

# Independent Environmental Audit on Sydney Metro City and Southwest – Sydenham Station Junction

## Final Report

**Contract works: Sydney Metro City and Southwest – Sydenham Station & Junction**

**Scope: Early works and construction systems, planning and implementation**

**Reference: SM18.19-066-CSW-SSJ-ENV**

04/12/2018

<b>Audit Organisation:</b>	QEM Consulting	<b>Audit Date:</b>	30 October 2018
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## 1. Executive Summary

### 1.1 Introduction

The purpose of this Independent Environmental Audit was to assess Principal Contractor John Holland Laing O'Rourke's (JHLOR's) Joint Venture compliance with the relevant Planning and Assessment Approvals associated with the City and Southwest (C&SW) Sydenham Station & Junction (SSJ) works, focusing on key construction management plans relevant to early works of the construction.

### 1.2 Background

Planning Approvals issued by the Department of Planning & Environment require Sydney Metro (formerly Transport for NSW) to develop an Environmental Audit Program for independent annual environmental auditing against the terms of the City and Southwest project Critical State Significant Infrastructure (CSSI) approval.

QEM Consulting Pty Ltd have been engaged by Sydney Metro Delivery Office (SMDO) Safety, Sustainability & Environment (SSE) to deliver a program of Independent Environmental Audits. As required by Critical State Significant Infrastructure Approval SSI 15\_7400 Condition A39 and the associated Environmental Audit Program, an Independent Environmental Audit was undertaken to assess JHLOR compliance with relevant Planning Approvals associated with the CEMP and relevant sub-plans in the delivery of the Sydenham Station and Junction (SSJ). The SSJ works were not originally assessed under the Planning approval but were assessed and approved under Modification SSI 7400 MOD 4.

The SSJ project forms part of the Sydney Metro City & Southwest project and includes upgrades to Sydenham Station, the surrounding network and other ancillary infrastructure to accommodate Sydney Metro trains. The works include permanent new infrastructure and modifications to existing infrastructure, which must be constructed to enable the construction of SSJ as well as temporary works. A temporary ancillary facility with office, crib facilities, laydown areas, containers and plant has been established at Fraser Park off Marrickville Road, Marrickville. Construction commenced 5 September 2018.

### 1.3 Objective and Scope

The objective of this audit was to assess the early works, planning and implementation of SSJ works to verify processes are in place to ensure compliance with planning approval requirements (Ministers Conditions of Approval (MCoA) and Revised Environmental Mitigation Measures (REMMs). The audit criteria also included implementation of relevant requirements documented within Construction Environmental Management Plan (CEMP), and related sub-plans.

The audit scope focused on the key project risks including noise and vibration, community and stakeholder consultation, compliance and performance monitoring and measurement, heritage, document and records management, waste management, and management of incidents and complaints. The scope was determined by the auditor in collaboration with Sydney Metro.

*\* Documents and records assessed at the time of audit are indicated in Appendix 1.*

## 1.4 Summary of Findings

The table below provides a summary of key findings noted in this audit and the priority assigned to these findings.

Ref	Description	Priority*
1	Specific training has not yet been provided to construction site supervisors to ensure they respond effectively to community complaints as per the Community Communications Strategy CCS commitment.	Low
2	There has been no formalised recording of toolbox talks to date.	Low
3	An audit finding raised at an internal project audit on 31 July on the management of the waste tracking has not yet been fully actioned and closed. The responsibilities for implementation, training and oversight were not well defined, and the issues identified have not yet been resolved.	Low

2. \* Priority Definition enclosed as Appendix 2

## 1.6 Overall Assessment

This section summarises the outcomes of the Independent Environmental Audit of the C&SW SSJ Early Works and Construction Systems, Planning and Implementation against relevant Planning and Assessment Approvals. The assessment was conducted on 30 October 2018 at the Fraser Park SSJ Project Office approximately 7 weeks after commencement of construction.

