

Sydney Metro Northwest
Environmental Construction Compliance Report #6
1 October 2015 to 31 March 2016



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Executive Summary

This Environmental Construction Compliance Report documents TfNSW's and its delivery contractors' compliance with three planning approvals (SSI-5100, SSI-5414, and SSI-5931) that have been granted for the Sydney Metro Northwest project. This report covers the period from 1 October 2015 to 31 March 2016 and is provided to the NSW Department of Planning and Environment (DP&E) in accordance with these planning approvals.

The project continued to experience a high level of construction activity during the reporting period. All three major contractors were operating well into their respective construction phases, with the TSC contractor beginning to demobilise at some sites in early 2016. By the end of January 2016, all four Tunnel Boring Machines (TBMs) had completed tunnelling operations – representing a significant milestone for the project. Gantry crane operations intensified on the skytrain and the Windsor Road Bridge, and bulk earthworks continued at the Sydney Metro Trains Facility and Cudgegong Road Station sites. A life-sized train model was delivered and station prototypes were completed at the Cudgegong Road Station site.

Environmental performance has generally been good across the project. The project continues to report zero Class 1 and 2 environmental incidents to date. Environmental compliance during the reporting period was fair and represented very little change from the previous reporting period (as evidenced in the summary table below). Only 29 non-compliances were reported against more than 1,600 applicable environmental (compliance) requirements generated from the planning approval conditions. Independent Environmental Representatives conducted 60 inspections that identified 379 issues across the project.

A notable change in the data below between this reporting period and the previous reporting period was a decrease in the number of complaints received (over 30%). This can be attributed to the completion of TBM operations, which reduced Noise & Vibration complaints by almost 50%. Audit findings also decreased by over 50%, however this is a result of a reduced number of environmentally relevant audits being undertaken (the ratio of audits to audit findings remains much the same).

		TfNSW	TSC	SVC	OTS	Total (This Period)	Total (Previous Period)
Totals for Reporting Period	Ongoing Environmental (Compliance) Requirements at end of reporting period	179	306	519	643	1,647	1,647
	(non-compliances during the reporting period)	(1)	(1)	(27)	(0)	(29)	(27)
	ER Inspections	N/A	11	25	24	60	64
	(issues raised)		(53)	(237)	(89)	(379)	(387)
	Audits	0	2	3	1	6	15
	(findings)	(0)	(1)	(12)	(2)	(15)	(41)
	Class 1 or 2 Incidents	0	0	0	0	0	0
	Complaints	0	60	23	3	86	126

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1 Introduction

1.1 Purpose of this Report

This Environmental Construction Compliance Report documents Transport for New South Wales (TfNSW) and its delivery contractors' compliance with three planning approvals (SSI-5100, SSI-5414, and SSI-5931) that have been granted to the Sydney Metro Northwest project. These approvals require regular reports to the Secretary of the NSW Department of Planning and Environment (DP&E) throughout construction of the project. This report is the sixth Environmental Construction Compliance Report for the project and covers the period between 1 October 2015 and 31 March 2015.

1.2 Background

The Sydney Metro Northwest project will deliver a new high frequency driverless single deck train system initially operating as a shuttle between Cudgegong Road, Rouse Hill and Chatswood. The project includes eight new stations, approximately 15.5 kilometres of tunnels from Epping to Bella Vista, a four kilometre elevated skytrain viaduct between Bella Vista and Rouse Hill, and conversion of the existing Epping to Chatswood Railway Line to deliver high frequency rapid transit services.

Figure 1 – Overview of the Project Alignment



1.3 Statutory Context

1.3.1 Planning Approvals

The Sydney Metro Northwest project is subject to numerous planning approvals:

- State planning approval as Critical State Significant Infrastructure under Part 5.1 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act).
- State planning approval under Part 5 of the EP&A Act for other works as required and not already covered by existing 'Part 5.1' approvals.
- Federal planning approval as a 'Controlled Action' under the Environmental Protection and Biodiversity Conservation Act (EPBC Act).

Table 1 lists the planning approvals held by TfNSW that relate to the Sydney Metro Northwest project.

Table 1 – Summary of Planning Approvals

Planning Approval	Determining Authority	Date Approved
Parramatta Rail Link	Minister for Planning (NSW)	26/02/2002
Major Civil Construction works (approval reference: SSI-5100) as Modified	Minister for Planning (NSW)	25/09/2012
Construction and Operation of NWRL (approval reference: EPBC 2012/6360)	Secretary for Department of the Environment (Commonwealth)	11/04/2013
Stations, Rail Infrastructure and Systems (approval reference: SSI-5414) as Modified	Minister for Planning (NSW)	08/05/2013
Sydney Metro Trains Facility (formerly Rapid Transit Rail Facility) (approval reference: SSI-5931)	Minister for Planning (NSW)	15/01/2014
Lindfield Substation	TfNSW (Sydney Metro)	19/09/2014
Epping to Chatswood Railway – Conversion to Rapid Transit	TfNSW (Sydney Metro)	13/02/2015
Lindfield Substation – Lindfield Station Electrical Works Conversion	TfNSW (Sydney Metro)	1/05/2015
Main North and North Shore Line Corridor Works	TfNSW (Sydney Metro)	19/06/2015
Norwest Station Subsurface Pedestrian Link and Northern Entry	TfNSW (Sydney Metro)	29/10/2015
Main North and North Shore Line Corridor Works: Addendum 01	TfNSW (Sydney Metro)	18/12/2015
Willoughby to North Chatswood 33kV Underground Feeder Power Line	TfNSW (Sydney Metro)	18/3/2016

1.3.2 Environmental Protection Licences

The Sydney Metro Northwest project requires its contractors to hold Environmental Protection Licences (EPLs) for works as required under the Protection of the Environment Operations Act. Table 2 lists the EPLs that were active on the project during the reporting period. This report does not document compliance against EPLs. This is being undertaken by the relevant licensee holders (i.e. contractors).

Table 2 – Summary of Environmental Protection Licences

Licensee	Contract	Activity	EPL #	Status
Thiess Pty Ltd (<i>Thiess John Holland Dragados</i>)	Tunnel and Station Civils (TSC)	Concrete Works and Railway systems activities	20319	Issued 30/09/2013
Salini Australia Pty Ltd (<i>Impregilo-Salini Joint Venture</i>)	Surface and Viaduct Civils (SVC)	Railway systems activities	20454	Issued 03/06/2014
John Holland Pty Ltd (<i>Northwest Rapid Transit</i>)	Operations, Trains and Systems (OTS)	Railway systems activities	20544	Issued 19/12/2014
Sydney Trains	All works within the Sydney Trains corridor	Railway systems activities	12208	Memorandum of Understanding *

* The Sydney Metro Delivery Office is currently entering into a Memorandum of Understanding with Sydney Trains to define compliance responsibilities against their EPL when working within the Sydney Trains rail corridor.

2 Active Construction Packages

The following construction packages were active during the reporting period:

Table 3 – Active Construction Packages

Contract Package	Contractor	Awarded	Status
Tunnel & Station Civils (TSC)	CPB John Holland Dragados (CPBJHD) (formerly Thiess John Holland Dragados)	July 2013	Construction ongoing
Surface & Viaduct Civils (SVC)	Impregilo-Salini Joint Venture (ISJV)	December 2013	Construction ongoing
Operations, Trains & Systems (OTS)	Northwest Rapid Transit (NRT)	September 2014	Construction ongoing
Lindfield Substation (LS) *	Laing O'Rourke Australia (LORA)	November 2014	Construction ongoing
Northern Corridor Works (NCW) *	Laing O'Rourke Australia (LORA)	November 2015	Site investigation works only

* Compliance tracking against works approved under Part 5 of the EP&A Act not included in this report.

