

# SYDNEY METRO CITY & SOUTHWEST VICTORIA CROSS INTEGRATED STATION DEVELOPMENT GROUNDWATER MONITORING REPORT JANUARY-JUNE 2021



## REVISION STATUS

Rev	Date	Details / Description
1	31/08/21	Draft for submission to ER and Sydney Metro
2	29/09/21	Final for submission to ER and Sydney Metro

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## 1.0 INTRODUCTION

### 1.1 Sydney Metro project background

The New South Wales (NSW) Government through Transport for NSW (TfNSW) is implementing Sydney's Rail Future, a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of commuters and customers in the future.

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro Northwest (previously known as the North West Rail Link), Sydney Metro City & Southwest and Sydney Metro West.

This monitoring report has been developed for construction of the Victoria Cross Metro Station.

### 1.2 Victoria Cross - Integrated Station Development (ISD)

The Sydney Metro Victoria Cross Integrated Station Development (VCISD) will be part of an integrated transport interchange, commercial, retail and public precinct, key to providing low-carbon transport options and enhancing connectivity for Sydney-siders and visitors.

The Victoria Cross Integrated Station Development comprises of the following:

- new Victoria Cross Metro Station within a cavern and north and south shafts;
- an Over Station Development (OSD) at the south site; and
- an amenities and access building at the north site.

The Victoria Cross Metro Station works are being completed as part of the Critical State Significant Infrastructure (CSSI) project (reference SSI 7400), and as approved by subsequent modifications. The south tower OSD works will be completed under a separate State Significant Development (SSD) approval.

The VCISD project occupied the south site, cavern and north site throughout the reporting period.

### 1.3 Project location

The Victoria Cross Station will be located at Miller Street in the heart of North Sydney's business district. The two station entrance boxes - Victoria Cross North (McLaren Street) and Victoria Cross South (Berry Street) are connected by the cavern platform directly beneath Miller Street.

The location of the Project is shown in Figures 1 and 2 below.

### 1.4 Construction Groundwater Management Plan

A Construction Groundwater Management Plan (CGMP) has been prepared for the construction of the Victoria Cross Metro Station project.

The CGMP includes a groundwater monitoring program, which specifies monitoring required throughout construction. This monitoring report has been prepared to address the requirements of the groundwater monitoring program.





Figure 1 – Project Location

## 2.0 WORK ACTIVITIES

Works during the reporting period have comprised of the following activities:

- Site establishment at north and sites.
- Deliveries & crane/hoist access to each site.
- Anchoring works at the south site.
- Detailed excavation of footings and foundations using hydraulic hammers and saws.
- Loading and haulage of excavated sandstone and concrete.
- Construction of station footings and foundations including steel & concrete placement.
- Structural elements including steel and concrete placement within the station, north shaft and south shaft.
- Waterproofing.
- Temporary and permanent services works including site establishment of water treatment plant.