The assessment noted that appropriate systems and processes had been developed and implemented to ensure initial and ongoing compliance with the MCoAs, REMMs and commitments made in the CEMP and sub-plans relevant to the scope of this audit. Overall, the outcome of this audit was positive, however three low risk findings have been raised.

The site inspection confirmed that adequate controls, hoarding and signage were in place and that actions raised through ER inspections were actioned. Evidence was provided to demonstrate that appropriate compliance tracking against allocated conditions and REMMs is being implemented, and that noise and vibration is being appropriately managed.

Effective community and stakeholder consultation was demonstrated through various documented means, and interviews with project community consultation personnel indicated a strong commitment to working with and minimising impacts on the local community and businesses. Findings were raised in regards to supervisor training and communication of requirements through toolbox talks.

The key heritage issues on the project are related to the Sydenham Station and the Pump and Pit, and evidence was provided to demonstrate compliance with the MCoA and REMMs to date with heritage reports, archival recordings and a Heritage Salvage registers developed and implemented. Issues arising from DP&E regarding the preparation of a Heritage Interpretation Plan (HIP) have been resolved through the Sydney Metro Staging Report.

Whilst there are various and parallel document management systems in place, a review of the processes and a sampling of documentation and records confirmed adequate and appropriate implementation. Records relating to waste management were noted to be adequate, however a finding was raised in relation to responsibilities for maintaining spoil and waste registers, and ensuring consistency between them. This issue had been raised in an internal audit and had not been fully actioned or closed out.

No significant incidents or complaints had occurred on the project to date, and evidence was provided that the minor incidents and complaint recorded were appropriately recorded, actioned and closed out within the JHLOR system.

### Report certified by:

*Julie Dickson*

Exemplar Global certified Lead Auditor (13573).

## 2. Detailed Findings and Proposed Action Plan

### 2.1 Audit Findings & Action Plan

The following section of this report provides details of audit findings and the agreed action plan, including allocation of responsibility and timeframes.

Ref	Audit Finding	Risk/Impact	Priority*	Agreed Action Plan
1	<p>Specific training has not yet been provided to construction site supervisors to ensure they respond effectively to community complaints.</p> <p>Section 6.1 of the Community Communications Strategy (CCS) makes a commitment that: <i>Specific training will be provided to construction site supervisors to ensure they respond effectively to community complaints, particularly those from hostile and emotional complainants</i>”.</p>	Community Reputation	Low	<p><b>SSJ Agreed Action:</b></p> <p>Training session(s) for all site supervisors to be organised</p> <p><b>Responsible person: JHLOR JV Community and Stakeholder Manager</b></p> <p><b>Due date: 14/12/18</b></p>
2	<p>There has been no formalised recording of toolbox talks to date.</p> <p>The Section 6.1 of the CCS also commits to <i>“Weekly ‘Toolbox’ inductions will also be carried out, introducing ‘Safety Alerts’, revisiting parts of the formal induction and refreshing staff and subcontractors understanding of the project’s requirements”</i></p>	Regulatory	Low	<p><b>SSJ Agreed Action:</b></p> <p>Toolbox talk form to be updated to include topics discussed.</p> <p>Toolbox talks to be undertaken as scheduled, environmental topics included as required, and records to be made available to the environmental team.</p> <p><b>Responsible person: WHS Manager</b></p> <p><b>Due date: 14/12/18</b></p>