2.1 Tunnel and Station Civils (TSC)

The TSC package is to construct the 15.5 kilometre twin tunnels between Epping Station and tunnel portals immediately north of Celebration Drive at Bella Vista. A combination of road headers and Tunnel Boring Machines (TBMs) are being used to construct the tunnel and tunnel cross-passages. Other facilities have been constructed including those for pre-cast segment production, batch plants, spoil handling, tunnelling support and water treatment plants.

The TSC package represents sub-stage 1b under the Stage 1 Approval SSI-5100.

During the reporting period:

- All sites remained active and largely sealed with well-established environmental controls;
- The three remaining TBMs to complete boring operations all reached their final destinations. TBM operations are now complete. The final break-throughs occurred for each TBM as follows;
 - TBM 'Isabelle' broke-through at the Epping Station site on 19 September 2015;
 - TBM 'Maria' broke-through at the Epping Station site on 29 October 2015;
 - TBM 'Elizabeth' broke-through at the Cherrybrook Station site on 12 December 2016; and
 - TBM 'Florence' broke-through at the Cherrybrook Station site on 14 January 2016.
- 'Portion 1' sites were officially handed-over on 22 March 2016, comprising;
 - The tunnels and cross-passages between the Bella Vista Station site and the Showground Station site to the OTS contractor;
 - The entire Norwest Station site and a small section of the Showground Station site to the OTS contractor; and
 - Some sections of the Bella Vista Station site to both the SVC and OTS contractors.

Figure 2 – Break-Through of TBM Maria at the Epping Station site on 29 October 2015



2.2 Surface and Viaduct Civils (SVC)

The SVC package is to construct an elevated four kilometre viaduct (including earthworks) between Bella Vista and Cudgegong Road, Rouse Hill. The package includes the construction of a 270 metre single span bridge over Windsor Road at Rouse Hill.

The SVC package represents sub-stage 1c under the Stage 1 Approval SSI-5100 and sub-stage 2a under the Stage 2 Approval SSI-5414. The second approval places requirements on permanent works design, including urban design of the viaduct.

During the reporting period:

- Pile and pier construction activities continued. As of the end of March 2016:
 - The Windsor Road Bridge piling activities are fully complete and only 6 of the 422 piles for the skytrain viaduct are still to be completed.
 - The Windsor Road Bridge permanent piers are fully complete and only 14 of the 118 piers for the skytrain viaduct are still to be completed.

- Concrete segment production and installation activities continued. As of the end of March 2016:
 - 34 of 88 segments have been produced and 17 installed as part of the Windsor Road Bridge.
 - 894 of 1,128 segments have been produced and 350 installed as part of the skytrain viaduct.
- A section of the Bella Vista Station site was accepted from the TSC contractor as part of 'Portion 1' handover on 22 March 2016.

Figure 3 – Construction of the Skytrain Viaduct at the Kellyville Site



2.3 Operations Trains and Systems (OTS)

The OTS package includes construction of the Sydney Metro Trains Facility (SMTF), eight new stations and the operation of the Sydney Metro Northwest project for 15 years. The eight new Sydney Metro Northwest stations are shown in Figure 1 and include underground, open cut and elevated station designs. The SMTF is a train stabling and maintenance facility at Tallawong Road, Rouse Hill. Accordingly, TfNSW and the OTS package will be required to comply with Approval SSI-5931.

The operation of the Sydney Metro Northwest project includes the provision of new rolling stock and the delivery of rail systems, rail track and precinct works. This package represents sub-stage 2b under the Stage 2 Approval SSI-5414.

The OTS package also includes the conversion of the Epping to Chatswood Railway Line (ECRL) to rapid transit. This conversion includes the:

- Modification of track connections at Epping and Chatswood;
- Modification of systems including electrical, signalling, communications, fire and life safety, mechanical and fire systems;
- Modifications of Chatswood, North Ryde, Macquarie University, Macquarie Park and Epping stations; and
- Installation of air-control units within the station precincts at Epping, Macquarie University, Macquarie Park and North Ryde.

The above works are subject to the Epping to Chatswood Railway – Conversion to Rapid Transit approval under Part 5 of the EP&A Act. The Parramatta Rail Link (PRL) approval will, in part, also apply to the design and operation of the converted line. Additionally during this reporting period, another two EP&A Act Part 5 planning approvals were determined by TfNSW and apply to the OTS works package:

- 1) Norwest Station Subsurface Pedestrian Link and Northern Entry (29 October 2015); and
- 2) Willoughby to North Chatswood 33kV Underground Feeder Power Line (18 March 2016).

During the reporting period:

- Construction has continued at the SMTF and Cudgegong Road Station sites and remains ongoing;
- All three Construction Environment Management Plans (CEMP) applicable to the project received final endorsement / approval:
 - The Phase 1 CEMP received approval from DP&E on 27 March 2015;
 - The ECRL Conversion Works CEMP received endorsement from the independent Environmental Representative on 1 Oct 2015; and
 - The Phase 2 CEMP received approval from DP&E on 4 Feb 2016 (covering all OTS works not covered by CEMPs already).
- Design investigation works have continued across the project's station sites and within the Epping to Chatswood Railway Line. These works include pavement testing, pot-holing, surveying and non-destructive testing;
- 'Portion 1' sites were officially accepted from the TSC contractor on 22 March 2016, comprising:
 - The tunnels and cross-passages between the Bella Vista Station site and the Showground Station site;
 - The entire Norwest Station site;
 - A small section of the Showground Station site; and
 - A section of the Bella Vista Station site.
- A Sydney Metro life-sized train model was delivered for customer testing and prototypes of a station concourse and underground station platform were constructed and completed for testing at the SMTF site.

