



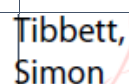
# Traffic Management Plan

## Blues Point Site Operations – extended scope

Line-wide Works Contract Sydney Metro City & Southwest

Project number:	C600
Document number:	SMCSWLWC-SYC-BPS-TF-PLN-012442
Revision date:	2 May 2022
Revision:	A

### Document Approval

Rev.	Date	Prepared by	Reviewed by	Recommended by	Remarks
A	2 May 2022	Mong Sim	Adam Binning	Simon Tibbett	Initial submittal.
Signature:				 Tibbett, Simon	<small>Digitally signed by Tibbett, Simon DN: cn=local, o=ak, ou=People, ou=IT and Alliances, ou=Sydney Metro Line Wide Works, ou=SCS, ou=LWOPD, ou=Users, cn=Tibbett, Simon Date: 2022.05.02 11:03:38 +1000</small>

## Details of Revision Amendments

### Document Control

The Project Director is responsible for ensuring that this plan is reviewed and approved. The Project Traffic Manager is responsible for updating this plan to reflect changes to legal and other requirements.

### Amendments

Any revisions or amendments must be approved by the Project Director and/or client before being distributed/implemented.

### Revision Details

Revision	Details
A	Issued to for stakeholder review.

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## 1. Traffic Management Plan – Blues Point Road Extended Scope

### 1.1. Context of the Blues Point Site

The Blues Point Site picturesque has changed since Line-wide was handed over the site. Summary of the key milestones on the site are:

Key activities	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
TSE Handover to LW	x																						
Track work and fitting to Barangaroo		x	x	x	x	x	x	x	x	x	x	x	x										
Shed and shaft backfilled														x									
Backfilled Blues Point Site															x	x	x						
Extension of Blues Point scope																	x	x					
Additional civil works (this TMP)																			x	x	x	x	x

This traffic management plan (TMP) covers the new specific traffic management requirement for the new Blues Point Road extended scope. This TMP is still linked and operates under to the overall the approved Blues Point Site Construction Traffic Management Plan (CTMP) for reference.



Figure 1. Blues Point Site (photo taken 29 Apr 2022) showing the completion of the backfill and landscaping work.



Figure 2. Blues Point site in Dec 2020 (for reference)



## 2.

## 2. Implementation of the new Blues Point extended scope

### 2.1. Scope of Work

The Blues Points extended scope includes but not limited to:

- Detailed landscaping including park features and amenities
- New pavement reconstruction including architectural brick feature pavement
- New drainage systems
- New street lighting
- New kerbing and rearrangement of street scapes (new parking spaces etc)

Access to the Blues Point site is still in accordance to the EIS stipulated route which is via Pacific Highway – Miller Street – Blues Point Road.



Figure 3 – Excerpt from CTMF regarding Blues Point access/haulage route



Figure 4 – Overlay off the new realignment of future Blues Point Road area

## 2.2. Traffic Management

To support the new Blues Point Road upgrade scope, Blues Point Road section south of Henry Lawson Avenue would need to be closed at all times during construction. There is no opportunity to keep the road open as the area will be transitioning to a full construction site as soon as Blues Point Road is permitted/handed. It is anticipated the closure of mid to late May 2022 till no later than 30 September 2022.

General traffic would need to continue on via Henry Lawson Avenue to loop back into Blues Point Road. The site will however maintain a maintenance access through lane for council maintenance crew into the Blues Point Reserve located at the southern end of the site.

This closure is the replica of the closure implemented in August 2021 till December 2021 during the vertical shaft backfill and removal of the site shed.

This proposed Blues Point Road closure will still maintain pedestrian access into the Blues Point Reserve. Pedestrians alignment could change one side to the other side depending on progress of the underlying work. Temporary lighting will be installed along pedestrian path within the work site.

At the top of the road closure point, there are 2 locked gates – one for construction access and one for North Sydney council (NSC) maintenance access.

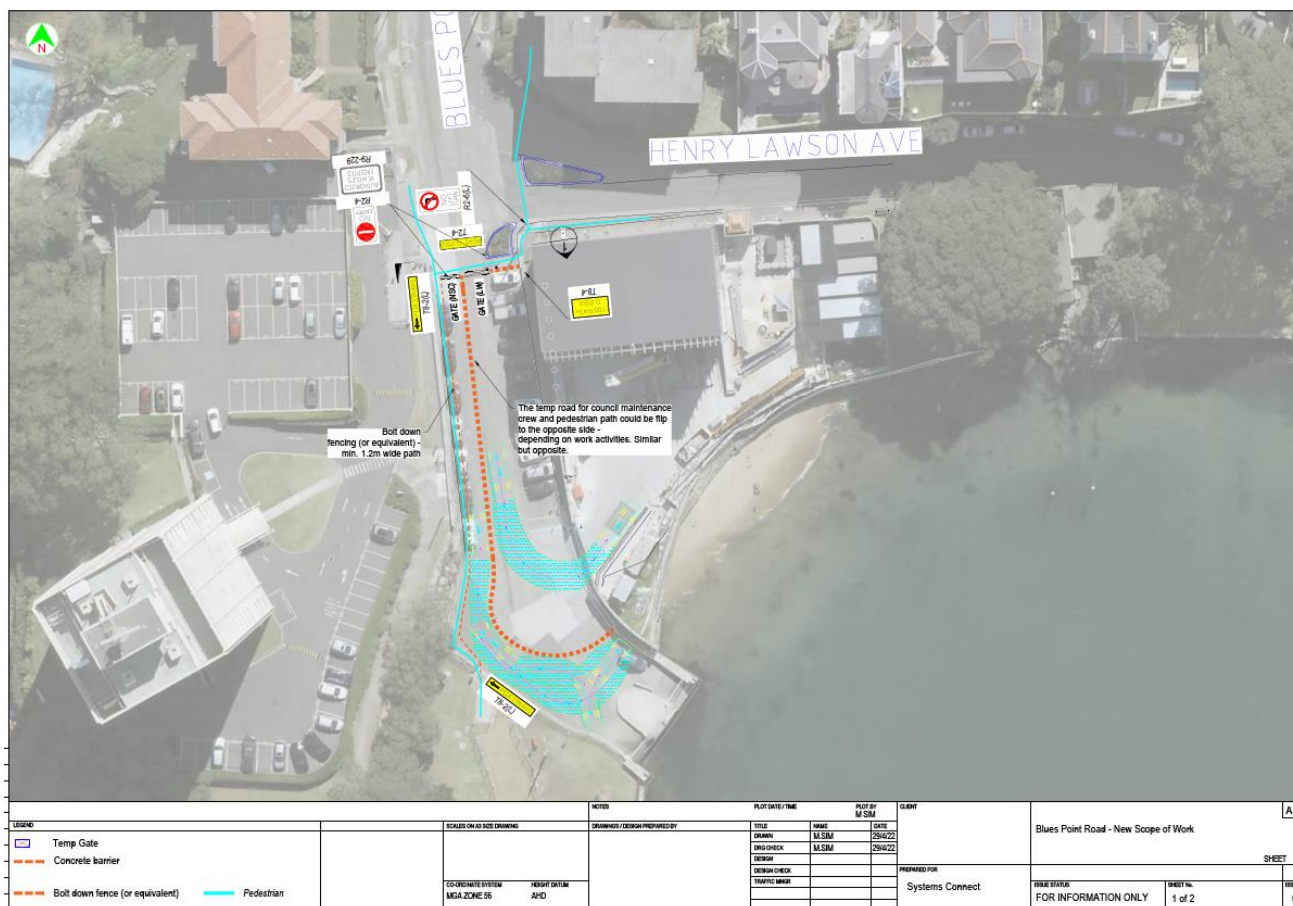


Figure 5 – TCP for the closed section of Blues Point Road

## 2.3. Construction traffic management

Construction traffic will generally consists of the following vehicles throughout the construction phase