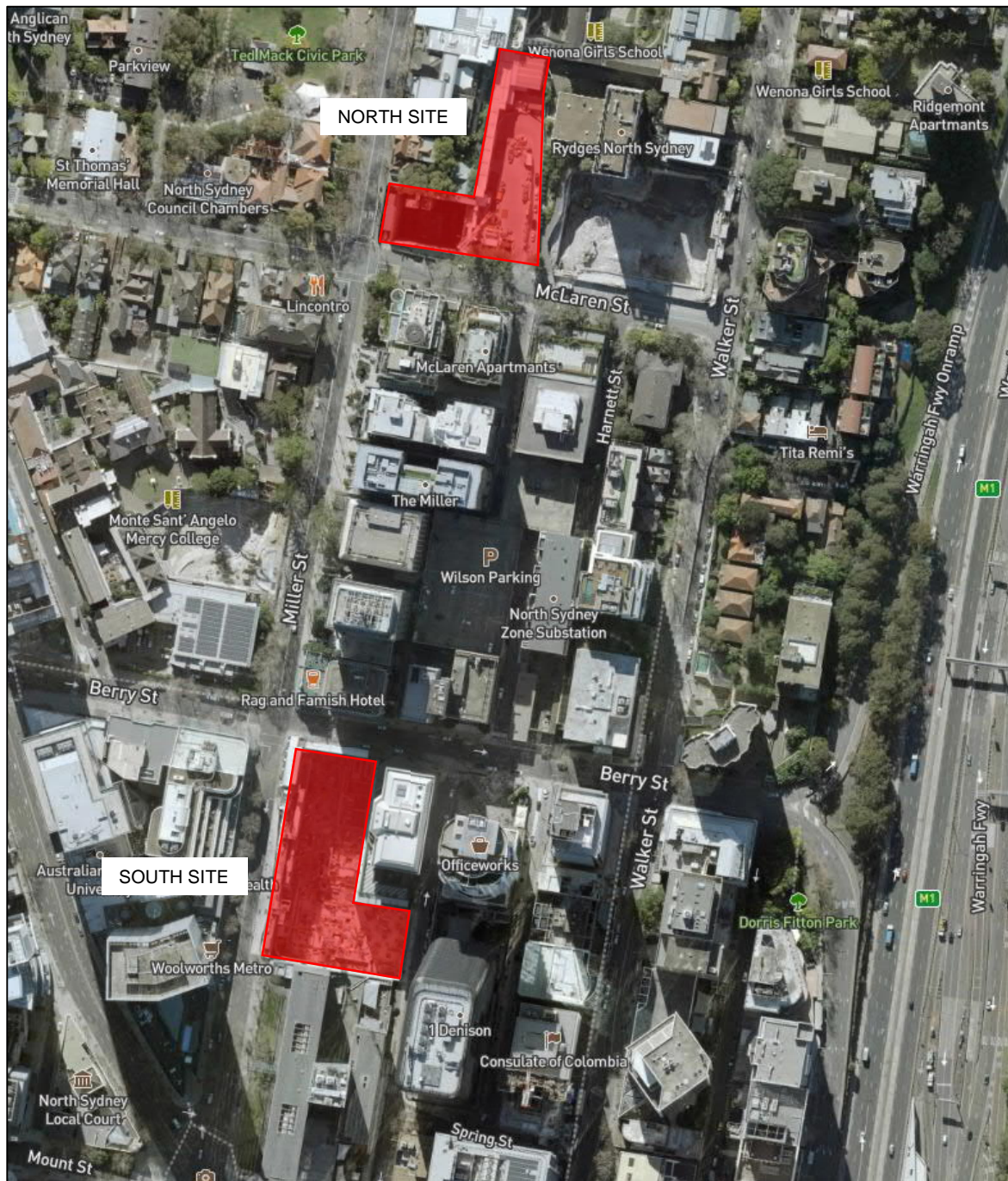


Figure 2 – North & South Project Sites

(Source: metromap.com.au)

## 3.0 MONITORING REQUIREMENTS

### 3.1 Construction Groundwater Management Plan Requirements

Table 1 below summarises groundwater-related monitoring that is required by the Construction Groundwater Management Plan, along with the current status of monitoring.

Table 1 – CGMP monitoring summary

Monitoring Location	Parameters	Frequency	Standards	Status at during reporting period
Groundwater discharge	pH, Turbidity, Suspended Solids, Oil and Grease, Iron, Manganese, Copper, Lead, Mercury, Nickel, Zinc, Hydrocarbons.	Prior to offsite discharge from WTP which incorporates captured station excavation groundwater, then quarterly.	Alert & trigger criteria	WTP not commenced

Groundwater monitoring required by the Construction Groundwater Management Plan relates to water treatment plant (WTP) influent, as per Table 1. This influent water is a mix of groundwater seepage into the Sydney Metro tunnels (being constructed separately), and construction site stormwater runoff.

For the duration that this report covers, this water has been pumped to the Linewide contractor for external treatment, and hence there is no monitoring data to be reported for the VCISD project. The WTP is expected to commence in the next monitoring period.

