Cross River Rail Project

Monthly Environmental Report

October 2020

CROSSRIVERRAIL

Queensland Government

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Executive Summary

This Monthly Environmental Report (MER) has been produced for Project Works undertaken on site for October 2020 for the Rail, Integration and Systems (RIS), and Tunnel, Stations and Development (TSD) packages. The report addresses the obligations outlined in the Coordinator-General's change report – *Coordinator-General's change report – design refinements and condition changes 2020 (July 2020)* and the individual contractor's Construction Environmental Management Plans (CEMPs) which have been developed generally in accordance with the Project's Outline Environmental Management Plan (OEMP). The Cross River Rail Delivery Authority (Delivery Authority), as the Proponent of the Cross River Rail Project, is required to submit a monthly report to the Coordinator-General to demonstrate compliance with the imposed conditions.

Section 1 of this report provides a background to the project and the Coordinator-General's conditions. Section 2 provides a review of the contractor's reports contained in **Appendix A** (Rail, Integration and Systems) and **Appendix B** (Tunnel, Stations and Development).

The Environmental Monitor (EM) has reviewed and endorsed this MER. This endorsement follows ongoing and new document reviews, and surveillance across the construction sites.

The CEMPs prepared by both Unity Alliance (RIS Contractor) and CBGU JV (TSD Contractor) for their Relevant Project Works were endorsed by the EM and submitted to the Coordinator-General in accordance with Condition 4 (a) and 4 (b) respectively.

The table below presents a summary of compliance status against each condition with a short comment against each condition:

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
1.	**General conditions** – compliance with the Project Changes relevant to the contractor's scope	Yes	The CEMP and site plans are in accordance with the Project Changes.
2.	**Outline Environmental Management Plan** – timely submission to the Coordinator-General including required sub plans	Yes	OEMP dated June 2020 is effective for the October 2020 report.
3.	**Design** – achievement of the Environmental Design Requirements	NA	RIS – Detailed flood modelling is in progress to ensure design will not cause property damage from flood impacts to third parties for events up to and including the 1 in 100 Annual Exceedance Probability flood event. Documents continue to be reviewed related to compliance with the environmental design standards. TSD – ongoing progress with design packages relating to tunnel and station work.

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
4.	**Construction Environmental Management Plan** – all relating to Relevant Project Works.	Yes	RIS – CEMP has been updated to align with latest version of the OEMP and Request for Project Change (RfPC) 7 approval. CEMP Revision 4 for Northern Portal (Stage 1), RNA Showgrounds (Stage 1) and Mayne Yard North (Stage 1 and 2) has now been implemented on site. TSD – CEMP Rev 7 for tunnelling and ongoing activities in the Central area was endorsed by the Environment Monitor, submitted to the Coordinator-General in June and became effective on 5 July 2020.
5.	**Compliance and Incident management** – Non-compliance events, notifications and reporting.	Yes	There were no non-compliance events (NCEs) recorded in October 2020. Refer to Section 2.5 of this report.
6.	**Reporting** – Monthly and Annual reporting.	Yes	Reports have been submitted in accordance with the conditioned requirements. RIS – Refer to **Appendix A (RIS Monthly Report)**. TSD – Refer to **Appendix B (TSD Monthly Report)**.
7.	**Environmental Monitor** – engaged and functions resumed.	Yes	Ongoing
8.	**Community Relations Monitor** – engaged and functions resumed	Yes	Ongoing
9.	**Community Engagement Plan** – developed and endorsed by Environmental Monitor.	Yes	CEMP's endorsed with Community Engagement Plan.
10.	**Hours of work** – works undertaken during approved hours.	Yes	This has been achieved through standard working hours, Extended work hours and Managed Work.
11.	**Noise** – Work must aim to achieve internal noise goals for human health and well-being.	Yes	RIS – Refer to **Appendix A (Table 2)** TSD – Refer to **Appendix B (Table 3)**
	Vibration – Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	RIS – Vibration monitoring as a result of the predictive vibration assessments and complaints was not triggered. TSD – Vibration monitoring continues across the sites. Refer to **Appendix B (Table 2)**

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
12.	**Property damage** – relating to ground movement.	Yes	RIS – Property Damage Sub-plan has been implemented for heritage and residential buildings where predictive modelling has identified a potential exceedance of nominated vibration goals. TSD – Vibration modelling has been prepared and is ongoing and where required, building condition survey reports (for heritage and residential buildings) and Property Damage Sub-plans completed.
13.	**Air quality** – Works must aim to achieve air quality goals for human health and nuisance.	Yes	RIS – Refer to **Appendix A (Section 3.2, Table 4** and **Figures 1, 2 and 3)**. TSD – Refer to **Appendix B (Table 4)**.
14.	**Traffic and transport** – Works must minimise adverse impacts on road safety and traffic flow.	Yes	Traffic Management Plans covered in the CEMP and Sub-plans for all active worksites have been reviewed by the EM.
15.	**Water quality** – Works must not discharge groundwater from the construction site above the relevant environmental values and water quality objectives. Monitor and report on water quality in accordance with CEMP and Sub-plans.	Yes	Monitoring and reporting on groundwater and surface water quality was undertaken in accordance with RIS and TSD Water Quality Management Plans. RIS – No groundwater discharges occurred for the month. Offsite surface water discharges occurred from the Northern Corridor, Mayne Yard and RNA worksites due to high intensity rainfall events from 24-27 October 2020. Surface water discharge from the Northern Corridor at York's Hollow did not meet project discharge criteria due to a series of storm events from 24-27 October that exceeded the design criteria for onsite ESC. The Department of Environment and Science (DES) was notified of an exceedance and did not request any further actions be undertaken. Refer to **Appendix A (Tables 6 - 10)** for surface water monitoring results and **Appendix A (Section 3.3.5)** for interpretation. TSD –two groundwater discharges at Albert Street and Roma Street did not meet the Water Quality Objectives, however recorded levels consistent with pre-construction conditions. No external influences were introduced by the construction activities.
16.	**Water resources** – Evaluate potential impact, plan works,	Yes	RIS – There will be no sustained groundwater extraction involved in the RIS

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
	implement controls and monitor inflow of groundwater associated with drawdown.		scope of works so predictive modelling of groundwater drawdown is not required. Collection of hydrological data to model potential inflow rates into excavations during construction has been undertaken. TSD – Inflow of groundwater into the worksites is being continously monitored to validate the predictive modelling.
17.	**Surface water** – Must be designed to avoid inundation from stormwater due to a 2-year (6hr) ARI rainfall event and flood waters due to a 5-year ARI rainfall event and constructed to avoid afflux or cause the redirection of uncontrolled surface water flows, including stormwater flows, outside of worksites.	Yes	Contractors continue to consider this condition in their site planning and design.
18.	**Erosion and sediment control** – Provisions for erosion and sediment control must be consistent with the Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52.	Yes	Site specific ESC plans for all active work sites have been certified and reviewed by the EM and implemented on site.
19.	**Acid sulfate soils** – managed as per the Queensland Acid Sulfate Soil Technical Manual.	Yes	Acid Sulfate Soil Management Plans for all active worksites are in place.
20.	**Landscape and open space** – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria Park.	Yes	Stormwater bund works and sewer relocation works in Victoria Park have commenced under the Site Environmental Plan and the Department of Environment and Science (DES) approved Heritage Exemption Certificate.
21.	**Worksite rehabilitation** – worksites rehabilitated as soon as practicable upon completion of works or commissioning, and in consultation with Brisbane City Council.	NA	N/A

Non-Compliance Events

There were no Non-Compliance Events (NCE's) raised in October 2020.

Definitions

Acronym	Definition
ARI	Average Recurrence Interval - The average or expected value of the periods between exceedances of a given rainfall total accumulated over a given duration.
CEMP	Construction Environmental Management Plan
CG	Coordinator-General
CGCR	Coordinator-General's Change Report
CRM	The Community Relations Monitor engaged in accordance with Imposed Condition 8
Contractor	The contractors appointed to design, construct and commission the Project
Coordinator-General	The corporation sole preserved, continued and constituted under section 8 of the SDPWO Act
CRR	Cross River Rail
DES	Department of Environment and Science
EIS	Environmental Impact Statement
EM	The Environmental Monitor engaged in accordance with Imposed Condition 7
ESC	Erosion and sediment control
IECA	International Erosion Control Association
Imposed condition/s	A condition/s imposed by the Coordinator-General under section 54B of the SDPWO Act for the Project
MER	Monthly Environment Report
MRTS52	Transport and Main Roads Specifications MRTS52 Erosion and Sediment Control
NCE	Non-Compliance Event
OEMP	Outline Environmental Management Plan
Project	The Cross River Rail Project
Project Works	As defined in the Imposed Conditions
Proponent	The Cross River Rail Delivery Authority
QR	Queensland Rail
RfPC	Request for Project Change
RIS	Rail, Integration and Systems
SDPWO Act	*State Development and Public Works Organisation Act 1971*
Sub-plan	Any sub-plan of the CEMP
The Delivery Authority	The Cross River Rail Delivery Authority
TSD	Tunnel, Stations and Development

1. Introduction

1.1. Background

The Cross River Rail Project (the Project) is a declared coordinated project under the *State Development and Public Works Organisation Act 1971* (SDPWO Act). The CRR Environmental Impact Statement (EIS) was evaluated by the Coordinator-General who recommended the Project proceed, subject to Imposed Conditions and recommendations. Since the evaluation of the EIS, a number of Requests for Project Change (RfPC) submissions have been evaluated by the Coordinator-General. RfPC 7 is applicable for the works that took place in October 2020.

The Coordinator-General has imposed conditions on the Project that apply throughout the design, construction and commissioning phases. These are referred to as the Imposed Conditions. In addition, the Coordinator-General has approved the Project's OEMP which outlines the environmental management framework for the Project. The OEMP includes environmental outcomes and performance criteria which must be achieved for the Project.

Imposed Conditions 5 and 6 nominate the compliance and reporting requirements for the Project. This monthly report addresses these requirements.

1.2. Project Delivery

The Delivery Authority is responsible for planning and delivering the Project. The Project established environmental management plans and secured some of the secondary environmental approvals in addition to enabling works.

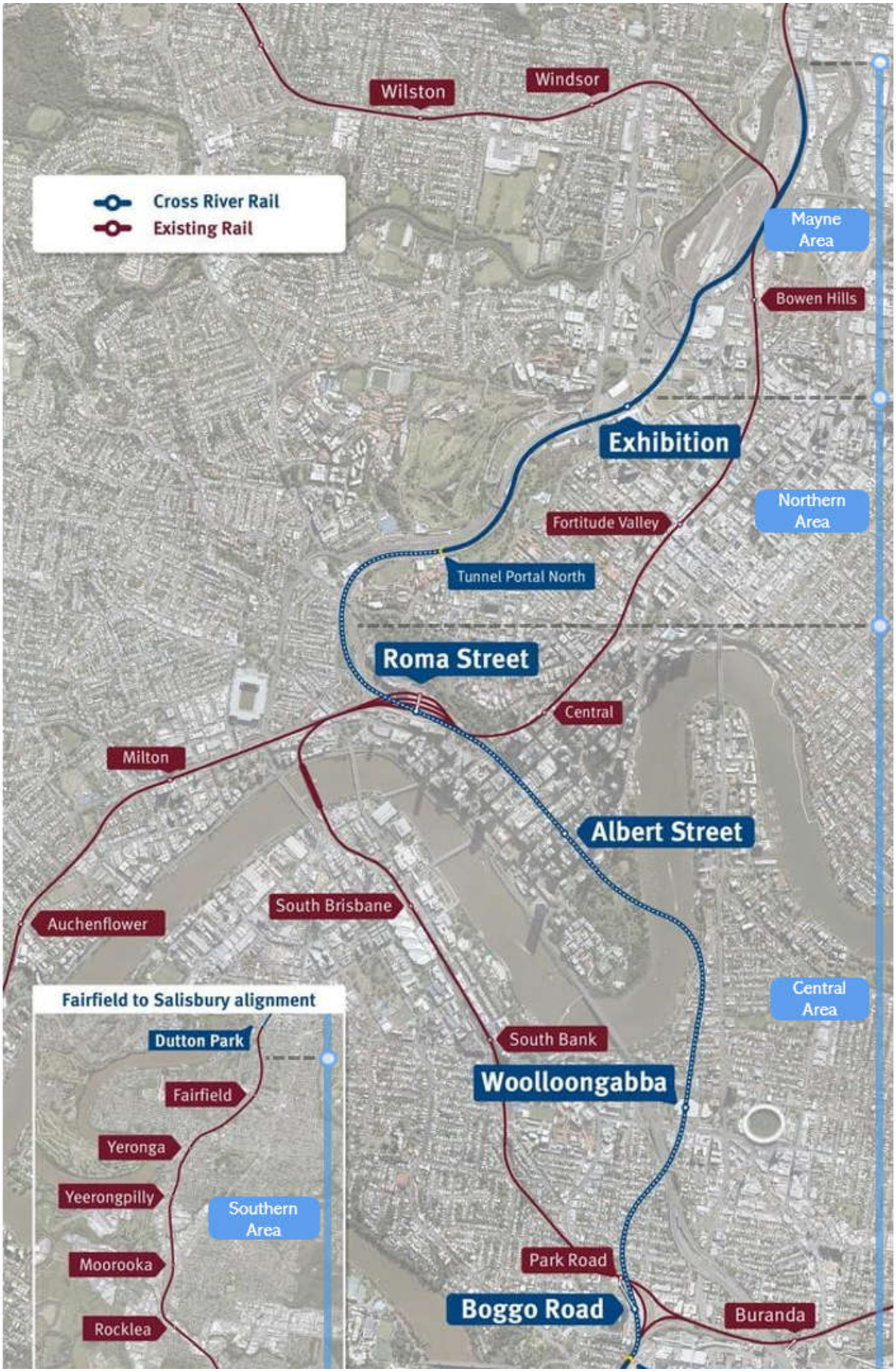
The two main delivery packages which require reporting under the Coordinator-General's imposed conditions are:

- Tunnel, Stations and Development (TSD) being delivered by CBGU JV; and
- Rail, Integration and Systems (RIS) being delivered by Unity Alliance.

The Project is geographically divided into four areas:

- Mayne Area;
- Northern Area;
- Central Area; and
- Southern Area.

These are shown in the figures below.


Cross River Rail
Existing Rail
Wilston
Windsor
Mayne Area
Bowen Hills
Exhibition
Northern Area
Fortitude Valley
Tunnel Portal North
Roma Street
Central
Milton
Albert Street
South Brisbane
Auchenflower
Fairfield to Salisbury alignment
Central Area
Dutton Park
South Bank
Fairfield
Woolloongabba
Yeronga
Yeerongpilly
Southern Area
Park Road
Moorooka
Boggo Road
Buranda
Rocklea

1.3. Reporting Framework

This MER has been prepared to comply with Conditions 6 and 7 of the Coordinator-General Change Report (CGCR) and includes:

- Monitoring data and associated interpretation of the results required by the imposed conditions and Construction Environmental Management Plan (CEMP);
- Details of any NCE's, including incidents, corrective actions and preventative actions; and
- Details of any complaints, including description, responses, and corrective actions.

Reporting on environmental elements captured in each monthly environmental report, including the annual environmental report, will be reviewed and endorsed by the EM.

1.4. Monthly Environment Report Endorsement

This MER has been endorsed by the EM and the endorsement provided to the Coordinator-General.

2. Compliance Review

This Monthly Environment Report has been reviewed and endorsed by the EM as per Condition 7 of the CGCR.

2.1. Relevant Project Works

The following Project Works were undertaken in October 2020:

Area	Project Works
Mayne Area	• Stormwater drainage works; • Re-decking of existing Breakfast Creek Bridge; and • Grafton Street access works; • ReefNet route works with directional drilling of an under bore under the existing track to the north of Breakfast Creek bridge; and • Temporary cable route diversions to facilitate Ferny Grove Flyover pier protection work.
Northern Area	• Line drilling and rock excavation to widen the rail corridor adjacent to O'Connell Terrace; • Soil nail installation adjacent to O'Connell Terrace; • Demountable toilet block relocations; • Combined services route installation; • Traffic signalisation works on Gregory Terrace; Form Reo Pour (FRP) for Land Bridge pier protection; Capping placement; Stone pitching works; Micro-tunnelling for drainage for under track crossing under Exhibition roads and holding road; • Sewer relocation in Victoria Park; • Concrete line drain installation; and • Boundary fence installation.
Central Area	• Roma Street – continued demolition of the Brisbane Transit Centre; adit excavation; and main cavern excavation; Services Building stage 2 piling works; and installation on stage 3A access to the station from Roma Street.
	• Albert Street – station box excavation and preparation works for the first row of props on Lot 1; tunnel and adit excavation and controlled blasting on Lot 2; and hard demolition continued on Lot 3.

Area	Project Works
	• Woolloongabba – excavation and retention within the station box, decline ramp, northern and southern caverns; acoustic shed conveyor installation in and around the shed; ongoing haulage of excavated material; and production blasting of northern box area.
	• Boggo Road – continued site establishment activities (e.g. water treatment plant); excavation and retention work in the station box; demolition of the busway retaining wall complete; and service and ground condition investigations.
	• Dutton Park – site establishment and demolition of existing structures on Kent Street has commenced;
Southern Area	• Service location investigations.