Ref	Audit Finding	Risk/Impact	Priority*	Agreed Action Plan
3	<p>An audit finding raised at an internal project audit on 31 July on the management of the waste tracking has not yet been fully actioned and closed. The responsibilities for implementation, training and oversight were not well defined.</p> <p>Whilst some improvements have been made to waste registers, and waste is being tracked, the responsibilities between the sustainability team and the project team for maintaining the registers, ensuring consistency between them and actioning the audit findings are still not well defined. Waste is currently tracked through a Waste Spoil Tracker (incorporating spoil permit info) spreadsheet and a Waste Tracker R3 spreadsheet (various waste streams including spoil)</p> <p><i>Internal audit finding stated: the waste tracking requires some improvement – in particular the need for an appropriate centralised document to collate the various sources</i></p> <p><i>Waste tracking for the Project is required to be improved including revision to the waste register to demonstrate that material disposal comply with relevant requirements. Appropriate responsibility, implementation, training and oversight to be employed</i></p>	Regulatory	<div style="background-color: #00FF00; border: 1px solid #000; border-radius: 5px; padding: 5px; text-align: center; color: #000; font-weight: bold;">Low</div>	<p><b>SSJ Agreed Action:</b></p> <p>Previous audit action closed out (1/11/18)</p> <p>The Project Manager to take overall responsibility for managing spoil</p> <ul style="list-style-type: none"> <li>Each Project Engineer is responsible for managing spoil in their area and organising waste classifications</li> <li>All spoil to be taken off by a single source waste contractor (Bingo)</li> <li>Project Engineer to update spoil tracker once records are provided by Bingo</li> <li>Environment Team to validate against spoil permits raised</li> </ul> <p>Sustainability team to manage records from other waste streams and reconcile</p> <p>Session to be organised with Project Manager and Superintendent to develop site wide stockpiling strategy and responsibilities</p> <p>A sole supplier has now been engaged for managing all spoil movements offsite which will streamline reporting and data reconciliation</p> <p>Voyage Control heavy vehicle tracking system has been implemented which will track each truck movement by GPS and QR codes. Each movement requires a booking to be placed the day before.</p> <p><b>Responsible person:</b> <b>Environment Manager</b></p> <p><b>Due date: 7/12/18</b></p>

\* Priority Definition enclosed as Appendix 2

## 2.2 Assessment Details

The focus of this audit was on the readiness and early implementation of the Sydenham Station and Junction project, with an emphasis on the key identified risks determined through collaboration between the auditor and Sydney Metro.

The following section of this report provides a synopsis of documentation, systems, processes, approvals, endorsements, communications, and activities assessed to determine compliance (or otherwise) with required project requirements, obligations and outcomes. Specific documents, records and information reviewed and assessed are documented within Appendix 1.

### Site Inspection outcomes

A site inspection was conducted at the site compound established in September 2018 in Fraser Park, Sydenham Station and surrounding areas including the pit and pumping station. At the time of the inspection, minimal physical works were underway, however adequate controls were in place at the compound and appropriate hoarding and signage were installed at the station and surrounds. Issues identified in recent ER inspection had been actioned.

### Planning Approvals, Compliance Tracking, compliance to requirements (CoAs A30, A31, A32, A33, C1, C2, C3, C4, C5, C6, C7, C8, C9a)

Evidence was sighted to confirm compliance is being appropriately tracked against allocated conditions and REMMs through the SSJ 2018 Q3 CTR tracking register, which was developed with input from the Environment Representative (ER). An ER endorsed Pre-Construction Compliance Report (PCCR) dated 28 August was sighted – no non-compliances recorded to date. CEMP and relevant sub-plans were approved and endorsed prior to construction commencement. Induction material and records provided evidence of processes in place to ensure management and worker awareness of project environmental approval requirements. Hold points were complied with through internal process control and referenced in meeting minutes.

### Noise and Vibration (CoAs C9a, C10, C11, C12, C13, C17, E33, E36, E47 and REMMs NV1, NV6)

The majority of SSJ works are carried out during scheduled possessions under the Sydney Trains Environment Protection Licence (EPL). Real-time monitoring is set up near Building 6, Burrows Road and was in operation during Week10 and WE11 possession works, however network issues prevented web access in real time. The system is not full time, as works are based on timing of possessions. Real time monitoring data provides limited useful information due to extraneous noise such as planes and diesel trains. Attended monitoring results generally indicate exceedance of NML, however these have been attributed to other unrelated activities. There have been no exceedances to date on the predicted noise levels. No vibration intensive works have yet occurred. Signed, endorsed and approved Out of Hours Works (OOHW) applications and approvals provided evidence of compliance to OOHW the protocol. An Independent Acoustic Advisor provides input as required.