Figure 4 – Inside the Sydney Metro Life-Sized Train Model



Figure 5 - Completed Prototype Station at the SMTF Site

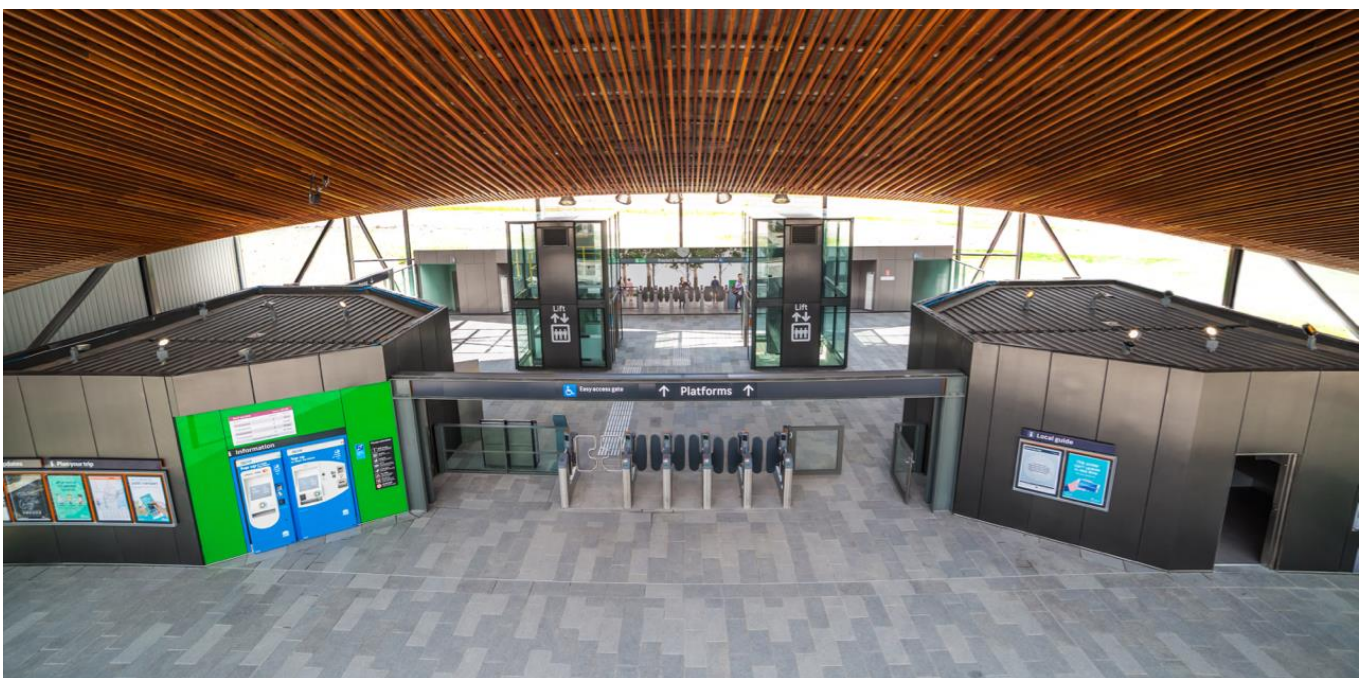
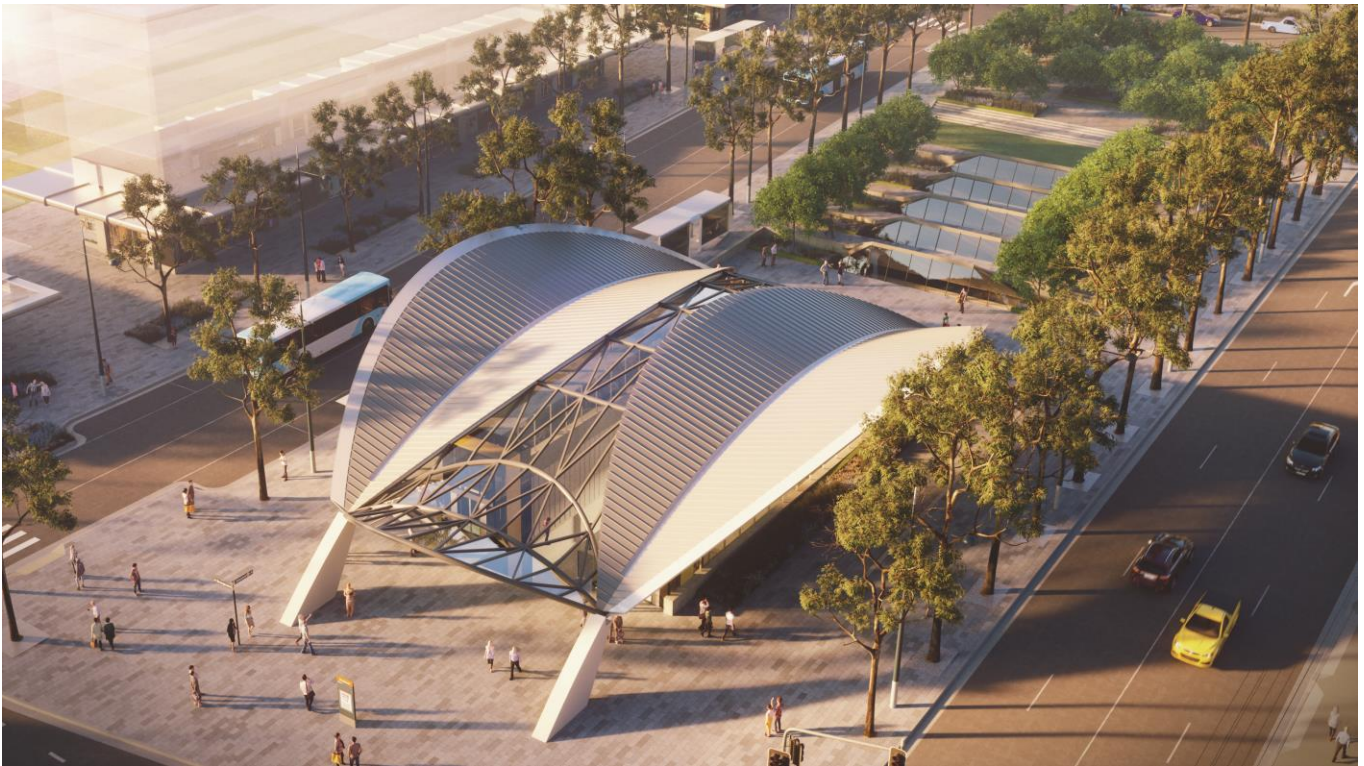


Figure 6 – Artist Impression of Showground Station



2.4 Lindfield Substation (LS)

The Sydney Metro Northwest project is responsible for delivering the Lindfield Substation project. Lindfield Substation will be a new electrical substation to provide additional electrical capacity to the North Shore Line on the Sydney Trains network.

Planning approval for Lindfield Substation was determined by TfNSW on 19 September 2014 under Part 5 of the EP&A Act. A subsequent planning approval for a variation to electrical works through Lindfield Station was determined by TfNSW on 1 May 2015 (also under Part 5 of the EP&A Act). The scope of this approval covers the conversion of electrical transmission through Lindfield Station from aerial to buried and on-post galvanised steel troughing.

During the reporting period, construction has continued and remains ongoing, including:

- Electrical and signalling cable removals and replacements;
- Service relocations;
- Civil works; and
- Structural works (foundations and basement level).

2.5 Northern Corridor Works (NCW)

The Sydney Metro Northwest project has taken responsibility for delivering signalling and overhead wiring works along the main north and north shore line corridor of the Sydney Trains rail network. These works extend between North Sydney and north of Waitara in the northern suburbs of Sydney.

Planning approval for these works was determined by TfNSW on 19 June 2015 under Part 5 of the EP&A Act.

During the reporting period, Laing O'Rourke was formally awarded the contract on 24 November 2015. The CEMP was approved by TfNSW on 24 March 2016 and site service investigations commenced at Chatswood on 29 March 2016.

2.6 Planning Approval and Construction Package Relationships

A summary of the relationship between the planning approvals and construction packages is provided in Table 4.

Table 4 – Allocation of Approvals

Planning Approval	Approval Date	TSC	SVC	OTS	LS	NCW	TfNSW
Parramatta Rail Link	26/02/2002			✓			✓
SSI-5100 (Stage 1)	25/09/2012	✓	✓				✓
Commonwealth Approval	11/04/2013						✓
SSI-5414 (Stage 2)	08/05/2013		✓	✓			✓
SSI-5931 (SMTF)	15/01/2014			✓			✓
Lindfield Substation	19/09/2014				✓		✓
Epping to Chatswood Railway – Conversion to Rapid Transit	13/02/2015			✓			✓
Lindfield Substation – Lindfield Station Electrical Works Conversion	1/05/2015				✓		✓
Main North and North Shore Line Corridor Works	19/06/2015					✓	✓
Norwest Station Subsurface Pedestrian Link and Northern Entry	29/10/2015			✓			✓
Main North and North Shore Line Corridor Works: Addendum 01	18/12/2015					✓	✓
Willoughby to North Chatswood 33kV Underground Feeder Power Line	18/3/2016			✓			✓

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3 Environmental Management

3.1 Periodic Review of Compliance

A variety of activities are undertaken to ensure that compliance is managed effectively. Commitments to undertake regular monitoring of compliance are drawn from the Sydney Metro Environmental Management System (inclusive of the Construction Environmental Management Framework) and the contractors' Construction Environmental Management Plans (CEMPs). These activities are summarised in Table 5.

