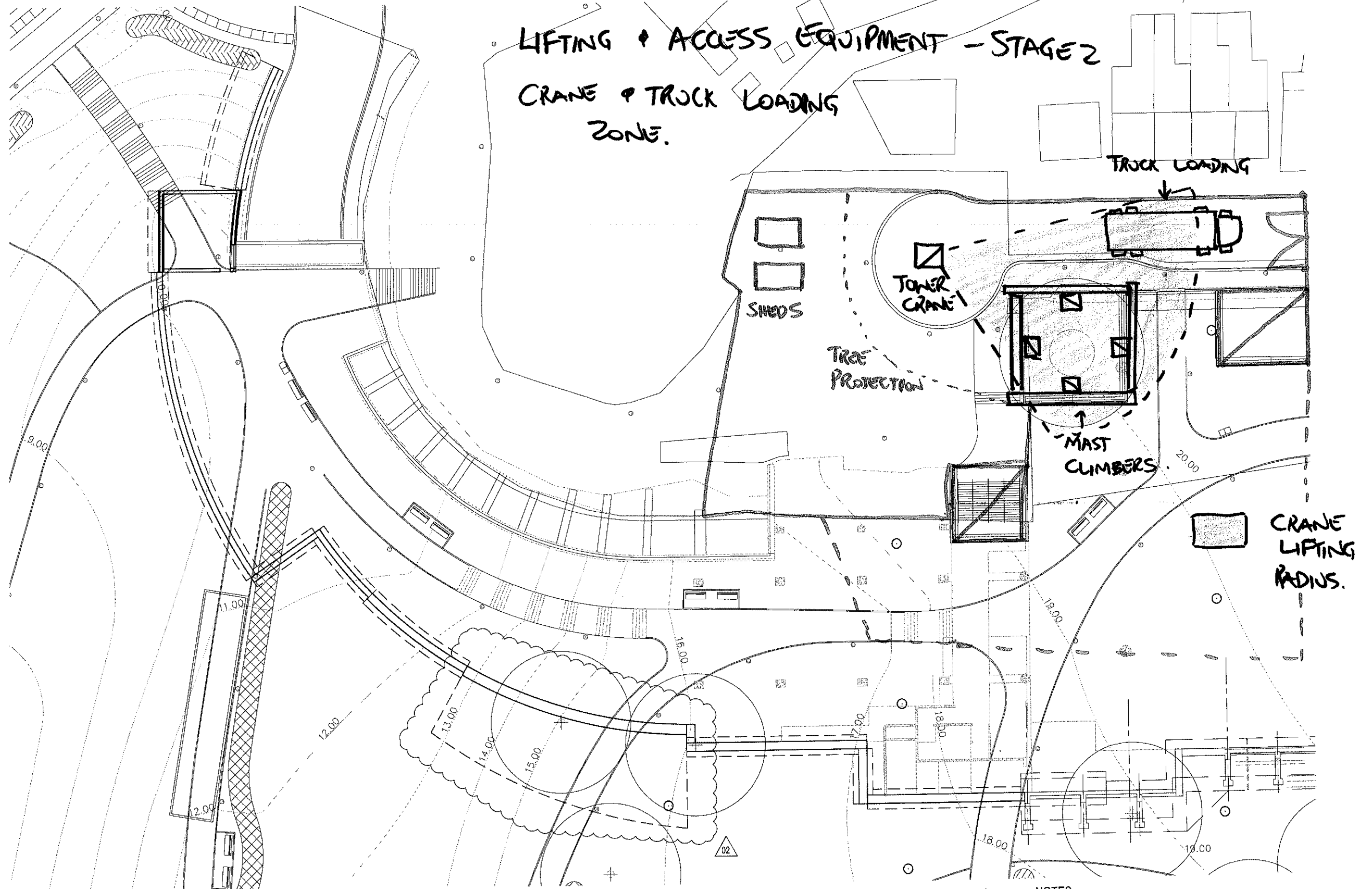
Barangaroo

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GENERAL LAYOUT PLAN
Project Number
230341
Drawing Number
DRG-AUR-S-S3-1700

Documentation Stage
FINAL DESIGN
Revision
02



LIFTING & ACCESS EQUIPMENT - STAGE 2 CRANE & TRUCK LOADING ZONE.