2.2. Key Environmental Elements

2.2.1. Noise

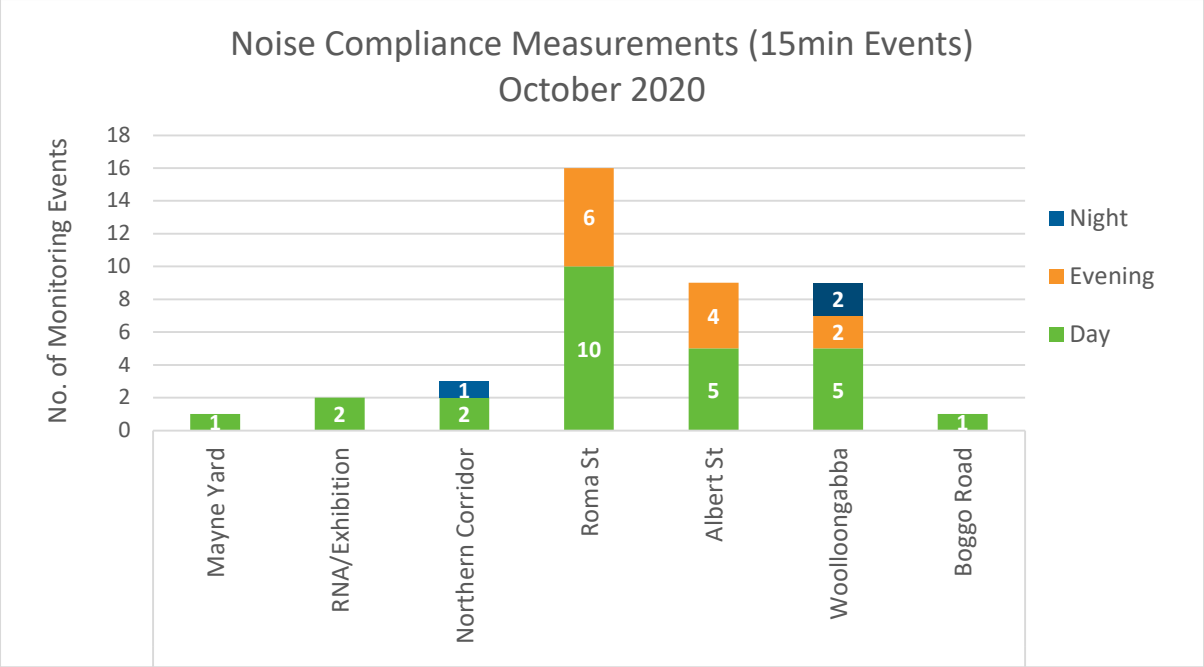
The Coordinator-General's conditions establish a framework for managing the impacts of noise. The Imposed Conditions do not establish noise limits. Compliance with the Imposed Conditions noise requirements involves demonstrating the implementation of the endorsed CEMP and associated Noise and Vibration Management Plan. This establishes the management measures to be applied which aims to achieve the identified noise goals as far as reasonably practicable. The CEMP also includes requirements for the provision of the required community notifications of upcoming work, potential impacts, and how the Project team can be contacted in relation to any potential impacts. For project works where potential noise impacts are modelled to be above the noise goal but below the noise goal plus 20dBA, this work is authorised where the endorsed CEMP and associated Noise and Vibration Management Plan are being implemented. For project works where potential noise impacts are predicted to be more than 20dBA above the relevant noise goal, specific engagement is required with Directly Affected Persons for these works.

Noise monitoring was undertaken to validate predictive modelling during combined service route installation at Mayne Yard and during drainage works in the Northern Corridor. Both activities were undertaken outside of standard hours and measured noise levels complied with project requirements.

Noise monitoring in response to complaints was undertaken during rock breaking works and during track movement associated with track installation in the Northern Corridor. Noise monitoring was undertaken at residential properties on Tufton Street and at an educational facility on Gregory Terrace during standard hours. Noise levels complied with project requirements. Monitoring results are detailed in Table 2, **Appendix A**.

In the Central Area, noise monitoring was undertaken in response to complaints and to validate predictive modelling for sensitive places close to the project worksites. The monitoring results are detailed in **Appendix B** (Table 3). Where internal monitoring was not possible, contractors have undertaken external monitoring at nominated locations. The contractors used recommended façade attenuation corrections, considering receiver property type, to determine compliance with the project's noise requirements and to provide calibration of the completed modelled predictions. The TSD contractors reported that the project noise requirements have been met during this reporting month. Noise levels complied with project requirements.

The graph below shows the majority of noise monitoring events in the reporting period were taken at and around the Roma Street worksite where major demolition works were occurring throughout the day and evening.



2.2.2. Vibration

Vibration monitoring was not required to validate predictive modelling or in response to complaints in the Mayne, Northern and Southern Areas.

In the Central Area vibration monitoring took place to validate predictive modelling at Roma Street, Albert Street and Woolloongabba sites (and nearby receivers) where major construction, demolition and controlled blasting activities were being undertaken. The contractor reported the results were within the project's nominated goals for all receiver types. No complaints were received regarding vibration during the month. Vibration monitoring results are detailed in **Appendix B** (Table 2).

2.2.3. Air Quality

2.2.3.1. Dust Deposition

Dust deposition monitoring was conducted at Mayne Yard, Northern Corridor, RNA Showgrounds, Albert Street, Boggo Road, Roma Street and Woolloongabba sites during the month. Monitoring for dust deposition is undertaken from mid-month to mid-month for all project worksites. All results met project goals.

A summary of air quality monitoring undertaken is shown in the table below.

Air Quality – Dust Deposition Monitoring			
Area	**Active Site***	**Monitoring Location**	**Comments**
Mayne Yard	Mayne Yard	Mayne Yard East	- Results met air quality goal.
Northern Area	Northern Corridor	Near Northern Portal	- Results met air quality goal.
		Near Centenary Pool	- Results met air quality goal.
	RNA / Exhibition	RNA Showgrounds	- Results met air quality goal.
Central Area	Albert Street	Mary Street	- Results met air quality goal.
	Boggo Road / Southern Portal	Leukemia Foundation	- Results met air quality goal.
		Peter Doherty Street	

Air Quality – Dust Deposition Monitoring			
Area	**Active Site***	**Monitoring Location**	**Comments**
	Roma Street	Roma Street Station	- Results met air quality goal.
	Woolloongabba	Russian Orthodox Cathedral	- Results met air quality goal.
		Woolloongabba Busway	- Results met air quality goal.

* Southern Area (Fairfield to Salisbury) had no active high-risk worksites

2.2.3.2. Particulate Matter and Total Suspended Particulates

Particulate matter (PM10) and total suspended particulates (TSP) were monitored at Mayne Yard, the Northern Corridor, RNA Showgrounds, Roma Street, Woolloongabba, Boggo Road and Albert Street during the reporting period. All worksites met air quality goals. The monitoring unit at the Woolloongabba site was temporarily removed from its location due to the potential for interference during the AFL grand final (24 October to 26 October). The monitoring unit was returned and operational on the 27 October. The nearby DES and contractor monitoring stations did not show any increases in air quality levels. The Roma Street monitoring unit stopped functioning on 25 October due to a technical fault but was immediately rectified on 26 October.

A summary of particulates monitoring is shown below.

Air Quality – PM10/ TSP Monitoring			
Area	**Active Site***	**Monitoring Location**	**Comments**
Mayne Area	Mayne Yard	Mayne Yard North - Eastern Air Shed (Burrows St, Bowen Hills)	- Results met air quality goals
Northern Area	Northern Corridor	Brisbane Girls Grammar School	- Results met air quality goals
	RNA / Exhibition	RNA - Western Air Shed (Lanham Street, Bowen Hills)	- Results met air quality goals
Central Area	Albert St	IStay River City and Capri, Cnr of Mary Street and Albert Street	- Results met air quality goals
	Boggo Rd / Southern Portal	North-east of Boggo Road worksite	- Results met air quality goals
	Roma St	Roma Street Station	- Results met air quality goals
	Woolloongabba	Place Park, Woolloongabba	- Results met air quality goals.

*Southern Area (Fairfield to Salisbury) had no active high-risk worksites

2.2.4. Water Quality

Monitoring and reporting on surface and groundwater quality was undertaken in accordance with the Project's Water Quality Management Plans.

Groundwater discharges occurred at Roma Street and at Albert Street. Both groundwater discharges exceeded the Water Quality Objectives (WQO's) for Total Nitrogen, Oxidised Nitrogen, Ammonia Nitrogen and Organic Nitrogen, however were consistent with baseline monitoring pre-construction commencement and therefore an NCE was not required... Compliance assessment for short term increases of pollutants does not necessarily cause significant impacts on the ecosystem and will require ongoing monitoring and assessment.

Groundwater Quality Monitoring			
Area	**Active Site***	**Discharge**	**Comments**
Mayne Area	Mayne Yard North	No	- No groundwater discharges.
Northern Area	Northern Corridor	No	- No groundwater discharges.
Central Area	Albert Street	Yes	- Active groundwater discharge (dewatering) - Discharge of groundwater did not meet WQO's but was generally consistent with pre-construction conditions and no external influences were introduced by construction activity.
	Boggo Road / Southern Portal	No	- No groundwater discharges.
	Roma Street	Yes	- Active groundwater discharge (dewatering) - Discharge of groundwater did not meet WQO's but was generally consistent with pre-construction conditions and no external influences were introduced by construction activity.
	Woolloongabba	No	- No groundwater discharges.

Post-rainfall surface water monitoring was undertaken at Mayne Yard and in the Northern Area from 25 to 28 October after a series of high intensity storm events on 24, 25 and 27 October. Offsite discharges occurred to the stormwater system through Type 2 and 3 erosion and sediment control (ESC) measures installed in accordance with site specific ESC plans. ESC measures were inspected and maintained after subsequent storm events and post rainfall water quality monitoring was undertaken in receiving waters at Breakfast Creek and Barrambin (York's Hollow) in accordance with the Water Quality Management Plan. An exceedance of the water quality discharge criteria[1] was identified for total suspended solids (110mg/L TSS) at Barrambin on 25 October. The Department of Environment and Science was notified of the exceedance on 26 October. All three storm events were confirmed to have exceeded the ESC design rainfall event[2] and therefore no further investigation was required.

For the Central Area, post-rainfall monitoring was also triggered due to the storm events that occurred during the month. In accordance with the Water Quality Management Plan, post-rainfall monitoring was undertaken on the 26, 28 and 29 October. Active dewatering was undertaken at the Albert Street, Boggo Road, Roma Street and Woolloongabba worksites during the month. Post-rainfall and active dewatering results were compliant with the relevant requirements detailed in CG Condition 18[1,2].

Surface water quality monitoring is summarised in the table below:

Surface Water Quality Monitoring				
Area	**Active Site***	**Discharge**	**Post-Rain**	**Comments**
Mayne Area	Mayne Yard North	Yes	Yes	- Offsite surface water discharge to Breakfast Creek. - Results met water quality discharge criteria.
Northern Area	Northern Corridor	Yes	Yes	- Offsite surface water discharge to Barrambin (York's Hollow).

[1] Department of Transport and Main Roads' Technical Standard MRTS51/MRTS52
[2] Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008)

Surface Water Quality Monitoring				
Area	**Active Site***	**Discharge**	**Post-Rain**	**Comments**
				- Results did not meet water quality discharge criteria.
Central Area	Albert Street	Yes	Yes	- Active surface water discharges. - Results met water quality discharge criteria.
	Boggo Road / Southern Portal	Yes	Yes	- Active surface water discharges. - Results met water quality discharge criteria.
	Roma Street	Yes	Yes	- Active surface water discharges. - Results met water quality discharge criteria.
	Woolloongabba	Yes	Yes	- Active surface water discharges. - Results met water quality discharge criteria.

**Southern Area (Fairfield to Salisbury) had no active high-risk worksites*

2.2.5. Erosion and Sediment Control

Site specific ESC Plans have been prepared, updated and implemented at Mayne Yard, Northern Corridor, RNA Showgrounds, Roma Street, Albert Street, Woolloongabba and Boggo Road.

2.3. Complaints Management

The project received 17 complaints during the month. There were seven complaints in relation to works occurring at the Northern Corridor and RNA/Exhibition worksites – these related to noise. Ten complaints were in relation to works at the Woolloongabba, Roma Street and Boggo Road worksites and covered, noise, vibration, working hours, odour and vehicle access. All complaints were responded to within the required timeframes.

Where attended noise monitoring was undertaken in response to a complaint, the contractor confirmed on all occasions that works undertaken at the time of the complaint adhered to project requirements.

To close out a complaint the project reviews the monitoring data (where applicable), compliance with the CEMP, site environmental management plans and permits, and that required community notification has taken place and any actions taken to reduce/mitigate the impact – this will then demonstrate that project requirements have been met.

For scheduled out of hours works, community notification was provided, as well as regular project updates.

2.4 New Upcoming Project Works

The key new planned Project Works for the coming months include:

Area	New planned works in the coming months
Mayne Area	• Security fencing installation.
Northern Area	• OHLE wire run for Turnback Road 7; • Commissioning of Turnback Road 8; and • Sewer and water public utility plant relocation.
Central Area	• Roma Street – Enabling works for Services Building, installing and opening Stage 3B station access pathway, continued cavern excavation and controlled blasting. • Albert Street – Excavation of station box to continue to mid-2021 and installation of first layer of props on Lot 1, 24 hour tunnelling will continue within the acoustic

Area	New planned works in the coming months
	enclosure on Lot 2 and blasting occurrences in the tunnel shaft, and ongoing hard demolition on Lot 3 in November. • Woolloongabba – Controlled blasting in station box to continue, cavern excavation and spoil shed construction to continue, 24-hour work for shaft excavation, earthworks and utility investigations and relocation is underway. • Boggo Road – Ongoing excavation with an increase in spoil removal from site; and the commencement of the northern canopy tubes installation; and • Southern Portal – Site establishment and demolition of existing structures, utility relocation and Scheduled Corridor Access System (SCAS) works.
Southern Area	• Site establishment works at Yeronga Station; and • Water main relocation works at Yeronga Station.

2.5 Non-Compliance Events

No new NCEs have been raised this month. The summary of NCEs to date is shown in the table below.

Status	Date of event	Category	Area as on the Report	Conditions affected	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
⊞ **Open**									
⊟ **Closed**									
CRRDA-001-RIS-001	11/09/19	Noise	Yeronga Station	4, 10, 11	11/10/19	14/11/19	26/11/19	18/12/19	01/10/20
CRRDA-002-TSD-001	27/03/20	ESC	Woolloongabba	4, 15, 18	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-003-TSD-002	27/03/20	ESC	Boggo Rd	4, 15, 18	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-005-TSD-004	27/03/20	Reporting	Albert St, Boggo Rd, Roma St, Woolloongabba	4, 6, 11, 13	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-006-TSD-005	27/03/20	Air Quality	Albert St, Boggo Rd, Roma St, Woolloongabba	13	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-004-TSD-003	28/03/20	Traffic	Boggo Rd	4, 10, 14	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
⊟ **Withdrawn**									
CRRDA-007-RIS-002	04/01/20	Air Quality	Mayne Yard, Victoria Park, Yeronga, Fairfield	13	28/04/20	30/04/20	Withdrawn		
CRRDA-008-TSD-006	04/08/20	Working Hours	Roma Street	4,10	28/04/20	30/04/20	Withdrawn		

Gate 1 - EM notification to contractor. NCE confirmed
Gate 2 - 48 hour NCE notification submitted to CG
Gate 3 - 14 day report submitted
Gate 4 - 14 day report uploaded to CRR website
Gate 5 - Records of mitigation / preventative measures submitted to the CG — Complete

Throughout construction activities, events and incidents are routinely investigated to verify compliance with the conditions and that there are management plans in place and required management measures implemented.

Appendix A – RIS Monthly Report

Monthly CGCR Report – October 2020

Cross River Rail – Rail, Integration and Systems Alliance

Assured Integration for a New Era

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1 Progress Summary

1.1 Summary of Project Works

The following *Project Works* continued in October 2020

- Mayne Yard North
  - Stormwater drainage works
  - Grafton Street access works
  - Re-decking of existing Breakfast Creek siding bridge to facilitate alternative construction access across Breakfast Creek.
- Northern Corridor
  - Combined services route installation
  - Traffic signal installation on Gregory Terrace
  - Form Reo Pour (FRP) for Land Bridge pier protection
  - Capping placement
  - Stone pitching works
  - Micro tunnelling for drainage under track crossings (UTX)
- RNA
  - Line drilling and rock excavations to widen the Northern corridor adjacent O'Connell Terrace
  - Soil nail installation adjacent to O'Connell Terrace
- F2S
  - Service location investigations

The following *Project Works* started in October 2020

- Mayne Yard North
  - ReefNet route works with directional drilling of an under bore under the existing track to the north of Breakfast Creek bridge
  - Temporary cable route diversions to facilitate Ferny Grove Flyover pier protection work
- Northern Corridor
  - Holding road works
  - Sewer relocation in Victoria Park
  - Concrete lined drain installation
  - Boundary fence installation
- RNA
  - Demountable toilet block relocations
- F2S
  - No new works commenced

The following *Project Works* are proposed in November 2020

- Mayne Yard North
  - Security fencing installation
- Northern Corridor
  - OHLE wire run for Turnback Road 7

- Commissioning of Turnback Road 8

- RNA
  - Sewer and water public utility plant relocation
- F2S
  - Yeronga site establishment
  - Yeronga water main relocation

2 Complaints

The below section summarises the complaints relating to the Project Works to be reported in accordance with condition 6(b)(iii) of the CGCR.