Table 5 – Compliance Monitoring Activities

Activity	Responsibility	Frequency
Ongoing site surveillance	Contractors	Daily
Site inspections (SVC & OTS)	Independent Environmental Representatives (ERs)	Weekly
Environmental Manager's site inspections	Contractors and TfNSW	Weekly
Review of environmental actions and controls	Contractors	Weekly
Site inspections (TSC)	Independent ERs	Fortnightly
Site inspections (LS)	Independent ERs	Monthly
Environmental compliance status update	Contractors to TfNSW, TfNSW to Program Executive Board	Monthly
Risk assessment review	Contractors	Quarterly
Compliance review	Contractors, TfNSW & Independent ERs	Quarterly
Targeted independent environmental auditing	Independent third-party auditor	Six-Monthly
TfNSW management review	TfNSW	Annual
Internal Environmental Management System auditing	Contractors and TfNSW	Annual

3.2 Auditing

The Sydney Metro Northwest project convenes Compliance Working Groups (CWG) comprised of representatives from the contractors and TfNSW for each major contract. The primary function of the CWGs is to oversee and coordinate audit programs within respective works packages. This includes the contractors' internal environmental audits and independent third party environmental audits.

3.2.1 Internal Audits

The first level of audit is undertaken by the contractors with TfNSW representatives to an agreed schedule. Environmental audits cover:

- Compliance with approval, permit and licence conditions;
- Compliance with the contractor's, CEMP, sub-plans and procedures;
- Community consultation and complaint response procedures;
- Environmental training records; and
- Environmental monitoring and inspection results.

3.2.2 Independent Audits

The CWGs also assist in coordinating the Independent Environmental Audit program required by the planning approvals. These audits are targeted at certain Contract Packages or at TfNSW and may focus on specific issues that are prevalent at the time. The Independent Environmental Auditor is a third party to TfNSW and the contractors.

3.3 Incident Management

Emergency and incident response procedures are produced by each contractor as well as TfNSW. These procedures include:

- Categories for environmental emergencies and incidents;
- Forms for recording environmental incident details and responses;
- Notification protocols for each category of environmental emergency or incident, including notification of TfNSW and notification to owners/occupiers in the vicinity of the incident;
- Procedures for the immediate notification of each relevant authority when the incident results in material harm to the environment;
- Procedures for notification to the Director-General within 48 hours of becoming aware of an off-site incident that significantly affects people or the biophysical environment (this notification will be followed by a full written report within 7 days of the date on which the incident occurred);
- Identification of personnel who have the authority to take immediate action to shut down any activity or to affect any environmental control measure (including as directed by an authorised officer of the NSW Environment Protection Agency); and
- Onsite rectification actions.

Categories for environmental incidents are assigned three classes (1, 2 and 3) under the TfNSW Incident Management Procedure. The classes shown in Table 6 are based upon the consequence matrix from the Sydney Metro Risk Management Procedure.

Table 6 – Environmental Incident Classes

Class Category	Class Sub-Category	Description
Class 3	C6	No appreciable changes to the environment and/or highly localised event.
	C5	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries.
	C4	Short-term and/or well-contained environmental effects. Minor remedial actions probably required.
Class 2	C3	Impacts external ecosystem and considerable remediation is required.
	C2	Long-term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required.
Class 1	C1	Irreversible large-scale environmental impact with loss of valued ecosystems.

3.4 Complaint Management

Complaints are handled through the Sydney Metro Northwest Complaints Management System. This system forms part of the Sydney Metro Northwest Communications Management System. The system for managing complaints was approved by DP&E on 19 March 2013 and includes procedures for:

- Responding to complaints;
- Recording complaints;
- Escalation;
- Mediation; and
- Reporting.

3.5 Independent Environmental Representatives

TfNSW engage independent Environmental Representatives (ERs) as third party advisers to TfNSW and the contractors. The engagement of an Independent ER is a requirement of the planning approvals. The ER's role is generally to:

- Monitor compliance with the planning approvals;
- Be available to DP&E for advice;
- Provide advice in relation to environmental performance;
- Assist with the undertaking and reporting of site inspections;
- Endorse works as non-construction works in accordance with the planning approvals;
- Review relevant environmental reports and management plans; and
- Participate in auditing on an as needs basis.

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4 Compliance Accountability and Tracking

4.1 Compliance Status

Each Condition of Approval has been assessed to determine how it will be complied with over the life of the Sydney Metro Northwest project. Specific details of this assessment are contained in the Sydney Metro Northwest Staging Report. Each condition is initially determined to be **Active** at the project level until each works package to which it applies has provided evidence that it has discharged its obligations as described in the Sydney Metro Northwest Staging Report. At this point, the condition will become **Inactive**.

Within each works package, each applicable condition progresses through two distinct phases as an 'environmental requirement':

- 1) **Ongoing:** The environmental requirement is determined to apply to the works package and that works package has commenced construction or non-construction activities.
- 2) **Complete:** The environmental requirement is determined to apply to the works package and no further evidence is required to demonstrate compliance.

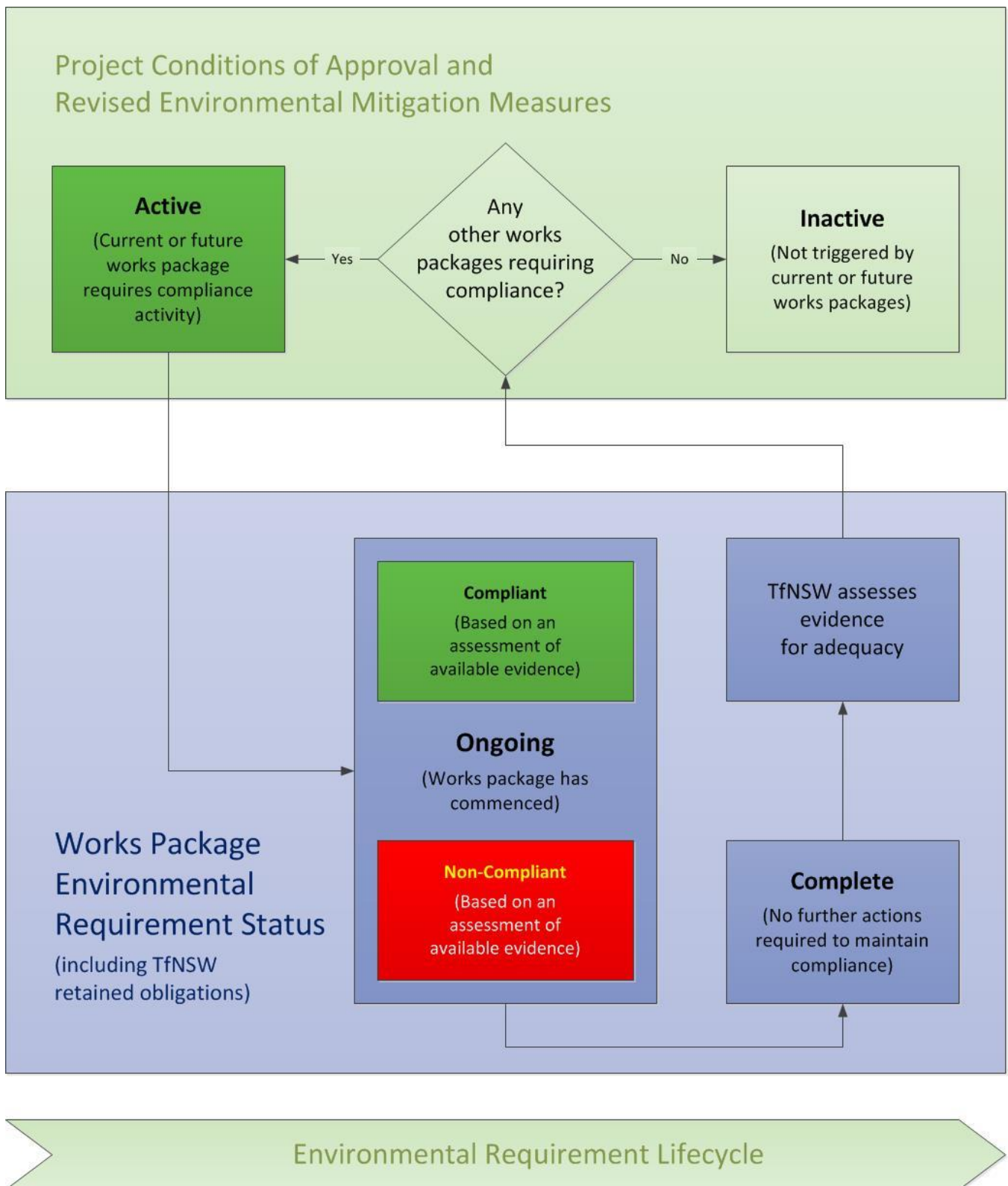
Where TfNSW has retained the obligation to comply with a particular condition, or holds a partial responsibility as defined in the Sydney Metro Northwest Staging Report, it will be classified as an **Ongoing** environmental requirement and tracked in the same manner as a works package.