### 3.2 Other Groundwater Monitoring

Lendlease has undertaken separate groundwater monitoring during the reporting period to inform design of the South site, and the WTP.

A project specific groundwater monitoring network was installed by others between 2015 and 2017 (Figure 3). The bore depths range from 28 to 49 m below ground level (BGL) with open area (screen) adjacent to the upper Hawkesbury Sandstone aquifer. Three of the groundwater monitoring bores remain in service at the time of this monitoring report:

- BH17, depth to 39.80 mBGL.
- BH2, depth to 38.5 mBGL.
- BH3, depth to 60 mBGL.

Groundwater quality samples were collected from the three remaining bores, along with a groundwater seep within the south site, in February and March 2021. The samples were analysed in the field, for physicochemical parameters, and delivered to a NATA accredited laboratory for chemical analysis.



## 4.0 MONITORING LOCATIONS

Groundwater monitoring locations are shown in Figure 3 below.

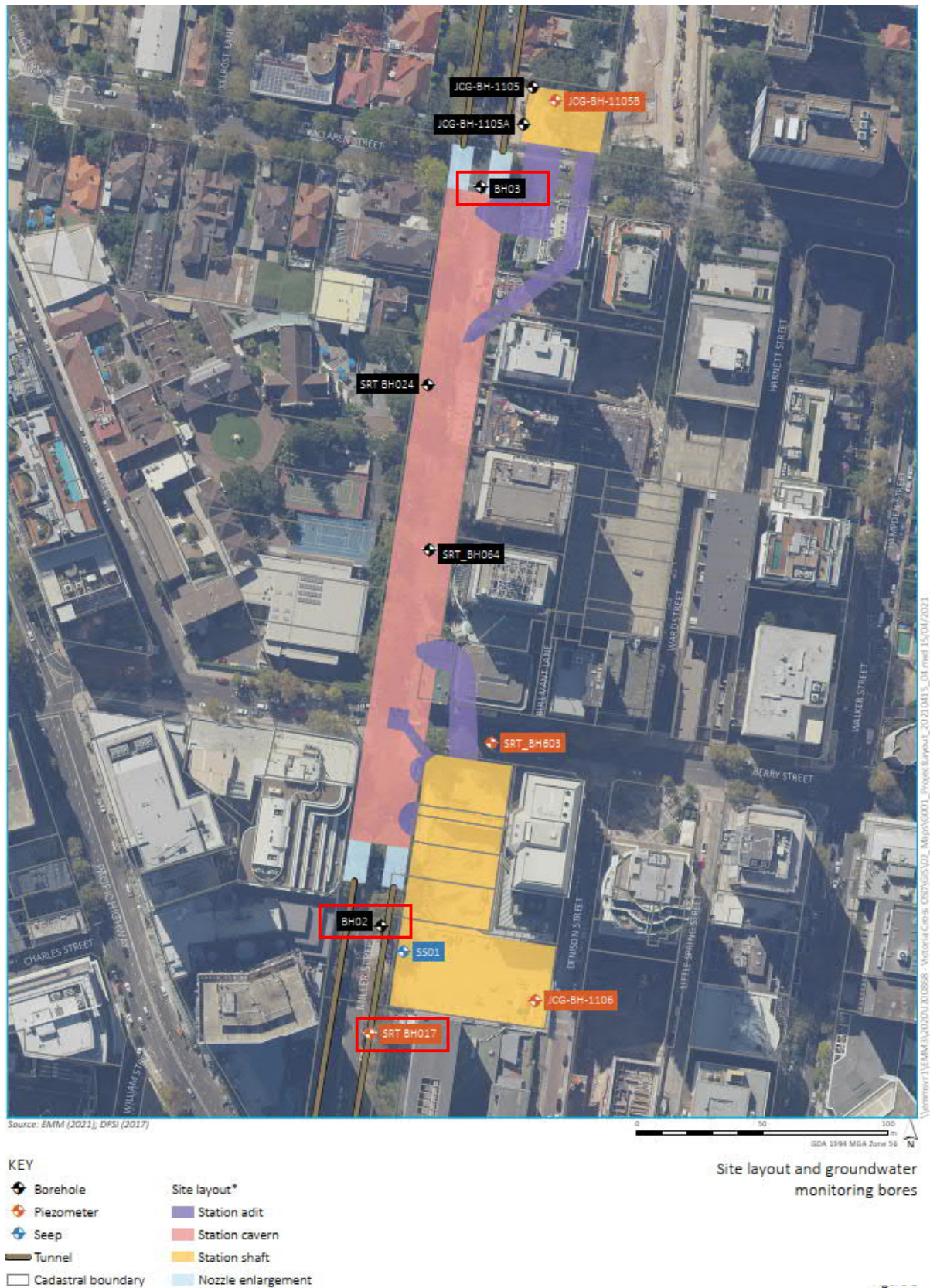


Figure 3 – Groundwater monitoring boreholes, locations in red used in this report.

## 5.0 MONITORING RESULTS

Evidence from the site suggested that groundwater seepage rates into the shafts and caverns at Victoria Cross were far less than predicted - refer to Section 5.6 of the CGMP for further background. The average discharge rate over the monitoring period was 0.33 litres per second (L/s), which was largely following rainfall. Little or no water was pumped to the Linewide WTP during days without precipitation.

### 5.1 Groundwater Levels

Pre-construction monitoring indicated depth to groundwater in the area generally ranged from 11.4 to 26 mBGL (36-59m AHD), and that groundwater levels typically fluctuated by up to 0.3 m correlating with rainfall events.

The local groundwater flow direction is north to south, consistent with topography.

A summary of groundwater level results for remaining boreholes is provided in Table 2 below, along with available comparative background results, which is limited to average levels at BH17 from 2019.

Table 2 – Groundwater levels comparison to guideline and pre-project levels