Table 1: Summary of Complaints

Date	Location	Issue	Activity source of the concern	Period	Unity Response	Status
07/10/20	Kennigo Street	Noise	Stage 4 Gregory Terrace Intersection	Out of hours works	Upon being made aware of the complaint the following morning, the Project Team contacted the stakeholder to discuss complaint and to explain why works occurred at night. No monitoring could be undertaken to validate the complaint as the works were completed by the time Unity became cognisant of the issues. The works had however been predicted to be noise intensive and were being carried out consistent with the written acceptance from DTMR, the entity with jurisdiction (Imposed Condition 10d).	Closed
16/10/20	Tufton Street	Noise	O'Connell Terrace rock breaking	Standard working hours	The team offered to undertake attended indoors noise monitoring. The affected stakeholder accepted, however monitoring of the activity was unable to be undertaken at the original agreed time agreed due to works being cancelled on the day of the agreed monitoring. Discussions with the stakeholder are ongoing to organise attended internal monitoring at their unit. Noise monitoring previously undertaken at this unit complex in September 2020 (external and indoors) confirmed compliance with the Project's noise goals (Imposed Condition 11a).	Closed
19/10/20 (Date the Project team was made aware of the complaint)	Tufton Street	Noise	O'Connell Terrace rock breaking	Standard working hours	Complaint received via local members office. The team called the stakeholder to discuss the stakeholder's complaint to the local member. Attended indoors monitoring had already been conducted at the stakeholder's unit on 15 and 17 September 2020 (the results were reported on in the September report). Noise monitoring undertaken in September 2020 at this property confirmed compliance with the Project's noise goals (Imposed Condition 11a).	Closed
26/10/20	Tufton Street	Noise	O'Connell Terrace rock breaking	Standard working hours	The team offered to undertake noise monitoring from their unit. Monitoring was undertaken on the 29th October. The attended indoors monitoring undertaken confirmed compliance with the Project's noise goals (Imposed Condition 11a).	Closed

Date	Location	Issue	Activity source of the concern	Period	Unity Response	Status
26/10/20	Gregory Terrace – Educational Facility	Noise	Track works	Standard working hours	The Unity team undertook attended external monitoring at the Proponent's request on 29 October 2020 of the activity on the 29th October. The monitoring data confirmed compliance with the Project's noise goals (Imposed Condition 11a).	Closed
31/10/20	Tufton Street	Noise	O'Connell Terrace rock breaking	Standard working hours	The team contacted the stakeholder to provide the stakeholder with additional information on the planned duration of the works. Team informed the stakeholder that there was no requirement to soundproof the building. Attended indoors monitoring had been undertaken in a nearby unit of the same complex on 29 October 2020 with the monitoring data confirming compliance with the Project's noise goals (Imposed Condition 11a).	Closed

3 Environmental Monitoring Results

The below section summarises the monitoring results to be reported in accordance with condition 6(b)(i) of the CGCR.

3.1 Acoustics

Condition 11(b) of the CGCR requires that during construction, monitoring and reporting on noise and vibration in accordance with the Noise and Vibration Management Plan, a sub-plan of the Construction Environmental Management Plan (CEMP) occurs.

3.1.1 Noise Monitoring

Attended noise monitoring was triggered based on the predictive noise assessments for

- Combined Service Route Installation (Mayne Yard – non-standard hours)
- Drainage Works (Northern – non-standard hours)

In accordance with the CEMP, attended outdoors monitoring was undertaken to validate the predictive assessment.

Monitoring was undertaken in order to confirm that works could continue to proceed as planned.

Attended noise monitoring was undertaken based on the complaints presented in Section 2 for:

- Gregory Terrace educational facility during track moving/track installation works
- Tufton Street during rock breaking activities.

Noise monitoring was not undertaken based upon the following complaint as Unity was only notified of the complaint once the works were completed. This was as a result of the complaint being directed to the TSD project rather than the RIS project by the complaints hotline.

- Kennigo Street during Stage 4 Intersection Works

3.1.2 Noise monitoring Results

The below table summarises the noise monitoring results for reporting period.

Table 2: Summary of Noise Monitoring Data

Location and Receiver Type Details	Type of Monitoring	Working Hours	Noise Type	Purpose of Monitoring	Predictive model LA10 (dBA)	Performance Goal (dBA) (Condition 11(a), Table 2, LA10 noise goals)	Performance Goal (dBA) – (Condition 11(c), Table 2 LA10 noise goal + 20dBA))	Measured LA10 (dBA)	Measured LAeq (dBA)	Is performance Goal exceeded?	Comments
Hudson Rd Albion Commercial	Attended - External	Out of Standard Hours 05/10/20 08:44 (Public Holiday)	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	64 (Outdoors)	52 (Outdoors) (42dBA default goal + 10dBA façade reduction)	72 (Outdoors) (52+ 20dBA)	60 (outdoors)	59 (outdoors)	No exceedance	Combined Services Route Works For interpretation, please refer to section 3.1.4.1.1
Gregory Terrace Commercial	Attended - External	Out of Standard Hours 07/10/20 20:05	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	64 (Outdoors)	52 (Outdoors) (42dBA default goal + 10dBA façade reduction)	72 (Outdoors) (52+ 20dBA)	63 (outdoors)	58 (outdoors)	No exceedance	Drainage Works For interpretation, please refer to section 3.1.4.1.2
Gregory Terrace Educational	Attended - External	Standard Hours Thursday 29/10/20 08:36	Intermittent	Complaint Response	68 without resonance penalty 73 with resonance Penalty (+5dBA)	65 (Outdoors) (AS2107 maximum design level [45dBA] + 10dBA + 10dBA façade reduction)	85 (Outdoors) (65+20dBA)	76 (outdoors)	72 (outdoors)	No exceedance	Track movement associated with track installation For interpretation, please refer to section 3.1.4.1.3
Gregory Terrace Educational	Attended - External	Standard Hours Thursday 29/10/20 08:52	Intermittent	Complaint Response	68 without resonance penalty 73 with resonance Penalty (+5dBA)	65 (Outdoors) (AS2107 maximum design level [45dBA] + 10dBA + 10dBA façade reduction)	85 (Outdoors) (65+20dBA)	84 (outdoors)	79 (outdoors)	No exceedance	Track movement associated with track installation For interpretation, please refer to section 3.1.4.1.3
Tufton Street Residential	Attended - Internal	Standard Hours Thursday 29/10/20 11:50	Intermittent	Complaint Response	60-65 (Indoors with windows closed)	55 (Indoors) (AS2107 maximum design level [45dBA] + 10dBA)	75 (Indoors) (55+20dBA)	53 (Indoors)	51 (Indoors)	No exceedance	Internal measurements taken during rock breaking works; measurements taken with all windows closed For interpretation, please refer to section 3.1.4.1.4
Tufton Street Residential	Attended - Internal	Standard Hours Thursday 29/10/20 12:20	Intermittent	Complaint Response	75-80 (Indoors with windows wide open)	55 (Indoors) (AS2107 maximum design level [45dBA] + 10dBA)	75 (Indoors) (55+20dBA)	68 (Indoors)	64 (Indoors)	No exceedance	Internal measurements taken during rock breaking works; measurements taken with kitchen window and lounge room door open For interpretation, please refer to section 3.1.4.1.4

- Note (1) - Monitoring Method
  - Note 2 of Imposed Condition 11 Table 2 states *Where internal noise levels are unable to be measured or monitored, the typical noise reductions presented in Guideline Planning for Noise Control, Ecoaccess, DEHP, January 2017 (PFNC) apply*.
  - Internal noise measurements were not undertaken as the majority of receivers at this location (outdoor pool) would be external.
  - The monitoring was undertaken to validate the model therefore external noise measurements are appropriate to determine the impact of construction noise.
- Note (2) – Façade Attenuation
  - Note 2 of Imposed Condition 11 Table 2 states *Where internal noise levels are unable to be measured or monitored, the typical noise reductions presented in Guideline Planning for Noise Control, Ecoaccess, DEHP, January 2017 (PFNC) apply*.
  - The PFNC guideline can no longer be accessed. The Department of Environment and Science (DES) website still states this guideline is under review and is yet to release an alternative guideline
  - Former revisions of the PFNC, in particular Table 7 stated the following regarding typical noise reductions through the building façade:
    - 5 dB – Window wide open
    - 10 dB – Partially closed
    - 20 dB – single glazed, closed
    - 25 dB – Thermal double glazing, closed
  - The RfPC-4 Technical Report considered that all receptors had closed external single glazing for the assessment of construction noise impacts.
  - The Queensland Ombudsman assessed this assumption for the Airport Link Project and recommended that 10dB be adopted for major infrastructure projects in Queensland[1].
  - Additionally, a number of acoustic studies have shown that 10 dB is a suitable assumption for open windows. Most importantly this requirement only applies to temporary rail works within the project footprint and does not apply to long term operational rail noise exposure.
  - Accordingly, it is considered appropriate to consider a 10 dB reduction on this basis. This assumption can be used for predictive modelling and for noise measurements, where indoor noise measurements are not practicable.

[1] https://www.ombudsman.qld.gov.au/ArticleDocuments/218/Airport_Link_Ombudsman_Statement.pdf.aspx, pages 208-210, Section 9.8.6

3.1.3 Vibration Monitoring

Vibration Monitoring was not triggered during the reporting period based on the predictive vibration assessments for all activities.

Vibration monitoring because of complaints was not triggered. No complaints related to vibration occurred during the reporting period.

3.1.4 Interpretation

3.1.4.1 Noise Monitoring[2]

3.1.4.1.1 Combined Service Route – Mayne Yard North

Monitoring of combined service route works near Hudson Road, Albion was undertaken externally at the nearest DAP (Hudson Rd Albion, concrete industrial building), approximately 10m from the façade of the building. Monitoring was undertaken during non-standard construction hours with the activity captured deemed representative for the entire duration of the activity. The measured LA_{10} readings were compliant with the Imposed Conditions for works during and outside of standard working hours. No additional monitoring was triggered for this activity.

The RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

3.1.4.1.2 Drainage Works – Northern Corridor

Monitoring of the drainage works within the Normanby rail corridor was undertaken at the closest affected DAP (Gregory Terrace, Spring Hill, a two-storey brick commercial building) approximately 10m from the nearest window/door. The measured LA_{10} readings were compliant with the Imposed Conditions for works during non-standard working hours. No additional monitoring was triggered for this activity

The RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

3.1.4.1.3 Track Works – Northern Corridor

Monitoring of track movements was undertaken to verify the complaint received by an Educational Facility on Gregory Terrace. This monitoring was undertaken externally at the closest educational buildings to the works (Multi-storey sports complex and arts centre). The resonance effect of moving the lengths of tracks was captured during the noise monitoring. The measured LA_{10} readings were compliant with the Imposed Conditions for works during standard working hours.

The RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

3.1.4.1.4 Lanham Street Rock Breaking

Monitoring of rock breaking works was undertaken to verify the complaints received from stakeholders. This monitoring was undertaken indoors when access was granted by the relevant occupiers of one of the units following their complaint. One session of monitoring was undertaken with the windows and doors closed and the other was undertaken with windows and doors open. The measured LA_{10} readings during both scenarios were compliant with the Imposed Conditions for works during standard working hours.

Therefore, the RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

3.1.4.2 Vibration Monitoring

Not triggered during this reporting period.

3.2 Air Quality

Imposed Condition 13(b) of the CGCR requires that during construction, monitoring and reporting on air quality in accordance with the Air Quality Management Plan, a sub-plan of the CEMP occurs.

Visual monitoring was undertaken during routine environmental inspections. A total of twelve (12) inspections were undertaken by the environment team across Mayne Yard, RNA showgrounds and the Northern Corridor.

[2] All free field measurements are undertaken in accordance with the latest revision of the Noise Measurement Manual from the Department of Environment and Science (DES) reference ESR/2016/2195

UNITY has installed the following air quality monitoring devices, therefore data collected from these devices, when active, is reported on in the monthly report regardless of the Project Works occurring.

Table 3: Summary of Air Quality devices

Monitoring Device Installed by UNITY	Area	Name	Date Installed	Status for the Month of October
Dust Deposition Gauge	RNA Showgrounds	AQ-01	13 December 2019	Active
Dust Deposition Gauge	Northern Corridor (near BGGS)	AQ-02	13 December 2019	Active
Dust Deposition Gauge	Northern Corridor (near Centenary Pool)	AQ-03	13 January 2020	Active
Dust Deposition Gauge	Mayne Yard (Eastern Air Shed)	AQ-04	13 February 2020	Active
TSP / PM_{10} Monitor	Mayne Yard (Eastern Air Shed)	UNI324	23 April 2020	Active
TSP / PM_{10} Monitor	Northern Corridor (Eastern Air Shed)	UNI327	23 April 2020	Active
TSP / PM_{10} Monitor	RNA (Western Air Shed)	UNI319	25 August 2020	Active

3.2.1 Dust results

Since passive dust deposition gauges are analysed on a monthly basis, results span from 14 September to 13 October 2020

The dust deposition gauges result for the reporting period are detailed below and complied with Imposed Condition 13(b) of the CGCR.

Table 4: Dust deposition gauge results for period 14 September 2020 to 13 October 2020.

CGCR Goal ($mg/m^2/day$)	AQ-01 Results - RNA Showgrounds ($mg/m^2/day$)	AQ-02 Results - BGGS ($mg/m^2/day$)	AQ-03 Centenary Pool ($mg/m^2/day$)	AQ-04 Abbotsford Rd (E Mayne) ($mg/m^2/day$)
120	7	13	20	23
Total Rainfall during Period	0.0mm	0.0mm	0.0m	0.8 mm

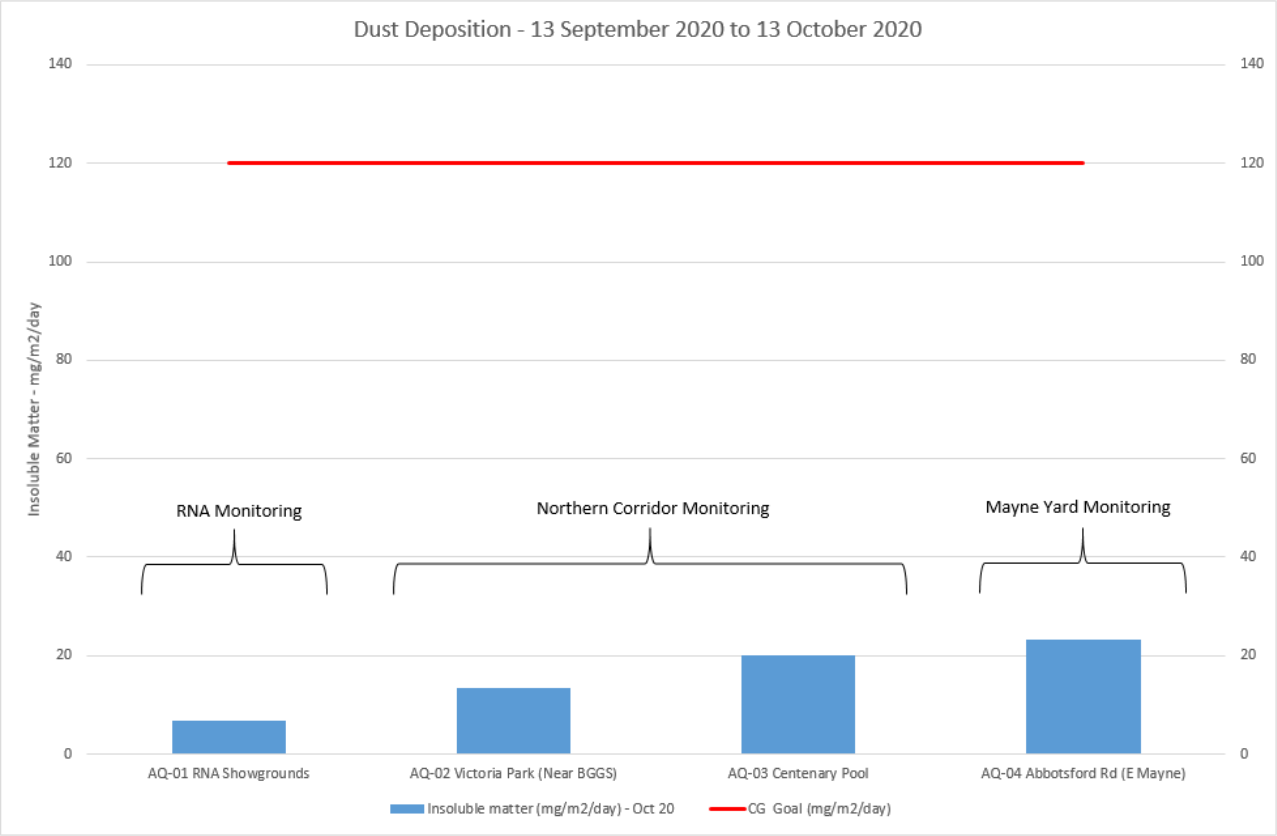


Figure 1: Air Quality Monitoring (Deposited Dust) 14 September – 13 October 2020 Results

3.2.2 Interpretation

The dust deposition gauge results did not exceed the relevant air quality goals specified by Imposed Condition 13.

3.2.3 Particulates results

3.2.3.1 UNITY Air Quality Monitoring Stations

Unity had three operational air quality monitoring stations set up for the reporting period.

3.2.3.2 Monitoring results

External ambient air quality data was collected for total suspended particles (TSP), and particulate matter less than 10 µm (PM_{10}).

TSP is one of the indicators for which the Coordinator-General has imposed a goal of 80 µg/m^3 (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

PM_{10} is one of the indicators for which the Coordinator-General has imposed a goal of 50 µg/m^3 (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

These stations have been set up on site as per AS/NZS 3850 1.1 following consultation with UNITY air quality professionals.

The results are represented in the below figures.