- Rigid trucks – concrete trucks, earthwork material trucks, general deliveries
- Semi sized truck to float in roller, grader, excavators and larger sized plants and equipment
- Road sweeper
- Vacuum truck
- Mobile crane
- Light vehicles
- Skip bins truck

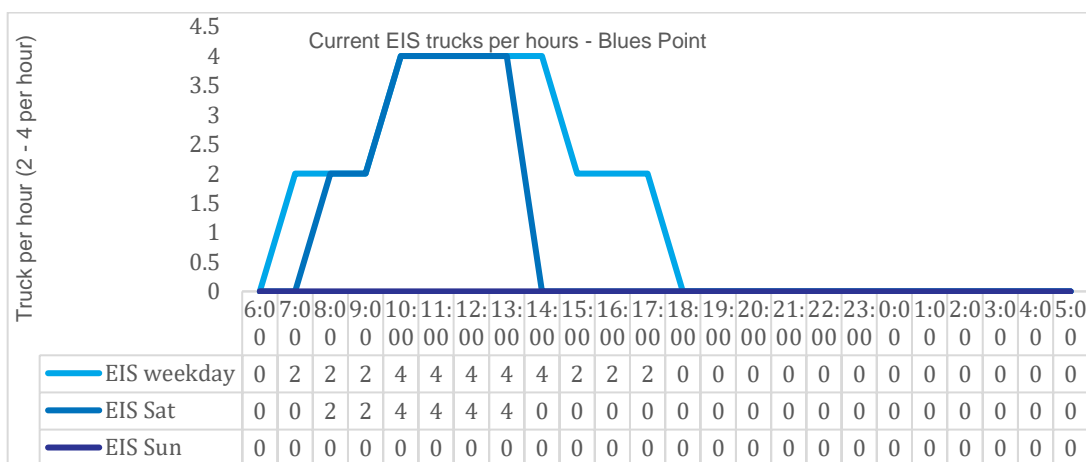


Figure 6 – Truck volume (arrival only) per the original EIS assessed volume.



Construction program is from mid/late May 2022 till 30 September 2022.

Construction traffic is current capped per the current EIS number which is 2 arrivals per hour during peak hours (7am to 9am; and 3pm to 6pm) and 4 arrivals per hours during non peak hours 10am to 3pm).

The project will seek the advise of relevant authorities with Council, Sydney Metro, TfNSW and Department of Planning if there is any need to review the EIS allowable construction traffic movement.

Construction traffic to the Blues Point site will adopt to the existing truck management protocol from the existing and previous work scope where all construction traffic and deliveries will need to prebook all deliveries (via Veyor trucks management application or similar). All drivers to also call or radio upon approach to site for any delays on the receiving site to avoid any unplanned queuing.

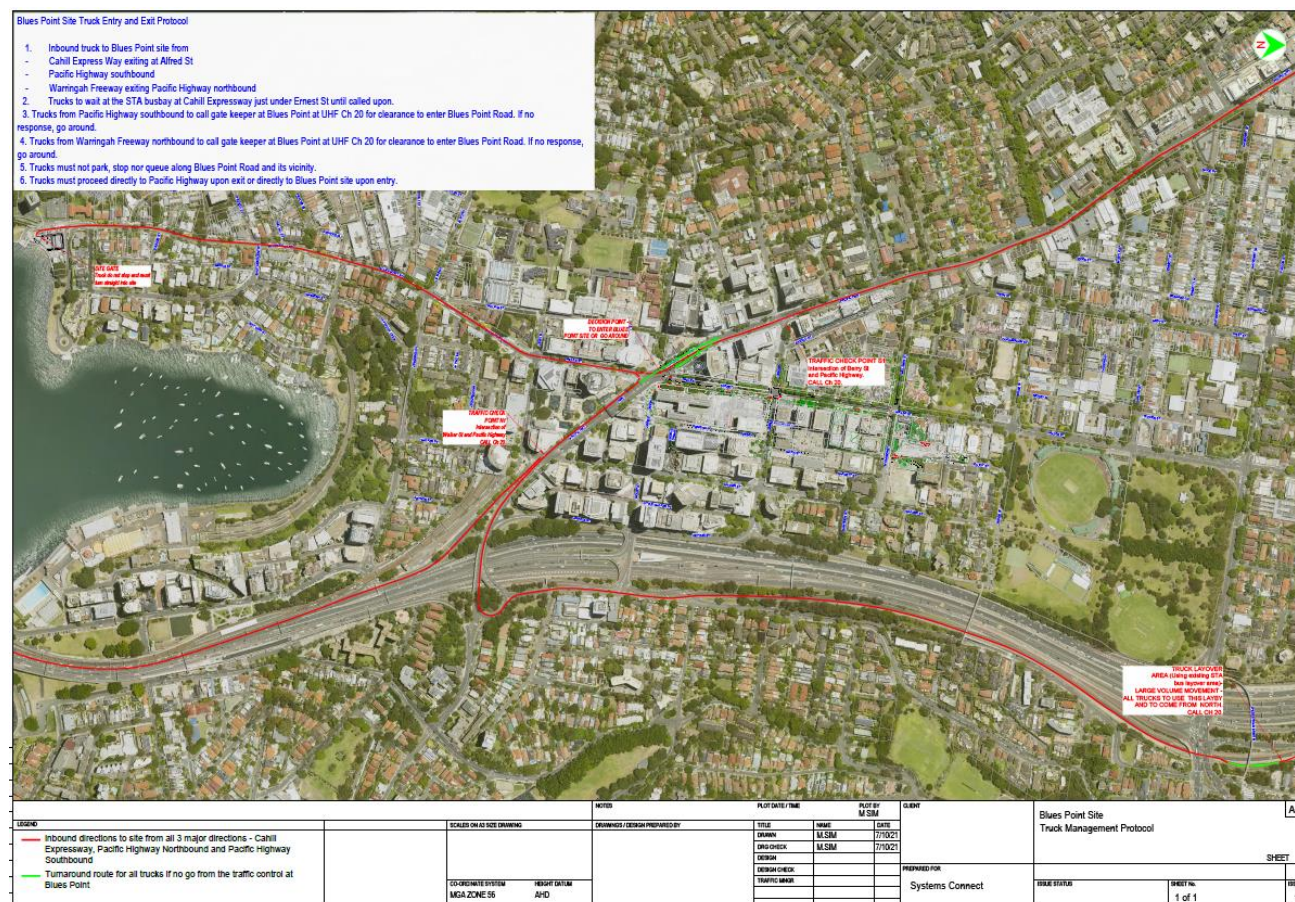


Figure 7 – Construction traffic entry and exit protocol

Scheduling of delivery of materials to Blues Point site acknowledges the community impact and the sensitivity of the area whilst maintaining the required delivery commitment. Mitigation measures for construction vehicles movement potential issues are summarised below:

Potential construction vehicle issues	Mitigation and/or Justification
Volume of trucks going to the site	<ul style="list-style-type: none"> <li>A Community Engagement Plan will be implemented and include information on vehicle movements and traffic management at the site.</li> <li>A coordinated control number of trucks onto Blues Point Road without over saturating Blues Point Road especially towards the end of Blues Point Road. Refer to the Appendix for access/egress protocol. Trucks are to drive straight to site and when leaving site, to drive straight to the depot or next destination without unnecessary stopping along Blues Point Road</li> </ul>
Construction Noise	<ul style="list-style-type: none"> <li>Trucks to limit compression braking when approaching the site. Trucks to be mechanically sound. Heavy vehicle will not travel along Blues Point Road, between the Pacific highway and Blues Point site, vehicle movement modelled in Construction Noise Vibration Impact Statement (CNVIS – refer to environmental approval document for more information).</li> </ul>
Construction traffic Parking and waiting	<ul style="list-style-type: none"> <li>Trucks are not to park nor wait along Blues Point Road or at any local roads in the area other than designated works zone/area that is proposed. All vehicles will adhere to all applicable road</li> </ul>

	rules. For Blues point Road this requirement applies both when approaching the Project site and and after leaving the project site (Refer to the Appendix for truck entry/exit protocol)
--	--

### 3. Impact during construction

#### 3.1 Parking loss and new parking layout at end of construction

All of the remaining parking within the area will need to be claimed to allow new construction scope of work. The new parking layout is shown below for information. Users of the parking spaces in the current Blues Point Road would need to find alternative area to park until completion of the work. New scope of work provides approximately 19 car spaces and 2 motorcycle parking spaces.