RETAINING WALL NORTH LAYOUT PLAN
1:200

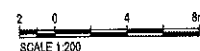
NOTES

1. REFER TO DRAWING No DRG-AUR-S-S3-1701 FOR GENERAL NOTES

Rev	App	Ckd	Revision or reason for issue	Date
01			FINAL DESIGN	15/03/2013
02			WALL OUTLINE AMENDED	28/03/2013

Rev	App	Ckd	Revision or reason for issue	Date
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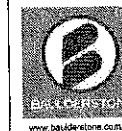


DRAWN
C. MACPHERSON
DESIGNED
K. O'NEILL
CHECKED

APPROVED

Consultant
Aurecon Australia Pty Ltd
Level 2, 118 Military Road
Neutral Bay NSW 2089 Australia
Telephone: +61 2 9495 5595
Facsimile: +61 2 9495 5596
www.aurecongroup.com

Contractor



Boulderstone Pty Ltd
Tenth Business Campus Level 4
39 De'Al Rd
North Ryde NSW 2113 Australia
Telephone: +61 2 9935 7100
Facsimile: +61 2 9935 7080
www.boulderstone.com.au

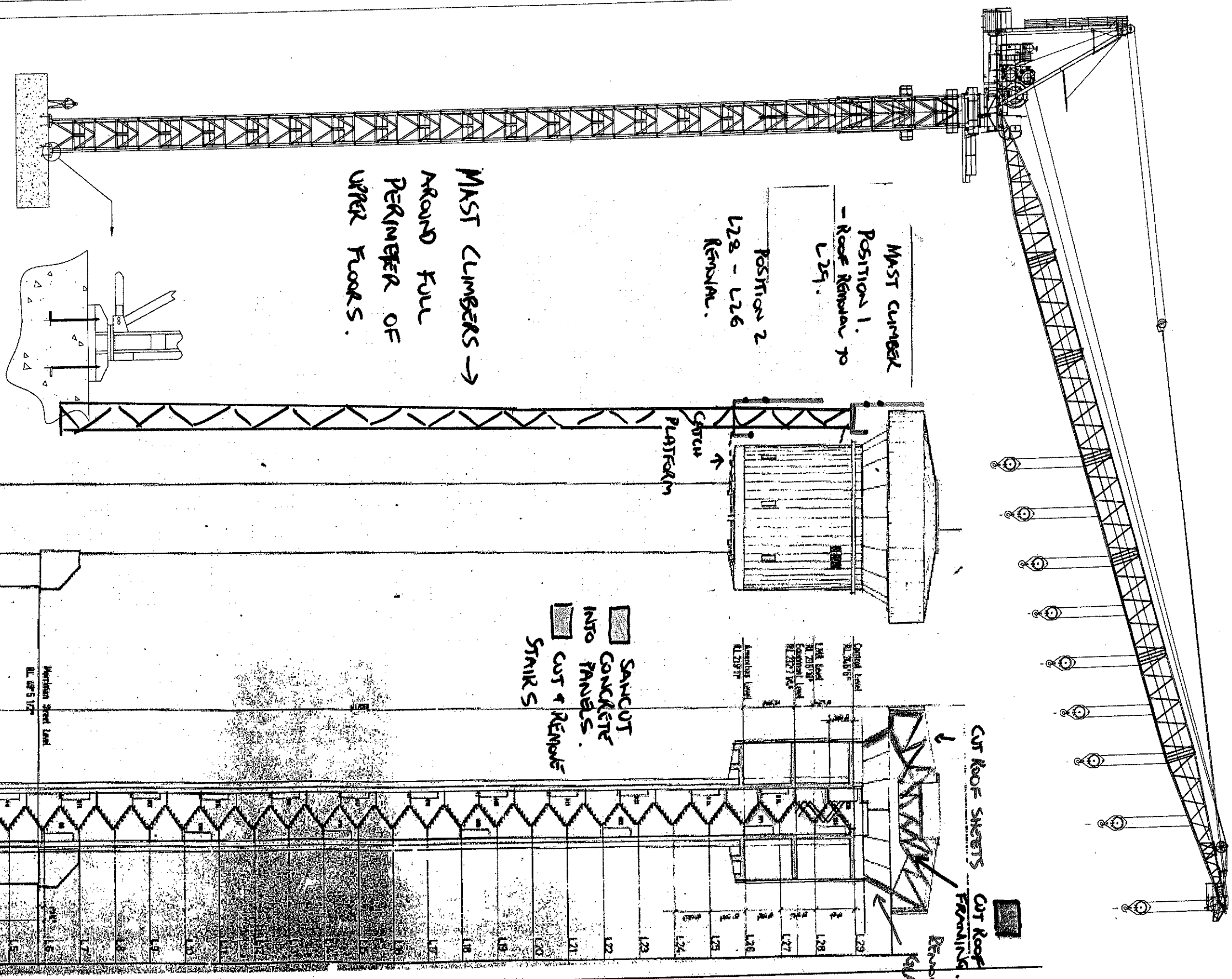
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BARANGAROO HEADLAND PARK
PUBLIC DOMAIN MAIN WORKS

