



# WATERLOO METRO QUARTER OVER STATION DEVELOPMENT

Environmental Impact Statement Appendix OO – Contaminated Sites Strategy Report Volume 1

SSD-10437 Southern Precinct

Alternative Reference Appendix GG SSD-10438 Basement Car Park

Detailed State Significant Development Development Application

Prepared for Waterloo Developer Pty Ltd

30 September 2020





Reference	Description	
Applicable SSD Applications	SSD-10437 Southern Precinct SSD-10438 Basement Carpark	
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## **Table of Contents**

1.	Glossary and abbreviations5			
2.	Executive summary			
3.	Introduction9			
4.	The site1			11
5.	Back	Background		
	5.1 About Sydney Metro			
		5.1.1	Sydney Metro North West	
		5.1.2	Sydney Metro City & Southwest	15
		5.1.3	Sydney Metro West	15
		5.1.4	Sydney Metro Greater West	15
	5.2	Sydne	ey Metro CSSI Approval (SSI 7400)	16
	5.3	Conce	ept Approval (SSD 9393)	17
6.	Prop	osed d	evelopment	18
	6.1	Water	rloo Metro Quarter Development	18
		6.1.1	Southern Precinct (Subject DA)	18
		6.1.2	Basement Car Park (Subject DA)	18
		6.1.3	Central Precinct	
		6.1.4	Northern Precinct	19
7.	Conta	aminat	ed Sites Strategy	20
	7.1 Introduction			20
	7.2	Site S	Sub-Areas	20
	7.3	Previo	ous Reports	21
		7.3.1	Station Box	21
		7.3.2	OSD	21
	7.4	Propo	osed Development	22
8.	Strate	egy to	Address Requirements of CSSI 7400	23
	8.1	Conta	aminated Sites Conditions	23
	8.2	Scope	e of Works to Address Site Contamination	24
		8.2.2	OSD	25
9.	Strate	egy to	Address Requirements of SEPP 55	26
10.	Conc	lusion		27
11.	. References			
12.	2. Limitations			
App	endix	Α		30
			lume 2)	
Apr	endix	C (Vo	lume 3)	32





## **List of Figures**

Figure 1 - Aerial image of the site	13
Figure 2 - Waterloo Metro Quarter site, with sub-precincts identified	14
Figure 3 - Waterloo Metro Quarter site, with sub-precincts identified	14
Figure 4 - Sydney Metro alignment map	16
Figure 5 - CSSI Approval scope of works	17
Figure 6 – WMQ Boundary (red line) and Sub-Areas	21
List of Tables	
Table 1 - SEARs requirements	10
Table 2 – CSSI 7400 Condition and Response	24





# 1. Glossary and abbreviations

Reference	Description	
ACHAR	Aboriginal Cultural Heritage Assessment Report	
ADG	Apartment Design Guide	
AHD	Australian height datum	
AQIA	Air Quality Impact Assessment	
BC Act	Biodiversity Conservation Act 2016	
BCA	Building Code of Australia	
BC Reg	Biodiversity Conservation Regulation 2017	
BDAR	Biodiversity Development Assessment Report	
CEEC	critically endangered ecological community	
CIV	capital investment value	
CMP	Construction Management Plan	
Concept DA	A concept DA is a staged application often referred to as a 'Stage 1' DA. The subject application constitutes a detailed subsequent stage application to an approved concept DA (SSD 9393) lodged under section 4.22 of the EP&A Act.	
CQA	Construction Quality Assurance Plan	
Council	City of Sydney Council	
CPTED	Crime Prevention Through Environmental Design	
CSSI approval	critical State significant infrastructure approval	
CTMP	Construction Traffic Management Plan	
DA	development application	
DP	Douglas Partners Pty Ltd	
DPIE	NSW Department of Planning, Industry and Environment	
DRP	Design Review Panel	
EP&A Act	Environmental Planning and Assessment Act 1979	
EPA	NSW Environment Protection Authority	





Reference	Description	
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999	
ESD	ecologically sustainable design	
GANSW	NSW Government Architect's Office	
GFA	gross floor area	
HIA	Heritage Impact Assessment	
IAP	Interchange Access Plan	
LGA	Local Government Area	
NCC	National Construction Code	
OSD	over station development	
PIR	Preferred Infrastructure Report	
POM	Plan of Management	
PSI	Preliminary Site Investigation	
RAP	Remediation Action Plan	
RMS	Roads and Maritime Services	
SAR	Site Audit Report(s)	
SAS	Site Audit Statement(s)	
SEARs	Secretary's Environmental Assessment Requirements	
SEPP	State Environmental Planning Policy	
SEPP 55	State Environmental Planning Policy No 55—Remediation of Land	
SEPP 65	State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development	
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2009	
SREP Sydney Harbour	State Regional Environmental Plan (Sydney Harbour Catchment) 2005	
SSD	State significant development	
SSD DA	State significant development application	
SLEP	Sydney Local Environmental Plan 2012	