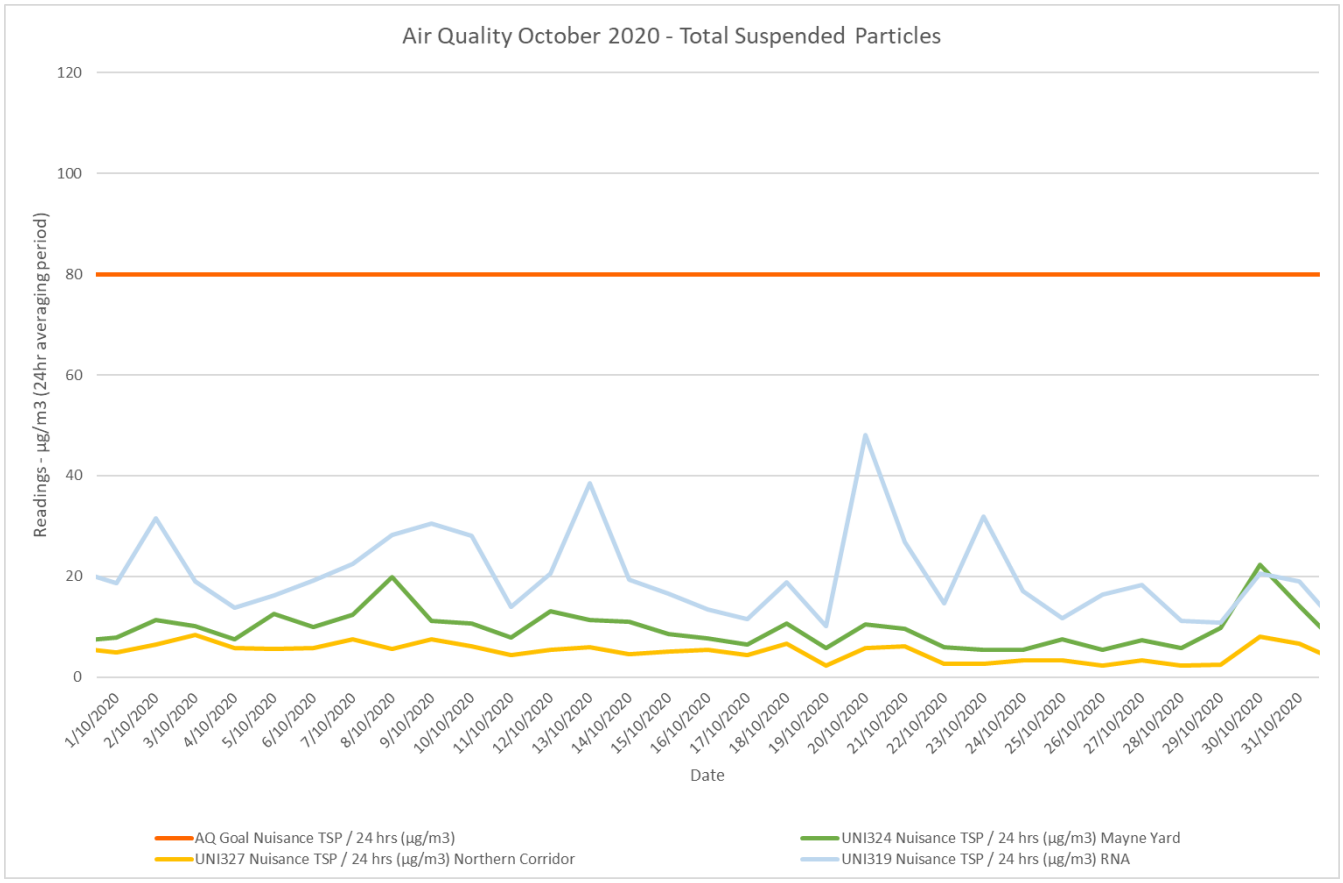


Figure 2: Air Quality Monitoring (TSP) - October 2020 Results

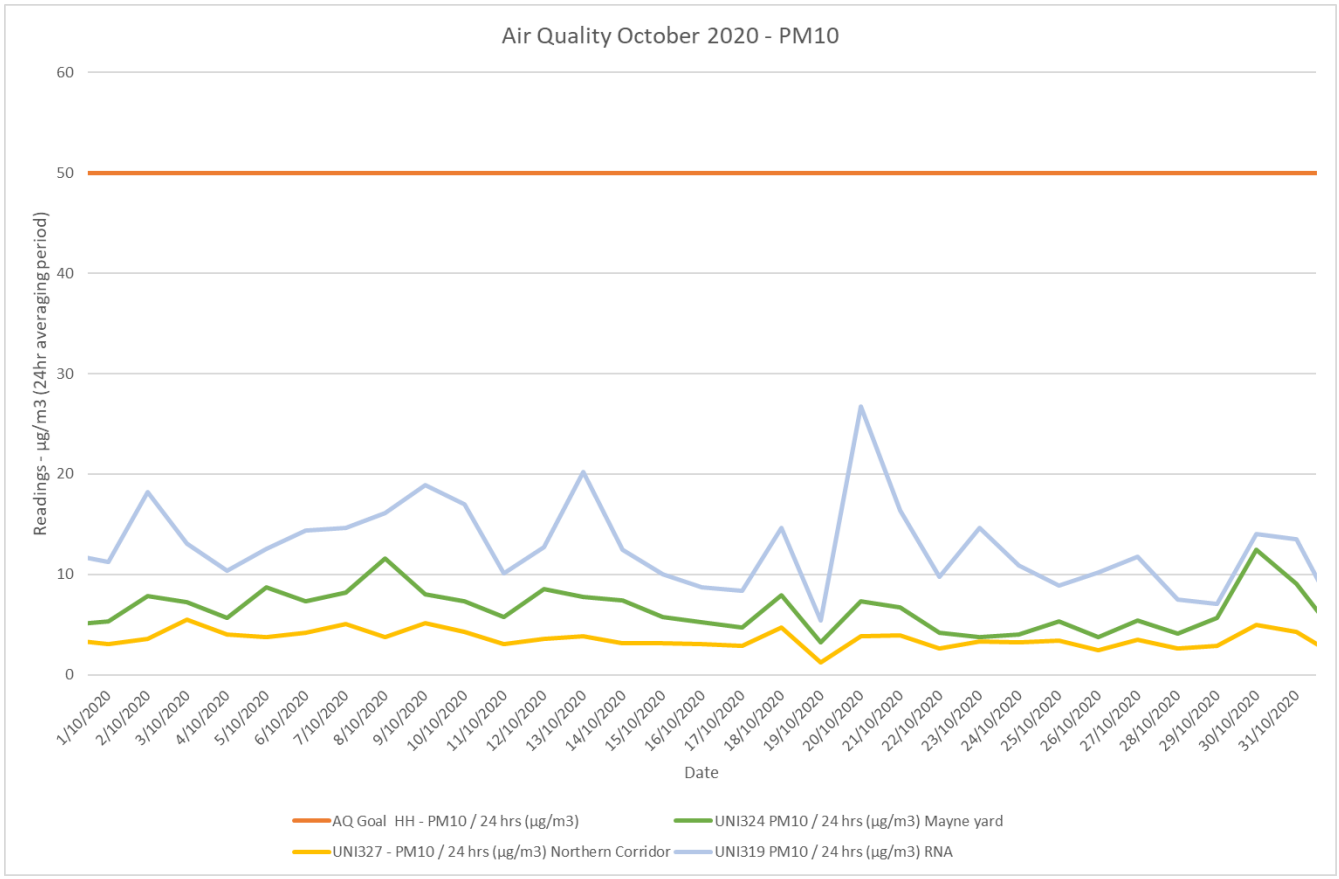


Figure 3: Air Quality Monitoring (PM10) - October 2020 Results

3.2.4 Interpretation

Particulate monitoring results did not exceed the relevant air quality goals specified by Imposed Condition 13.

The CEMP and the AQMP recognise that particulate matter monitoring can be a lag indicator. Therefore, the monitoring regime detailed in the CEMP consists of a combination of surveillance regimes through inspections at the time the works are occurring and particulate matter monitoring to validate the surveillance regime findings and potential complaints.

Site inspections at Mayne Yard, RNA Showgrounds and the Northern Corridor by the environment team confirmed that:

- There was no visible dust leaving the site boundaries.
- Waters carts were on site and used for dust suppression / fill conditioning.
- During rock breaking activities at RNA, continuous dust suppression with hoses has been undertaken.
- Stabilised egress was in place and in functioning order at each access point.

The RIS scope of works therefore achieved the outcomes set out by the CGCR and OEMP.

3.3 Water Quality

Condition 15(a) requires that discharges of groundwater from Project Works within the Breakfast Creek catchment must comply with the Brisbane River Estuary environmental values and water quality objectives (Basin no.143 – mid-estuary) in the *Environment Protection (Water) Policy 2009*.

Condition 15(a) requires that discharges of groundwater from Project Works within Moolabin Creek, Yeerongpilly – Oxley Creek catchment must comply with the Oxley Creek - Lowland freshwater environmental values and water quality objectives (Basin no.143 (part) – including all tributaries of the creek) in the *Environment Protection (Water) Policy 2009*.

Water quality monitoring to demonstrate compliance with Condition 15(b) and Condition 18 was triggered.

There were no active surface water discharges during October (e.g. dewatering through pumping, sediment basin release).

There were passive discharges during October associated with above design rain events. These are discussed in further detail in section 3.3.5.

There were no groundwater discharges during October 2020.

Condition 15(b) of the CGCR requires that during construction, monitoring and reporting on water quality in accordance with the Water Quality Management Plan, a sub-plan of the CEMP occurs.

A maximum monthly rain recording of 72mm over a 24-hour period was recorded at the Brisbane BOM weather station on 28 October, which exceeds the default trigger for post rainfall monitoring.

In-situ monitoring of physico-chemical parameters results for all monitoring undertaken during the reporting period are presented below.

3.3.1 Rainfall Records

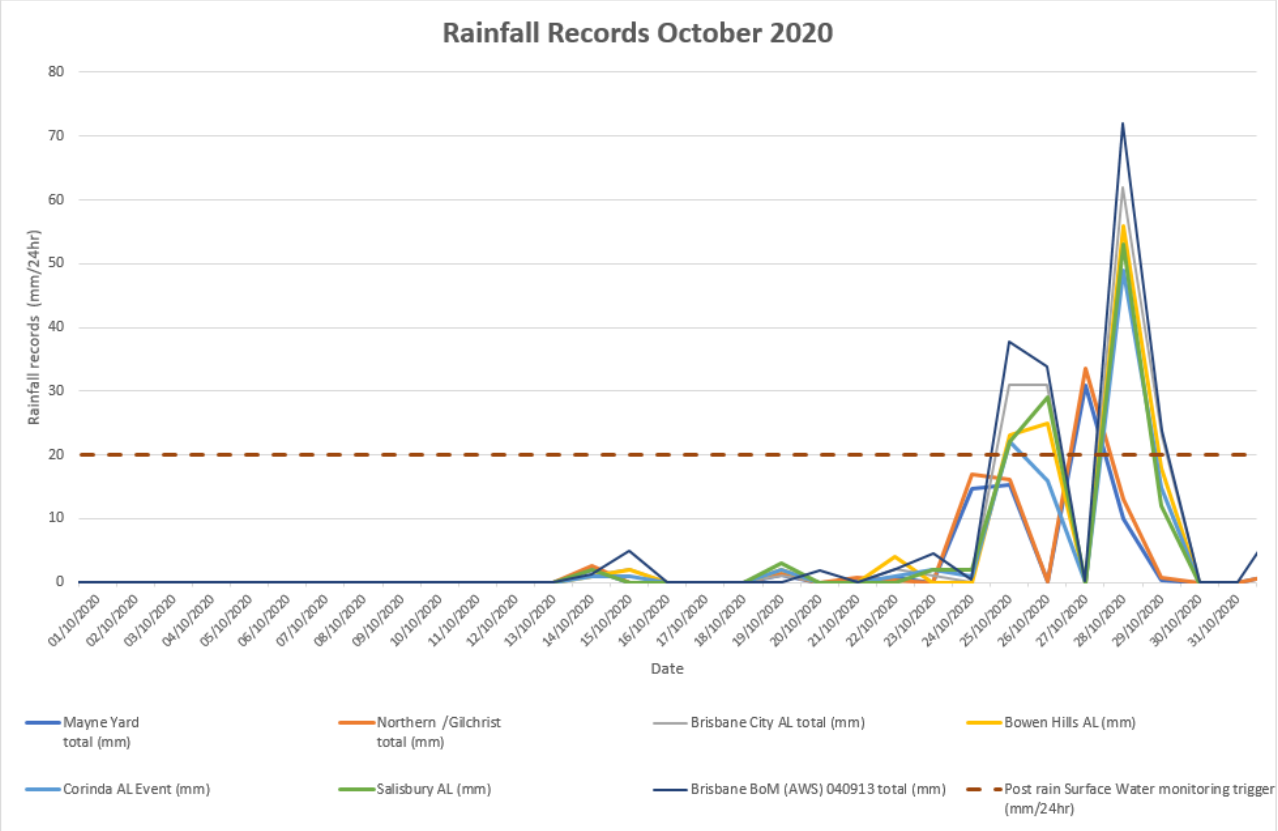


Figure 4: Rainfall – October 2020 Results

3.3.2 Discharge Monitoring / Post Rainfall Monitoring

Post rainfall monitoring is triggered typically following any rainfall event exceeding 20 to 25 mm over 24 hours, however storm events during the high risk period of the year (November to March) of lesser amounts but higher intensity may cause run-off.

Post rainfall monitoring was triggered during the reporting period at the active worksites of RNA, Northern Corridor and Mayne Yard due to high intensity storms starting 24 October 2020.

3.3.3 CEMP Monitoring

During the reporting period, UNITY undertook one (1) round of routine surface water monthly monitoring.. This monitoring is being undertaken as it may inform the Dis-1 Credit for the ISCA 'Excellent Rating' the Project is pursuing. The results are presented in the following sections.

3.3.4 Monitoring Results

3.3.4.1 Breakfast Creek

The below table summarises the in-situ records collected during one (1) round of routine surface water monitoring and two (2) rounds of post-rainfall surface water monitoring.

When results are blue, they exceed / do not meet the Water Quality Objectives nominated in the relevant *Environmental Protection Policy (Water and Wetland Biodiversity) 2019* documentation (EPP Water).

When result are in red, they exceed / do not meet the Project discharge criteria for compliance with Imposed Conditions 15 and 18.

Table 6: Breakfast Creek

Date	Location	Tide	Sampling Purpose	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH Unit)
WQO (EPP Water)				8	20	85-105% saturation	7.0-8.4
Discharge Criteria[3]				Nil until Turbidity / TSS correlation achieved	50	Nil	Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0
19/10/20	SW 1 – Upstream of Mayne Yard	Falling brackish to marine conditions	Monthly Dis-1 monitoring	In field: 8. Lab: 11	11	80	7.3
25/10/20	SW 1 – Upstream of Mayne Yard	Falling brackish to marine conditions	Post-rain monitoring	In field: 17.5 Lab: 17	10	54	6.9
28/10/20	SW 1 – Upstream of Mayne Yard	Falling brackish to marine conditions	Post-rain monitoring	In field: 62	N/A (As discussed with the Proponent)	74	7.1
19/10/20	SW 2 – Adjacent to Mayne Yard	Falling brackish to marine conditions	Monthly Dis-1 monitoring	In field: 11.5 Lab:15	15	94	7.7
25/10/20	SW 2 – Adjacent to Mayne Yard	Falling brackish to marine conditions	Post-rain monitoring	In field: 21 Lab:19	17	58	7.0
28/10/20	SW 2 – Adjacent to Mayne Yard	Falling brackish to marine conditions	Post rain monitoring	In field: 47	N/A (As discussed with the Proponent)	77	7.0

[3] Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria

Date	Location	Tide	Sampling Purpose	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH Unit)
19/10/20	SW 3 – Downstream of Mayne Yard	Falling brackish to marine conditions	Monthly Dis-1 monitoring	In field: 14 Lab: 17	7	94	7.8
25/10/20	SW 3 – Downstream of Mayne Yard	Falling brackish to marine conditions	Post-rain monitoring	In field: 16.5 Lab: 15	19	70	7.2
28/10/20	SW 3 – Downstream of Mayne Yard	Falling brackish to marine conditions	Post-rain monitoring	In field: 27	N/A (As discussed with the Proponent)	81	7.2

3.3.4.2 Barrambin (York's Hollow)

The below table summarises the in-situ records collected during one (1) round of surface water monitoring and three (3) rounds of post-rainfall surface water monitoring.

When results are blue, they exceed / do not meet the Water Quality Objectives nominated in the relevant *Environmental Protection Policy (Water and Wetland Biodiversity) 2019* documentation (EPP Water) as referenced in Imposed Condition 15a.

When results are in red, they exceed / do not meet the Project discharge criteria for compliance with Imposed Conditions 15 and 18.

Table 7: Barrambin (York's Hollow)

Date	Location	Sampling Purpose	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH Unit)
WQO (EPP Water)			50	6	85-110% saturation	6.5-8.0
Discharge Criteria[4]			Nil until Turbidity / TSS correlation achieved	50	Nil	Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0
19/10/20	SW 4 – Downstream of Northern Corridor	Monthly Dis-1 monitoring	In Field: 4 Lab:8	6	119	8.2
25/10/20	SW 4 – Downstream of Northern Corridor	Post-rain Monitoring	In Field: 188 Lab:232	110 (refer section 3.3.5 for more details)	48	7.0
26/10/20	SW 4 – Downstream of Northern Corridor	Post-rain Monitoring	In Field: 141	No additional samples collected – monitoring undertaken as part of ongoing monitoring of a post rain event	61	7.1
28/10/20	SW 4 – Downstream of Northern Corridor	Post Rain Monitoring	In Field: 104	No additional samples collected – monitoring undertaken as part of ongoing monitoring of a post rain event	71	7.1

3.3.4.3 Moolabin Creek, Rocky Water Holes Creek and Stable Swamp Creek

The below tables summarise the in-situ records collected during one (1) round of routine surface water monitoring at Moolabin Creek, Rocky Water Holes Creek and Stable Swamp Creek, the relevant surface water receivers for the Southern Corridor (F2S).