Project Number
230341
Drawing Number
DRG-AUR-S-S3-1700

Drawing Title
CULTURAL SPACE - STRUCTURAL
RETAINING WALL NORTH
GENERAL LAYOUT PLAN
Documentation Stage
FINAL DESIGN
Revision
02

STAGE 3 - WORKING FLOORS REMOVAL.

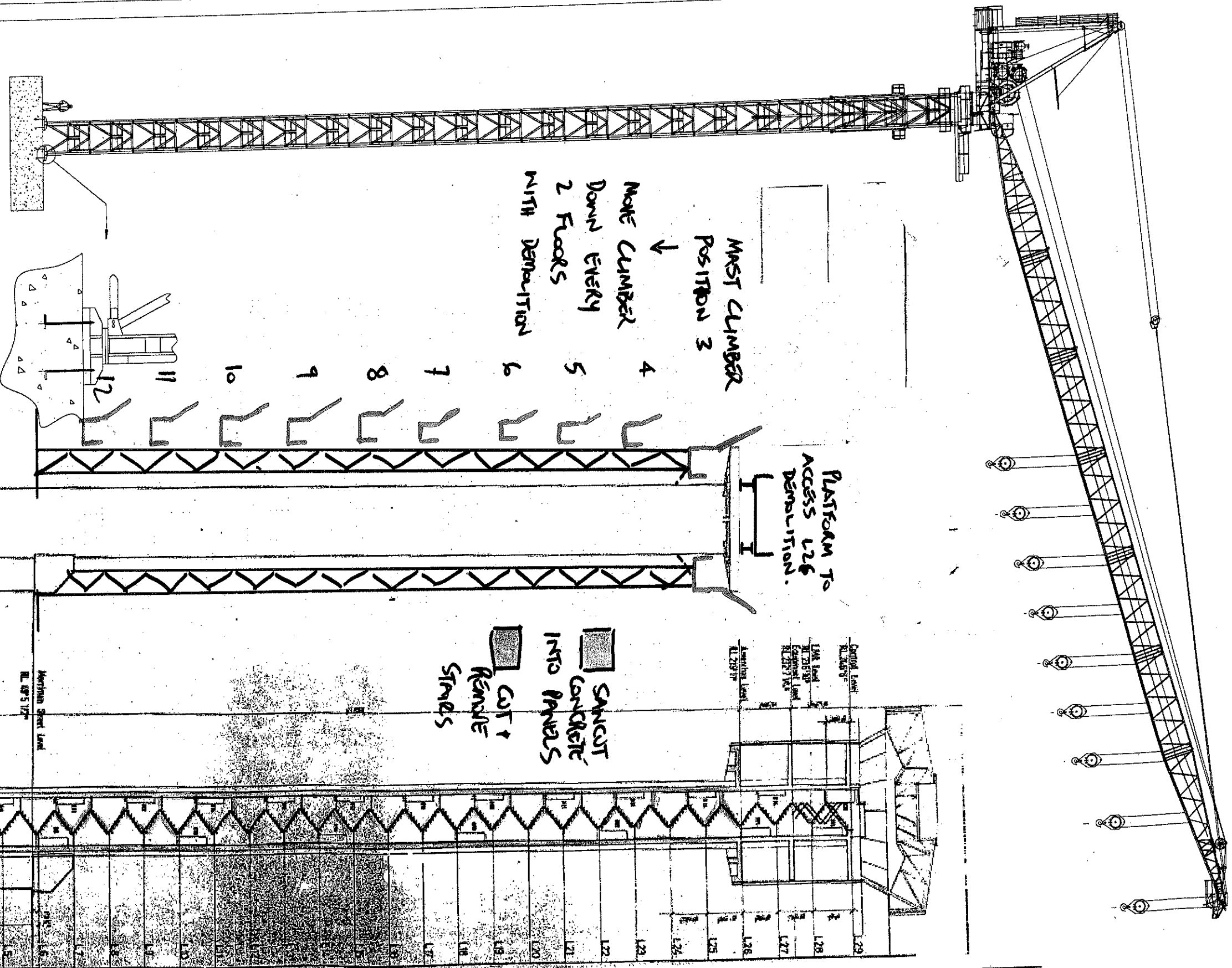


Structural Assessment Report
BDA - Harbour Control Tower
Issue: A

Project No. 12831
21st December 2012

SYDNEY HARBOUR BOARD OF NSW MARINE SERVICES SYDNEY HARBOUR CONTROL TOWER ELEVATIONS SECTION & SITE PLAN	
DATE: 1/12/12 DRAWN: [Signature] CHECKED: [Signature] APPROVED: [Signature]	PROJECT NO: 12831 ISSUE: A DATE: 21/12/12

STAGE 4 - TOWER SHAFT REMOVAL.