Figure 7 – New parking layout at the end state

#### 3.2 Park activities/bookings/visit

Planned activities may need to be refer to the council park management team for the latest information. Access to the park is still possible at all times.



## 4. Traffic and Transport Management

### 4.1 Business / Resident Access

There is no impact to business nor resident access. The section of Blues Point Road south of the Henry Lawson Avenue which does not any business or residential driveways.

### 4.2 Bus Operations

During the stage where construction for the footpath upgrade along Henry Lawson Avenue begins later in the program, there may be a need to temporarily relocate the bus stop.

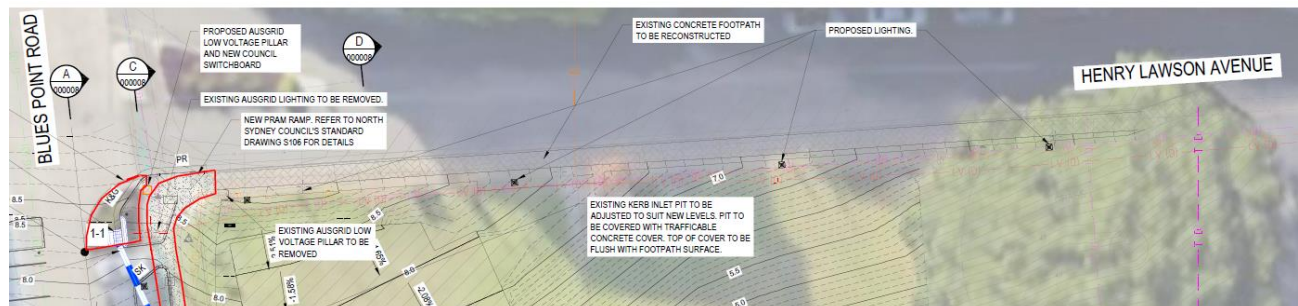


Figure 8 – Design drawing showing footpath upgrade along Henry Lawson Avenue. During this time, bus stop may need to be relocated to the west of the work area.

A sample bus stop relocation plan is show below. An exact date for the temporary relocation will be relayed for bus operator for review and approval. Typical bus stop relocation are shown on the diagram below.

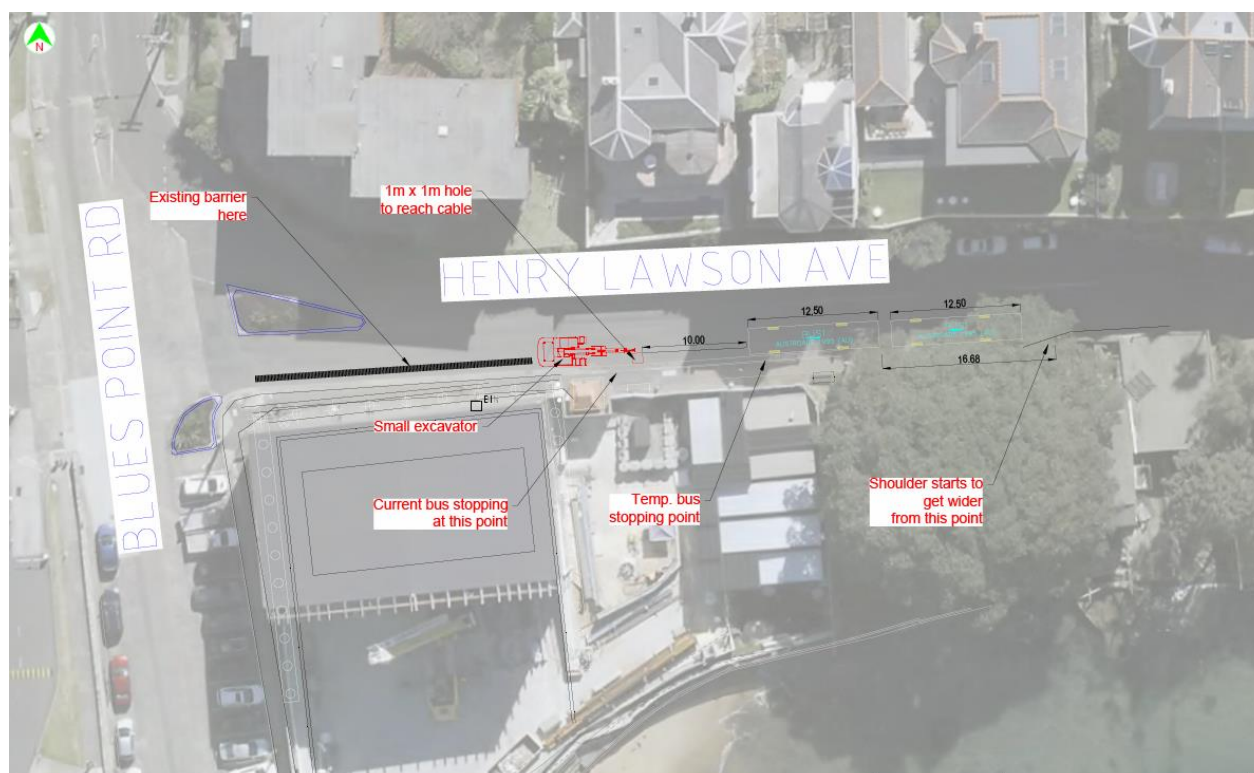


Figure 9 – Draft bus stop relocation plan (not final)



#### 4.4 Emergency Services

The closed section of Blues Point Road is not a through road. There shall be no impact to emergency services department.

### 5. Communications and Community Strategy

Systems Connect will meet the reasonable needs and desires of the community for information on any changed traffic conditions, cyclist and pedestrian impacts and property access arrangement. Systems Connect will ensure that the public and other key stakeholders are informed of planned traffic arrangements, including any activities which may result in delays. Refer to Community Engagement plan for more information.

### 6. Working Hours

The standard working hours are per the table below. Some activities are also permitted to occur outside of standard hours at the Blues point site. Details of standard working hours are set out below if applicable. Refer to Environmental approval for more information.