Reference	Description
Transport for NSW	Transport for New South Wales
TIA	Traffic Impact Assessment
The proposal	The proposed development which is the subject of the detailed SSD DA
The site	The site which is the subject of the detailed SSD DA
VIA	Visual Impact Assessment
WMQ	Waterloo Metro Quarter
WMP	Waste Management Plan
WSUD	water sensitive urban design





## 2. Executive summary

This report has been prepared by Douglas Partners Pty Ltd to accompany a detailed State significant development (SSD) development application (DA) for the following Precincts; Southern Precinct and Basement Car Park over station development (OSD) at the Waterloo Metro Quarter site.

This report has been prepared to address the relevant conditions of the concept SSD DA (SSD 9393) and the Secretary's Environmental Assessment Requirements (SEARs) issued for the detailed SSD DA (SSD 10437 and SSD 10438).

This report concludes that the strategy proposed herein is suitable to address the requirements of SEPP 55 for the Southern Precinct and Basement Car Park OSD. The described strategy is also required to satisfy the CSSI 7400 conditions of approval to remediate the site to a standard suitable for the proposed development prior to the commencement of the SSD DA (SSD 10437 and SSD 10438).





## 3. Introduction

This report has been prepared to accompany a detailed State significant development (SSD) development application (DA) for the following precincts: Southern Precinct and Basement Car Park over station development (OSD) at the Waterloo Metro Quarter site. The detailed SSD DA is consistent with the concept approval (SSD 9393) granted for the maximum building envelope on the site, as proposed to be modified.

The Minister for Planning, or their delegate, is the consent authority for the SSD DA and this application is lodged with the NSW Department of Planning, Industry and Environment (DPIE) for assessment.

The detailed SSD DA seeks development consent for the design, construction and operation of:

#### Southern Precinct

- 25-storey residential building (Building 3) comprising student accommodation, to be delivered as a
  mixture of studio and twin apartments with approximate capacity of 474 students
- 9-storey residential building (Building 4) above the southern station box to accommodate 70 social housing dwellings
- ground level retail tenancies including Makerspace and gymnasium lobby, and loading facilities
- level 1 and level 2 gymnasium and student accommodation communal facilities
- landscaping and private and communal open space at podium and roof top levels to support the residential accommodation
- new public open space including the delivery of the Cope Street Plaza, including vehicle access to the site via a shared way from Cope Street, expanded footpaths on Botany and Wellington streets and public domain upgrades
- signage zone locations
- utilities and service provision
- stratum subdivision (staged).

#### Basement Car Park

- 2-storey shared basement car park and associated excavation
- Ground level structure
- carparking for the commercial Building 1, residential Building 2, social housing Building 4, Waterloo Congregational Church and Sydney Metro
- service vehicle spaces
- commercial end-of-trip and bicycle storage facilities
- retail end-of-trip and bicycle storage facilities
- residential storage facilities
- shared plant and services
- in ground OSD tank for building 2 and Cope St Plaza, located in Church Square.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 8 April 2020 and 9 April 2020 and issued for the detailed SSD DA. Specifically, this report has been prepared to respond to the SEARs requirements summarised below.





Item	Description of requirement	Section reference (this report)		
Southern Pred	Southern Precinct (SSD-10437)			
1.	State Environmental Planning Policy No. 55 – Remediation of Land	Section 9		
15.	Contamination and Remediation  The EIS shall: - address the provisions of SEPP 55 - demonstrate the suitability of the site for the proposed use having regard to contamination and remediation	Section 9 Section 7 & Section 10		
Plans and Documents	Contamination and remediation report (including any site audits, soil specification where relevant)	Section 7 Appendix A Appendix B Appendix C		
Basement Ca	r Park (SSD-10438)			
1.	State Environmental Planning Policy No. 55 – Remediation of Land	Section 9		
13.	Contamination and Remediation  The EIS shall: - address the provisions of SEPP 55 - demonstrate the suitability of the site for the proposed use having regard to contamination and remediation	Section 9 Section 7 & Section 10		
Plans and Documents	Contamination and remediation report (including any site audits, soil specification where relevant)	Section 7 Appendix A Appendix B Appendix C		

Table 1 - SEARs requirements

This report has also been prepared in response to the following conditions of consent issued for the concept SSD DA (SSD 9393) for the OSD as summarised in the table below.





## 4. The site

The site is located within the City of Sydney Local Government Area (LGA). The site is situated about 3.3 kilometres south of Sydney CBD and eight kilometres northeast of Sydney International Airport within the suburb of Waterloo.