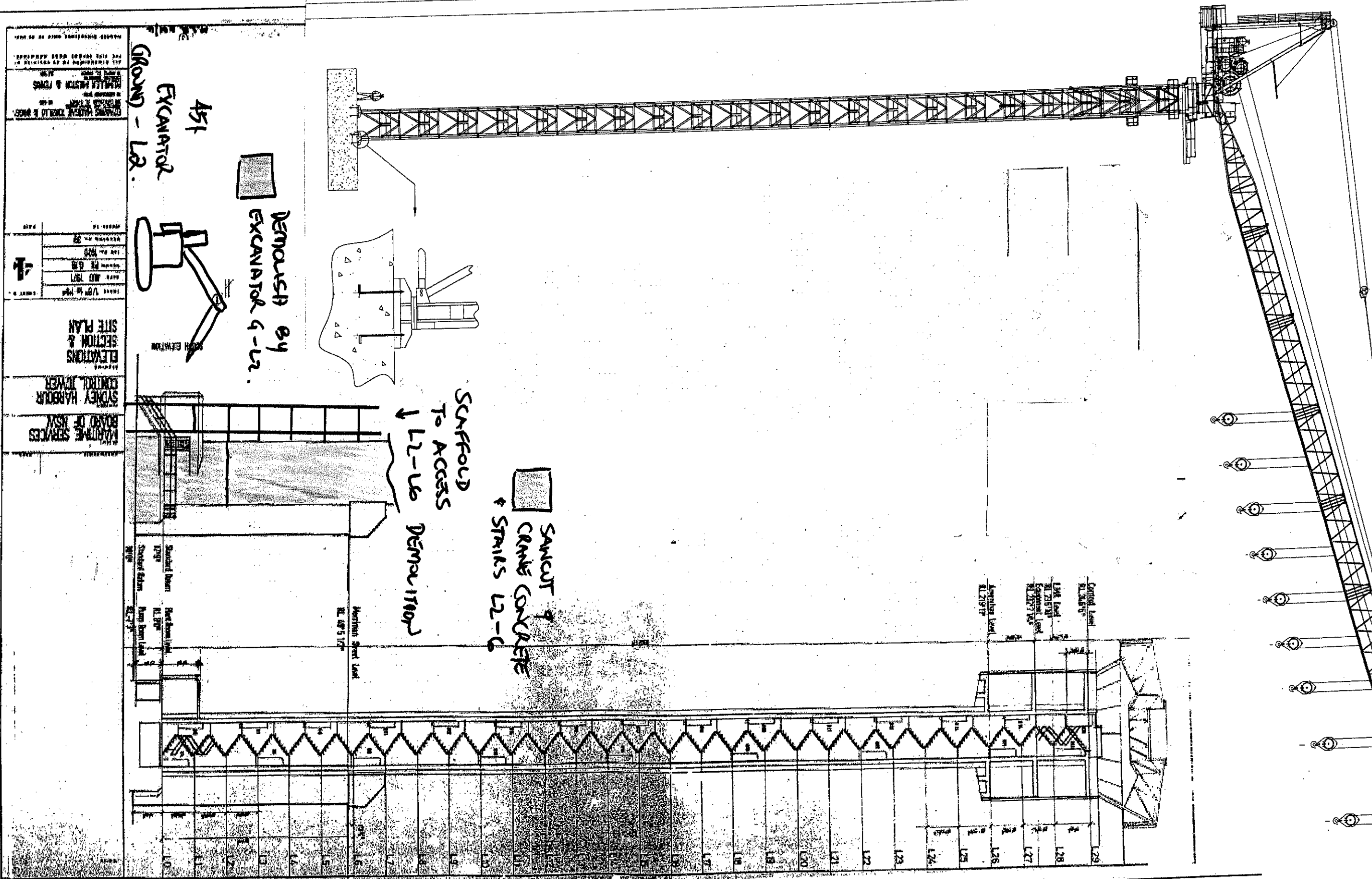


Structural Assessment Report
BDA # Harbour Control Tower
Issue: A

Project No. 12831
21st December 2012

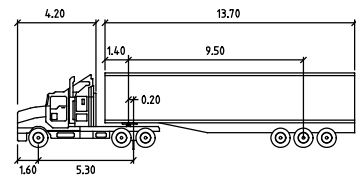
SYDNEY HARBOUR BOARD OF NSW MARITIME SERVICES CONTROL TOWER	
ELEVATIONS SECTION & SITE PLAN	
DATE: 10/12/12	SCALE: 1/50
DESIGNER: BDA	PROJECT: 12831
REVISION: 1	DATE: 10/12/12
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STAGE 5 - LOWER TOWER SHAE.