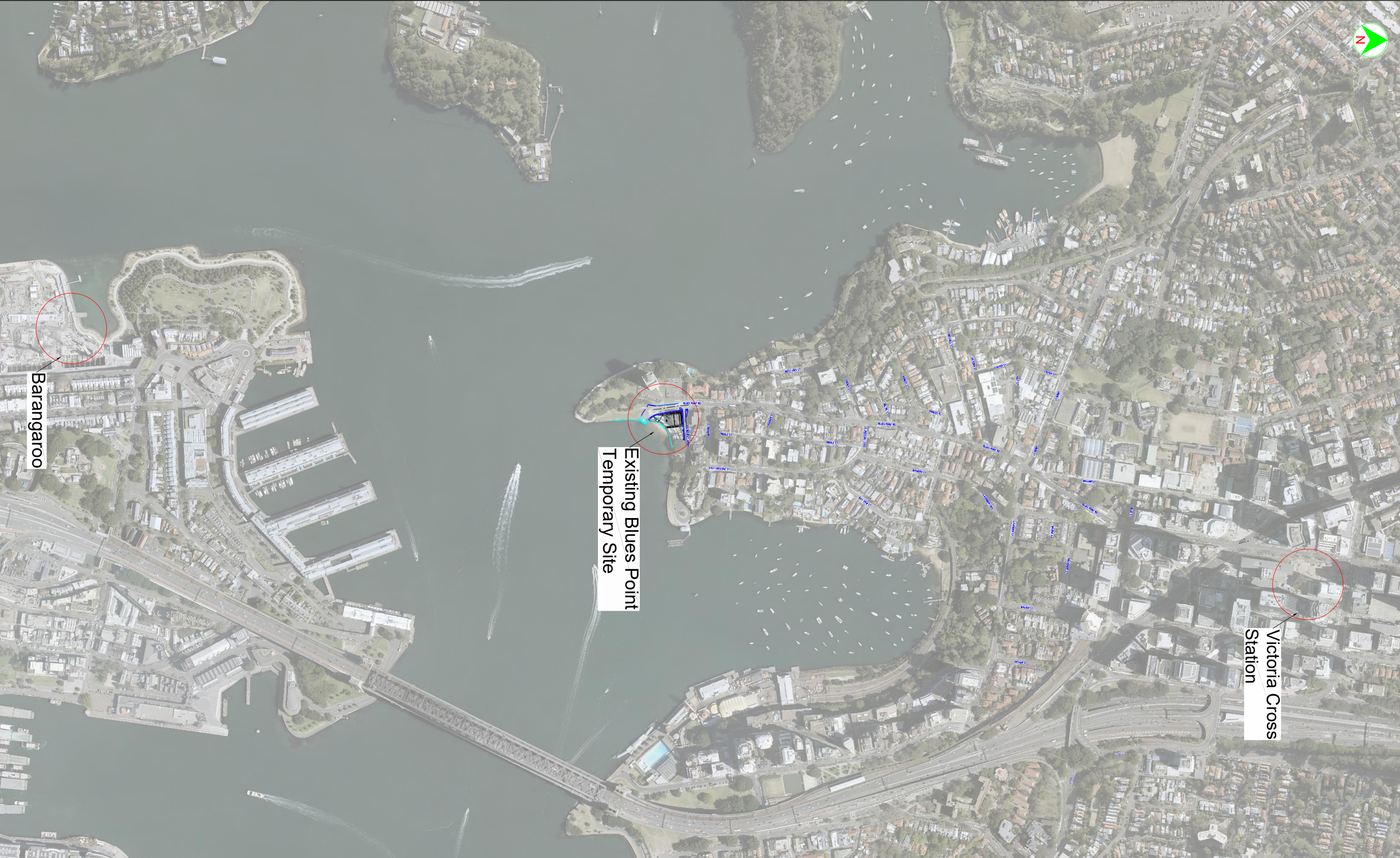
CoA/EPL Condition	Construction Hours/Limitations	
Standard construction hours CSSI 7400 CoA E36	Monday to Friday:	7am – 6pm
	Saturdays:	8am to 1pm
	Sundays & Public Holidays:	No work

## PART C – Appendices

### Appendix A. Locality plan



THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED  
150mm ON A3 SIZE ORIGINAL



			NOTES	PLOT DATE / TIME		PLOT BY M SIM	CLIENT	Blues Point Locality Map			A3
LEGEND		SCALES ON A3 SIZE DRAWING	DRAWINGS / DESIGN PREPARED BY	TITLE	NAME	DATE					
				DRAWN	M.SIM	5/11/20					
				DRG CHECK	M.SIM	5/11/20					
				DESIGN							
				DESIGN CHECK							
		CO-ORDINATE SYSTEM MGA ZONE 56		HEIGHT DATUM AHD		TRAFFIC MNGR					
							PREPARED FOR	SHEET			
							Systems Connect	ISSUE STATUS	SHEET No. 1 of 1	ISSUE 0	

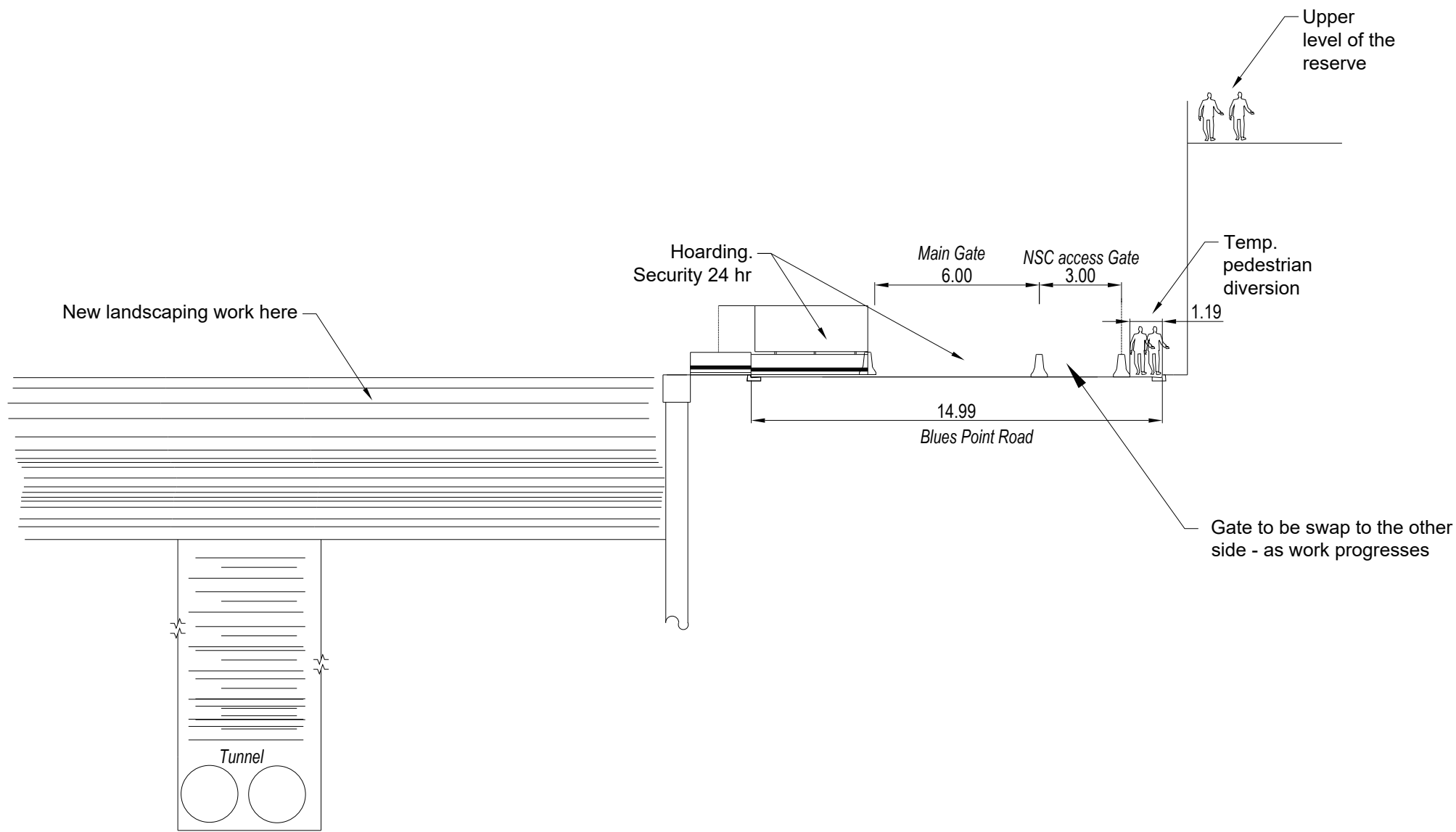


## Appendix B. TCPs













SECTION 1 Proposed closure of Blues Point Road (New Scope of Work)  
SCALE 1:

				NOTES	PLOT DATE / TIME			PLOT BY	CLIENT	Blues Point Road - New Scope of Work			A3
LEGEND			SCALES ON A3 SIZE DRAWING	DRAWINGS / DESIGN PREPARED BY	TITLE	NAME	DATE	M SIM					
 Temp Gate					DRAWN	M.SIM	29/4/22						
 Concrete barrier					DRG CHECK	M.SIM	29/4/22						
					DESIGN								
					DESIGN CHECK					PREPARED FOR	Systems Connect		
				TRAFFIC MNGR									
 Bolt down fence (or equivalent)				CO-ORDINATE SYSTEM	HEIGHT DATUM					ISSUE STATUS		SHEET No.	ISSUE
 Pedestrian				MGA ZONE 56	AHD					FOR INFORMATION ONLY		2 of 2	0



- Blues Point Site Truck Entry and Exit Protocol
1. Inbound truck to Blues Point site from
    - Cahill Express Way exiting at Alfred St
    - Pacific Highway southbound
    - Warringah Freeway exiting Pacific Highway northbound
  2. Trucks to wait at the STA busbay at Cahill Expressway just under Ernest St until called upon.
  3. Trucks from Pacific Highway southbound to call gate keeper at Blues Point at UHF Ch 20 for clearance to enter Blues Point Road. If no response, go around.
  4. Trucks from Warringah Freeway northbound to call gate keeper at Blues Point at UHF Ch 20 for clearance to enter Blues Point Road. If no response, go around.
  5. Trucks must not park, stop nor queue along Blues Point Road and its vicinity.
  6. Trucks must proceed directly to Pacific Highway upon exit or directly to Blues Point site upon entry.