[4] Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria

No post rainfall montioring was triggered as no worksites are currently active within these catchments.

When results are in blue, they exceed / do not meet the Water Quality Objectives nominated in the relevant *Environmental Protection Policy (Water and Wetland Biodiversity) 2019* documentation (EPP Water) as referenced in Imposed Condition 15a.

When results are in red, they exceed / do not meet the project discharge Criteria for compliance with Imposed Conditions 15 and 18.

Table 8: Moolabin Creek

Date	Location	Sampling Purpose	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH Unit)
WQO (EPP Water)			50	6	85-110% saturation	6.5-8.0
Discharge Criteria[5]			Nil until Turbidity / TSS correlation achieved	50	Nil	Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0
19/10/20	SW 5 – Upstream rail corridor	Monthly Dis-1 Monitoring	Field: 5.6 Lab: 9.3	8	71	7.3
19/10/20	SW 6 – Downstream rail corridor	Monthly Dis-1 Monitoring	Field:7.3 Lab:12.4	12	78	7.7

Table 9: Rocky Water Holes Creek

Date	Location	Sampling Purpose	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH Unit)
WQO (EPP Water)			50	6	85-110% saturation	6.5-8.0
Discharge Criteria			Nil until Turbidity / TSS correlation achieved	50	Nil	Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0
19/10/20	SW 7 – Upstream Rail corridor	Monthly Dis-1 Monitoring	Field: 3.7 Lab: 7.5	<5	73	7.2
19/10/20	SW 8 – Downstream Rail corridor	Monthly Dis-1 Monitoring	Field: 1.4 Lab: 9.7	<5	81	7.2

[5] Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria

Table 10: Stable Swamp Creek

Date	Location	Sampling Purpose	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH Unit)
WQO (EPP Water)			50	6	85-110% saturation	6.5-8.0
Discharge Criteria			Nil until Turbidity / TSS correlation achieved	50	Nil	Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0
19/10/20	SW 9 – Downstream Rail corridor	Monthly Dis-1 Monitoring	Field: 1.7 Lab: 6.6	<5	83	7.3

3.3.5 Interpretation

The active project sites experienced a succession of above design storm events which resulted in off-site discharges.

The storm events were as follows:

- Saturday 24 October 2020: storm event between 2.00pm and 3.00pm with maximum rainfall recorded at nearby BoM weather (Brisbane AWS) station of 26mm. Size of the storm was between a 3EY and 2 EY which exceeded the ESC measures design rainfall event (0.5 x the 1 in 1 year critical storm or 4 EY).
- Sunday 25 October 2020: 15-minute storm between 2.30pm and 2.45pm resulting in 14mm of rain recorded at nearby site weather station located at Roma Street. The size of the storm was between a 3EY and 2EY with peak storm between 2EY and 1EY. This storm also exceeded the ESC design storm event.
- Tuesday 27 October 2020: storm event between 4.00pm and 5.00pm with maximum rainfall recorded at nearby BoM weather stations between 56 and 65 mm. The size of this storm was between a 20% to 10% AEP. This storm also exceeded the ESC measures design storm event.

The following total rain amounts were recorded over a 72-hour period

- Brisbane City Alert BoM weather stations (2km away from Herston): 124 mm
- Brisbane BoM Automated Weather Station (3km away from Herston): 144mm

The Project team undertook a series of pre-rain inspections leading up to the first storm. All actions assigned relating to ESC implementation were consistent with the Site-Specific Erosion and Sediment Control Plans and closed out prior to the first storm.

Post-rain inspections and water quality monitoring records confirmed the following:

- Offsite discharges occurred to Barrambin (York's Hollow) via the Northern Corridor stormwater system and associated onsite ESC measures.
- Offsite discharges occurred to Breakfast Creek via the Mayne Yard North stormwater system and associated onsite ESC measures.
- Offsite discharges occurred at RNA via the stormwater system and associated onsite ESC measures.
- The offsite discharges to Barrambin resulted in localised increases of in-situ turbidity (compared to ambient conditions).

The Northern Corridor was the most affected site (based on the damage to the ESC measures and site observation during the rain events) by these successive storm events however the site team mobilised labour and plant resources to undertake maintenance of the ESC measures damaged by the storms following each storm event and ahead of the next storm.

On the basis of the evidence reviewed and the information summarised in this report, this event is not a non-compliance event (NCE) against the Imposed conditions (Condition 18 and Condition 15).

The Proponent and Environmental Monitor were notified on Monday 26 October of the offsite discharges having occurred at Barrambin and subsequently remained appraised of the situation.

The Proponent provided a courtesy call to their contacts within the Department of Environment Science (DES). It is understood the DES did not raise any concerns.

Therefore, it has been concluded that the RIS scope of works is achieving the outcomes set out by the CGCR and OEMP.

4 Compliance Review

4.1 Non-Compliance Events

The below section summarises the events to be reported in accordance with Condition 5 and Condition 6(b)(ii) of the CGCR.

A non-compliance event (NCE) is defined as Project Works that do not comply with the Imposed Conditions.

4.1.1 Non - Compliance Events Summary

Table 11: Summary of Non-Compliance Events

Event Title	Location, Date, and time of event	Date the Event was Formally Notified to CG/IEM	Conditions Affected	Date the Event Report Formally Sent to CG/IEM	Status of Event
None for this reporting period					

4.2 CEMP Compliance

The below table summarise compliance status with the CEMP and monitoring requirements of relevant Sub-plans for the reporting period.

Table 12: CEMP and relevant Subplans monitoring requirements – Compliance Status for the reporting period

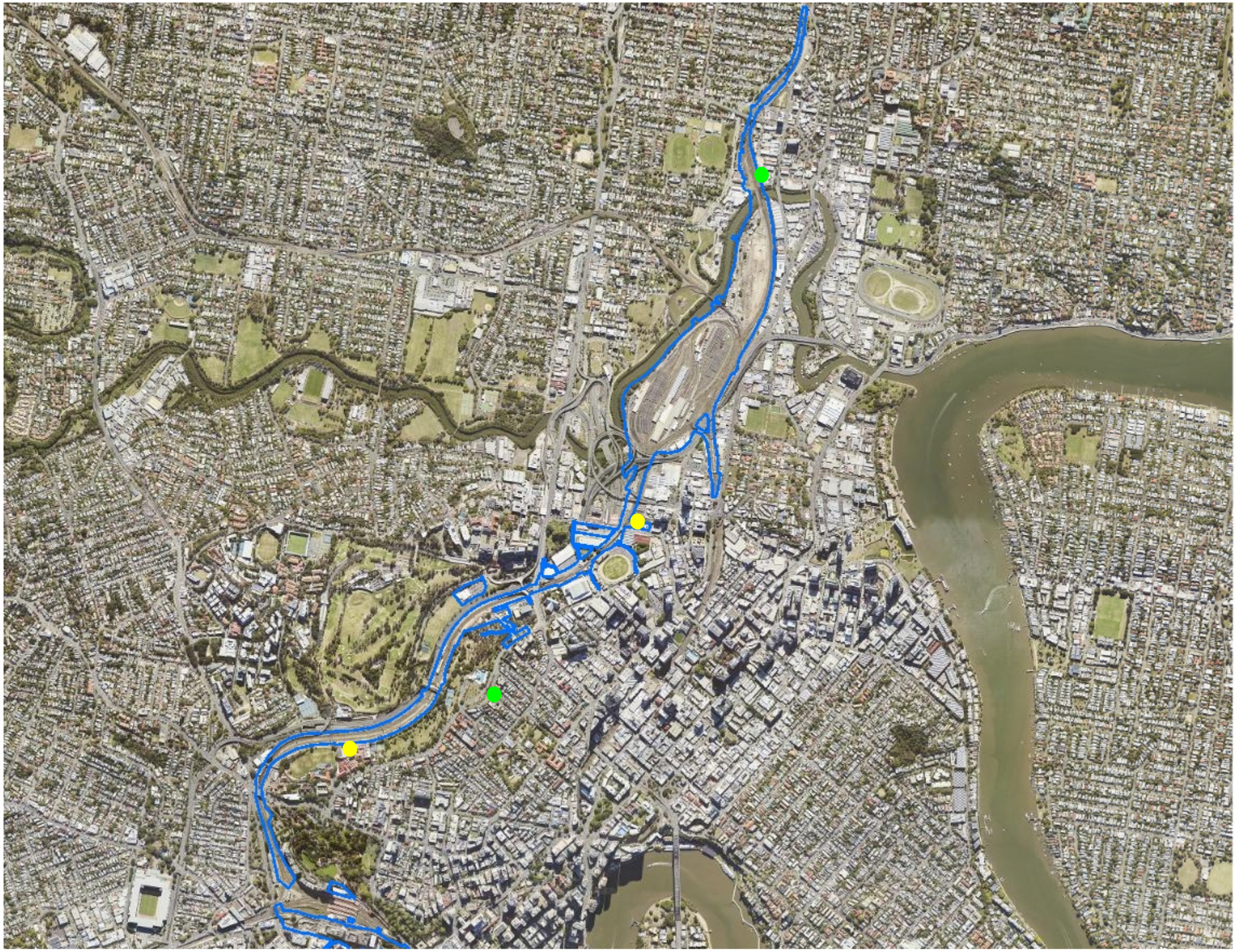
Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with CEMP / Subplan	Effect of the non-compliance
Air Quality	Visual monitoring program + Additional particulate monitoring as required based on the outcomes of the predictive assessment / risk profile	Moderate to High	Yes – visual monitoring undertaken as part of routine inspections Monitoring for TSP, PM10 and Deposited dust also undertaken	Compliant	Not Applicable
Air Quality	Complaints response	Moderate to High	Not triggered – no complaints pertaining to nuisance dust	Compliant	Not Applicable
Noise	Buffer distance tests based on the outcomes of the predictive assessment based / risk profile of activities	Moderate to High	Yes	Compliant	Not Applicable
Noise	Plant noise audits for Noisy Plant to validate models input as required	Moderate to High	No	Compliant	Not Applicable
Noise	Complaints response	Moderate to High	Yes	Compliant	Not Applicable
Vibration	Construction Monitoring at Sensitive Places / DAPs - Model Verification based on the outcomes of the predictive assessment based / risk profile of activities	Moderate to High	No	Compliant	Not Applicable
Vibration	Complaints response	Moderate to High	Not triggered – no complaints	Compliant	Not Applicable

Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with CEMP / Subplan	Effect of the non-compliance
Water Quality	Monthly monitoring	-	Yes	Compliant	Not Applicable
Water Quality	Post Rainfall	Moderate to High	Yes	Compliant	Not Applicable
Water Quality	Dewatering	Moderate to High	Not triggered – no dewatering to receiving water systems	Compliant	Not Applicable

Attachment 1 CGCR Non-Compliance Event Report (if required)

None for this reporting period.

Attachment 2 Monitoring Locations – Noise



Legend

- Project Boundary RFPC7
- Brisbane Imagery (25/06/2020)
- Construction Monitoring at Sensitive places
- Complaint Response

Issue	Description	Date	Approved
A	FOR INFORMATION		
	Noise		

Scale 1: 20,000

1,016 0 508.0 1,016 Meters

This map is a user generated static output from EIC Activities Web GIS Viewer and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Status	GIS OUTPUT NOT USED FOR CONSTRUCTION		
Original Size	A3	Drawn	
Coordinate System	GDA MGA94-56	Designed	
Height Datum	AHD	Date Printed	11-Nov-2020

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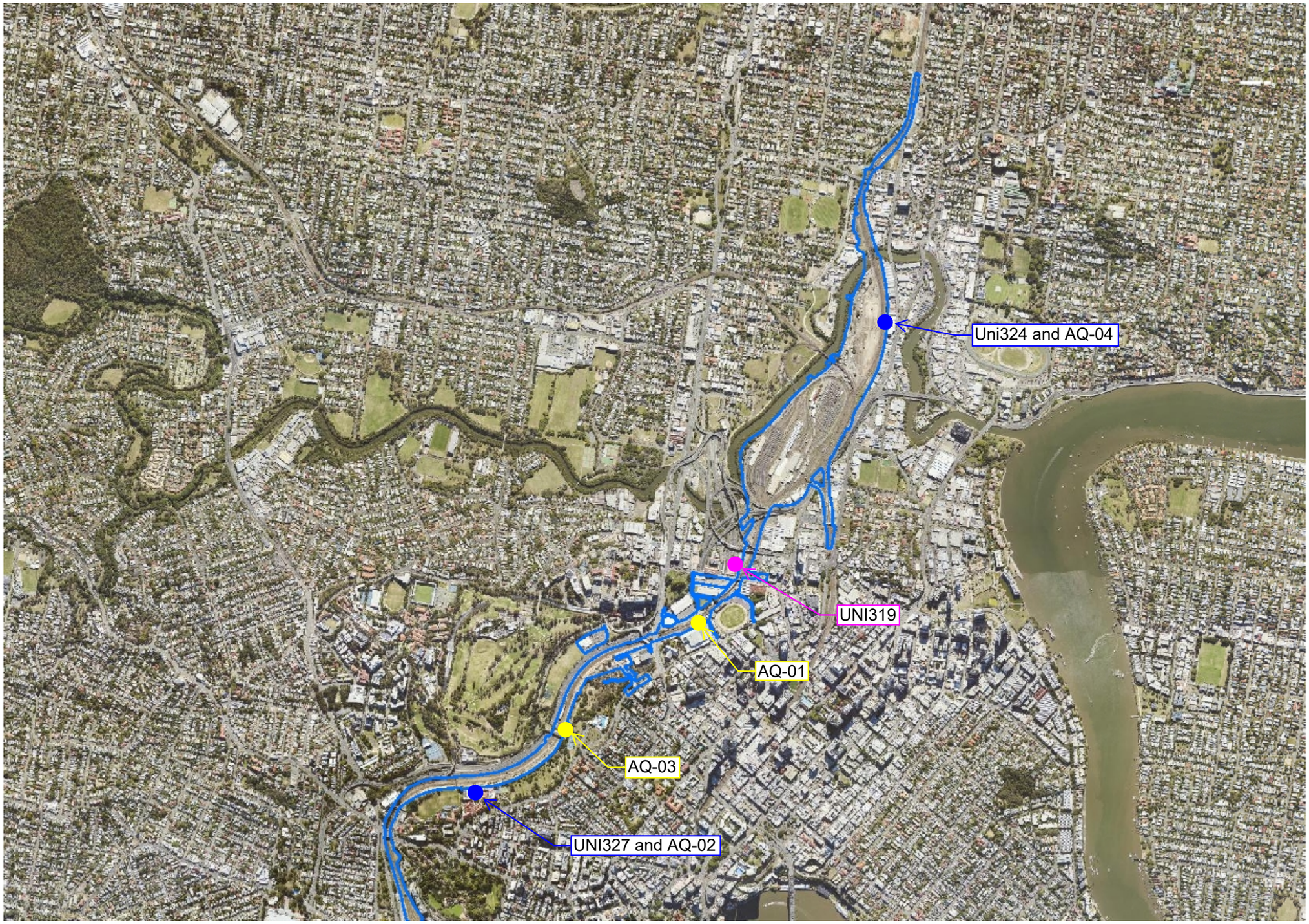
CG Monthly Report

Noise

Attachment 3 Monitoring Locations – Vibration

Not triggered during this monitoring period

Attachment 4 Monitoring Locations – Air Quality



Legend

Project Boundary RFPC7

Brisbane Imagery (25/06/2020)

Air Quality Monitoring

DDG

DDG, TSP & PM10

TSP & PM10

A FOR INFORMATION

Issue	Description	Date	Approved
	August 2020		

Scale 1: 20,000

1,016 0 508.0 1,016 Meters

This map is a user generated static output from EIC Activities Web GIS Viewer and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Status: GIS OUTPUT
NOT USED FOR CONSTRUCTION

Original Size	A3	Drawn	
Coordinate System	GDA MGA94-56	Designed	
Height Datum	AHD	Date Printed	11-Sep-2020