The Waterloo Metro Quarter site comprises land to the west of Cope Street, east of Botany Road, south of Raglan Street and north of Wellington Street (refer to Figure 1). The heritage-listed Waterloo Congregational Church at 103–105 Botany Road is within this street block but does not form a part of the Waterloo Metro Quarter site boundaries.

The Waterloo Metro Quarter site is a rectangular shaped allotment with an overall site area of approximately 1.287 hectares.

The Waterloo Metro Quarter site comprises the following allotments and legal description at the date of this report. Following consolidation by Sydney Metro (the Principal) the land will be set out in deposited plan DP1257150.

- 1368 Raglan Street (Lot 4 DP 215751)
- 59 Botany Road (Lot 5 DP 215751)
- 65 Botany Road (Lot 1 DP 814205)
- 67 Botany Road (Lot 1 DP 228641)
- 124-128 Cope Street (Lot 2 DP 228641)
- 69-83 Botany Road (Lot 1, DP 1084919)
- 130-134 Cope Street (Lot 12 DP 399757)
- 136-144 Cope Street (Lots A-E DP 108312)
- 85 Botany Road (Lot 1 DP 27454)
- 87 Botany Road (Lot 2 DP 27454)
- 89-91 Botany Road (Lot 1 DP 996765)
- 93-101 Botany Road (Lot 1 DP 433969 and Lot 1 DP 738891)
- 119 Botany Road (Lot 1 DP 205942 and Lot 1 DP 436831)
- 156-160 Cope Street (Lot 31 DP 805384)
- 107-117A Botany Road (Lot 32 DP 805384 and Lot A DP 408116)
- 170-174 Cope Street (Lot 2 DP 205942).

The detailed SSD DA applies to the Southern Precinct and Basement Car Park (the site) of the Waterloo Metro Quarter site. The site has an area of approximately 4830sqm and 5,700sqm. The subject site comprises the following allotments and legal description at the date of this report.

#### Southern Precinct DA

- 130–134 Cope Street (Lot 12 DP 399757) (Part)
- 136–144 Cope Street (Lots A-E DP 108312) (Part)
- 93–101 Botany Road (Lot 1 DP 433969 and Lot 1 DP 738891) (Part)
- 156–160 Cope Street (Lot 31 DP 805384)
- 107–117A Botany Road (Lot 32 DP 805384 and Lot A DP 408116)





- 119 Botany Road (Lot 1 DP 205942 and Lot 1 DP 436831)
- 170–174 Cope Street (Lot 2 DP 205942).

#### Basement Car Park DA

- 1368 Raglan Street (Lot 4 DP 215751) (Part)
- 59 Botany Road (Lot 5 DP 215751) (Part)
- 65 Botany Road (Lot 1 DP 814205) (Part)
- 67 Botany Road (Lot 1 DP 228641) (Part)
- 124–128 Cope Street (Lot 2 DP 228641) (Part)
- 69–83 Botany Road (Lot 1, DP 1084919)
- 130–134 Cope Street (Lot 12 DP 399757) (Part)
- 136–144 Cope Street (Lots A-E DP 108312) (Part)
- 85 Botany Road (Lot 1 DP 27454)
- 87 Botany Road (Lot 2 DP 27454)
- 89–91 Botany Road (Lot 1 DP 996765)
- 93–101 Botany Road (Lot 1 DP 433969 and Lot 1 DP 738891) (Part).

The boundaries of the overall site are identified at Figure 1, and the subject site of the detailed SSD DA is identified at Figures 2 and 3. The site is reasonably flat with a slight fall to the south.

The site previously included three to five storey commercial, light industrial and shop top housing buildings. All previous structures except for an office building at the corner of Botany Road and Wellington Street have been demolished to facilitate construction of the new Sydney Metro Waterloo station. As such the existing site is predominately vacant and being used as a construction site. Construction of the Sydney metro is currently underway on site in accordance with critical State significant infrastructure approval (CSSI 7400).







Figure 1 - Aerial image of the site Source: Urbis

The area surrounding the site consists of commercial premises to the north, light industrial and mixed-use development to the south, residential development to the east and predominantly commercial and light industry uses to the west.