				NOTES		PLOT DATE / TIME		PLOT BY M SIM		CLIENT		Blues Point Site Truck Management Protocol			A3		
LEGEND			SCALES ON A3 SIZE DRAWING		DRAWINGS / DESIGN PREPARED BY		TITLE	NAME	DATE						PREPARED FOR	SHEET	
<div><div></div><div>Inbound directions to site from all 3 major directions - Cahill Expressway, Pacific Highway Northbound and Pacific Highway Southbound</div></div> <div><div></div><div>Turnaround route for all trucks if no go from the traffic control at Blues Point</div></div>							DRAWN	M.SIM	7/10/21								
		DRG CHECK					M.SIM	7/10/21									
		DESIGN															
							DESIGN CHECK			Systems Connect	ISSUE STATUS		SHEET No. 1 of 1	ISSUE 1			
						TRAFFIC MNGR											
				CO-ORDINATE SYSTEM MGA ZONE 56		HEIGHT DATUM AHD											



## Appendix C. Correspondence (attached as required)

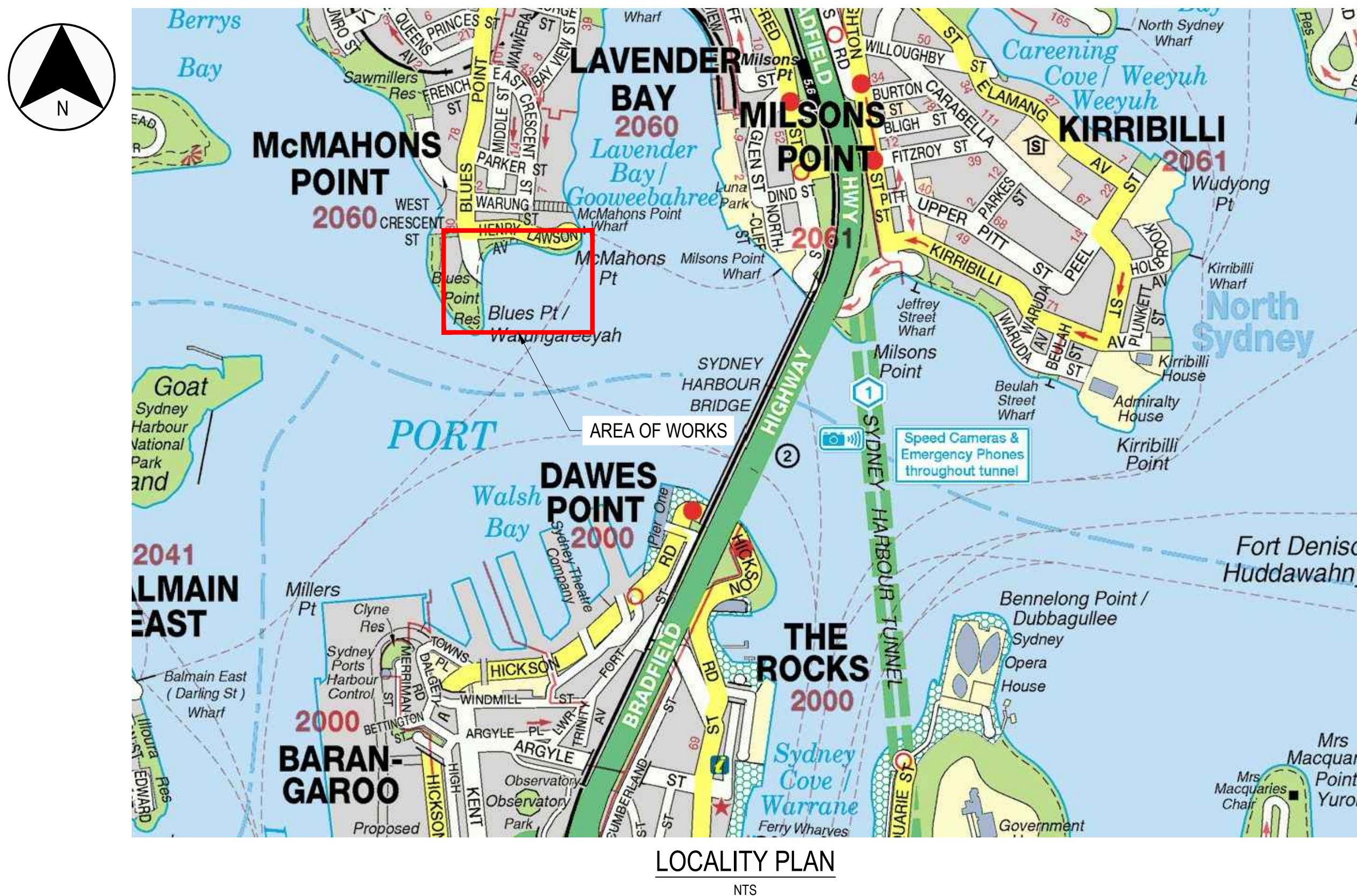
## Appendix D. Drawings (design etc)



# SYDNEY METRO CITY & SOUTHWEST

## BLUES POINT (HENRY LAWSON RESERVE)

### CIVIL



DRAWING LIST	
CIVIL	
DRAWING No.	DRAWING TITLE
SMCSWSBR-SMD-BPS-CE-000001	COVER SHEET, LOCALITY PLAN AND DRAWING LIST
SMCSWSBR-SMD-BPS-CE-000002	GENERAL NOTES
SMCSWSBR-SMD-BPS-CE-000003	GENERAL ARRANGEMENT PLAN
SMCSWSBR-SMD-BPS-CE-000004	SITE PLAN
SMCSWSBR-SMD-BPS-CE-000005	TYPICAL DETAILS
SMCSWSBR-SMD-BPS-CE-000006	TYPICAL DETAILS
SMCSWSBR-SMD-BPS-CE-000007	SIGNAGE AND LINEMARKING PLAN
SMCSWSBR-SMD-BPS-CE-000008	SITE CROSS SECTIONS
SMCSWSBR-SMD-BPS-CE-000009	DRAINAGE LONGITUDINAL SECTIONS AND PIT SCHEDULE
SMCSWSBR-SMD-BPS-CE-000010	CONTROL LINE PLAN
SMCSWSBR-SMD-BPS-CE-000011	LONGITUDINAL SECTIONS - SHEET 1 OF 2
SMCSWSBR-SMD-BPS-CE-000017	LONGITUDINAL SECTIONS - SHEET 2 OF 2
SMCSWSBR-SMD-BPS-CE-000018	CONTROL LINE LONGITUDINAL SECTIONS
SMCSWSBR-SMD-BPS-CE-000019	CONTROL LINE LONGITUDINAL SECTIONS
SMCSWSBR-SMD-BPS-CE-000020	PAVEMENT PLAN

100mm AT FULL SIZE Plot Date & Time: 16/12/21 - 21:38

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
C	DETAILED DESIGN	WL	AR	MP	15.12.21
B	75% DETAILED DESIGN	JZ	AR	MP	19.11.21
A	40% DETAILED DESIGN	JZ	AR	MP	01.10.21

SCALE: AS SHOWN					
A1	Original	Co-ordinate System: GDA2020/MGAZONE 56	Height Datum: AHD	This sheet may be prepared using colour and may be incomplete if copied	

NOTE: Do not scale from this drawing.