Bore	Bore depth (m)	2019		Feb 2021		Mar 2021	
		(mBGL)	(mAHD)	(mBGL)	(mAHD)	(mBGL)	(mAHD)
BH17	39.80	19.3	43.6	26.27	36.63	26.24	36.67
BH2	38.5	-	-	0.03	-	0.00	-
BH3	60	-	-	0.00	-	0.25	-

Bore caps at BH2 and BH3 were missing and hence were collecting surface runoff. Levels recorded are not considered to represent true groundwater conditions.

As per results from TSE works presented in Appendix B of the Construction Groundwater Management Plan, groundwater levels dropped in the period leading up to October 2019 (prior to VCISD works), and then stabilised. The groundwater levels measured in 2021 in the vicinity of BH17 remain at a similar level of ~36m AHD.

### 5.2 Groundwater Quality

Observations from sampling the three bores and seep were:

- The bores were purged using a submersible pump. The low permeability of the screened formation restricted purging to the volume of one saturated well column.
- The seep sample (SSP1) was collected directly from the rock face at the south site using a dedicated syringe.
- As above, monitoring bores BH2 and BH3 were collecting surface runoff and therefore samples are considered to represent a mix of groundwater and surface water runoff.

A summary of all groundwater monitoring results for BH17 and SSP1 are provided in Table 3 below.



Comparative background results for BH17 from 2016 are also provided in Table 3, along with the following relevant guideline criteria for assessment:

- Australian and New Zealand Environment and Conservation Council (ANZECC) & Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ), 2018 Australian and New Zealand Guidelines for Fresh and Marine Water Quality.
- Department of Environment, Climate Change and Water 2006 NSW Water Quality Objectives. <https://www.environment.nsw.gov.au/ieo/SydneyHarbour/report-02.htm>

Analysis of the site monitoring data indicates the local groundwater is:

- fresh with an average electrical conductivity (EC) of 371 microsiemens per centimetre  $\mu\text{S}/\text{cm}$ );
- neutral to alkaline, the observed pH result was acidic prior to the construction phase however, more recent results are neutral to alkaline; and
- sodium and chloride dominate.