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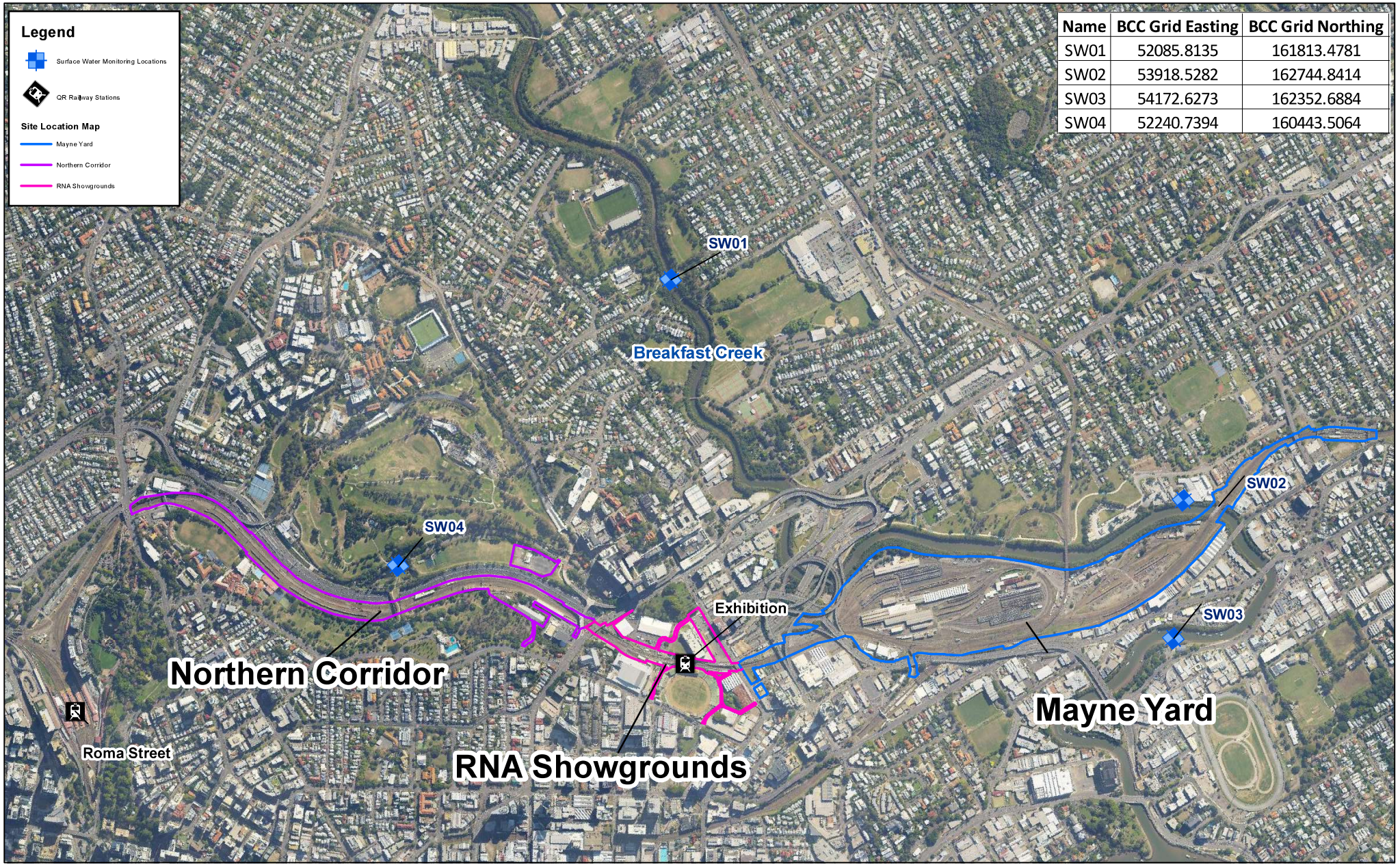
Air Quality Monitoring locations

Attachment 5 Monitoring Locations – Surface Water



Name	BCC Grid Easting	BCC Grid Northing
SW01	52085.8135	161813.4781
SW02	53918.5282	162744.8414
SW03	54172.6273	162352.6884
SW04	52240.7394	160443.5064

Rev	Description	Date	Approved
1	Overview Map	17/09/2019	J Perry

0 100 200 400 600 m

Scale 1 : 12,000 cm

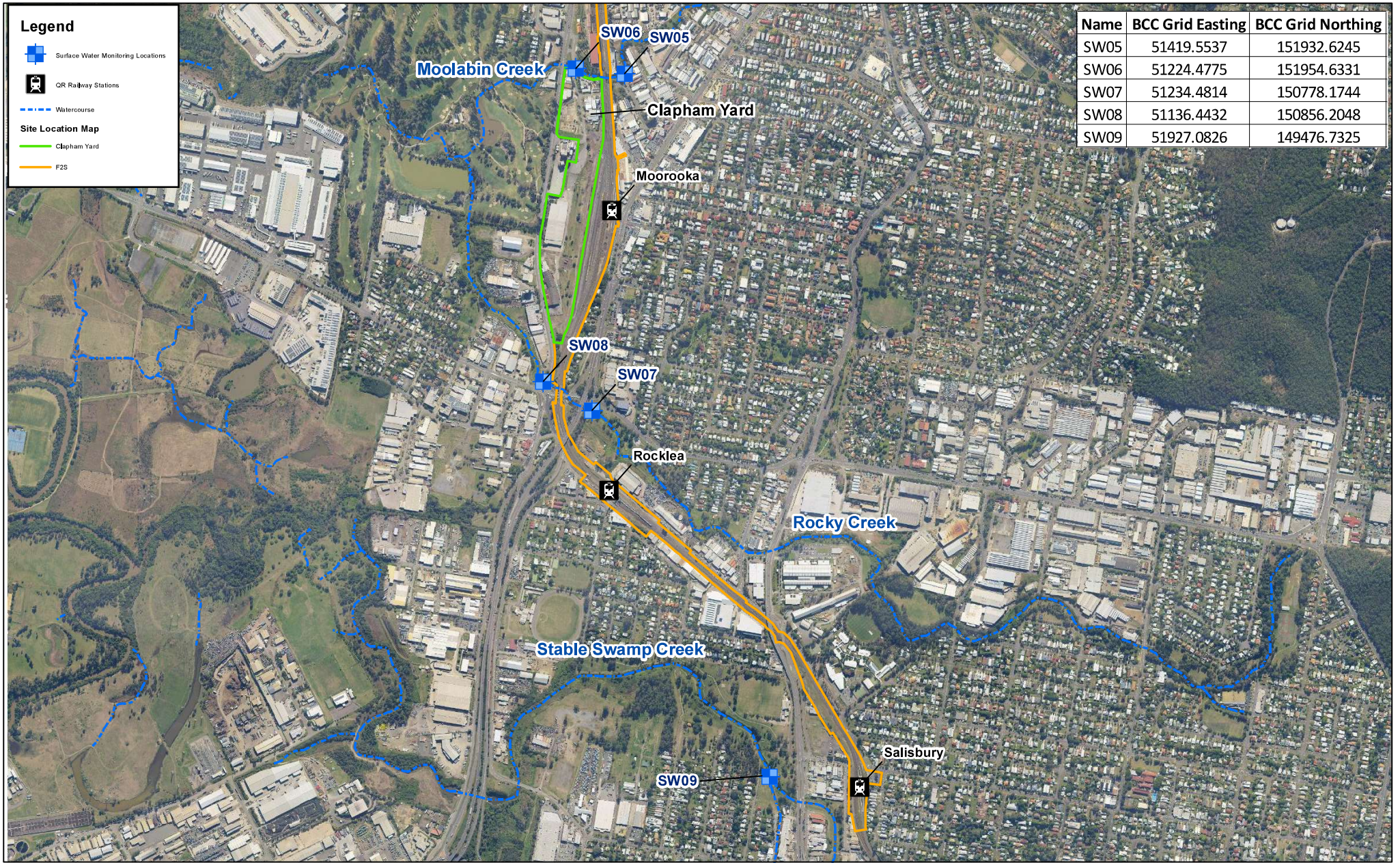
Status: Issued for Information

Original Size	A3	Drawn	GIS
Coordinate System	GDA 1994 BCSG02	Designed	J Clothier
Height Datum	AHD	Date Printed	2/13/2020
Filename:	Surface_Water_Northern_Area_Map.mxd		

Project Wide Surface Water Investigation

Figure 1 - Surface Water Monitoring Locations

Project Number	Discipline	Document	Document Number	Rev
	ENV	PL	002	1



Name	BCC Grid Easting	BCC Grid Northing
SW05	51419.5537	151932.6245
SW06	51224.4775	151954.6331
SW07	51234.4814	150778.1744
SW08	51136.4432	150856.2048
SW09	51927.0826	149476.7325

Rev	Description	Date	Approved
1	Southern Overview Map	17/09/2019	J Perry

0 100 200 400 600 m

Scale 1 : 12,000 cm

Status: Issued for Information

Original Size	A3	Drawn	GIS
Coordinate System	GDA 1994 BCSG02	Designed	J Clothier
Height Datum	AHD	Date Printed	2/13/2020
Filename:	Surface_Water_Southern_Area_Map.mxd		

N

Project Wide Surface Water Investigation

Figure 2 - Surface Water Monitoring Locations

Project Number	Discipline	Document	Document Number	Rev
	ENV	PL	002	1

Appendix B – TSD Monthly Report

COORDINATOR GENERAL MONTHLY REPORT: October 2020

Prepared in accordance with Coordinator-General Imposed Condition 6 - Reporting.

1. Monthly Monitoring Summary

It is the Project's intent to aim for the Goals and Objectives relevant to vibration, noise, air quality and water monitoring within the practical extent of delivering the Project.

Vibration monitoring was conducted on nineteen (19) occasions, and noise monitoring was conducted on thirty-five (35) occasions during October 2020. Each vibration and noise monitoring event confirmed works adhered to project requirements.

Ambient air quality monitoring was conducted at the Roma Street, Albert Street, Woolloongabba and Boggo Road precinct sites during October 2020. Air quality monitoring confirmed works adhered to project requirements.

Water quality monitoring was conducted before the release of water from the site on twenty-five (25) occasions. Each monitoring event confirmed project requirements were adhered to. Three (3) rounds of surface water quality monitoring were also conducted that confirmed no impacts were generated by the Project.

2. CG Monthly Report – Compliance Assessment Against Imposed Conditions

Whilst not a requirement of Imposed Condition 6, CBGU offers the below Compliance Status Table as a good-will gesture to demonstrate the Project's ongoing environmental performance.

Table 1: Compliance Status – CG Imposed Conditions

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
1.	**General conditions** – compliance with the Project Changes relevant to the Contractor's scope.	Yes	Project works have been conducted compliant with the Imposed Conditions.
2.	**Outline Environmental Management Plan** – timely submission to the Coordinator-General, including required sub plans.	N/A	The OEMP is not an obligation of the CBGU Joint Venture.
3.	**Design** – the achievement of the Environmental Design Requirements.	Yes	Design and implementation proceeded in accordance with the Environmental Design Requirements.
4.	**Construction Environmental Management Plan** – all relating to Relevant Project Works.	Yes	All works were conducted in accordance with the Construction Environmental Plan (CEMP) (Rev 7).
5.	**Compliance and Incident management** – Non-compliance events, notifications and reporting.	Yes	Nil non-compliances occurred during the monitoring period (refer to Section 4).
6.	**Reporting** – Monthly and Annual reporting.	Yes	All reporting requirements are completed in accordance with Imposed Condition 6.
7.	**Environmental Monitor** – engaged and functions resumed.	Yes	An EM is appointed to the Project, and CBGU is committed to working collaboratively to aid the EM's functions under Imposed Condition 7.
8.	**Community Relations Monitor** – engaged and functions resumed.	Yes	A Community Relations Monitor (CRM) is appointed to the Project, and CBGU is committed to working collaboratively to aid the CRM's functions under Imposed Condition 8.
9.	**Community engagement plan** – developed and endorsed by Environmental Monitor.	Yes	A Community Engagement Plan (CEP) has been developed and implemented in accordance with Imposed Condition 9. The CEMP has been endorsed with the CEP.
10.	**Hours of work** – works undertaken during approved hours.	Yes	Project works have been conducted in accordance with the approved hours of work.
11.	**Noise** – Work must aim to achieve internal noise goals for human health and well-being.	Yes	Project work has aimed to achieve internal noise goals for human health and well-being. Where internal noise levels have been unable to be measured, suitable noise reductions have been applied in accordance with Imposed Condition 11. Noise monitoring data is provided within Section 3.2.

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
	Vibration – Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	Project work has aimed to achieve vibration goals for cosmetic damage, human comfort and sensitive buildings. Vibration monitoring data is provided within Section 3.1.
12.	**Property damage** relating to ground movement	Yes	The management of potential impacts relating to property damage has been completed in accordance with Imposed Condition 12.
13.	**Air quality** – Works must aim to achieve air quality goals for human health and nuisance.	Yes	Project works have aimed to achieve air quality goals. Air quality monitoring data is provided within Section 3.3.
14.	**Traffic and transport** – Works must minimise adverse impacts on road safety and traffic flow.	Yes	Project works have been conducted in a manner that has minimised adverse impacts on road safety and traffic flow.
15.	**Water quality** – Works must not discharge surface water and groundwater from the construction site above the relevant environmental values and water quality objectives.	Yes	The Project possesses processes that ensure water quality is managed in accordance with Imposed Condition 15.
16.	**Water resources** – evaluate potential impact, plan works, implement controls and monitor the inflow of groundwater associated with drawdown.	Yes	Project works are managed in accordance with Imposed Condition 16.
17.	**Surface water** – Must be designed to avoid inundation from stormwater due to a 2-year (6hr) ARI rainfall event and flood waters due to a 5-year ARI rainfall event and constructed to avoid afflux or cause the redirection of uncontrolled surface water flows, including stormwater flows, outside of worksites.	Yes	Design of the Project considers the requirements of Imposed Condition 17.
18.	**Erosion and sediment control** – Provisions for erosion and sediment control must be consistent with the Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52.	Yes	The Project possesses processes that ensure erosion & sediment control is managed in accordance with Imposed Condition 18.
19.	**Acid Sulfate Soils** managed as per the *Queensland Acid Sulfate Soil Technical Manual.*	Yes	The Project possesses processes that ensure acid sulphate soils are managed in accordance with Imposed Condition 19.
20.	**Landscape and open space** – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria park	Yes	Project works are designed and implemented in accordance with Condition 20.

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
21.	**Worksite rehabilitation** – worksites rehabilitated as soon as practicable upon completion of works or commissioning, and in consultation with Brisbane City Council.	Yes	Project works are designed and implemented in accordance with Condition 21.

1. Environmental Monitoring Results

Monitoring data is provided below in accordance with Imposed Condition 6(b)(i).

3.1 Vibration

Vibration requirements (levels) are defined as goals within Imposed Condition 11. The goals are to be aimed for.

The Coordinator-General Change Report acknowledges instances exist that these goals may not be achieved.

Nineteen (19) vibration monitoring sessions were conducted during October 2020.

All vibration monitoring adhered to project requirements and is detailed in the table below.

Table 2: Vibration Monitoring Data

Start Date	**Time** (AM/PM)	**Finish Date**	**Location** (Street Name) (Construction Precinct)	**Average Vibration level** (mm/s)	**Max Vibration Level** (mm/s)	**Vibration Goal** (mm/s)	**Receiver / Goal Type**	**Adhered to Project Requirements** (Yes / No)
7/10/2020	12:46 PM	13/10/2020	Roma Street (Roma Street Precinct)	0.09	0.26	2	Heritage Structure	Yes
12/10/2020	04:22 PM	13/10/2020	Mary Street (Albert Street Precinct)	0.08	0.16	50	Residential	Yes
12/10/2020	6:30 PM	13/10/2020	Mary Street (Albert Street Precinct)	0.07	0.12	0.5	Residential	Yes
12/10/2020	7:57 AM	19/10/2020	Joe Baker Street (Boggo Road Precinct)	0.11	0.13	50	Structure	Yes
12/10/2020	7:57 AM	19/10/2020	Vulture Street (Woolloongabba Precinct)	0.10	0.15	2	Heritage Structure	Yes
13/10/2020	2:09 PM	15/10/2020	Mary Street (Albert Street Precinct)	0.08	0.15	50	Residential	Yes

Start Date	**Time** (AM/PM)	**Finish Date**	**Location** (Street Name) (Construction Precinct)	**Average Vibration level** (mm/s)	**Max Vibration Level** (mm/s)	**Vibration Goal** (mm/s)	**Receiver / Goal Type**	**Adhered to Project Requirements** (Yes / No)
13/10/2020	6:30 PM	15/10/2020	Mary Street (Albert Street Precinct)	0.08	0.12	0.5	Residential	Yes
14/10/2020	8:23 AM	14/10/2020	Vulture Street (Woolloongabba Precinct)	NA	5.20	10	Controlled Blast (Heritage Structure)	Yes
16/10/2020	11:09 AM	16/10/2020	Inner Northern Busway (Roma Street Precinct)	0.28	0.96	50	Structure	Yes
16/10/2020	4:14 PM	21/10/2020	Roma Street (Roma Street Precinct)	0.09	0.18	2	Heritage Structure	Yes
22/10/2020	11:22 AM	27/10/2020	Stanley Street (Woolloongabba Precinct)	0.10	0.11	2	Heritage Structure	Yes
23/10/2020	2:37 PM	6/10/2020	Roma Street (Roma Street Precinct)	0.09	0.35	2	Heritage Structure	Yes
23/10/2020	2:36 PM	27/10/2020	Supreme Court	0.086	0.16	50	Structure	Yes
26/10/2020	11:31 AM	27/10/2020	Albert Street (Albert Street Precinct)	0.44	0.76	2	Heritage Structure	Yes
26/10/2020	11:30 AM	26/10/2020	Albert Street (Albert Street Precinct	0.37	0.37	2	Heritage Structure	Yes
28/10/2020	10:26 AN	28/10/2020	Mary Street (Albert Street Precinct)	0.07	0.07	2	Heritage Structure	Yes
28/10/2020	10:20 AN	28/10/2020	Mary Street (Albert Street Precinct)	0.10	0.10	2	Heritage Structure	Yes
31/10/2020	4:28 PM	31/10/2020	Mary Street (Albert Street Precinct)	NA	2.64	10	Controlled Blast (Heritage Structure)	Yes

Start Date	**Time** (AM/PM)	**Finish Date**	**Location** (Street Name) (Construction Precinct)	**Average Vibration level** (mm/s)	**Max Vibration Level** (mm/s)	**Vibration Goal** (mm/s)	**Receiver / Goal Type**	**Adhered to Project Requirements** (Yes / No)
31/10/2020	4:28 PM	31/10/2020	Mary Street (Albert Street Precinct)	NA	2.23	10	Controlled Blast (Heritage Structure)	Yes

3.2 Noise

Noise requirements (levels) are defined as goals within Imposed Condition 11. The goals are to be aimed for.