CLIENT:





OFFICIAL

The information shown on this drawing is for the purposes of the Sydney Metro Project only. No warranty is given or implied as to its suitability for any other purpose. The Service Providers accept no liability arising from the use of this drawing and the information shown thereon for any purpose other than the Sydney Metro Project.			
DRAWN	LUKE HERCULES	15.12.2021	
DESIGNED	WENG LYE	15.12.2021	
DRG CHECK	DAVID SMITH	15.12.2021	
DESIGN CHECK	AMINUR RAHMAN	15.12.2021	
APPROVED	MATT PRESSWELL	15.12.2021	

SYDNEY METRO CITY & SOUTHWEST

BLUES POINT (HENRY LAWSON RESERVE)

CIVIL

ROAD PACKAGE

COVER SHEET, LOCALITY PLAN AND DRAWING LIST

FILE No: SMCSWSBR-SMD-BPS-CE-DRG-000001

STATUS: DETAILED DESIGN

DRG No: SMCSWSBR-SMD-BPS-CE-DRG-000001

SHEET: 1 OF 15

©

EDMS No:

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VER 0

File Path: N:\AU\Sydney\Projects\2112552375\CADD\Drawings\SMCSWSBR-SMD-BPS-CE-DRG-000001.dwg

Title Block Revision: v6.1



- G1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS, COUNCIL STANDARDS, SPECIFICATIONS AND GUIDELINES INCLUDING NORTH SYDNEY COUNCIL'S INFRASTRUCTURE SPECIFICATION GUIDE AND PUBLIC DOMAIN STYLE MANUAL AND DESIGN CODES.
- G2. DIMENSIONS ARE INDICATIVE ONLY. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE CONTRACTOR. DIMENSIONS SHOWN ARE IN METERS UNLESS NOTED OTHERWISE.
- G3. THE CURRENT DESIGN LAYOUT AND LEVELS ARE BASED ON THE PROVIDED SURVEY INFORMATION (B. DEGOTARD SMITH AND PARTNERS DATED 19/10/2021).
- G4. COORDINATES ARE IN MAP GRID OF AUSTRALIA (MGA2020).
- G5. ALL EXISTING SERVICES WITHIN THE PROJECT BOUNDARY ARE SUBJECT TO ONSITE VALIDATION AND VERIFICATION PRIOR TO CONSTRUCTION. EXISTING SERVICES INFORMATION ARE BASED ON THE WORKS AS EXECUTED DRAWINGS FOR THE BLUES POINT SHAFT AND PRECINCT PROJECT DATED 23.10.2020
- G6. NO WORK TO BE CARRIED OUT ON ADJOINING PRIVATE PROPERTIES WITHOUT WRITTEN PERMISSION FROM COUNCIL.
- G7. ANY SERVICE RELOCATIONS, ADJUSTMENTS OR UPGRADES IF REQUIRED, ARE TO BE DONE PRIOR TO ANY ROAD WORKS.
- G8. ALL EXISTING ASSETS SUCH AS PAVEMENTS, LANDSCAPED AREAS, RETAINING WALLS, SIGNAGE, DRAINAGE ETC. THAT ARE DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REINSTATED TO A CONDITION NOT LESS THAN THAT PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL MAKE SMOOTH CONNECTION WITH EXISTING DISTURBANCE.
- G9. THE CONTRACTOR TO ENSURE THAT MINIMAL DISTURBANCE IS MADE TO AREAS OUTSIDE OF THE CONSTRUCTION WORKS.
- G10. DURING EXCAVATIONS, ALL STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART OF THE STRUCTURE TO BE OVERSTRESSED. THE CONTRACTOR SHALL UNDERTAKE ALL NECESSARY MEASURES TO SUPPORT THE EXISTING STRUCTURES, OTHER PIPES AND SERVICES WHEN CROSSING UNDER OR OVER THESE WORKS, OR WHEN WORKS ARE LOCATED IN THE VICINITY IN ORDER TO ENSURE NO DAMAGE OCCURS TO EXISTING WORKS OR SERVICES.
- G11. THE CONTRACTOR SHALL OBTAIN APPROVALS FROM ALL AUTHORITIES PRIOR TO COMMENCEMENT.
- G12. CONTRACTORS SHALL CONDUCT SERVICES SEARCH AND POTHOLING TO VERIFY LOCATIONS OF ALL SERVICES PRIOR TO CONSTRUCTION.
- G13. CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROL PRIOR TO CONSTRUCTION. TO BE APPROVED BY COUNCIL AND SYDNEY METRO.

E1.	ALL WORKS ARE TO CARRIED OUT IN ACCORDANCE WITH: 1.1 NORTH SYDNEY COUNCIL'S INFRASTRUCTURE SPECIFICATION GUIDE 1.2 RMS SPECIFICATION R44 - EARTHWORKS 1.3 RMS SPECIFICATION 3071 - SELECTED MATERIALS FOR FORMATION LAYERS
E2.	CBR TESTING IS REQUIRED TO CONFIRM ASSUMPTION THAT IN-SITU SPECIFIC CBR OF 3% IS ACCURATE PRIOR TO CONSTRUCTION
F1.	ALLOWABLE BEARING CAPACITY TO BE CONFIRMED ON SITE BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER AS NO LESSER THAN 100kPa.
F2.	MINIMUM COMPACTION OF FILL SHALL BE 98% DRY DENSITY RATIO.

S1. STORMWATER DRAINAGE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH NORTH SYDNEY COUNCIL'S INFRASTRUCTURE SPECIFICATION GUIDE.

S2. GRATES AND COVER SHALL CONFORM TO AS3996

S3. DURING CONSTRUCTION OF STORMWATER PIPES, THE CONTRACTOR SHALL PROVIDE ADEQUATE SAFETY MEASURES TO PREVENT PERSONNEL FALLING INTO PIPES AND TRENCHES.

S4. PROVIDE SHORING OR BRACING TO ALL TRENCHES AND EXCAVATIONS, OR WHEN GROUND IS UNSTABLE AND NOT SELF-SUPPORTING IN ACCORDANCE WITH SAFE WORK AUSTRALIA, AUSTRALIAN STANDARDS AND RMS 209 GUIDELINES

S5. CONCRETE PITS, PIPES AND TRENCHING TO BE IN ACCORDANCE WITH NORTH SYDNEY COUNCIL'S STANDARD DRAWING - S200 SERIES

S6. STORMWATER PIPES SHALL BE PRECAST REINFORCED CONCRETE (RCP) CLASS 3 MINIMUM TO AS4508 APPROVED SPIGOT AND SOCKET (LONG JANT) WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE

- L1. ALL NEW SIGNAGE AND SIGNPOSTING TO BE INSTALLED IN ACCORDANCE WITH ROADS AND MARITIME SERVICES (RMS) STANDARD SPECIFICATIONS AND DRAWINGS
- L2. ALL NEW LINE MARKING TO BE IN ACCORDANCE WITH AS2890
- L3. PAINT IS WATERBASED - COLOUR 'WHITE'. LINE SHALL BE 100mm WIDE UNBROKEN LINE FOR PARKING. LINE MARKING OTHER THAN PARKING BAYS: PAINT IS WATER BASED WITH REFLECTIVE GLASS BEADS - COLOUR WHITE
- L4. LINE MARKING FOR DISABLED PARKING AREAS:
  - PAINT IS WATER BASED WITH REFLECTIVE BEADS
  - COLOUR IS 'BLUE'. 'YELLOW' AND 'WHITE' IS PER AS 2890.6
  - LINE MARKING AROUND THE DESIGNATED DISA SPACE IS UNBROKEN 'YELLOW' 100mm WIDE.
  - THE SYMBOL OF ACCESS (WHEELCHAIR) IS WHITE (800mm HIGH) ON A BLUE SQUARE (1200mm X 1200mm). SITTING 500mm FROM THE BACK IN THE SPACE AND CENTERED.
  - ALL SPACES DELINEATED IN ACCORDANCE WITH AS2890.5
- L5. ALL SIGNS ARE TO BE ANTI GRAFFITI COATED
- L6. ALL EXISTING SIGNS OUTSIDE OF THE PROPOSED CONSTRUCTION AREA SHALL BE MAINTAINED. RELEVANT SIGNS WITHIN THE CONSTRUCTION AREA TO BE REFUSED.
- L7. ALL PARKING SIGNS TO BE INSTALLED FACING ONCOMING TRAFFIC AT AN ANGLE OF 30° TO THE KERB.