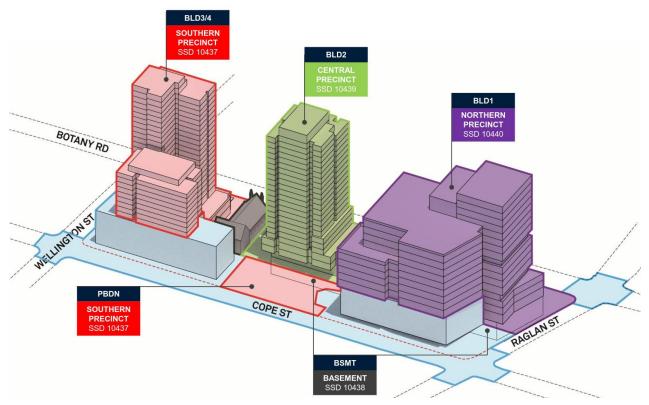


Figure 2 - Waterloo Metro Quarter site, with sub-precincts identified Source: HASSELL

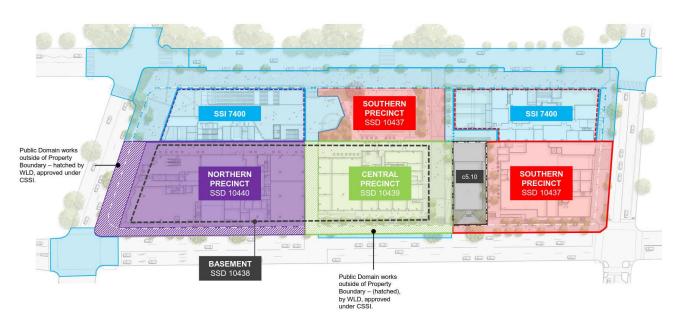


Figure 3 - Waterloo Metro Quarter site, with sub-precincts identified Source: Waterloo Developer Pty Ltd





## 5. Background

## 5.1 About Sydney Metro

Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. A new standalone railway, this 21st century network will revolutionise the way Sydney travels.

There are four core components:

## **5.1.1 Sydney Metro North West**

This project is now complete and passenger services commenced in May 2019 between Rouse Hill and Chatswood, with a metro train every four minutes in the peak. The project was delivered on time and \$1 billion under budget.

## 5.1.2 Sydney Metro City & Southwest

Sydney Metro City & Southwest project includes a new 30km metro line extending metro rail from the end of Metro Northwest at Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition, it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.

## 5.1.3 Sydney Metro West

Sydney Metro West is a new underground railway connecting Greater Parramatta and the Sydney CBD. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and supporting employment growth and housing supply between the two CBDs.

The locations of seven proposed metro stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays.

The NSW Government is assessing an optional station at Pyrmont and further planning is underway to determine the location of a new metro station in the Sydney CBD.

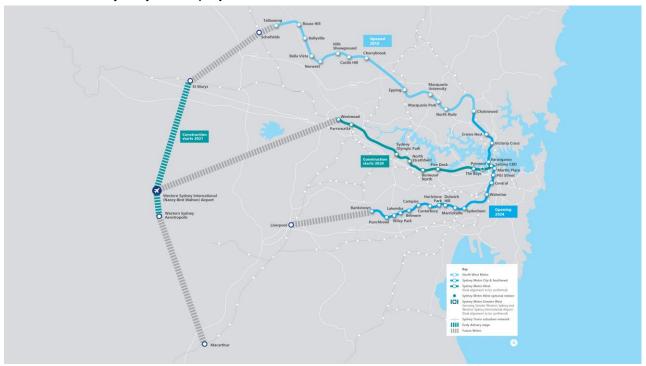
#### 5.1.4 Sydney Metro Greater West

Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service.

The Australian and NSW governments are equal partners in the delivery of this new railway.







The Sydney Metro project is illustrated below.

Figure 4 - Sydney Metro alignment map Source: Sydney Metro

## 5.2 Sydney Metro CSSI Approval (SSI 7400)

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a critical State significant infrastructure (CSSI) project (reference SSI 7400) (CSSI approval). The terms of the CSSI approval includes all works required to construct the Sydney Metro Waterloo Station. The CSSI approval also includes the construction of below and above ground works within the metro station structure for appropriate integration with the OSD.

With regards to CSSI related works, any changes to the 'metro station box' envelope and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of the concept SSD DA or detailed SSD DA for the OSD.

Except to the extent described in the EIS or Preferred Infrastructure Report (PIR) submitted with the CSSI application, any OSD buildings and uses do not form part of the CSSI approval and will be subject to the relevant assessment pathway prescribed by the EP&A Act.

The delineation between the approved Sydney Metro works, generally described as within the two 'metro station boxes' and surrounding public domain works, and the OSD elements are illustrated in Figure 5.





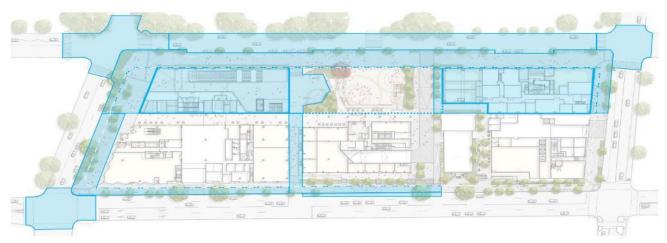


Figure 5 - CSSI Approval scope of works Source: WL Developer Pty Ltd

## 5.3 Concept Approval (SSD 9393)

As per the requirements of clause 7.20 of the *Sydney Local Environmental Plan 2012* (SLEP), as the OSD exceeds a height of 25 metres above ground level (among other triggers), development consent is first required to be issued in a concept DA (formerly known as Stage 1 DA).