Appendix B

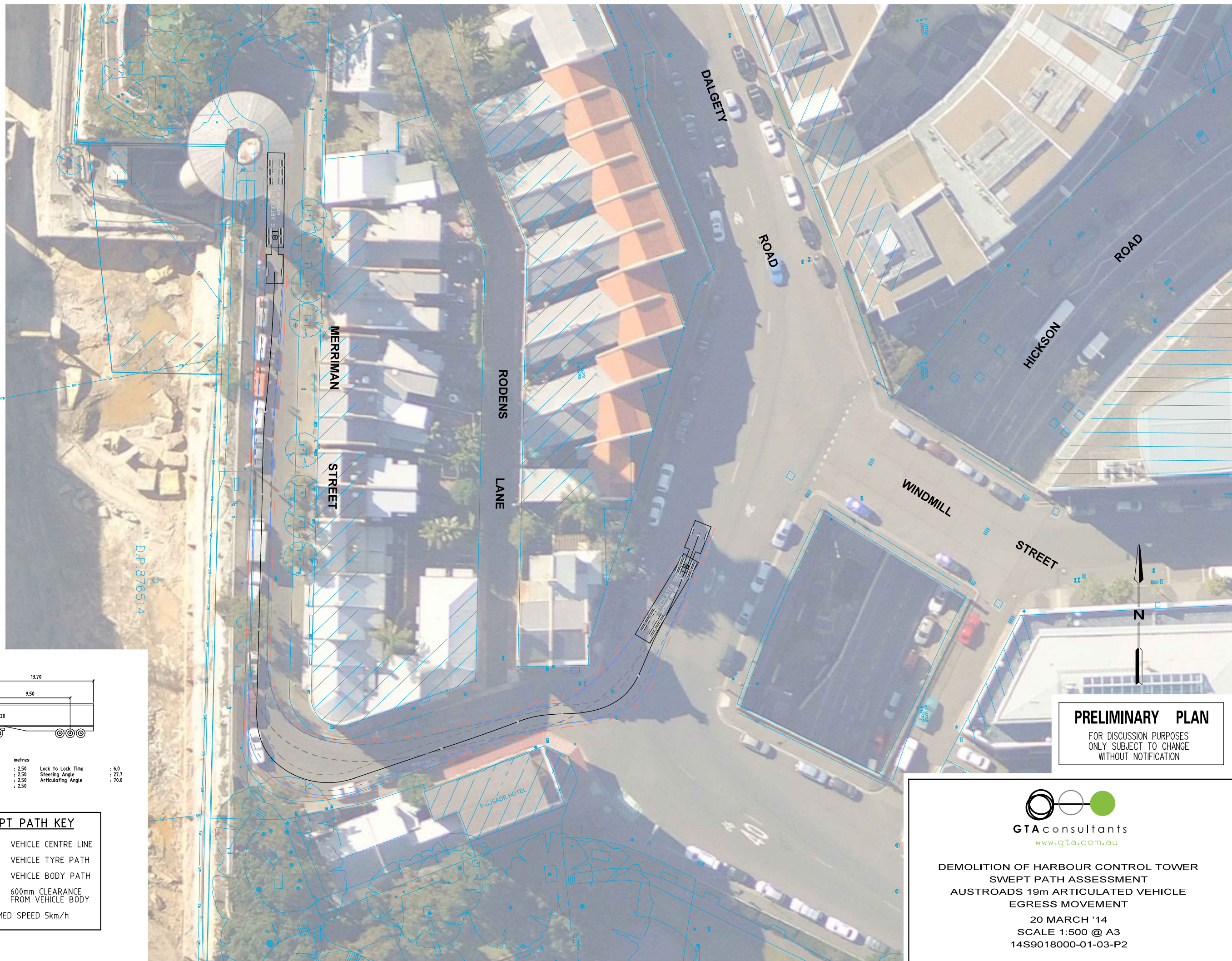
Swept Path Assessments



S ARTICULATED 19M			
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		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
 - - VEHICLE TYRE PATH
 - VEHICLE BODY PATH
 - - 600mm CLEARANCE FROM VEHICLE BODY
- ASSUMED SPEED 5km/h



PRELIMINARY PLAN

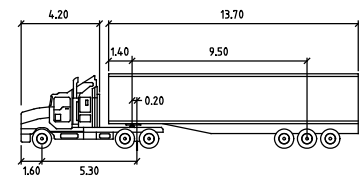
FOR DISCUSSION PURPOSES
ONLY SUBJECT TO CHANGE
WITHOUT NOTIFICATION



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DEMOLITION OF HARBOUR CONTROL TOWER
SWEPT PATH ASSESSMENT
AUSTROADS 19m ARTICULATED VEHICLE
EGRESS MOVEMENT

20 MARCH '14
SCALE 1:500 @ A3
14S9018000-01-03-P2



S ARTICULATED 19M	metres		
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		

SWEEP PATH KEY

- VEHICLE CENTRE LINE
 - VEHICLE TYRE PATH
 - VEHICLE BODY PATH
 - 500mm CLEARANCE FROM VEHICLE BODY
- ASSUMED SPEED 10km/h



PRELIMINARY PLAN

FOR DISCUSSION PURPOSES
 ONLY SUBJECT TO CHANGE
 WITHOUT NOTIFICATION

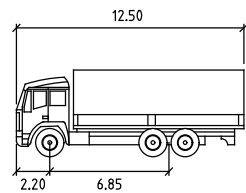


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DEMOLITION OF HARBOUR CONTROL TOWER
 SWEEP PATH ASSESSMENT
 AUSTRADS 19m ARTICULATED VEHICLE
 INGRESS MOVEMENT

20 MARCH '14
 SCALE 1:500 @ A3
 14S9018000-01-02-P2



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

SWEPT PATH KEY

- VEHICLE CENTRE LINE
 - - VEHICLE TYRE PATH
 - VEHICLE BODY PATH
 - 500mm CLEARANCE FROM VEHICLE BODY
- ASSUMED SPEED 10km/h

D.P. 876514

RODENS LANE

MERRIMAN STREET

DALGETY ROAD

HICKSON ROAD

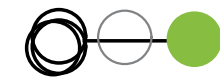
WINDMILL STREET

STREET

N

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES
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WITHOUT NOTIFICATION