C1. ALL CIVIL CONCRETE WORKS SHALL COMPLY WITH AS3600

C2. CONCRETE EXPOSURE CLASSIFICATION SHALL BE B2 MINIMUM FOR ALL EXPOSED CONCRETE AND A2 FOR ALL FOUNDATIONS

C3. MINIMUM COMPRESSIVE STRENGTH ARE AS FOLLOWS:  
CONCRETE (AT 28 DAYS) - SEE TABLE BELOW  
NON-SHRINK GROUT = 40MPa

C4. CONCRETE, MORTAR AND GROUT SHALL CONFORM TO AS 1478

C5. CONCRETE PROPERTIES:

CONCRETE PROPERTIES				
ELEMENTS	AS3600 GRADE	SLUMP (mm)	MAX. AGG. SIZE (mm)	CEMENT TYPE
CONCRETE SEATING AND WALLS	40 MPa	80	20	GP
FOUNDATION	32 MPa	80	20	GP

- C6. NO HOLES, CHASES OR EMBEDDED PIPES ARE TO BE PLACED WITHIN THE CONCRETE MEMBERS  
UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE PRINCIPAL.  
C7. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY, IT IS NOT NECESSARILY SHOWN IN TRUE  
PROJECTION.  
C8. SPLICES OF REINFORCEMENT SHALL ONLY BE MADE IN POSITIONS SHOWN.  
C9. WRITING OF APPROVAL OF THE PRINCIPAL SHALL BE OBTAINED FOR ANY OTHER SPLICES.  
C10. DO NOT WELD REINFORCEMENT UNLESS SHOWN ON THE DRAWINGS.  
C11. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF ANY APPLIED FINISHES.  
C12. GROUTING SHALL NOT SHRINK CEMENTITIOUS GROUT PREPARED AND APPLIED IN ACCORDANCE  
WITH THE MANUFACTURER'S INSTRUCTION. GROUTING SHALL FILL THE ENTIRE SPACE BETWEEN  
PRECAST SEATING AND CONCRETE SUPPORT/FOOTING.

R1.	REINFORCEMENT SYMBOLS
	N HOT-ROLLED DEFORMED BAR, GRADE 500 TO A5/NZS 4671
	PL PLAIN ROUND, GRADE 250 TO A5/NZS 4671
	SL HARD DRAWN REINFORCEMENT FABRIC TO A5/NZS 4671
R2.	CONCRETE CURING AND STRIPPING SHALL BE IN ACCORDANCE WITH RMS SPECIFICATION R53.
R3.	ALL CONCRETE OTHER THAN PILES SHALL BE COMPACTED BY IMMERSION TYPE VIBRATORS.
R4.	HOT BENDING OF REINFORCEMENT IS NOT PERMITTED.
R5.	REINFORCEMENT SHALL BE GRADE D500N U.N.O.
R6.	REINFORCEMENT TO BE CLEAN, FREE OF LOOSE MILL, SCALE, RUST, OIL, GREASE, MUD OR OTHER MATERIAL THAT MIGHT REDUCE BOND BETWEEN REINFORCEMENT AND CONCRETE.
R7.	CAP STARTER BARS AND OTHER REINFORCEMENT TO REDUCE RISK OF IMPELEMENT AND LACERATIONS.
R8.	REINFORCEMENT TO BE SUPPLIED TO SITE PRE-BENT TO REQUIRED SHAPES. REINFORCEMENT CAGES TO BE PRE-FABRICATED OFF-SITE AS FAR AS PRACTICABLE.
R9.	SECURE REINFORCEMENT IN POSITION AGAINST DISPLACEMENT AND MAINTAIN SPECIFIED CLEAR CONCRETE COVER TO REINFORCEMENT (INCLUDING FITMENTS) BY APPROVED CHAIRS, SPACERS, LIGATURES OR TIES AT 800 mm MAXIMUM CENTRES EACH WAY U.N.O. PROVIDE ADEQUATE SUPPORT TO PREVENT DISPLACEMENT OF REINFORCEMENT BY WORKMEN OR EQUIPMENT DURING CONCRETE PLACEMENT.
R10.	SECURE THE REINFORCEMENT WITH WIRE TIES. TURN ENDS OF THE WIRES INTO CONCRETE, CLEAR OF COVER ZONE.
R11.	COVER MUST NOT BE LESS THAN SPECIFIED. PROVIDED MINIMUM CLEAR COVER TO REINFORCEMENT AS SHOWN BELOW, EXCEPT WHERE SPECIFIED OTHERWISE:

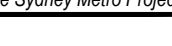
LOCATION	COVER (mm)
FOOTINGS, UNDERSIDE SLABS ON GROUND	50
TOP OF FOOTINGS	40
SEATING AND WALLS	45

- R12. LAPPED SPLICE LENGTHS FOR HORIZONTAL BARS TO COMPLY WITH THE FOLLOWING U.N.O.

COVER	fc	N12	N16	N20	N24	N28	N32
≥25	≥20	770	1150	1570	-	-	-
≥30	≥25	630	980	1350	1740	-	-
≥40	≥32	510	770	1100	1440	1810	2220
≥50	≥40	460	630	890	1200	1530	1890

The information shown on this drawing is for the purposes of the Sydney Metro Project only. No warranty is given or implied as to its suitability for any other purpose. The Service Providers accept no liability arising from the use of this drawing and the information shown thereon for any purpose other than the Sydney Metro Project.

DRAWN	LUKE HERCULES	15.12.2021
DESIGNED	WEND LYE	15.12.2021
DRG CHECK	DAVID SMITH	15.12.2021
DESIGN CHECK	AMINUR RAHMAN	15.12.2021
APPROVED	MATT PRESSWELL	15.12.2021



<b>SYDNEY METRO CITY &amp; SOUTHWEST</b>			
BLUES POINT (HENRY LAWSON RESERVE)			
CIVIL			
ROAD PACKAGE			
GENERAL NOTES			
FILE No: SMCSWSBR-SMD-BPS-CE-DRG-000002		SHEET: 2 OF 15	©
STATUS: DETAILED DESIGN		EDMS No:	
DRG No: SMCSWSBR-SMD-BPS-CE-DRG-000002		REV C	VER 0





GENERAL ARRANGEMENT PLAN  
SCALE 1:250

LEGEND:

EXISTING

- EXISTING MAJOR CONTOURS (1.0m)
- EXISTING FENCE
- EXISTING STORMWATER PIPE
- EXISTING DRAINAGE PIPE
- EXISTING TELSTRA CABLE
- EXISTING SEWER PIPE
- EXISTING WATER PIPE
- EXISTING GAS MAIN
- EXISTING ELECTRICITY CABLE
- EXISTING NBN LINE
- EXISTING DRAINAGE LINE (DBYD)
- EXISTING STORMWATER PIT

DESIGN

- DESIGN MAJOR CONTOURS (0.5m)
- DESIGN MINOR CONTOURS (0.1m)
- NEW WHEEL STOP
- NEW SIGN
- NEW WHITE LINEMARKING
- NEW YELLOW LINEMARKING
- NEW TREE
- NEW STORMWATER PIT
- NEW TURF
- NEW RAIN GARDENS / WSUD
- NEW RETAINING WALLS