### Community and Stakeholder Consultation (CoAs B1, B2, B3, B4, B6, B7 B15 and REMMs BI1, BI2)

Evidence of effective community and stakeholder consultation was demonstrated through various face to face and documented / electronic consultation methods including; doorknocking, distribution of hardcopy and electronic notifications through 3<sup>rd</sup> party supplier and email; monthly and quarterly construction updates; face-to-face meetings and manning stall at Marrickville fair. Interactions and complaints are recorded in Consultation Manager and are captured in daily complaints reports. One complaint had been received to date, and evidence of satisfactory resolution was sighted. The Community

Communications Strategy (CCS) made commitments that specific training will be provided to construction site supervisors to ensure they respond effectively to community complaints and that weekly toolbox talks would be carried out. These had not occurred at the time of the audit. **FINDINGS 1 & 2.**

#### Monitoring and Measurement (CoA C2, C9, CEMP and sub-plan requirements)

A review of weekly environmental inspections by the Contractor and ER site inspections provided evidence of performance monitoring being conducted at this early stage and that identified issues are being actioned. Surface water quality baseline monitoring has been undertaken indicating downstream turbidity which does not appear to be related to site activities. No pumping off site has occurred to date.

#### Heritage Management (CoA E10, E13 (e), E14, E15, E16(f), E19, E21, and REMMs – NAH1, NAH11, AH1)

Heritage photographic archival recordings have been prepared for Sydenham Station and Sydenham Pump and Pit in accordance with the requirements of Conditions E13 and E14 to date. A Heritage Salvage register for Sydenham Station had been prepared in accordance with E16f, and a scanned version to indicate activities taken to date on the salvage status was sighted. Identified items were salvaged from the Platform 6 building in September 2018. The Pump and Pit had not been disturbed at the time of the audit. An unexpected finds procedure (UFP) is included in the CHMP, and no UFPs have been encountered to date. A Heritage Interpretation Plan (HIP) has not yet been prepared as required by E21, however a letter from DP&E clarified that it acknowledges that aspects of heritage may not be available and that the issue can be addressed in the Staging Report. Sydney Metro have now issued the requisite modification to the Staging Report within the required time frame.

#### Document and Records Management

Parallel project document software systems are in place with Teambinder administered by Sydney Metro and Asite by contractors, JHLOR. Other systems in place include Consultation Manager (community consultation), IMPACT (incident management), Pegasus (induction), Field View (electronic inspections) and the project drive. Document Control and Records is addressed in the CEMP. Documents and records were sampled throughout the audit and the systems and processes were assessed as generally appropriate and adequate.

#### Waste and Spoil Management (CoAs –E106 and REMMs - WM1, WM2)

Waste management tracking processes were generally in place at the time of the audit with a spoil permit system, spoil disposal register, and a waste tracking register commenced, however findings from an internal audit relating to responsibilities for waste tracking had not been fully actioned and closed. This audit found that the responsibilities between the sustainability team and the project team for maintaining the registers, ensuring consistency between them and actioning the audit findings are still not well defined. **FINDING 3.**

#### Incidents and complaints (CoAs A41, A42, B6, B7)

The incident management process is defined within the CEMP and references internal and Sydney Metro requirements. At the time of the audit, three minor environmental incidents had been reported (minor spill, standpipe damage, and one complaint regarding stockpile location), entered into the incident management system IMPACT, actioned and closed. No incidents have required formal notification to DP&E or EPA. Complaint was recorded in daily complaints report, complaints register and Consultation Manager and appropriately resolved. The assessment found the process is well understood and adequately implemented.