Compliance is assessed for **Ongoing** environmental requirements and can be determined to be either **Compliant** or **Non-Compliant**. These assessments occur during surveillance activities outlined in Table 5. For the purposes of the Sydney Metro Northwest Compliance Tracking Program, **Compliant** and **Non-Compliant** are defined as:

- **Compliant:** A temporary status assigned to an environmental requirement which indicates a check of evidence has occurred and confirmed it is adequate to demonstrate that compliance is being met on the day it was checked.
- **Non-Compliant:** A temporary status assigned to an environmental requirement which indicates a check of evidence has occurred and confirmed it is inadequate to demonstrate that compliance is being met on the day it was checked.

The 'Requirements Lifecycle' is displayed as a flow chart in Figure 7.

Figure 7 – Environmental Requirements Lifecycle



5 Compliance Status

The total number of ongoing EP&A Act Part 5.1 environmental (compliance) requirements at the end of this reporting period was 1,674 (there are an additional 121 when also including Part 5 planning approval environmental requirements). There were a total of 29 non-compliances against these requirements during the reporting period. These are detailed in Table 9. There were no significant environmental incidents during the reporting period.

There were six environmentally relevant audits during the reporting period that generated 15 audit findings. These audits include two that were undertaken at the end of the previous reporting period, but the final reports were not finalised until this reporting period. Only three environmental audit findings remain open at the end of the reporting period, none of which were opened prior to the reporting period.

5.1 Compliance Overview

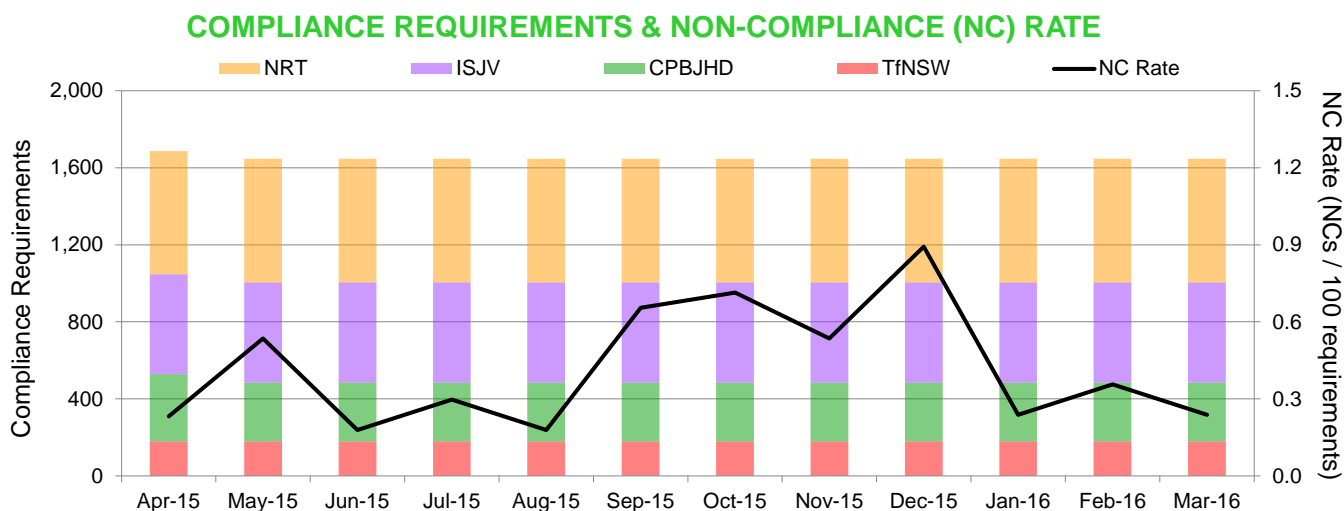
The results of the compliance monitoring are provided in Table 7. Non-Compliances and audit findings are detailed in Section 5.3 and 5.4. Issues and observations arising from independent ER inspections that identify non-compliances against the environmental requirements (Conditions of Approval) are also included in Section 5.3.

Table 7 – Environmental Compliance Surveillance Data

	TfNSW	TSC	SVC	OTS	Total	
By End of Q1 2016	Ongoing Environmental (Compliance) Requirements (non-compliances during quarter)	179 (1)	306 (1)	519 (8)	643 (0)	1,647 (10)
	ER Inspections during quarter (issues raised during quarter)	N/A	6 (32)	13 (133)	13 (60)	32 (225)
	Audits undertaken or reports finalised during quarter (findings)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)
	Class 1 or 2 Incidents during quarter	0	0	0	0	0
	Complaints Received during quarter	0	20	12	0	32
By End of Q4 2015	Ongoing Environmental (Compliance) Requirements (non-compliances during quarter)	179 (0)	306 (0)	519 (19)	643 (0)	1,647 (19)
	ER Inspections during quarter (issues raised during quarter)	N/A	5 (21)	12 (104)	11 (29)	28 (154)
	Audits undertaken or reports finalised during quarter (findings)	0 (0)	2 (1)	3 (12)	0 (0)	5 (13)
	Class 1 or 2 Incidents during quarter	0	0	0	0	0
	Complaints Received during quarter	0	40	11	3	54

As demonstrated in Figure 8, the compliance load for the Sydney Metro Northwest project was unchanged throughout the reporting period. The compliance load is expected to decrease in mid to late 2016 as the TSC contract reaches completion.

Figure 8 – Compliance Load and Non-Compliance Rate



The Independent ERs conducted six quarterly compliance reviews against the environmental requirements (Conditions of Approval) since 1 October 2015 across the three major contracts (two per contract). These reviews and other surveillance activities identified 29 non-compliances as detailed in Table 8. The 'Non-Compliance Rate' in Figure 8 represents the number of non-compliances reported each month per 100 environmental (compliance) requirements. This rate is closely monitored by the project and may be used to set environmental performance objectives for future Sydney Metro projects.

5.2 SVC Improvement Program

The SVC Improvement Program has been implemented to address key focus areas. The program was established during the October 2014 to March 2015 reporting period following increasing numbers of environmental issues, incidents and non-compliances from SVC site establishment activities.

During this current reporting period, the SVC contractor continued to establish additional construction teams, techniques and sites to accelerate construction of the skytrain viaduct. For example, construction on the viaduct now includes teams working on an underslung crane and scaffolding, in addition to the two original gantry cranes. Subsequently, more of the project's alignment corridor is now subject to construction activity.

As mentioned in the previous Environmental Construction Compliance Report, training sessions on environmental matters were conducted throughout the reporting period. This resulted in a noticeable improvement to the SVC contractor's environmental awareness and practises, particularly through a reduction of environmental incidents (refer to Figure 9). Whilst training initiatives have been effective, additional staff (primarily subcontractors) continually requires induction and initial environmental training. The increased focus on environmental management has helped to maintain environmental performance levels.

5.3 Non-Compliances

5.3.1 Open Non-Compliances from the Previous Reporting Period

The Environmental Construction Compliance Report for the previous reporting period (April 2015 to September 2015) indicated that seven non-compliances remained open. These were all closed out during this reporting period. Table 8 provides a list of these non-compliances.