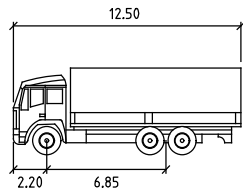
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DEMOLITION OF HARBOUR CONTROL TOWER
SWEPT PATH ASSESSMENT
AUSTROADS 12.5m HEAVY RIGID VEHICLE
EGRESS MOVEMENT

20 MARCH '14
SCALE 1:500 @ A3
14S9018000-01-05-P2



D.P. 876514



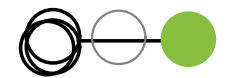
SU TRUCK metres
Width : 2.50
Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 36.6

SWEPT PATH KEY

- VEHICLE CENTRE LINE
 - - VEHICLE TYRE PATH
 - VEHICLE BODY PATH
 - 500mm CLEARANCE FROM VEHICLE BODY
- ASSUMED SPEED 10km/h

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES
ONLY SUBJECT TO CHANGE
WITHOUT NOTIFICATION



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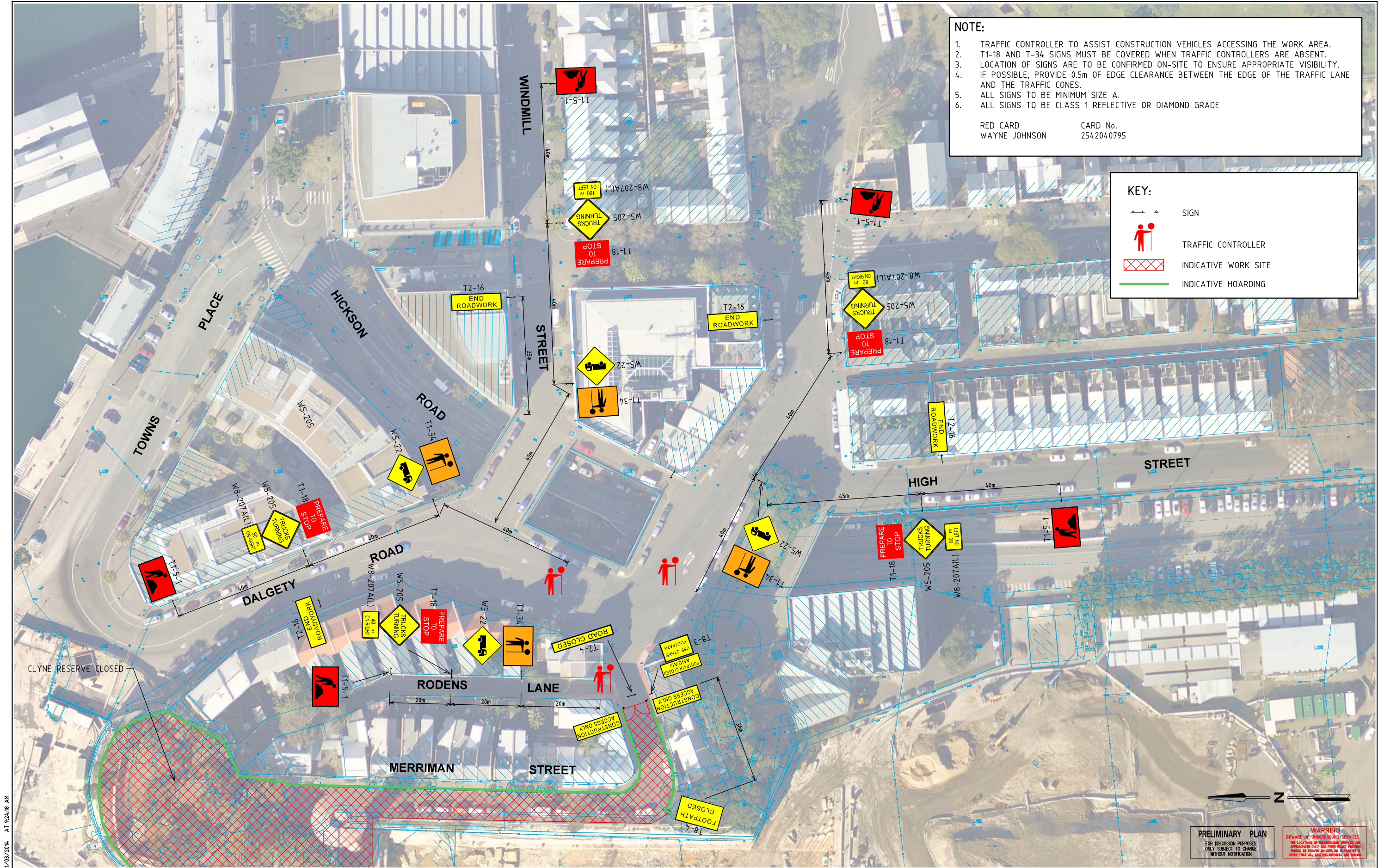
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DEMOLITION OF HARBOUR CONTROL TOWER
SWEPT PATH ASSESSMENT
AUSTROADS 12.5m HEAVY RIGID VEHICLE
INGRESS MOVEMENT