## Appendix 1: Audit information

The following indicates key systems, documents, reports, information and records that were reviewed, accessed or sighted during the audit process:

Documentation	Information / Records
1. Project documentation – Management Plans (general)	
SMCSWSSJ-JHL-WSS-EM-PLN-000028 - Construction Environmental Management Plan Rev 8.0, 16 August 2018	Various emails to EPA and Inner West Council (IWC) seeking to consult on the CEMP / Management Plans (March to May 2018)
	Appendix J of CEMP – Stakeholder Consultation Details – Agency consultation details including status and comments summary
SMCSWSSJ-JHL-WSS-EM-PLN-000029 - Construction Noise and Vibration Management Plan Rev 5, dated 24 August 2018	Endorsement – City and Southwest Acoustic Advisor – Review of the Sydenham Station & Junction Noise and Vibration Management Plan (25/5/18)
SMCSWSSJ-JHL-WSS-EM-REP-000002 - Construction Noise and Vibration Impact Statement Ver C dated 20 August 2018	Endorsement – City and Southwest Acoustic Advisor - Construction Noise and Vibration Impact Statement: Sydenham Station Junction Site 23/08/2018
SMCSWSSJ-JHL-WSS-CL-PLN-000024 - Sydenham Metro Upgrade Business Management Plan	
SMCSWSSJ-JHL-WSS-EM-PLN-000526 – Ancillary Facility Management Plan – Fraser Park Rev 3 (30 August 2018)	Sydney Metro City and Southwest Chatswood to Sydenham (SSI 15_7400): Approval of the Fraser Park Ancillary Facility Management Plan (6/09/18)
2. Pre-construction compliance, compliance tracking, awareness, induction	
SSJ (John Holland Laing O'Rourke (JHLOR)) Pre-Construction Compliance Status Report (28 August 2018)	Endorsement of Sydney Metro City and Southwest, Sydenham Station and Sydenham Pit and Pumping Station (SSJ) – Pre-Construction Compliance Report (PCCR) dated 28 August 2018
	Compliance Tracking Register 2018 – QTR 3 (no date)
	Project Induction Presentation – Rev 3 – updated Oct 2018
3. Noise and Vibration, impacts on community and businesses	
SMCSWSSJ-JHL-WSS-EM-REP-000002 - Construction Noise and Vibration Impact Statement Rev 2 dated 21 August 2018	ENDORSEMENT CITY & SOUTHWEST ACOUSTIC ADVISOR of Construction Noise and Vibration Impact Statement: Sydenham Station Junction Site dated 23 August 2018 (Dave Anderson – City and Southwest Acoustic Advisor)
SMCSWSSJ-JHL-WSS-EM-PLN-000029 - Construction Noise and Vibration Management Plan – Rev 5 dated 24 August 2018	Endorsement Of Sydney Metro City & Southwest-John Holland Laing O'Rourke Joint Venture Construction Noise And Vibration Impact Statement:

Documentation	Information / Records
	Sydenham Station Junction Site – dated 23 August 2018 (Annabelle Reyes – ER)
	ENDORSEMENT CITY & SOUTHWEST ACOUSTIC ADVISOR Out of Hours Work Protocol Rev 3 dated 14 August 2018 Dave Anderson
	Endorsement of Sydney Metro City & Southwest Out of Hours Work Protocol dated 28 March 2017– Jo Robertson - ER
	Endorsement of Sydney Metro City & Southwest Out of Hours Work Protocol dated 14 August 2018 – Rev 3– Jo Robertson - ER
	Sydney Metro City & Southwest Chatswood to Sydenham (SSI 15_7400): Approval of the Out of Hours Work Protocol under condition E 47 Dated 14 July 2017 (Jacqui McLeod)
	City and Southwest Out of Hours Work Application No SSJ-OOHW-013 – Rev01 12/10/18 Week 15 Midweek Possession October 2018 ( 15-19 Oct scheduled) – signed and endorsed by SM, AA and ER
	City and Southwest Out of Hours Work Application No SSJ-OOHW-014 – Rev 02 8/10/18 – OOH Plant Delivery 24 Oct 2018 (work not yet completed - delayed)
4. Community and Stakeholder consultation	
SMCSWSSJ-JHL-WSS-CL-PLN-000023 - Sydenham Metro Upgrade Community Communications Strategy (CCS) Revision 5 dated 18 June 2018	Endorsement of Community Communications Strategy (CCS) for Sydney Metro City & Southwest – Sydenham Station and Junction (SSJ) dated 18 May 2018 (HBI Annabelle Reyes)
SMCSWSSJ-JHL-WSS-CL-PLN-000024 - Sydenham Metro Upgrade Business Management Plan Revision 5 dated 14 May 2018	Sydney Metro, SSI 15_7400 – Sydenham Station Junction – Approval of Community Communication Strategy (Stacy Warren – Director – Infrastructure Management – DP&E) dated 12 August 2018
	Sydenham Metro Upgrade – Community Notification October 2018 – upcoming work around Sydenham Station (works commencing Sat 20 Oct)
5. Heritage Management	
Construction Heritage Management Plan SMCSWSSJ-JHL-WSS-HE-PLN-000034 Rev 5 (22 August 2018)	Sydney Metro – SSJ - Heritage Salvage Register (latest entry – 8/8/2018)
	Sydenham Pump and Pit Photographic Archival Recording – prepared for Sydney Metro on behalf of Purcell (27 September 2018 – Draft) by Extent Heritage Advisors