Development consent was granted on 10 December 2019 for the concept SSD DA (SSD 9393) for the Waterloo Metro Quarter OSD including:

- a maximum building envelope for podium, mid-rise and tower buildings
- a maximum gross floor area of 68,750sqm, excluding station floor space
- conceptual land use for non-residential and residential floor space
- minimum 12,000sqm of non-residential gross floor area including a minimum of 2,000sqm of community facilities
- minimum 5% residential gross floor area as affordable housing dwellings
- 70 social housing dwellings
- basement car parking, motorcycle parking, bicycle parking, and service vehicle spaces.

The detailed SSD DA seeks development consent for the OSD located within the Southern Precinct and Basement Car Park of the site, consistent with the parameters of this concept approval. Separate SSD DAs have been prepared and will be submitted for the Central and Northern precincts proposed across the Waterloo Metro Quarter site.

A concurrent amending concept SSD DA has been prepared and submitted to the DPIE which proposed to make modifications to the approved building envelopes at the northern precinct and central building. This amending concept SSD DA does not impact the proposed development within the southern precinct.





## 6. Proposed development

## 6.1 Waterloo Metro Quarter Development

The Waterloo Metro Quarter OSD comprises four separate buildings, a basement carpark and public domain works adjacent to the Waterloo Metro station.

Separate SSD DAs will be submitted concurrently for the design, construction and operation of each building in the precinct;

- Southern precinct SSD-10437,
- Basement Car Park SSD-10438,
- Central precinct SSD-10439, and
- Northern precinct SSD-10440.

An overview of the Development is included below for context. This detailed SSD DA seeks development consent for the design, construction and operation of the Southern Precinct and Basement Car Park

#### 6.1.1 Southern Precinct (Subject DA)

The Southern Precinct comprises:

- 25-storey residential building (Building 3) comprising student accommodation, to be delivered as a mixture of studio and twin apartments with approximate capacity of 474 students
- 9 storey residential building (Building 4) above the southern station box to accommodate 70 social housing dwellings
- ground level retail tenancies including Makerspace and gymnasium lobby, and loading facilities
- level 1 and level 2 gymnasium and student accommodation communal facilities
- landscaping and private and communal open space at podium and roof top levels to support the residential accommodation
- new public open space including the delivery of the Cope Street Plaza, including vehicle access to the site via a shared way from Cope Street, expanded footpaths on Botany and Wellington Streets and public domain upgrades
- signage zone locations
- utilities and service provision
- stratum subdivision (staged).

#### 6.1.2 Basement Car Park (Subject DA)

The Basement Car Park comprises:

- 2-storey shared basement car park and associated excavation comprising
- Ground level structure
- Carparking for the Commercial Building 1, Residential Building 2, social housing Building
   4, Waterloo Congregational Church and Sydney Metro
- Service vehicle bays





- commercial end of trip and bicycle storage facilities
- retail end of trip and bicycle storage facilities
- residential storage facilities
- shared plant and services
- in ground OSD tank for building 2 and Cope St Plaza, located in Church Square.

#### 6.1.3 Central Precinct

The Central Precinct comprises:

- 24-storey residential building (Building 2) comprising approximately 126 market residential and 24 affordable housing apartments, to be delivered as a mixture of 1 bedroom, 2 bedroom and 3 bedroom apartments
- Ground level retail tenancies, community hub, precinct retail amenities and basement car park entry
- level 1 and level 2 community facilities (as defined in the SLEP) intended to be operated as a childcare centre
- landscaping and private and communal open space at roof top levels to support the residential accommodation
- new public open space including the delivery of the Church Square, including vehicle access to the basement via a shared way from Cope Street, expanded footpaths and public domain upgrades on Botany Road
- external licensed seating areas
- signage zone locations
- utilities and service provision
- stratum subdivision (staged).

## 6.1.4 Northern Precinct

The Northern Precinct comprises:

- 17-storey commercial building (Building 1) comprising Commercial floor space, with an approximate capacity of 4000 workers
- ground level retail tenancies, loading dock facilities serving the northern and central precinct including Waterloo metro station
- landscaping and private open space at podium and roof top levels to support the commercial tenants
- new public open space including the delivery of the Raglan Street Plaza, Raglan Walk and expanded footpaths on Raglan Street and Botany Road and public domain upgrades
- external licensed seating areas
- signage zone locations
- utilities and service provision
- stratum subdivision (staged).