Pesticides, polyaromatic hydrocarbons, monocyclic aromatic hydrocarbons (BTEX) and polychlorinated biphenyls results were all below the laboratory limits of reporting (LOR). The exception was one pesticide result, dieldrin, 0.6 micrograms per litre ( $\mu\text{g}/\text{L}$ ) at BH17.

There were some exceedances of oil and grease above the laboratory LOR at BH17, and petroleum hydrocarbons above the laboratory LOR at BH17 and BH603. The maximum oil and grease result was 8 milligrams per litre ( $\text{mg}/\text{L}$ ) (BH17) and the maximum total recoverable hydrocarbon (TRH) result was 140  $\mu\text{g}/\text{L}$  (C10-C40 sum, BH17). However, there was no petroleum hydrocarbon contamination in the groundwater seep samples.

Nutrients are present within the groundwater with the guideline criteria exceeded for nitrite and nitrate, ammonia, total nitrogen and phosphorus. The maximum total nitrogen result was 4.0  $\text{mg}/\text{L}$  (BH17), and the maximum phosphorus result was 2.15  $\text{mg}/\text{L}$  (BH17).

Guideline criteria were also exceeded for metals, specifically copper and zinc. The maximum copper concentration detected was 0.2  $\text{mg}/\text{L}$  (SSP1), and the maximum zinc concentration detected was 0.6  $\text{mg}/\text{L}$  (SSP1).

Table 3 – Groundwater monitoring results summary

Chemical Group	Chemical Name	Units	LOR	ANZG (2018) Marine water (unknown reliability) 95% toxicant DGVs	ANZG (2018) Marine water 95% toxicant DGVs	NSW WQO for Sydney Harbour, Lower Estuary	BH17 6/12/2016	BH17 24/02/2021	BH17 24/03/2021	SSP1 1/02/2021	SSP1 17/03/2021
Field	Temp (Field)	°C					-	21.2	22	22.5	19.4
	DO % Saturation (Field)	%Sat				80-110	-	45	77.5	86.7	73
	EC (field)	uS/cm					240	813	154.2	619	401.3
	pH	-				7-8.5	5.2	8.23	8	9.62	7.42
	Redox Potential (Field)	mV					-	-154.2	-54.4	-139.4	19.9
	Turbidity (Field)	NTU				0.5-10	-	5,100	222	3.4	-
	TDS (Field)	mg/L					-	526.5	1,001	403	260.6
	DO (Field)	mg/L					-	3.95	6.74	7.34	6.7
Metals	Aluminium	mg/L	0.01				-	-	3.90	-	-
	Aluminium (filtered)	mg/L	0.01				-	-	0.03	-	-
	Arsenic	mg/L	0.001				-	0.004	0.002	<0.001	0.003
	Arsenic (filtered)	mg/L	0.001				-	<0.001	<0.001	<0.001	<0.001
	Cadmium	mg/L	0.0001		0.0007**		-	0.0004	0.0002	<0.0001	0.0009
	Cadmium (filtered)	mg/L	0.0001		0.0007**		-	<0.0001	<0.0001	0.0001	0.0001
	Chromium (III+VI)	mg/L	0.001		0.0044*		-	0.198	0.012	<0.001	0.024
	Chromium (III+VI) (filtered)	mg/L	0.001		0.0044*		<0.001	<0.001	0.001	<0.001	0.001
	Copper	mg/L	0.001		0.0013		-	0.154	0.067	0.011	0.166
	Copper (filtered)	mg/L	0.001		0.0013		0.002	<0.001	<0.001	0.184	0.011
	Iron	mg/L	0.05				-	22.2	-	-	-
	Iron (filtered)	mg/L	0.05				0.012	<0.05	-	-	-
	Lead	mg/L	0.001	0.0044			-	0.036	0.016	0.011	0.131
	Lead (filtered)	mg/L	0.001	0.0044			<0.001	<0.001	<0.001	0.015	0.010
	Manganese	mg/L	0.001	0.08			-	0.437	-	-	-
	Manganese (filtered)	mg/L	0.001	0.08			<0.005	0.253	-	-	-
	Mercury	mg/L	0.0001		0.0001**		-	<0.0001	<0.0001	<0.0001	0.0002
	Mercury (filtered)	mg/L	0.0001		0.0001**		-	<0.0001	<0.0001	<0.0001	0.0002
	Nickel	mg/L	0.001		0.007**		-	0.131	0.014	0.007	0.096
	Nickel (filtered)	mg/L	0.001		0.007**		0.001	0.002	0.002	0.016	0.008
	Zinc	mg/L	0.005		0.015		-	0.704	0.283	0.028	0.598
	Zinc (filtered)	mg/L	0.005		0.015		0.003	<0.005	0.007	0.144	0.045
Nutrients	Ammonia as N	mg/L	0.01		0.91		0.12	-	1.63	0.11	<0.01
	Nitrite + Nitrate as N	mg/L	0.01				-	-	0.91	2.06	1.96
	Kjeldahl Nitrogen Total	mg/L	0.1				1.6	15.0	3.1	1.6	0.3
	Nitrite (as N)	mg/L	0.01				-	-	0.26	<0.01	<0.01