The Coordinator-General Change Reports acknowledge instances exist that these goals may not be achieved.

Noise monitoring was conducted on thirty-five (35) occasions during October 2020. All noise monitoring data adhered to project requirements and is provided in the table below.

Table 3: Noise Monitoring Data

Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External [3] Monitoring	Activity	Dominate noise source	Noise Goal LA10[1]	Noise level LA10[1]	Noise Goal LAeq[2]	Noise level LAeq[2]	Adhered to Project Requirements (Yes / No)
1/10/2020	7:13:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Ground Stabilisation Works and Geotechnical investigation	Road Traffic	67	66.7	57	67.8	Yes
1/10/2020	8:15:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Ground Stabilisation Works and Geotechnical investigation	Construction and Road Traffic	67	76.3	57	74.1	Yes
7/10/2020	9:34:00 AM	Vulture Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Road Traffic	72	73.1	62	69.0	Yes
7/10/2020	9:58:00 AM	Stanley Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Road Traffic	72	68.3	62	66.1	Yes
9/10/2020	12:33:00 PM	George Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Haulage	Construction and Road Traffic	72	74.8	62	72.5	Yes
9/10/2020	12:53:00 PM	George Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Haulage	Road Traffic	72	71.6	62	69.3	Yes

Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External [3] Monitoring	Activity	Dominate noise source	Noise Goal LA10[1]	Noise level LA10[1]	Noise Goal LAeq[2]	Noise level LAeq[2]	Adhered to Project Requirements (Yes / No)
9/10/2020	1:12:00 PM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Haulage	Road Traffic	67	71.3	57	68.5	Yes
12/10/2020	5:55:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Ground Stabilisation Works	Road Traffic	67	68.5	57	66.1	Yes
12/10/2020	6:15:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Ground Stabilisation Works	Road Traffic	67	68.6	57	65.8	Yes
12/10/2020	11:55:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition and Spoil Haulage	General Public / Station Noise	60	69.3	50	67.5	Yes
12/10/2020	12:13:00 PM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Spoil Haulage	Construction	72	63.9	62	61.3	Yes
12/10/2020	8:24:00 PM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Utility Works	Non-Project related Construction	62	77.9	52	75.6	Yes
12/10/2020	8:56:00 PM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Utility Works	Utility Relocation	62	75.9	52	74.7	Yes
14/10/2020	8:23:00 AM	Stanley Street (Woolloongabba Precinct)	Controlled blast	External	Tunnelling and Excavation	Construction	130[4]	119.2[4]	NA	NA	Yes
14/10/2020	9:40:00 PM	Stanley Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Road Traffic	62	64.6	52	60.0	Yes
14/10/2020	9:59:00 PM	Stanley Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Road Traffic	54	62.0	47	58.1	Yes

Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External [3] Monitoring	Activity	Dominate noise source	Noise Goal LA10[1]	Noise level LA10[1]	Noise Goal LAeq[2]	Noise level LAeq[2]	Adhered to Project Requirements (Yes / No)
19/10/2020	10:13:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition and Haulage	Concourse	60	69.9	50	67.4	Yes
20/10/2020	9:31:00 AM	Mark Lane (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Road Traffic and Construction	67	60.2	57	58.4	Yes
20/10/2020	9:49:00 AM	Anglesey St (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Road Traffic	67	64.5	57	62.6	Yes
21/10/2020	6:31:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Excavation and Spoil Haulage	Construction and Road Traffic	67	68.6	57	66.7	Yes
21/10/2020	6:49:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Excavation and Spoil Haulage	Construction and Road Traffic	67	67.6	57	66.2	Yes
21/10/2020	12:06:00 PM	Joe Baker Street (Boggo Road Precinct)	Construction Monitoring at Sensitive Places	External	Excavation and Spoil Haulage	Construction Noise	77	65.3	67	63.0	Yes
22/10/2020	8:23:00 PM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Utilities Works	Road Traffic	62	70.3	52	67.9	Yes
22/10/2020	8:54:00 PM	Herschel Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Utilities Works	Road Traffic and General Public	67	65.1	57	63.8	Yes
23/10/2020	11:49:00 AM	George Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Excavation	Construction and Road Traffic	72	76.3	62	74.1	Yes
23/10/2020	12:13:00 PM	George Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition and Excavation	Office Noise	60	53.3	50	51.3	Yes

Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External [3] Monitoring	Activity	Dominate noise source	Noise Goal LA10[1]	Noise level LA10[1]	Noise Goal LAeq[2]	Noise level LAeq[2]	Adhered to Project Requirements (Yes / No)
23/10/2020	1:10:00 AM	Mark Lane (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Construction	54	53.0	47	52.0	Yes
23/10/2020	1:33:00 AM	Anglesey Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling and Excavation	Construction	54	46.6	47	45.5	Yes
26/10/2020	11:59:00 AM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition	Construction and Traffic	67	71.5	57	70.3	Yes
26/10/2020	11:38:00 AM	Elizabeth Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition	General Public and Entertainment	72	65.3	62	63.4	Yes
26/10/2020	11:32:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition	General Public and Station Noise	60	75.1	50	71.7	Yes
26/10/2020	11:52:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Pilling	Construction	72	67.8	62	65.5	Yes
26/10/2020	8:51:00 PM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Utility Investigations	Construction	62	79.2	52	74.2	Yes
26/10/2020	9:38:00 PM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Utility Investigations	Construction	62	69.9	52	64.9	Yes
31/10/2020	4:28:00 PM	Albert Street (Albert Street Precinct)	Controlled blast	External	Tunnelling	Construction	130[4]	125.4	NA	NA	Yes

- *[1] Intermittent noise goal (LA10)*
- *[2] Continuous noise goal (LAeq)*

- *[3] In accordance with Imposed Condition 11 where internal noise levels were unable to be measured, external noise goals were developed by an acoustic specialist using the following standards: ISO 140-5:1998 Acoustics – Measurement of Sound Insulation in Buildings and of Building Elements, Part 5: Field measurements of airborne sound insulation of façade elements and facades and ISO 354:1985 Acoustics – Measurement of sound absorption in a reverberation room.*
- *[4] Blasting is measured in dB Linear Peak.*

3.3 Air Quality

3.3.1 Deposited Dust Results

Air quality requirements (levels) are defined as goals within Imposed Condition 13. The goals are to be aimed for.

The Coordinator-General Change Report acknowledges instances exist that these goals may not be achieved.

Dust deposition monitoring was performed during October 2020. The dust deposition gauges result for the reporting period are detailed below, and all monitoring data adhered to project requirements.

Table 4: Air Quality Monitoring – Deposited Dust Data

Location	Project Wide Air Quality Criteria & Goals[1]			Monitoring results	Comments
	Criterion	Air Quality Indicator	Goal		
Roma Street Precinct/ Northern Portal	Nuisance	Deposited dust	120 mg/m2/day	10.0 mg/m2/day	*Air quality monitoring was performed during the reporting period. All results adhered to project requirements.*
Albert Street Precinct				16.6 mg/m2/day	
Woolloongabba Precinct				13.3 mg/m2/day 40.0 mg/m2/day	
Boggo Road Precinct/ Southern Portal				13.3 mg/m2/day 80.0 mg/m2/day	

- *[1] Project works must aim to achieve construction air quality goals. The Coordinator-General Change Report – Whole of Project Refinements 2019 acknowledges instances exist that these goals may not be achieved.*

3.3.2 Particulates and Ambient Air Quality Results

Total Suspended Particules (TSP) and particulate matter less than 10µm (PM10) monitoring was conducted during October 2020.

TSP and PM10 are monitored using portable air quality units, as well as nearby Government air quality stations. Targeted monitoring of potential dust-generating activities is conducted by the mobile air quality units and was completed at the Roma Street, Albert Street, Woolloongabba, and Boggo Road Precincts during October 2020. Three (3) Government air quality stations near to the Construction Precincts are also utilised.

Table 5: Targeted Air Quality Monitoring – Total Suspended Particles and PM10 Data

Date	Woolloongabba				Roma Street				Boggo Road				Albert Street			
	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10
	(µg/m3/24 hr)															
01-Oct-20	80	4.67	50	4.60	80	4.29	50	4.08	80	4.98	50	7.25	80	6.87	50	6.83
02-Oct-20	80	8.46	50	8.33	80	5.36	50	5.06	80	8.21	50	8.21	80	11.79	50	11.74
03-Oct-20	80	5.35	50	5.29	80	2.75	50	2.67	80	6.98	50	6.19	80	7.64	50	7.61
04-Oct-20	80	3.37	50	3.33	80	2.4	50	2.34	80	4.95	50	7.40	80	7.19	50	7.16
05-Oct-20	80	4.09	50	4.06	80	2.56	50	2.44	80	5.58	50	7.92	80	7.49	50	7.46
06-Oct-20	80	6.17	50	6.10	80	4.36	50	4.22	80	7.26	50	5.76	80	9.63	50	9.56
07-Oct-20	80	6.56	50	6.45	80	3.37	50	3.22	80	8.24	50	6.59	80	9.44	50	9.37
08-Oct-20	80	5.58	50	5.52	80	4.45	50	4.37	80	6.22	50	9.62	80	8.89	50	8.84
09-Oct-20	80	7.65	50	7.57	80	2.4	50	2.15	80	7.44	50	8.36	80	12.11	50	12.04
10-Oct-20	80	6.35	50	6.22	80	3.73	50	3.48	80	8.02	50	8.04	80	9.72	50	9.64
11-Oct-20	80	4.00	50	3.92	80	4.4	50	4.28	80	5.78	50	6.48	80	6.76	50	6.73
12-Oct-20	80	4.89	50	4.79	80	3.88	50	3.67	80	6.63	50	8.45	80	7.09	50	7.02
13-Oct-20	80	4.55	50	4.42	80	3.95	50	3.86	80	9.66	50	9.60	80	6.45	50	6.41
14-Oct-20	80	3.59	50	3.54	80	3.51	50	3.29	80	8.42	50	2.97	80	9.19	50	9.16
15-Oct-20	80	4.98	50	4.91	80	5.25	50	5.07	80	8.05	50	6.16	80	8.35	50	8.28
16-Oct-20	80	4.46	50	4.38	80	2.54	50	2.41	80	6.51	50	4.63	80	8.35	50	8.28
17-Oct-20	80	4.51	50	4.42	80	2.23	50	2.14	80	8.47	50	5.00	80	8.83	50	8.81
18-Oct-20	80	6.43	50	6.40	80	2.57	50	2.51	80	9.63	50	4.52	80	12.84	50	12.81
19-Oct-20	80	2.26	50	2.19	80	2.52	50	2.28	80	3.00	50	46.30	80	3.40	50	3.33
20-Oct-20	80	2.69	50	2.65	80	3.50	50	3.02	80	6.21	50	9.19	80	5.35	50	5.30
21-Oct-20	80	2.95	50	2.89	80	2.79	50	2.58	80	4.65	50	5.33	80	7.36	50	7.31
22-Oct-20	80	13.53	50	13.49	80	2.97	50	2.87	80	5.00	50	6.21	80	6.19	50	6.15
23-Oct-20	80	6.99	50	6.94	80	7.08	50	6.83	80	4.55	50	6.01	80	6.84	50	6.79

Date	Woolloongabba				Roma Street				Boggo Road				Albert Street			
	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10
	(µg/m3/24 hr)															
24-Oct-20	80	-[1]	50	-[1]	80	14.41	50	14.39	80	46.33	50	7.13	80	46.53	50	46.50
25-Oct-20	80	-[1]	50	-[1]	80	-[2]	50	-[2]	80	9.20	50	11.62	80	11.70	50	11.66
26-Oct-20	80	-[1]	50	-[1]	80	6.23	50	6.12	80	5.35	50	10.00	80	7.44	50	7.17
27-Oct-20	80	3.34	50	3.28	80	2.60	50	2.40	80	6.22	50	7.25	80	6.83	50	6.81
28-Oct-20	80	3.95	50	3.89	80	4.29	50	4.19	80	6.03	50	8.21	80	6.99	50	6.96
29-Oct-20	80	6.23	50	6.13	80	5.6	50	5.46	80	7.16	50	6.19	80	8.90	50	8.87
30-Oct-20	80	9.05	50	8.90	80	3.63	50	3.5	80	11.64	50	7.4	80	16.33	50	16.28
31-Oct-20	80	7.63	50	7.49	80	2.99	50	2.83	80	10.03	50	7.92	80	13.10	50	13.05

- [1] Due to the air quality monitoring unit's accessibility and potential for interference, the unit was temporarily removed (from the 24th October 2000 to the 26th October 2020) during the AFL Grand Final.
- [2] Due to a technical fault, the Roma Street mobile air quality unit stopped functioning on 25th October 2020. The fault was immediately rectified. A nearby (Brisbane CBD) DES Air Quality Station demonstrated nil impact by the Project on air quality during August. The levels are also consistent with levels recorded early in the month when the unit was operating.

CBGU also utilises three (3) Government air quality monitoring stations to monitor PM10 near to the project sites. The results during this reporting period were as follows:

- Brisbane CBD: PM_{10} daily Maximum average: **34.7 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=cbd&parameter=18&date=1/10/2020&timeframe=month)
- South Brisbane: PM_{10} daily Maximum average: **44.2 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=sbr&parameter=18&date=1/10/2020&timeframe=month)
- Woolloongabba: PM_{10} daily Maximum average: **29.9 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=woo&parameter=18&date=1/10/2020&timeframe=month)

The graphical representation of the Government air quality data is presented in the below charts (refer to Figure 1-3).

Particle PM10 at Brisbane CBD, 1–31 October 2020

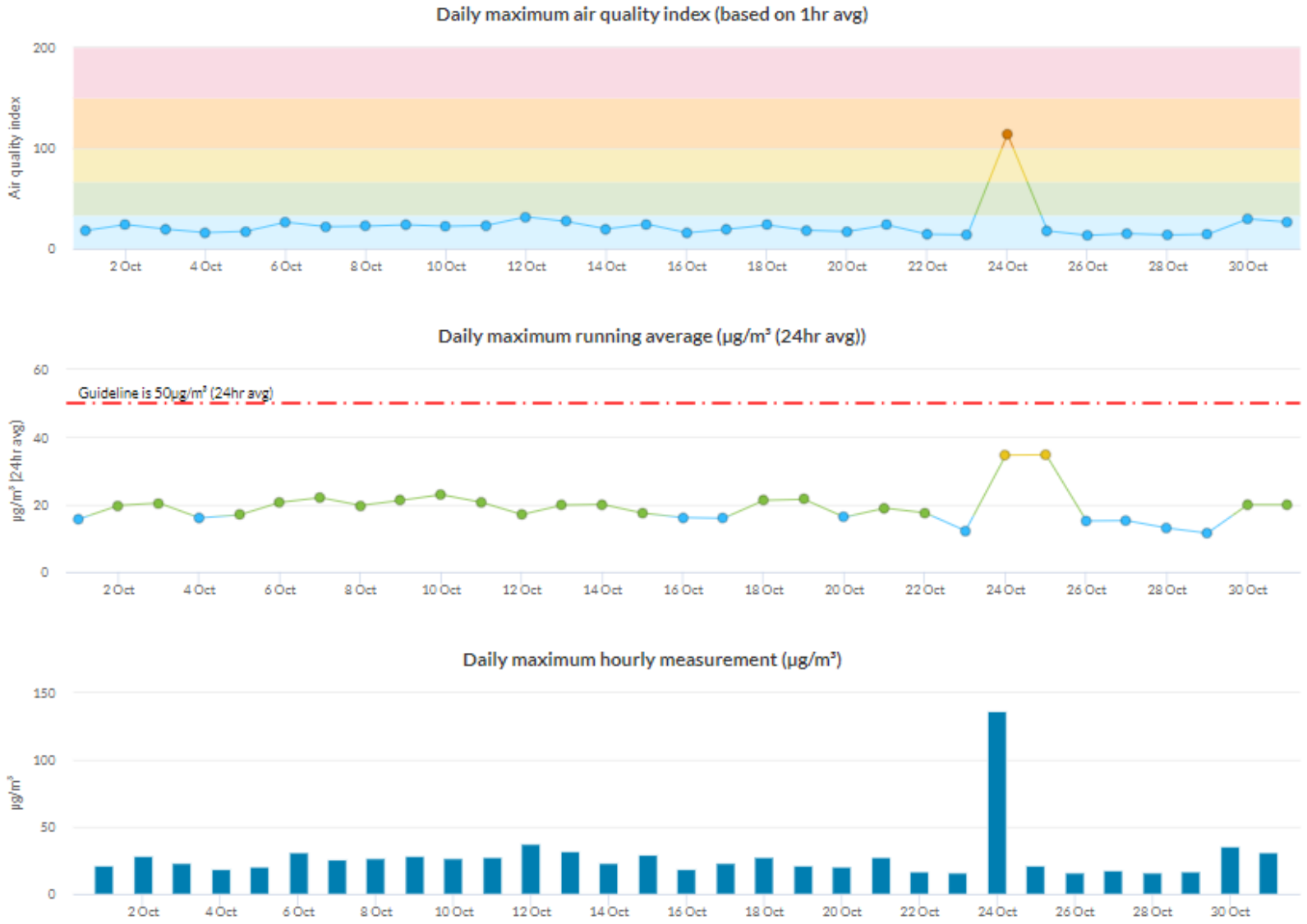


Figure 1: Brisbane CBD – DES Station - PM10 graph for October 2020 (reproduction from the DES website accessed November 2020).