## 7. Contaminated Sites Strategy

#### 7.1 Introduction

This strategy has been prepared by Douglas Partners Pty Ltd (DP) to address the requirements for managing contamination identified at the Waterloo Metro Quarter Development Site, Botany Road, Waterloo (the WMQ). This strategy has been prepared with reference to the Critical State Significant Infrastructure Sydney Metro City & Southwest Chatswood to Sydenham Conditions of Approval, 2017 (CSSI 7400) and State Environmental Planning Policy No 55 - Remediation of Land (SEPP 55).

The WMQ comprises land to the west of Cope Street, east of Botany Road, south of Raglan Street and north of Wellington Street. The heritage-listed Waterloo Congregational Church at 103-105 Botany Road is within this street block but does not form a part of the WMQ site.

## 7.2 Site Sub-Areas

For the purposes of the regulation of contaminated land management, the site can be considered in two portions. The portions comprise:

- Waterloo Metro Station Box (the Station Box), comprising the below ground level development in the area shaded yellow on Figure 1;
- The OSD, the area excluding the Station Box, comprising:
  - Above ground level development in the area shaded yellow on Figure 6: and
  - The area not shaded on Figure 6.





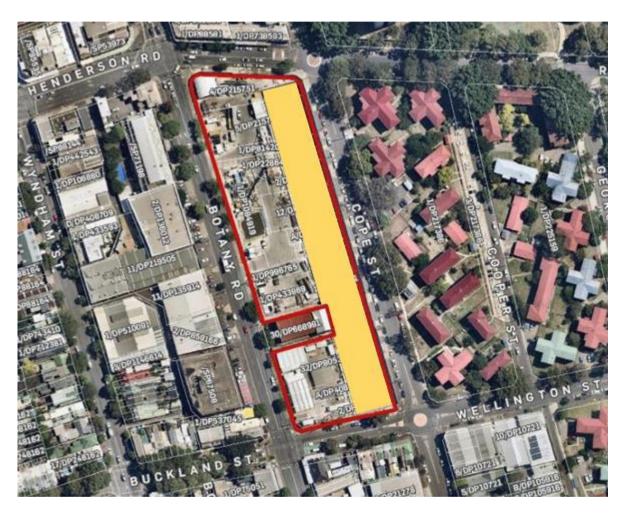


Figure 6 - WMQ Boundary (red line) and Sub-Areas

## 7.3 Previous Reports

## 7.3.1 Station Box

The Waterloo Metro Station Box, located in the eastern portion of the WMQ, has previously been remediated. All contamination sources from within the Station Box were removed as part of the station box excavation works. However, contamination present in the western portion of the WMQ has been identified to potentially present a risk to future site users of Waterloo Station.

The remediation of the Station Box is documented in the following reports, which are provided as Appendices A and B, respectively:

- Report on Validation of Remediation, Sydney Metro City and South West Tunnel and Station Excavation Works Package, Waterloo Station, Botany Road, Waterloo, NSW (DP, 2020); and
- Site Audit Report Waterloo Station Box Excavation and Validation (Ramboll, 2020).

#### 7.3.2 OSD

A combined Phase 1 and Phase 2 Site Contamination Investigation has previously been conducted for the western portion of the WMQ, and is presented in: Golder Douglas City Metro City South-West, Environmental Site Assessment - Waterloo, Integrated Station





Development, Botany Road, Waterloo NSW (GDP, 2019). A copy of GDP (2019) is provided as Appendix C.

## GDP (2019) identified:

- The presence of contamination impact to the quality of the soil, soil vapour and groundwater, and recommended that appropriate remediation / management would be required to render the site suitable for an assumed commercial / industrial land use [DP notes that the need for remediation / management also applies for the proposed mixed-use development]; and
- Data gaps in the investigation associated with limited access at the time of field work preventing sampling in some of the target areas, and due to only one round of groundwater and soil vapour sampling being undertaken. Additional investigation was recommended to further assess the site prior to remediation.

## 7.4 Proposed Development

The proposed development comprises the following:

#### **Station Box**

 Construction of Waterloo Station under CSSI 7400. Further contamination assessment/ management works will be conducted concurrently with the Station Construction;

#### **OSD**

- Phase 1: Remediation works required to enable the future mixed-use development. The Phase 1 works will be conducted under CSSI 7400; and
- Phase 2: Mixed-use development as described in Section 6.





## 8. Strategy to Address Requirements of CSSI 7400

## 8.1 Contaminated Sites Conditions

CSSI 7400 includes the conditions for contaminated sites E66 to E70, as provided in Table 2, below. The proposed manner of addressing each condition for the WMQ is also provided in Table 2.