**SYDNEY METRO VICTORIA CROSS STATION – INTEGRATED STATION DEVELOPMENT  
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							6/12/2016	24/02/2021	24/03/2021	1/02/2021	17/03/2021
	Nitrate (as N)	mg/L	0.01				0.53	-	0.65	2.06	1.96
	Nitrogen (Total)	mg/L	0.1			0.3	2.1	-	4.0	3.7	2.3
	Phosphorus	mg/L	0.01			0.03	0.3	2.15	0.78	<0.01	0.41
TRH	C10-C16	µg/L	100				-	-	<100	<100	<100
	C10-C16 (F2 minus Naphthalene)	µg/L	100				-	-	<100	<100	<100
	C10-C40 (Sum of total)	µg/L	100				<100	-	140	<100	<100
	C16-C34	µg/L	100				-	-	140	<100	<100
	C34-C40	µg/L	100				-	-	<100	<100	<100
	C6-C10	µg/L	20				-	<20	<20	<20	<20
	C6-C10 (F1 minus BTEX)	µg/L	20				-	<20	<20	<20	<20
	Oil and Grease	mg/L	5				-	8	7	-	-
BTEX	Benzene	µg/L	1		500**		-	<1	<1	<1	<1
	Ethylbenzene	µg/L	2	80			-	<2	<2	<2	<2
	Toluene	µg/L	2	180			-	<2	<2	<2	<2
	Total BTEX	µg/L	1				-	<1	<1	<1	<1
	Xylene (m & p)	µg/L	2	75***			-	<2	<2	<2	<2
	Xylene (o)	µg/L	2				-	<2	<2	<2	<2
	Xylene Total	µg/L	2				-	<2	<2	<2	<2
Halogenated Benzenes	Hexachlorobenzene	µg/L	0.5	0.05**			-	<0.5	<0.5	<0.5	<0.5
PAH	Naphthalene	µg/L	1		50**		1.1	<5	<1.0	<1.0	<1.0
	Acenaphthene	µg/L	1				-	-	<1.0	<1.0	<1.0
	Acenaphthylene	µg/L	1				-	-	<1.0	<1.0	<1.0
	Anthracene	µg/L	1	0.01**			-	-	<1.0	<1.0	<1.0
	Benz(a)anthracene	µg/L	1				-	-	<1.0	<1.0	<1.0
	Benzo(a) pyrene	µg/L	0.5	0.1**			-	-	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ calc (Zero)	mg/L	0.0005				-	-	<0.0005	<0.0005	<0.0005
	Benzo(b+j)fluoranthene	mg/L	0.001				-	-	<0.0010	<0.0010	<0.0010
	Benzo(g,h,i)perylene	µg/L	1				-	-	<1.0	<1.0	<1.0
	Benzo(k)fluoranthene	µg/L	1				-	-	<1.0	<1.0	<1.0
	Chrysene	µg/L	1				-	-	<1.0	<1.0	<1.0
	Dibenz(a,h)anthracene	µg/L	1				-	-	<1.0	<1.0	<1.0
	Fluoranthene	µg/L	1	1**			-	-	<1.0	<1.0	<1.0
	Fluorene	µg/L	1				-	-	<1.0	<1.0	<1.0
	PAHs (Sum of total)	µg/L	0.5				-	-	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	µg/L	1				-	-	<1.0	<1.0	<1.0