20 MARCH '14
SCALE 1:500 @ A3
14S9018000-01-04-P2

Appendix C

Merriman Street Work Area – Indicative Traffic Control Plan



ON 21/03/2014 AT 9:24:18 AM
PLOTTED BY : Barry Li

AMENDMENTS				
ISSUE	DATE	DESCRIPTION	BY	CHK
P3	21.03.14	MINOR AMENDMENTS	BLL	ADM
P2	20.03.14	MINOR AMENDMENTS	BLL	ADM
P1	21.11.13	INITIAL ISSUE	BLL	ADM

GENERAL NOTES

1. ALL DIMENSIONS AND RADII ARE IN METRES.
2. GTA CONSULTANTS DOES NOT TAKE ANY RESPONSIBILITY FOR THE ACCURACY OF THE EXISTING CONDITIONS BASE (AERIAL PHOTOGRAPHY) ON WHICH THE SETOUT DETAIL IS BASED. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE EXISTING CONDITIONS INCLUDING SHOULD BE VERIFIED ON SITE.

DESIGNED A.MODESSA	DESIGN CHECK W.JOHNSON
DRAWN B.LI	DRAFTING CHECK A.MODESSA
APPROVED BY W.JOHNSON	DATE APPROVED FOR INITIAL ISSUE 21 NOVEMBER '13
SCALE A3	CAD FILE NO. 14S9018000-01-P3.dgn

GTA consultants
www.gta.com.au

Melbourne 03 9851 9200
Sydney 02 8448 1800
Brisbane 07 3113 5000
Canberra 02 6243 9400
Adelaide 08 8334 3600
Gold Coast 07 5510 4814
Townsville 07 4722 2765

CLIENT BARANGAROO DELIVERY AUTHORITY			
DEMOLITION OF HARBOUR CONTROL TOWER MERRIMAN STREET, SYDNEY			
INDICATIVE TRAFFIC CONTROL PLAN			
SYDWAY REF. 55/G12	DRAWING NO. 14S9018000-01-01	SHEET 01 OF 05	ISSUE P3

Melbourne

A Level 25, 55 Collins Street
PO Box 24055
MELBOURNE VIC 3000
P +613 9851 9600
F +613 9851 9610
E melbourne@gta.com.au

Sydney

A Level 2, 815 Pacific Highway
CHATSWOOD NSW 2067
PO Box 5254
WEST CHATSWOOD NSW 1515
P +612 8448 1800
F +612 8448 1810
E sydney@gta.com.au

Brisbane

A Level 4, 283 Elizabeth Street
BRISBANE QLD 4000
GPO Box 115
BRISBANE QLD 4001
P +617 3113 5000
F +617 3113 5010
E brisbane@gta.com.au

Canberra

A Unit 4, Level 1, Sparta Building, 55 Woolley
Street
PO Box 62
DICKSON ACT 2602
P +612 6263 9400
F +612 6263 9410
E canberra@gta.com.au

Adelaide

A Suite 4, Level 1, 136 The Parade
PO Box 3421
NORWOOD SA 5067
P +618 8334 3600
F +618 8334 3610
E adelaide@gta.com.au

Gold Coast

A Level 9, Corporate Centre 2
Box 37
1 Corporate Court
BUNDALL QLD 4217
P +617 5510 4800
F +617 5510 4814
E goldcoast@gta.com.au

Townsville

A Level 1, 25 Sturt Street
PO Box 1064
TOWNSVILLE QLD 4810
P +617 4722 2765
F +617 4722 2761
E townsville@gta.com.au