Table 8 – Open Non-Compliances from the Previous Reporting Period that were Closed during this Reporting Period

Month Raised	Contract	Condition of Approval	Classification	Issue	Status
Aug 15	SVC	SSI-5100 – B1 & E45 SSI-5414 – B1 & E33	Management Systems	Utility relocation works commenced at two pier locations prior to the release of Environmental Hold Points (pre-ground disturbance and pre-start checklist).	Closed
Aug 15	SVC	SSI-5100 – B1 & E45 SSI-5414 – B1 & E33	Management Systems	Utility relocation works commenced at one pier location prior to the release of Environmental Hold Points (pre-ground disturbance and pre-start permits).	Closed
Aug 15	SVC	SSI-5100 – C22 SSI-5414 – C46	Waste & Spoil	Minor hydraulic oil spill accidentally cleaned up by a street-sweeper within the Mulgrave Precast Yard.	Closed
Sep 15	SVC	SSI-5100 – B1 & E45 SSI-5414 – B1 & E33	Management Systems	Commencement of ground disturbance works in Sydney Water land.	Closed
Sep 15	SVC	SSI-5100 – B1 & E45 SSI-5414 – B1 & E33	Management Systems	Commencement of ground disturbance works in Sydney Water land prior to the release of Environmental Pre-Ground Disturbance Permit Hold Point	Closed
Sep 15	SVC	SSI-5100 – B1 & E45 SSI-5414 – B1 & E33	Management Systems	Commencement of pier works prior to the release of Environmental Hold Points	Closed
Sep 15	SVC	SSI-5100 – B1 & E45 SSI-5414 – B1 & E33	Management Systems	Commencement of ground disturbance works at Windsor Road median strip without a Ground Disturbance Permit.	Closed

5.3.2 This Reporting Period

There were 29 non-compliances raised during the reporting period. Noise & Vibration, Management Systems and Soil & Water issues contributed 90% of all of these non-compliances:

- 17 Noise & Vibration non-compliances;
- 5 Management Systems non-compliances; and
- 4 Soil & Water non-compliances.

Details on all non-compliances raised during the reporting period are presented in Table 9.

Table 9 – Non-Compliances raised during the Reporting Period

Month Raised	Contract	Condition of Approval	Classification	Issue	Status
Oct 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Concrete pouring works on a temporary pier finished after 1pm on a Saturday (1:45pm).	Closed
Oct 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Concrete pouring works for pier piles finished after 1pm on a Saturday (1:30pm).	Closed
Oct 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Concrete pier pour activities finished after 1pm on a Saturday (approximately 1:15pm).	Closed
Oct 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Fencing, signage and security hut works to enable a segment-loaded truck access to site finished after 6pm on a weekday (8pm).	Closed
Oct 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Flatbed truck entered site at approximately 1:30am and was unloaded by a 25t plant for approximately 1 hour until 2:30am.	Closed
Oct 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Pile-cap concrete pouring works finished after 6pm on a weekday (approximately 8:45pm).	Closed
Nov 15	SVC	SSI-5100 – E46(b) SSI-5414 – E34(b)	Noise & Vibration	A smooth-drum roller was in use with a beeper rather than squawkers.	Closed
Nov 15	SVC	SSI-5100 – E1 & E46(g) SSI-5414 – E8 & E34(g)	Air Quality	Demolition of temporary piers generated dust travelling to the caravan park adjacent to works.	Closed
Nov 15	SVC	SSI-5414 – REMM SW37	Soil & Water	General erosion and sediment control breaches including loose material in clean water drain, stockpiling of material in flood zone and stockpiling without any shaping, trimming or stabilising.	Closed
Nov 15	SVC	SSI-5100 – C11 SSI-5414 – C37	Management Systems	Reporting of the Annual Surface and Groundwater Monitoring Results to the DP&E, EPA and NoW not completed within the required timeframe.	Closed
Dec 15	SVC	SSI-5414 – REMM SW37	Soil & Water	Materials brought into site designated stockpiling area had beached the area and infiltrated the flood zone (including other general erosion and sediment control breaches).	Closed
Dec 15	SVC	SSI-5100 – E15 SSI-5414 – E15	Management Systems	Process for OOH works hold point not undertaken.	Closed
Dec 15	SVC	SSI-5414 – REMM SW37	Soil & Water	Backfilling dirty water drain onsite without prior consultation with environmental team.	Closed

Month Raised	Contract	Condition of Approval	Classification	Issue	Status
Dec 15	SVC	SSI-5100 – E46(b) SSI-5414 – E34(b)	Noise & Vibration	Use of beeper alarm onsite on cranes low loader as part of gantry works.	Closed
Dec 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Rattle gun used to launch Gantry 2 at 8.45pm (outside of the approved construction hours).	Closed
Dec 15	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Grinder used to launch Gantry 2 at 9:40pm (outside the approved construction hours)	Closed
Dec 15	SVC	SSI-5100 – E46(b) SSI-5414 – E34(b)	Noise & Vibration	Excavator fitted with beeper rather than squawkers.	Closed
Dec 15	SVC	SSI-5100 – E15 SSI-5414 – E15	Management Systems	Concrete pour for pier works finished after 6pm (8pm) including washing out the line of a boom pump. Reported to EPA on 14/12/15 at 5:55pm.	Closed
Dec 15	SVC	SSI-5414 – REMM SW37	Soil & Water	Change to erosion and sediment controls without prior consultation with the environment team.	Closed
Jan 16	TfNSW	SSI-5100 – E10 SSI-5414 – E31	Heritage	The European Heritage Report was not submitted to DP&E within 2 years following the completion of the excavation program.	Closed
Jan 16	SVC	SSI-5100 – E46(b) SSI-5414 – E34(b)	Noise & Vibration	Use of beeper alarm on a Goldsrings Prime Mover as part of gantry works.	Closed
Feb 16	SVC	SSI-5100 – E15 SSI-5414 – E15	Management Systems	Numerous unauthorised OOH works have occurred during Q4 2015. Systemic failures associated with obtaining OOH works permits and working within the permitted work hours and locations.	Closed
Feb 16	SVC	SSI-5100 – E35 SSI-5414 – E1	Traffic, Transport & Access	Heavy vehicles observed travelling on Bellcast Road (not in accordance with current Vehicle Management Plan).	Open – Toolbox meeting to be held with all drivers to remind them of the requirements of the Vehicle Management Plan and Traffic Control Plan.
Feb 16	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Works onsite continued past 1pm on a Saturday.	Closed
Feb 16	SVC	SSI-5100 – E46(d) SSI-5100 – REMM SW22 SSI-5414 – E34(d)	Management Systems	Sediment basin was decommissioned without prior notice to EPA.	Closed
Feb 16	SVC	SSI-5100 – D3 SSI-5414 – D3	Management Systems	The environment team was not notified of community complaint received at 5:10am until 3:30pm, and was therefore unable to notify the EPA in time in accordance with the EPL.	Closed

Month Raised	Contract	Condition of Approval	Classification	Issue	Status
Feb 16	TSC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Works started prior to 7am on 19 January 2016 at the Epping Services Facility site.	Closed
Mar 16	SVC	SSI-5100 – E46(b) SSI-5414 – E34(b)	Noise & Vibration	Three separate instances of squawkers heard onsite.	Open – Supervisor to address work crew and staff to immediately tag-out any plant with non-compliant alarms.
Mar 16	SVC	SSI-5100 – E12 & E46(b) SSI-5414 – E12 & E34(b)	Noise & Vibration	Works continued past approved construction hours onsite and included the use of a hammer drill.	Closed at time of this report's finalisation.

5.4 Audit Findings

5.4.1 Open Findings from the Previous Reporting Period

The Environmental Construction Compliance Report for the previous reporting period (April 2015 to September 2015) indicated that 18 audit findings remained open, two of which had remained open from the October 2014 to March 2015 Environmental Construction Compliance Report. As indicated in Table 10, all of these findings were closed during this reporting period.