Documentation	Information / Records
Sydenham Station & Junction REF: SMCSWSSJ-JHL-WSS-HE-REP-600004 Heritage Interpretation Strategy 3 August 2018 (Purcell and Extent)	DP&E Letter – SSI-7400 – Condition E21 Clarification to Fil Cerone dated 18 October 2018 re- Heritage Interpretation Plan
	Sydney Metro City and Southwest Chatswood to Sydenham Staging Report Rev 5.0 dated 31 October 2018 (addresses DP&E letter above)
6. Records and document retention	
Quality Management Plan (details records retention requirements)	Asite records system
	Teambinder system
	IMPACT incident reporting system
	Inspection records in “Field View” – web based system
	Consultation Manager – complaints and community consultation system
7. Waste Management	
Waste Management and Recycling Plan SMCSWSSJ-JHL-WSS-SU-PLN-000036 February 2018.	Waste Diversion Report - Grasshopper
Spoil Management Plan	K44 Sydenham Station Junction Spoil Disposal Register (Permit Register)
	Waste Tracker – R3
	Spoil Movement Permit dated 28/09/2018 – 350 tonne – classification GSW, receiving facility – Sydney Recycling Park.
8. Incidents and Complaints Management	
Construction Environmental Management Plan Rev 8.0 (see Project documentation - Management Plans (general) section	Incident report – burst fire hydrant – report only (extracted from IMPACT)
	Incident report – diesel leak from a water cart observed during a site inspection 27 Sept 2018

## Appendix 2: Priority Definition

The priority for findings raised in this report is described in the table below.

Priority	Definition	Guidelines for Implementing Actions
<b>Very High</b>	A significant control weakness / issue or fundamental non-compliance that exposes the project or area under review to a very high level of risk	Requires immediate management attention, with actions plans to be developed and enforced within an agreed time frame. The matter will be escalated immediately to senior management from all parties
<b>High</b>	A control weakness / issue or non-compliance that may expose the project or area under review to a high level of risk	Action plans to be developed and implemented within an agreed time frame. The matter will be escalated to relevant senior executives where it is deemed necessary
<b>Medium</b>	A control weakness / issue or non-compliance that may expose the project or area under review to a moderate level of risk	Action plans to be developed and implemented within an agreed time frame
<b>Low</b>	A control weakness / issue or non-compliance that may expose the project or area under review to a low level of risk	Action plans to be developed and implemented within an agreed time frame
<b>OFI</b>	Opportunity For Improvement (OFI) – opportunity to implement a good or better practice to improve efficiency or further reduce exposure to risk	Suggestion to be considered for implementation
<b>Observation</b>	Good Practice – process / system in place and implemented effectively across business.	Maintain to current standard. Share with other areas of business.