Clause		Response	
		Station Box	OSD
E66	A Site Contamination Report, documenting the outcomes of Phase 1 and Phase 2 contamination assessments of land upon which the Critical State Significant Infrastructure is to be carried out, that is suspected to be, or known to be, contaminated must be prepared by a suitably qualified and experienced person in accordance with guidelines made or approved under the Contaminated Land Management Act 1997 (NSW).	A Site Audit Report has been prepared for the Station Box excavation (Ramboll, 2020) and is provided as Appendix B. This report documents the outcomes of the previous Phase 1 and Phase 2 contamination assessment of this area.	A Site Contamination Report comprising a combined Phase 1 and Phase 2 contamination assessment has been prepared (GDP, 2019) for the western portion of the site and is provided as Appendix C.
E67	If a Site Contamination Report prepared under Condition E66 finds such land contains contamination, a site audit is required to determine the suitability of a site for a specified use. If a site audit is required, a Site Audit Statement and Site Audit Report must be prepared by a NSW EPA Accredited Site Auditor. Contaminated land must not be used for the purpose approved under the terms of this approval until a Site Audit Statement is obtained that declares the land is suitable for that purpose and any conditions on the Site Audit Statement have been complied with.	Ramboll (2020) identifies that further management/ remediation of contamination is required.  A statutory site audit will be conducted and a Site Audit Statement (SAS) and Site Audit Report (SAR) for the Station Box will be prepared by a NSW EPA Accredited Site Auditor.  This area of the site will not be used for the purpose approved under the terms of this approval until a SAS is obtained that declares the land is suitable for that purpose and any conditions on the SAS have been complied with.	GDP (2019) identifies that management/ remediation of contamination is required.  A statutory site audit will be conducted and a Site Audit Statement(s) (SAS) and Site Audit Report(s) (SAR) will be prepared by a NSW EPA Accredited Site Auditor.  Separate SAS/SAR may be issued for sub-areas of this portion of the site as required to maximise the efficiency of the development approval process.  An SAS/SAR stating that the site (or nominated portion of the site) is suitable for the proposed development (ie. a Section A SAS) will be issued prior to use of the site.





Clause		Response	
		Station Box	OSD
			The Section A SAS/SAR would be issued prior to commencement of construction of the mixed-use development.
E68	A copy of the Site Audit Statement and Site Audit Report must be submitted to the Secretary and Council for information no later than one (1) month before the commencement of operation.	A copy of the SAS and SAR will be submitted to the Secretary and Council for information no later than one month before the commencement of operation.	A copy of the SAS and SAR for the relevant portion(s) of the site will be submitted to the Secretary and Council for information no later than one month before the commencement of operation.
E69	An Unexpected Contaminated Land and Asbestos Finds Procedure must be prepared and must be followed should unexpected contaminated land or asbestos be excavated or otherwise discovered during construction.	This is not considered to be applicable to the Station Box as excavation to an approximate depth of 28 m has already been completed and no additional earthworks are proposed.	An Unexpected Contaminated Land and Asbestos Finds Procedure will be prepared and followed should unexpected contaminated land or asbestos be excavated or otherwise discovered during construction.
E70	The Unexpected Contaminated Land and Asbestos Finds Procedure must be implemented throughout construction.	This is not considered to be applicable to the Station Box as excavation to an approximate depth of 28 m has already been completed and no additional earthworks are proposed.	The Unexpected Contaminated Land and Asbestos Finds Procedure will be implemented throughout construction.
		0001 7 (00 0 - 1/1/2	

Table 2 - CSSI 7400 Condition and Response

## 8.2 Scope of Works to Address Site Contamination

The following works will be undertaken to support provision of the requirements of CSSI 7400 for site contamination:

#### 8.2.1 Station Box

- Engage a suitably experienced Contaminated Lands Consultant and NSW EPA Accredited Site Auditor;
- Undertake Supplementary Assessment. This will include a risk assessment addressing risk from the identified off-site source. Collection of additional site data may be undertaken to





inform the risk assessment. The scope of these works will be agreed between the Contaminated Lands Consultant and the Site Auditor;

- Prepare a Remediation Action Plan (RAP) if the Supplementary Assessment determines that there is a potential unacceptable risk to future site users from contamination. If the supplementary assessment determines that there is no unacceptable risk from contamination under the proposed Station Box land use a RAP will not be required;
- Prepare a Construction Quality Assurance (CQA) Plan detailing:
  - The construction elements upon which the supplementary assessment relied in determining the risk to site users and/ or required by the RAP; and
  - The quality assurance measures required to record the construction/ installation of these construction elements.
- Implement the RAP (if required) and CQA Plan;
- Validation Assessment of the management works by the Contaminated Lands Consultant;
- Prepare a Validation Assessment Report. This will be prepared by the Contaminated Lands Consultant; and
- Prepare a Site Audit Statement and Site Audit Report, by the NSW EPA Accredited Site Auditor, and submit to the Secretary and Council for information. The Site Audit Statement will state that the land is suitable for the proposed land use.