Table 10 – Audit Findings that remained 'Open' from the Previous Environmental Construction Compliance Report

Month	Audit ID (Auditee)	Finding	Agreed Action / Resolution	Current Status
Dec 2014	NWRL_008_SVC_ISJV V (ISJV)	Processes used to define Planning Conditions and related technical requirements as design input had not always correctly identified relevant design-lot-specific requirements.	ISJV to facilitate a collaborative review of the SMEC Master Environment Compliance Register to ensure that requirements allocated to specific design lots are correct.	Closed
Dec 2014	ISJV-SVC-EN-004 (ISJV)	Dilapidation surveys have been undertaken based on geotechnical modelling rather than specified distances from buildings and infrastructure for particular items of plant used in adjacent construction activities.	Dilapidation survey to be undertaken based upon specified distances from buildings and infrastructure.	Closed
Mar 2015	ISJV-SVC-PM-PLN-120205 (ISJV)	The approval for the ISJV CEMP required resubmission of the HMP to DP&E once consultation requirements were addressed, but resubmission had not occurred.	Send final version of HMP to DP&E for information.	Closed
Mar 2015	ISJV-SVC-PM-PLN-120205 (ISJV)	Vibration monitoring records not available to show vibration has no impacts on Mungerie House.	Perform vibration monitoring at Mungerie House and keep records on file.	Closed
Mar 2015	ISJV-SVC-PM-PLN-120205 (ISJV)	Consultation has not yet occurred on the latest Visual Impact Strategy. The VIS does not read as a strategy.	Consultation to occur when VIS is updated. Revise VIS to be a strategy document, not a management plan.	Closed
Mar 2015	ISJV-SVC-PM-PLN-120205 (ISJV)	Unclear if dilapidation survey had been completed for Carriage Drive, which requires reinstatement after construction.	Do dilapidation survey of Carriage Drive.	Closed

Month	Audit ID (Auditee)	Finding	Agreed Action / Resolution	Current Status
Apr 2015	NWRL-021-SVC-ISJV / ISJV-TfNSW-CS-010 (ISJV)	ISJV is required to review the CLIP every 6 months. At the time of audit, the current version of the CLIP was issued in July 2014 and has not been reviewed and updated since then.	The CLIP and sub-plans are currently being reviewed and updated. Several inaccuracies have been identified between the three approved plans and it is important that these inconsistencies are amended to reflect the same information. The changes suggested in this report will also be included in the CLIP. Plans will be finalised once all changes have been made.	Closed
Apr 2015	NWRL-021-SVC-ISJV / ISJV-TfNSW-CS-010 (ISJV)	The CLIP includes a requirement for ISJV to manage their own area within the NWRL website, however there is currently no ISJV maintained section within the NWRL website.	Correspondence will be issued to TfNSW requesting confirmation regarding website management. The CLIP will be updated accordingly.	Closed
May 2015	NRT 2015/048 (NRT)	DJV had not clearly articulated specific functions / individuals who were considered competent nor assigned responsibility / authority to verify Environment Planning Approval compliance and consistency in design.		
May 2015	NRT 2015/048 (NRT)	NRT had not specified functions / individuals who had responsibility / accountability for ensuring that designs were compliant and consistent with Environment Planning Approvals.	NRT to organise an independent review on the delivery of environmental planning requirements. The review will be undertaken by an independent environmental consultant and will make recommendations for improvement.	Closed
May 2015	NRT 2015/048 (NRT)	Hassell had not clearly defined many functions / individuals who had been deemed competent to verify Environment Planning Approval compliance and consistency in design.		
May 2015	NRT 2015/048 (NRT)	The Design Management Plan, Quality Assurance Section 6.8 identified a 'Schedule of signatures of competent persons' as one of many key components of Design Reports, however the intent was subject to varied interpretation and the intent appeared not to have been implemented as yet.		
Jul 2015	NWRLSVC-ISJ-SVC-PM-PLN-120203 (ISJV)	The Soil and Water Management Plan indicates basins will be clay lined. The amended Salinity Plan does not require clay lined basins (unlike previous revisions), which has not been updated in the mitigation measures within the plan.	The plan is to be updated to align with the Salinity Plan. Update as part of next scheduled review.	Closed
Jul 2015	NWRLSVC-ISJ-SVC-PM-PLN-120203 (ISJV)	Salinity Testing Form shows a different disposal criterion to the Soil Salinity Report for saline material.	Amend either document (Form or Plan) to ensure both documents use the correct disposal criteria.	Closed
Jul 2015	NWRLSVC-ISJ-SVC-PM-PLN-120203 (ISJV)	Salinity Testing Form shows a different discharge criterion to the Soil Salinity Report for groundwater.	Amend either document (Form or Plan) to ensure both documents use the correct discharge criteria.	Closed
Jul 2015	NWRLSVC-ISJ-SVC-PM-PLN-120203 (ISJV)	Six months of groundwater monitoring results have not been collected / reviewed to determine ongoing requirements as per the commitment.	A report reviewing the available data is currently being prepared by ISJV for issue to ER and TfNSW. Following review of the report, agreement to be reached as to ongoing monitoring requirements.	Closed

Month	Audit ID (Auditee)	Finding	Agreed Action / Resolution	Current Status
Jul 2015	NWRLSVC-ISJ-SVC-PM-PLN-120203 (ISJV)	The plan needs to be updated to reflect the current EPL requirements, including records, erosion and sediment control plans, weekly inspection checklist, non-compliance reports, monthly monitoring reports on website, monthly EPL non-compliance reports and annual return. The audit did not find any evidence that the EPL is not being complied with.	Include how the EPL is being implemented including where data is recorded and on which forms / procedures with respect to soil and water management.	Closed
Jul 2015	NWRLSVC-ISJ-SVC-PM-PLN-120209 (ISJV)	The monitoring requirements listed in Section 8 indicate a daily record will be kept of visual air quality surveillance on the Weekly Environmental Inspection Checklist. The environment team are recording this weekly on the Weekly Environmental Inspection Checklist (as is also required in Section 8).	Section 8 of the plan to be updated to remove the requirement to record daily air quality surveillance. Site access staff to contact street sweeper directly should the entry / exit areas require additional cleaning. Update as part of next routine management plan review or within 3 months.	Closed

5.4.2 This Reporting Period

Six environmental audits were undertaken or reports finalised during this reporting period as shown in Table 11. These audits produced a total of 15 findings which are detailed in Table 12. There are three findings that currently remain open.

As of 2016, TfNSW agreed not to undertake any more audits on the TSC contractor. This is due to the significantly reduced construction activity onsite as a result of preparing sites for handover to other contractors during 2016.

Table 11 – Environmental Audits undertaken or reports finalised during the Reporting Period

Audit ID	Auditee	Audit Title	Audit Date	Total Findings	Closed Findings	Open Findings
ISJV-SVC-EN-014 / NWRL-034-SVC-IC	ISJV	Construction Traffic Management Plan	14/9/2015 *	7	6	1
TSC-AUD-081	CPBJHD	Sustainability Plan, Carbon & Energy Management Plan and Waste Management & Recycling Plan	24/9/2015 *	1	1	0
TSC-AUD-084	CPBJHD	Spoil Management Plan and Construction Traffic Management Plan	5/11/2015	0	0	0
TFNSW-SVC-Q-031 / SM15.16-004-SVC-ISJV	ISJV	Construction Noise & Vibration Management Plan	19/11/2015	1	1	0
TFNSW-SVC-E-019 / SM15.16-005-SVC-ISJV	ISJV	Construction Environment Management Plan	30/11/2015	4	2	2
NRT 2016/004	NRT	Community Liaison Implementation Plan	14/1/2016	2	2	0
Totals				15	12	3

* Indicates audit reports were finalised during this reporting period.