### Appendix 3: Personnel Consulted and Timeline

We would like to extend our appreciation to the following individuals involved this audit:

Name	Title
Cameron Newling	Environmental Manager, JHLOR JV
Andie Pitsiatari	Community Manager, JHLOR JV
Simon Fisher	Environmental Manager, SSJ Sydney Metro
Fiona Morrisby	Communications Manager, Sydney Metro

The timeline is shown in the table below.

Milestone	Date
Issuance of Audit Notification Plan	12 October 2018
Issuance of Audit Checklist	24 October 2018
Briefing Meeting	17 October 2018
Desktop Audit	22 October 2018
Audit including Opening Meeting	30 October 2018
Issue of draft Audit Findings	5 November 2018
First response to audit findings (proposed action plan)	19 November 2018
Second response to audit findings (agreed action plan)	22 November 2018
Issuance of Draft Report	29 November 2018
Issuance of Final Report	4 December 2018

### Appendix 4: Audit attendance register

<b>AUDITEE:</b> JHLOR <b>AUDIT:</b> SM18.19-066-CSW-SSJ-ENV <b>SITE:</b> Sydenham Station Junction site compound – Fraser Park, Marrickville Road, Marrickville			30/10/2018	
NAME (print)	POSITION & ORGANIZATION		ENTRY (Initials)	EXIT (initials)
Julie Dickson	Lead Auditor	QEM	<i>JLD</i>	<i>JLD</i>
Simon Fisher	Environment Manager Sydenham Station Junction	Sydney Metro	<i>SF</i>	<i>SF</i>
Cameron Newling	Environmental Manager	JHLOR	<i>CN</i>	<i>CN</i>
Fiona Morrisby	Communications Manager	Sydney Metro	<i>FM</i>	
Andie Pitsiatari	Community Manager	JHLOR SSJ	<i>AP</i>	<i>AP</i>
Yousuf Jokhio	Quality Manager	JHLOR	<i>YJ</i>	<i>YJ</i>
Sonia Chand	Sustainability Graduate JHLOR	JHLOR	<i>SC</i>	
Vereine Masson	Project Sustainability Manager -	JHLOR		<i>VM</i>

## Appendix 5: Audit Credentials

### Audit process

The Independent Environmental Audit comprised a desktop review, and a one day desktop review at the Metron project office, which was conducted by Julie Dickson, of QEM Consulting Pty Ltd. The audit comprised an assessment of documentation and records conducted at the METRON office at Level 39, 680 George Street Sydney. The audit utilised an assignment specific Audit Checklist based on the Planning Approvals in Design, including compliance review & prior audit findings, focusing on Barangaroo Station (Criteria: EIS, MCoAs, REMMs & SM Design Guideline) which are material for the Stage 1 preliminary design. Requirements were then verified as being implemented and/or compliant, based on records and objective evidence, the entire process undertaken in accordance with AS / NZS / ISO 19011:2014 – Guidelines for Auditing Management Systems.

### Auditor information

<b>Audit Organisation:</b>	QEM Consulting Pty Ltd
<b>Auditor &amp; Report Author</b>	Julie Dickson
<b>Auditor Qualification</b>	Lead EMS and Environmental Compliance Auditor, Exemplar Global Certification 13573
<b>Affiliations</b>	Certified Environmental Practitioner (EIANZ) Reg No: #221 MEIANZ

### Auditor certification

The abovementioned Auditor certifies as having personally undertaken this Independent Audit and preparing the contents of this Independent Environmental Audit Report; and that the findings of the audit are reported truthfully, accurately and completely; and that she has exercised due diligence and professional judgement in conducting the audit. The signed Statement of Interests and Association in our services agreement with Sydney Metro confirm our Auditor’s independence and absence of pecuniary interest in the audited project.

### Audit disclaimer

It should be noted that this report is a snapshot in time, based on selected and supplied evidence, and does not purport to be a definitive confirmation of overall compliance or vice-versa.