Note: the Unexpected Contaminated Land and Asbestos Finds Procedure are not considered to be applicable to the Station Box as excavation to an approximate depth of 28 m has already been completed and no additional earthworks are proposed.

#### 8.2.2 OSD

- Engage a suitably experienced Contaminated Lands Consultant and NSW EPA Accredited Site Auditor;
- Undertake Supplementary Contamination Investigation and Assessment. This will be
  undertaken by the Contaminated Lands Consultant to obtain additional data on the site
  conditions and further assess the risk the identified contamination potentially presents
  under the proposed development. The investigation and assessment will provide sufficient
  data to allow for the development of a suitable remediation strategy. The scope of these
  works will be agreed between the Contaminated Lands Consultant and the Site Auditor;
- Prepare a Remediation Action Plan. This will be prepared by the Contaminated Lands
  Consultant based on the results of the supplementary contamination investigation and
  assessment and will be specific to the proposed development. The Site Auditor will review
  the Remediation Action Plan (RAP) and provide Interim Advice supporting the suitability of
  the RAP prior to its implementation;
- Prepare an Unexpected Contaminated Land and Asbestos Finds Procedure. This will be prepared and included in the RAP;
- Implement the RAP and Unexpected Contaminated Land and Asbestos Finds Procedure;
- Validation Assessment of the remediation works by the Contaminated Lands Consultant;
- Prepare a Validation Assessment Report. This will be prepared by the Contaminated Lands Consultant; and
- Prepare a Site Audit Statement and Site Audit Report, by the NSW EPA Accredited Site Auditor, and submit to the Secretary and Council for information. The Site Audit Statement will state that the land is suitable for the proposed land use.





## 9. Strategy to Address Requirements of SEPP 55

The future mixed-use development will be subject to separate approvals and will need to meet the requirements of SEPP 55.

SEPP 55 requires, inter alia, that contamination and remediation need to be considered in determining a development application.

The requirements of SEPP 55 will be addressed by provision, as part of the application for the construction certificate, of a Section A SAS / SAR stating that the site is suitable for the proposed development. The SAS / SAR will be those prepared to address the requirements of CSSI 7400 detailed in Section 8 above.





## 10. Conclusion

It is considered that the strategy proposed herein is suitable to address the requirements of SEPP 55 for the Southern Precinct and Basement Car Park OSD. The described strategy is also required to satisfy the CSSI 7400 conditions of approval to remediate the site to a standard suitable for the proposed development prior to the commencement of the SSD DA (SSD 10437 and SSD 10438).





## 11. References

CSSI15\_7400. (2017). Critical State Significant Infrastructure Sydney Metro City & Southwest Chatswood to Sydenham Conditions of Approval. Application no.: SSI 15\_7400: NSW Government Planning & Environment.

DP. (2020). Report on Validation of Remediation, Sydney Metro City and South West - Tunnel and Station Excavation Works Package, Waterloo Station, Botany Road, Waterloo, NSW. Report 85608.14.R.072.Rev0, dated 14 May 2020: Douglas Partners Pty Ltd.

GDP. (2019). City Metro City South-West, Environmental Site Assessment - Waterloo, Integrated Station Development, Botany Road, Waterloo NSW. Reference 1791865-008-R-Rev 1, dated 13 March 2019: Golder Douglas.

Ramboll. (2020). Site Audit Report Waterloo Station Box Excavation and Validation. Project No. 318000323-006, Audit No. TO-024-1, dated 2 June 2020: Ramboll Australia Pty Ltd.

SEPP 55. (n.d.). State Environmental Planning Policy No 55—Remediation of Land, 2019. NSW Department of Planning, Industry and Environment.





## 12. Limitations

Douglas Partners (DP) has prepared this report for this project at the Waterloo Metro Quarter Development Site, Botany Road, Waterloo in accordance with DP's proposal SYD200696 dated 1 July 2020 and acceptance received from Sally Reynolds of John Holland Pty Ltd dated 9 July 2020. The work was carried out under Agreement No WISD\_135. This report is provided for the exclusive use of John Holland Pty Ltd for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk.





# Appendix A

- About this Report
- Report on Validation of Remediation Sydney Metro City and South West Tunnel and Station Excavation Works Package, Waterloo Station, Botany Road, Waterloo, NSW (DP, 2020)





# Appendix B (Volume 2)

Site Audit Report Waterloo Station Box Excavation and Validation (Ramboll, 2020)





# **Appendix C (Volume 3)**

Golder Douglas City Metro City South-West, Environmental Site Assessment - Waterloo, Integrated Station Development, Botany Road, Waterloo NSW (GDP, 2019).