ELECTRICAL

- INDICATIVE LOCATION OF PROPOSED NORTH SYDNEY APPROVED PEDESTRIAN LIGHTING POLES (SUBJECT TO LIGHTING CATEGORY AS/NZS 1158.3.1)
- NEW NORTH SYDNEY COUNCIL MAIN SWITCHBOARD
- AUSGRID LOW VOLTAGE SERVICE PILLAR

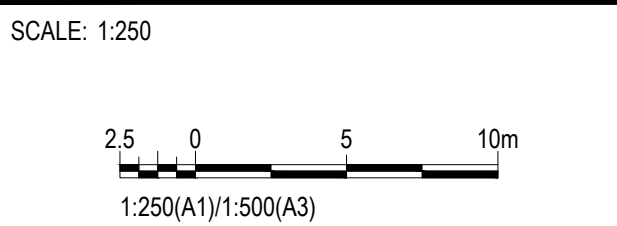
NOTES:

- FOR GENERAL NOTES, REFER TO DRG SMCSWEDS-SMD-BPS-CE-DRG-000002

OFFICIAL

PRELIMINARY

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
C	DETAILED DESIGN	WL	AR	MP	15.12.21
B	75% DETAILED DESIGN	JZ	AR	MP	19.11.21
A	40% DETAILED DESIGN	JZ	AR	MP	01.10.21



NOTE: Do not scale from this drawing.	
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NSW GOVERNMENT

sydney METRO

Engineering Design Solutions

DRAWN	LUKE HERCULES	15.12.2021
DESIGNED	WENG LYE	15.12.2021
DRG CHECK	DAVID SMITH	15.12.2021
DESIGN CHECK	AMINUR RAHMAN	15.12.2021
APPROVED	MATT PRESSWELL	15.12.2021

SYDNEY METRO CITY & SOUTHWEST			
BLUES POINT (HENRY LAWSON RESERVE)			
CIVIL			
ROAD PACKAGE			
GENERAL ARRANGEMENT PLAN			
FILE No: SMCSWSBR-SMD-BPS-CE-DRG-000003	SHEET: 3	OF 15	©
STATUS: DETAILED DESIGN		EDMS No:	
DRG No: SMCSWSBR-SMD-BPS-CE-DRG-000003	REV C	VER 0	



100mm AT FULL SIZE Plot Date & Time: 16/12/21 - 21:24



SITE PLAN  
SCALE 1:200

LEGEND:

EXISTING

- EXISTING MAJOR CONTOURS (1.0m)
- EXISTING FENCE
- EXISTING STORMWATER PIPE
- EXISTING DRAINAGE PIPE
- EXISTING TELSTRA CABLE
- EXISTING SEWER PIPE
- EXISTING WATER PIPE
- EXISTING GAS MAIN
- EXISTING ELECTRICITY CABLE
- EXISTING NBN LINE
- EXISTING DRAINAGE LINE (DBYD)
- EXISTING STORMWATER PIT

DESIGN

- DESIGN MAJOR CONTOURS (0.5m)
- DESIGN MINOR CONTOURS (0.1m)
- NEW WHEEL STOP
- NEW SIGN
- NEW WHITE LINEMARKING
- NEW YELLOW LINEMARKING
- TO BE DEMOLISHED
- NEW TREE
- NEW STORMWATER PIPE
- NEW TRENCH DRAIN
- NEW STORMWATER PIT
- BOLLARD
- NEW SHARED ZONE PAVEMENT TYPE S1 (REFER TO LANDSCAPE DRAWINGS)
- NEW FOOTPATH
- NEW TURF
- NEW RAIN GARDENS / WSUD
- NEW RETAINING WALLS
- HK HIGH KERB
- SK SLOTTED KERB
- PR PRAM RAMP
- K&G KERB & GUTTER
- 15.00% SURFACE SLOPE

ELECTRICAL

- NEW LIGHTING
- NEW NORTH SYDNEY COUNCIL MAIN SWITCHBOARD
- AUSGRID LOW VOLTAGE SERVICE PILLAR

UTILITIES

- ELEC. LOW VOLTAGE EXISTING
- ELEC. HIGH VOLTAGE EXISTING
- ELEC. HIGH VOLTAGE ABOVE GROUND
- ELEC. LOW VOLTAGE ABOVE GROUND
- SYDNEY ELECTRICITY
- COMMUNICATIONS ABOVE GROUND
- COMMUNICATIONS EXISTING
- OPTICAL FIBRE EXISTING
- WATER EXISTING
- SEWER EXISTING
- GAS EXISTING
- TRAFFIC CONTROL SIGNALS
- ELECTRICITY
- COMMUNICATIONS
- OPTIC FIBRE
- WATER
- SEWER
- GAS

NOTES:

- FOR GENERAL NOTES, REFER TO DRG SMCSWSBR-SMD-BPS-CE-DRG-000002

PRELIMINARY

REV.	AMENDMENT DESCRIPTION	Design by	Verified by	Approved by	Date
C	DETAILED DESIGN	WL	AR	MP	15.12.21
B	75% DETAILED DESIGN	JZ	AR	MP	19.11.21
A	40% DETAILED DESIGN	JZ	AR	MP	01.10.21

SCALE: 1:200



A1 Original Co-ordinate System: GDA2020/MGAZONE 56 Height Datum: AHD This sheet may be prepared using colour and may be incomplete if copied

NOTE: Do not scale from this drawing.

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DRG CHECK	DAVID SMITH	15.12.2021
DESIGN CHECK	AMINUR RAHMAN	15.12.2021
APPROVED	MATT PRESSWELL	15.12.2021

SYDNEY METRO CITY & SOUTHWEST  
BLUES POINT (HENRY LAWSON RESERVE)

CIVIL  
ROAD PACKAGE  
SITE PLAN

FILE No: SMCSWSBR-SMD-BPS-CE-DRG-000004  
STATUS: DETAILED DESIGN

DRG No: SMCSWSBR-SMD-BPS-CE-DRG-000004

SHEET: 4	OF 15	©
REV C	VER 0	





LEGEND:

EXISTING

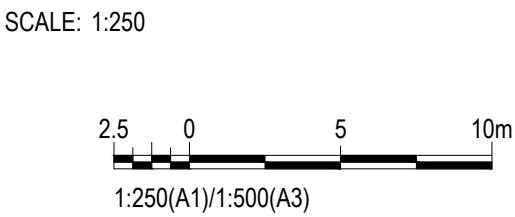
- EXISTING MAJOR CONTOURS (1.0m)
- EXISTING FENCE
- EXISTING STORMWATER PIPE
- EXISTING DRAINAGE PIPE
- EXISTING TELSTRA CABLE
- EXISTING SEWER PIPE
- EXISTING WATER PIPE
- EXISTING GAS MAIN
- EXISTING ELECTRICITY CABLE
- EXISTING NBN LINE
- EXISTING DRAINAGE LINE (DBYD)
- EXISTING STORMWATER PIT

DESIGN

- NEW WHEEL STOP
- NEW SIGN
- NEW WHITE LINEMARKING
- NEW YELLOW LINEMARKING

SIGNAGE AND LINEMARKING PLAN

SCALE 1:250



OFFICIAL

PRELIMINARY

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C	DETAILED DESIGN	WL	AR	MP	15.12.21
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CLIENT:

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Engineering Design Solutions

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SYDNEY METRO CITY & SOUTHWEST			
BLUES POINT (HENRY LAWSON RESERVE)			
CIVIL			
ROAD PACKAGE			
SIGNAGE AND LINE MARKING PLAN			
FILE No: SMCSWSBR-SMD-BPS-CE-DRG-000007	SHEET: 7	OF 15	©
STATUS: DETAILED DESIGN		EDMS No:	
DRG No: SMCSWSBR-SMD-BPS-CE-DRG-000007	REV C	VER 0	