**SYDNEY METRO VICTORIA CROSS STATION – INTEGRATED STATION DEVELOPMENT  
GROUNDWATER MONITORING REPORT JAN-JUNE 2021**

Chemical Group	Chemical Name	Units	LOR	ANZG (2018) Marine water (unknown reliability) 95% toxicant DGVs	ANZG (2018) Marine water 95% toxicant DGVs	NSW WQO for Sydney Harbour, Lower Estuary	BH17	BH17	BH17	SSP1	SSP1
							6/12/2016	24/02/2021	24/03/2021	1/02/2021	17/03/2021
	Phenanthrene	µg/L	1	0.6**			-	-	<1.0	<1.0	<1.0
	Pyrene	µg/L	1				-	-	<1.0	<1.0	<1.0
Organochlorine Pesticides	a-BHC	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	4,4-DDE	µg/L	0.5	0.0005			-	<0.5	<0.5	<0.5	<0.5
	Aldrin	µg/L	0.5	0.003			-	<0.5	<0.5	<0.5	<0.5
	b-BHC	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Chlordane (cis)	µg/L	0.5	0.001****			-	<0.5	<0.5	<0.5	<0.5
	Chlordane (trans)	µg/L	0.5	0.001****			-	<0.5	<0.5	<0.5	<0.5
	chlordane	µg/L	0.5	0.001			-	<0.5	<0.5	<0.5	<0.5
	d-BHC	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	DDD	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	DDT	µg/L	2	0.0004			-	<2.0	<2.0	<2.0	<2.0
	DDT+DDE+DDD	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Dieldrin	µg/L	0.5	0.01			-	0.6	<0.5	<0.5	<0.5
	Endosulfan I	µg/L	0.5		0.005**		-	<0.5	<0.5	<0.5	<0.5
	Endosulfan II	µg/L	0.5		0.005**		-	<0.5	<0.5	<0.5	<0.5
	Endrin	µg/L	0.5		0.004**		-	<0.5	<0.5	<0.5	<0.5
	Endosulfan sulphate	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Endrin aldehyde	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Endrin ketone	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	g-BHC (Lindane)	µg/L	0.5	0.007			-	<0.5	<0.5	<0.5	<0.5
	Heptachlor	µg/L	0.5	0.0004			-	<0.5	<0.5	<0.5	<0.5
	Heptachlor epoxide	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Methoxychlor	µg/L	2	0.004			-	<2.0	<2.0	<2.0	<2.0
	Aldrin + Dieldrin	µg/L	0.5				-	0.6	<0.5	<0.5	<0.5
Organophosphorous Pesticides	Azinophos methyl	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Bromophos-ethyl	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Chlorpyrifos	µg/L	0.5		0.009		-	<0.5	<0.5	<0.5	<0.5
	Chlorpyrifos-methyl	mg/L	0.0005				-	<0.0005	<0.0005	<0.0005	<0.0005
	Diazinon	µg/L	0.5	0.01^			-	<0.5	<0.5	<0.5	<0.5
	Dichlorvos	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Dimethoate	µg/L	0.5	0.15^			-	<0.5	<0.5	<0.5	<0.5
	Ethion	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Malathion	µg/L	0.5	0.05^			-	<0.5	<0.5	<0.5	<0.5
	Carbophenothion	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Chlorfenvinphos	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5