Particle PM10 at South Brisbane, 1–31 October 2020

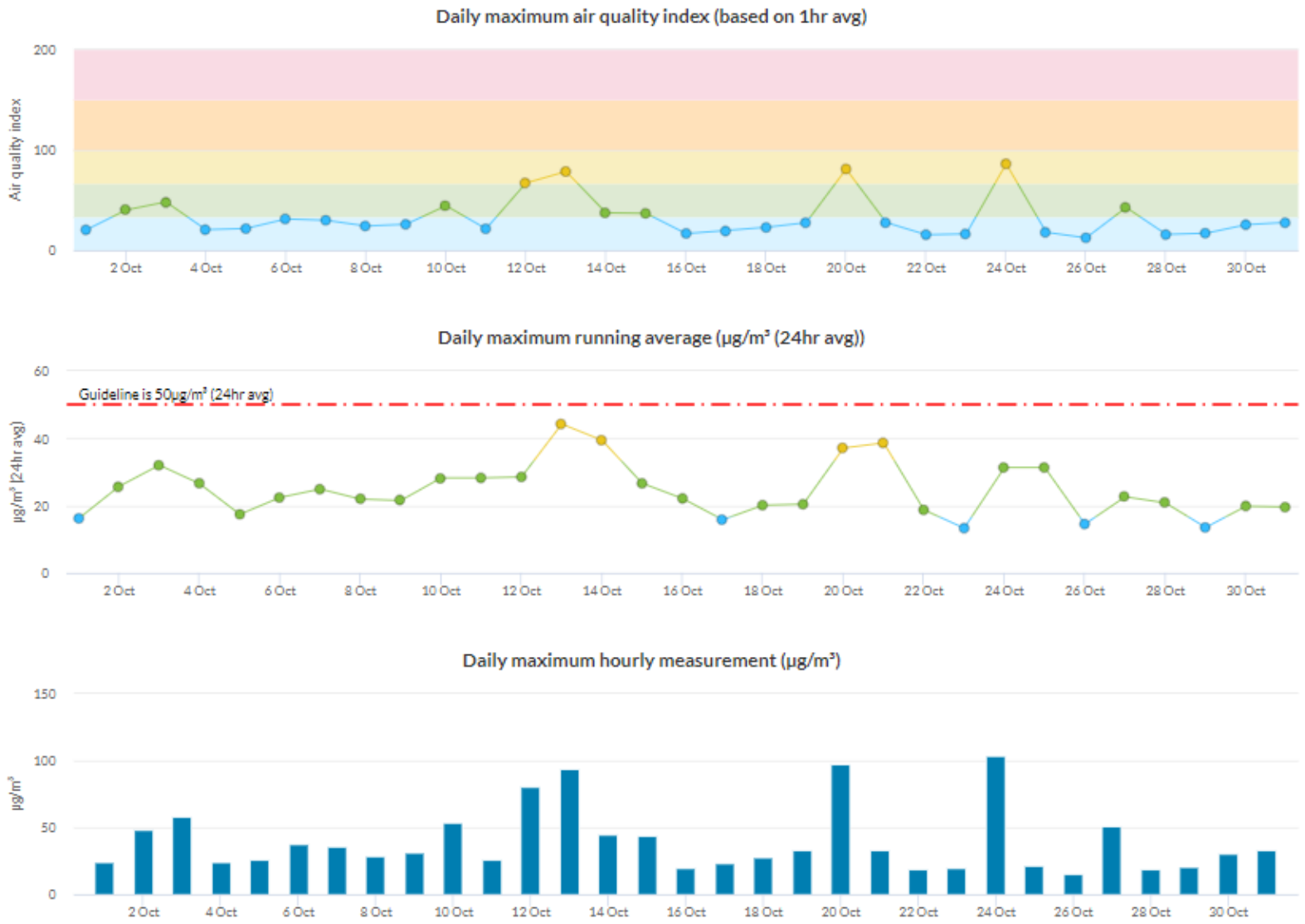


Figure 2: South Brisbane – DES Station - PM10 graph for October 2020 (reproduction from the DES website accessed November 2020).

Particle PM10 at Woolloongabba, 1–31 October 2020

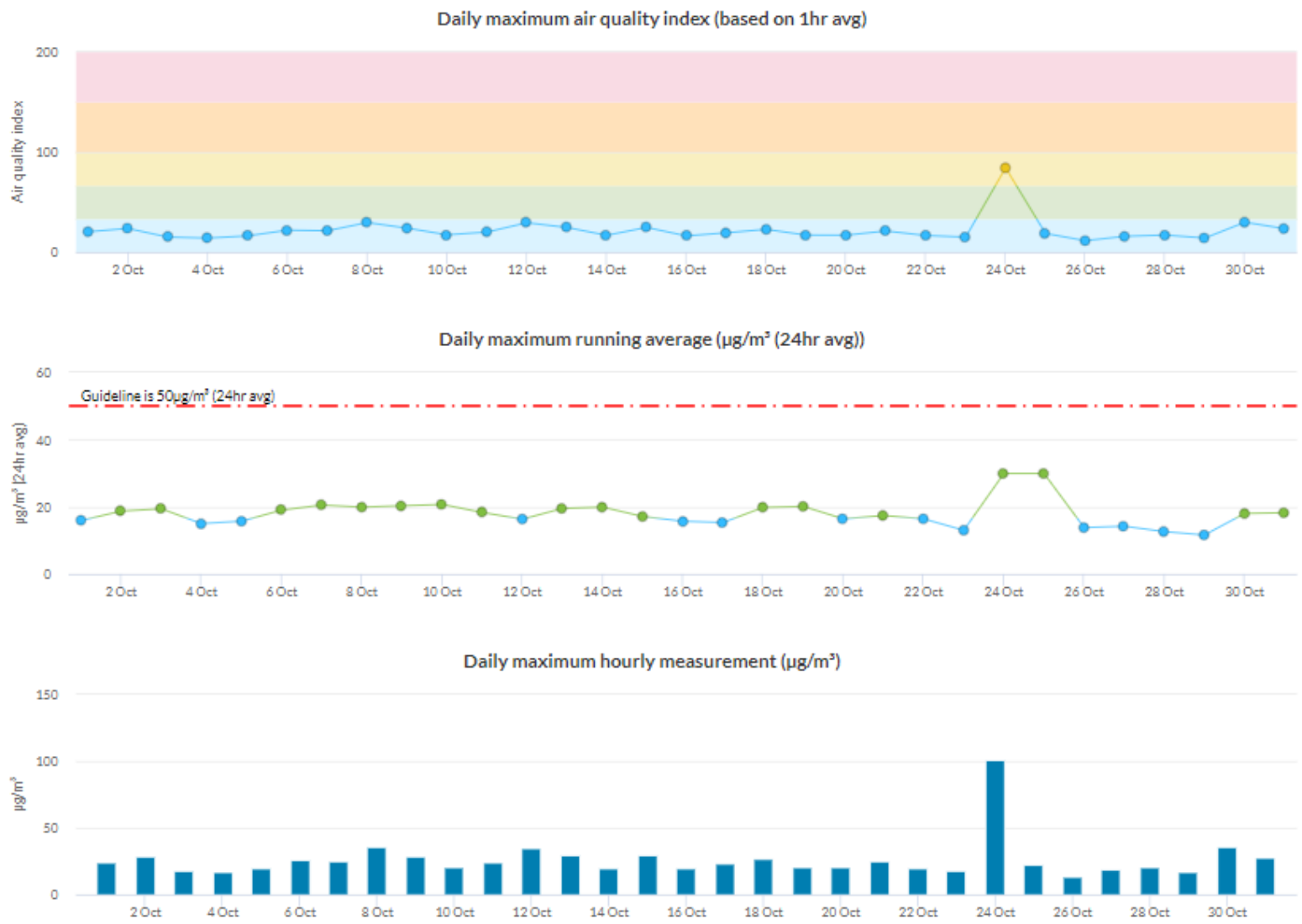


Figure 3: Woolloongabba – DES Station - PM10 graph for October 2020 (reproduction from the DES website accessed November 2020).

3.4 Water Quality – Discharge

CBGU undertook twenty-five (25) water quality monitoring events prior to the release (groundwater and surface water) from the site during October 2020.

3.4.1 Groundwater Discharge

Water quality monitoring data is provided in the table below.

Table 6: Groundwater Discharge - Water Quality Monitoring Data

Location	Date	Water Quality Objectives [1]											Adhered to Project Requirements (Yes / No)
		Turbidity (NTU)	**Suspended solids** (mg/L)	**Chlorophyll a** (µg/L)	**Total nitrogen** (µg/L) [3]	**Oxidised N** (µg/L) [3]	**Ammonia N** (µg/L) [3]	**Organic N** (µg/L) [3]	**Total phosphorus** (µg/L)	**Filterable reactive phosphorus** (FRP) (µg/L)	**Dissolved oxygen** (%) [2]	**pH**	
Albert Street	28/09/2020	0.20	<5	<1	2200.00	40.00	940.00	1300.00	20.00	<10	83.77	7.88	Yes
Roma Street	13/10/2020	0.70	<5	<1	2400.00	80.00	1490.00	800.00	20.00	<10	89.56	8.10	Yes

- [1] The Project's discharge procedure is designed to minimise environmental impact and aim to achieve the water quality objectives. Water quality objectives are defined as goals within the Brisbane River estuary environmental values and water quality objectives document.
- [2] Adhered to project requirements regarding aiming to achieve the water quality objective. The dissolved oxygen samples were acquired prior to discharge from the site. Pumping of the water will have inadvertently aerated the water, thus influencing the dissolved oxygen level.
- [3] Adhered to project requirements regarding aiming to achieve the water quality objective. These samples identified results generally consistent with pre-construction conditions, and no external influences were introduced by construction activity.
- Note: EPP (Water) Quality Objectives are analysed at a NATA accredited laboratory each month (results provided above). Field testing (turbidity, pH) is done regularly during ongoing discharge.

3.4.2 Ponded/surface water Discharge

Surface water quality monitoring data is provided in the table below.

Table 7: Surface Water Discharge - Water Quality Monitoring Data

Location	Date	Water Quality Objectives [1]		Adhered to Project Requirements (Yes / No)
		Turbidity (NTU)	pH	
Boggo Road	15/10/2020	13.79	7.05	Yes
Woolloongabba	19/10/2020	7.38	7.50	Yes
Boggo Road	22/10/2020	11.62	7.27	Yes
Woolloongabba	22/10/2020	11.06	7.47	Yes
Roma Street	19/10/2020	0.40	7.80	Yes
Boggo Road	26/10/2020	16.60	7.29	Yes
Boggo Road	26/10/2020	25.80	7.23	Yes
Woolloongabba	26/10/2020	10.75	7.35	Yes
Woolloongabba	26/10/2020	41.00	7.53	Yes
Woolloongabba	26/10/2020	39.10	8.01	Yes
Roma Street	27/10/2020	41.60	8.41	Yes
Boggo Road	27/10/2020	35.70	6.90	Yes
Boggo Road	27/10/2020	5.13	7.02	Yes
Woolloongabba	27/10/2020	28.50	7.96	Yes

Roma Street	28/10/2020	28.70	8.46	Yes
Woolloongabba	28/10/2020	28.50	7.98	Yes
Woolloongabba	28/10/2020	31.50	6.61	Yes
Woolloongabba	28/10/2020	35.20	7.80	Yes
Woolloongabba	28/10/2020	25.30	6.95	Yes
Boggo Road	29/10/2020	16.46	7.37	Yes
Boggo Road	29/10/2020	30.40	7.42	Yes
Boggo Road	30/10/2020	5.14	6.98	Yes
Woolloongabba	31/10/2020	29.50	7.01	Yes

- [1] The Project's discharge procedure is designed to minimise environmental impact and aim to achieve the water quality objectives. All discharges were compliant with *Guidelines for Best Practice Erosion and Sediment Control (IECA, 2008) and* the *Department of Transport and Main Roads' Technical Standard MRTS 52 – Erosion and Sediment Control.*

3.5 Water Quality – Surface Water

During October 2020, CBGU JV undertook three (3) rounds of surface water sampling at four (4) locations (upstream and downstream).

Results from the below-monitoring locations reflect the condition of the broader catchment (not just the influence of the Project). Water quality generally appears good, and water discharge from the Project would not have had an impact on the catchment considering the results provided within section 3.4 above.

Table 8: Offsite Upstream & Downstream Water Quality Data

Location	Date	Purpose of Monitoring	Turbidity (NTU)	EC (µS/cm)	Dissolved oxygen (%)	pH
Woolloongabba	13/10/2020	Monthly	26.3	15700	100.4	7.24
Woolloongabba	13/10/2020	Monthly	20.1	41800	98.0	7.73
Boggo Road[1]	13/10/2020	Monthly	8.18	42100	55.7	7.52
Roma Street	14/10/2020	Monthly	11.3	>3999	99.2	7.97
Roma Street	14/10/2020	Monthly	10.1	>3999	100.4	8.01
Albert Street	14/10/2020	Monthly	14.7	39400	93.4	7.83
Albert Street	14/10/2020	Monthly	16.1	39500	95.0	7.82
Woolloongabba	26/10/2020	Post Rainfall	22.9	>3999	95.6	7.7
Woolloongabba	26/10/2020	Post Rainfall	22.8	>3999	94.4	7.79
Boggo Road[1]	26/10/2020	Post Rainfall	37.1	1105	78.6	7.56
Roma Street	28/10/2020	Post Rainfall	18.0	>3999	94.4	7.94
Roma Street	28/10/2020	Post Rainfall	15.4	>3999	88.3	7.86
Albert Street	28/10/2020	Post Rainfall	23.3	>3999	95.6	7.83

Location	Date	Purpose of Monitoring	Turbidity (NTU)	EC (µS/cm)	Dissolved oxygen (%)	pH
Albert Street	28/10/2020	Post Rainfall	19.7	>3999	96.8	7.76
Woolloongabba	29/10/2020	Post Rainfall	33.3	>3999	89.5	7.62
Woolloongabba	29/10/2020	Post Rainfall	28.8	>3999	95.6	7.71
Boggo Road[1]	29/10/2020	Post Rainfall	35.0	825	96.8	7.89

- [1] Monitoring at the Boggo Rd site occurs at a pipe outlet at the beginning of the surface catchment. There is no upstream/downstream monitoring point as such. The pipe outlet receives water released from the site, as well as a broader stormwater catchment.

4 Non-Compliances

Details of non-compliances are provided in accordance with Imposed Condition 6(b)(ii).

A Non-Compliance Event is defined as project works that do not comply with the Imposed Conditions. Nil non-compliances occurred during the monitoring period.

Table 9: Non-Compliance Events

Event Title	Location, Date and time of the event	Date the Event was Formally Notified to CG/IEM	Conditions Affected	Date the Event Report Formally Sent to CG/IEM	Status of Event
Nil for this reporting period					

5 Complaints

Reporting of complaints is provided below in accordance with Imposed Condition 6(b)(iii).

During October 2020, eleven (11) complaints relating to the Project were received as detailed in Table 10 below.

Table 10: Summary of Complaints

No.	Date	Location	Description of Issue	Responses	Status of Event
1.	01/10/2020	Peter Doherty Street (Boggo Road Precinct)	Construction Hours	A stakeholder emailed the Project regarding the arrival of a heavy vehicle at the commencement of shift. CBGU addressed the workforce via a toolbox talk about exercising courtesy when arriving to work (worker behaviour) and construction hours.	Closed
2.	02/10/2020	(Albert Street Precinct)	Noise	A stakeholder emailed the Project regarding noise from the Albert St precinct during non-standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert St precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.	Closed

No.	Date	Location	Description of Issue	Responses	Status of Event
3.	08/10/2020	Stanley Street (Woolloongabba Precinct)	Noise	A stakeholder emailed the Project regarding noise from the Woolloongabba precinct during non-standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Woolloongabba precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.	Closed
4.	13/10/2020	Woolloongabba area	Pedestrian trip/fall outside project area	A stakeholder called the Project regarding a trip/fall outside of the project area. This complaint was investigated and did not relate to the Project.	Closed
5.	22/10/2020	Anglesey Street (Woolloongabba Precinct)	Noise	A stakeholder emailed the Project regarding noise from the Woolloongabba precinct during non-standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Woolloongabba precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.	Closed
6.	22/10/2020	Mary Street (Albert Street Precinct)	Noise	A stakeholder emailed the Project regarding noise from the Albert St precinct during standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert St precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.	Closed
7.	22/10/2020	Albert Street (Albert Street Precinct)	Air Quality Emissions	A stakeholder emailed the Project regarding emissions from a generator operating at the Albert precinct during non-standard hours. CBGU investigated and retrofitted an exhaust pipe to redirect the emissions away from the stakeholder.	Closed
8.	23/10/2020	Hubert Street (Woolloongabba Precinct)	Noise	A stakeholder emailed the Project regarding noise from the Woolloongabba precinct during standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Woolloongabba precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.	Closed

No.	Date	Location	Description of Issue	Responses	Status of Event
				The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.	
9.	23/10/2020	Annerley Road (Southern Portal Area)	Traffic Management	A stakeholder called the Project hotline regarding the closure of Dutton Park Street and potential business impacts. CBGU provided the stakeholder with an overview of the planned works and traffic management requirements. The site team discussed potential initiatives to be implemented to support the stakeholder.	Closed
10.	23/10/2020	Roma Street (Roma Street Precinct)	Noise and vibration	A stakeholder emailed the Project regarding noise and vibration from the Roma Street precinct during standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Roma St precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.	Closed
11.	27/10/2020	Boggo Road/Southern Area	Traffic Management	A stakeholder called the Project hotline regarding the closure of Annerley Road and Pound Street and potential traffic issues. CBGU provided the stakeholder with an overview of the planned works and traffic management requirements.	Closed