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Chemical Group	Chemical Name	Units	LOR	ANZG (2018) Marine water (unknown reliability) 95% toxicant DGVs	ANZG (2018) Marine water 95% toxicant DGVs	NSW WQO for Sydney Harbour, Lower Estuary	BH17 6/12/2016	BH17 24/02/2021	BH17 24/03/2021	SSP1 1/02/2021	SSP1 17/03/2021
	Fenthion	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Methyl parathion	µg/L	2				-	<2.0	<2.0	<2.0	<2.0
	Monocrotophos	µg/L	2				-	<2.0	<2.0	<2.0	<2.0
	Parathion	µg/L	2	0.004			-	<2.0	<2.0	<2.0	<2.0
Pesticides	Prothiofos	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Demeton-S-methyl	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Fenamiphos	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
	Pirimphos-ethyl	µg/L	0.5				-	<0.5	<0.5	<0.5	<0.5
PCBs	PCBs (Sum of total)	µg/L	1				-	-	-	-	<1
Analytical results – general	TSS	mg/L	5				-	5,370	-	20	348
	Turbidity	NTU	0.1				-	5,100	222	3.4	-
	Electrical Conductivity (Lab)	µS/cm	1				-	-	-	611	-
	pH (Lab)	-	0.01				-	-	-	7.41	-
Analytical results – alkalinity	Alkalinity (Bicarbonate as CaCO <sub>3</sub> )	mg/L	1				-	248	106	9	3
	Alkalinity (Carbonate as CaCO <sub>3</sub> )	mg/L	1				-	<1	<1	<1	<1
	Alkalinity (Hydroxide) as CaCO <sub>3</sub>	mg/L	1				10	<1	<1	<1	<1
	Alkalinity (total) as CaCO <sub>3</sub>	mg/L	1				-	248	106	9	3
Inorganics	Calcium (filtered)	mg/L	1				-	59	57	18	6
	Chloride	mg/L	1				20	544	106	101	85
	BOD	mg/L	2				-	<2	14	-	-
	Dissolved Oxygen (filtered)	mg/L					-	3.95	6.74	7.34	6.7
	Sodium (filtered)	mg/L	1				30	280	64	76	71
	Magnesium (filtered)	mg/L	1				-	24	6	12	11
	Potassium (filtered)	mg/L	1				-	29	12	4	2
	Anions Total	meq/L	0.01				-	22.1	6.52	5.51	4.25
	Ionic Balance	%	0.01				-	10.6	0.73	1.97	1.12
	Cations Total	meq/L	0.01				-	17.8	6.43	5.29	4.34
	Sulfate as SO <sub>4</sub> - Turbidimetric	mg/L	1				11	85	68	119	86

Notes:

-<sup>1</sup> denotes not analysed

\* Chromium VI 95% marine guideline adopted as a conservative approach

\*\* To account for the bioaccumulating nature of this toxicant, the 99% species protection level DGV is adopted to protect key species from chronic toxicity in slightly to moderately disturbed systems.

\*\*\* Xylene (m) 95% marine guideline adopted as a conservative approach

\*\*\*\* Value for chlordane adopted as a conservative approach

^ 95% freshwater guideline was adopted as recommended by ANZG 2018.

## 6.0 CONCLUSION

Limited groundwater monitoring at the Victoria Cross site during the period January to June 2021, in conjunction with available background information, indicates that:

- Groundwater levels at the south site stabilised in 2019, and remain stable and at similar levels for the two monitoring events undertaken at BH17.
- Groundwater quality slightly exceeded relevant assessment criteria, and was broadly consistent with pre-construction monitoring results from 2016.

Evidence from the site suggested that groundwater seepage rates were far less than predicted.

As groundwater levels have remained stable to date, and as per the Construction Groundwater Management Plan, further monitoring of groundwater levels and quality at bores is not required.

Remaining groundwater monitoring at the Victoria Cross site will comprise WTP influent from the site, along with discharge results from the WTP.