Table 12 – Audit Findings during the Reporting Period

Month	Audit ID (Auditee)	Finding	Agreed Action / Resolution	Current Status
Sep 2015 *	ISJV-SVC-EN-014 / NWRL-034-SVC-IC (ISJV)	Incorrect Traffic Control Plan being implemented at the Rouse Hill Construction Area 2 site.	Traffic Manager or delegate to regularly review and update the Traffic Control Resourcing Spreadsheet appropriately. Signage and Control Measures Record to be filed by the engineer. Traffic Manager to review and sign-off the Signage and Control Measures Record.	Closed
Sep 2015 *	ISJV-SVC-EN-014 / NWRL-034-SVC-IC (ISJV)	Heavy vehicles reversing off the T-Way into the site and vehicles exiting the main worksite.	ISJV to notify traffic control and construction sub-contractors of the need to comply with approved access and egress arrangements. Also reinforced at toolbox talks with sub-contractors. Site inspections by the ISJV Traffic Engineer to include verification that sub-contractors are complying with approved access and egress arrangements.	Closed
Sep 2015 *	ISJV-SVC-EN-014 / NWRL-034-SVC-IC (ISJV)	A pedestrian / cycleway re-routed by ISJV is rough, unsealed and poorly lit. Temporary fencing support footings also presented a potential trip hazards and pre-existing cyclist sign may mislead cyclists into believing they can ride on Memorial Avenue.	ISJV to improve the temporary arrangements for pedestrian / cycleway at Memorial Avenue to an acceptable and safe standard.	Closed
Sep 2015 *	ISJV-SVC-EN-014 / NWRL-034-SVC-IC (ISJV)	No evidence or formal records to prove that weekly Construction Traffic Control Plan set-up inspections or audits to assess traffic compliance requirements were being undertaken.	ISJV to pursue resources and/or technology to capture proper/adequate evidence of inspections and audits.	Open – Traffic inspection evidence sighted, however program of formal inspections/audits still under development.
Sep 2015 *	ISJV-SVC-EN-014 / NWRL-034-SVC-IC (ISJV)	Electrical sub-contractors observed to have moved temporary safety fencing, obscuring signs directing pedestrians around the worksite and allowing pedestrian access to an open and unattended electrical cabling pit.	ISJV to formally notify sub-contractors that protective measures installed at worksites must not be moved without approval or effective mitigations put in place. Site inspections by the ISJV Traffic Engineer to include verification that temporary changes to site safety measures have been managed effectively.	Closed
Sep 2015 *	ISJV-SVC-EN-014 / NWRL-034-SVC-IC (ISJV)	Security guard confirmed he had facilitated large trucks accessing the site by stopping traffic on Sanctuary Drive, even though he was not a trained as a qualified Traffic Controller.	ISJV to formally notify Challenger Knight that site security guards are not to perform traffic control activities and to establish and implement communication procedures for security guards to request Traffic Controller assistance if required.	Closed
Sep 2015 *	ISJV-SVC-EN-014 / NWRL-034-SVC-IC (ISJV)	Traffic Control Plan did not identify a gated access point to a fenced staging area. Two light trucks were observed reversing into the staging area.	Site inspections by the ISJV Traffic Engineer to include verification that TCPs accurately reflect site configuration such as access / egress points. ISJV to formally notify traffic control sub-contractor, site manager and sub-contractors of the need to comply with approved access and egress arrangements.	Closed

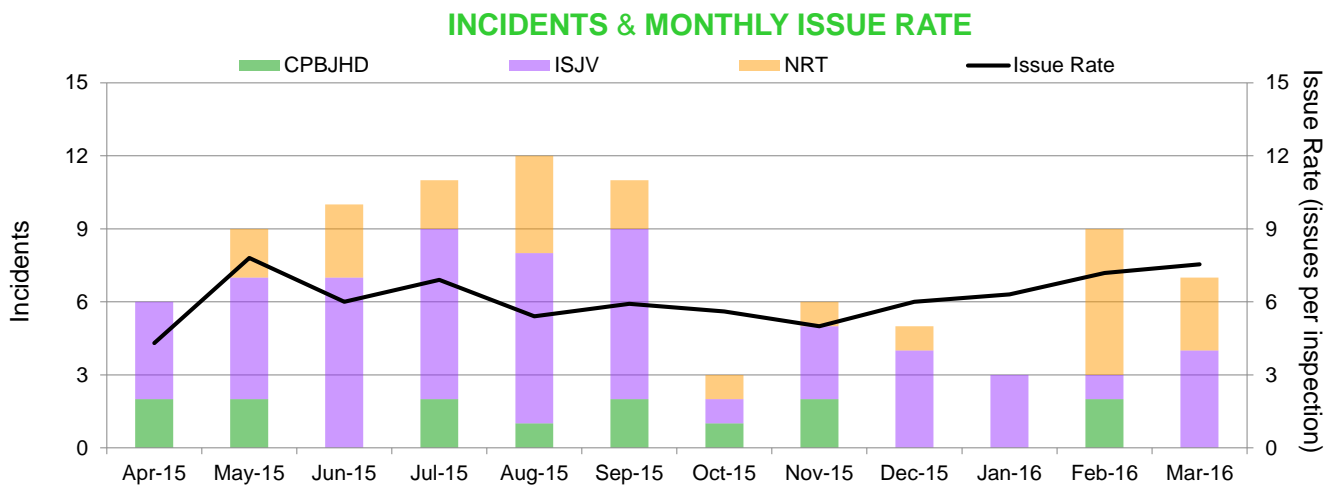
Month	Audit ID (Auditee)	Finding	Agreed Action / Resolution	Current Status
Sep 2015 *	TSC-AUD-081 (CPBJHD)	EcoHut Trial Report to be finalised & issued to TfNSW.	Report finalised and issued to TfNSW.	Closed
Nov 2015	TFNSW-SVC-Q-031 / SM15.16-004-SVC-ISJV (ISJV)	The new process for recording and documenting new plant and equipment onsite introduced by the Safety Team does not prescribe noise monitoring procedures and does not include measurement of Sound Power Levels.	Environment Manager to facilitate review of new process and forms with the Safety Team to ensure that the pre-existing process for addressing environmental requirements is understood. Safety Team to address procedural and data deficiencies through documentation revision and implementation. Practical arrangements to be implemented to ensure SPLs continue to be recorded.	Closed
Nov 2015	TFNSW-SVC-E-019 / SM15.16-005-SVC-ISJV (ISJV)	No schedule or forward looking plan for personal environmental training had been developed as yet.	Update and maintain the Environmental Training Profile to reflect a rolling program of planned / future training, re-training and refresher training and deliver RMS night construction work video training sessions as a matter of high-priority.	Closed
Nov 2015	TFNSW-SVC-E-019 / SM15.16-005-SVC-ISJV (ISJV)	The Training Register Spreadsheet did not systematically address environment skill or knowledge gaps for identified individuals or evidence sub-contractor individual environmental training needs. Training records were not being systematically collected and maintained by the Training Coordinator.	Determine basic environmental awareness for key individuals and update the Training Register Spreadsheet accordingly. Plan and deliver outstanding environmental training sessions. Identify key individuals who have not attended relevant environmental training as planned and ensure this training is delivered and recorded. Training Coordinator to develop a logical filing system for environmental training records, collect missing/outstanding training records and update the Training Register Spreadsheet.	Closed
Nov 2015	TFNSW-SVC-E-019 / SM15.16-005-SVC-ISJV (ISJV)	Sub-contractor receipt, awareness, implementation of CEMP and sub-plan procedures was informal and could not be demonstrated. No environmental sub-contractor audits undertook.	Relevant teams to confirm and implement requirements for effective sub-contractor control. Environment Team to undertake or facilitate sub-contractor audits to demonstrate understanding and implementation of environmental related plans, procedures and practices by high risk contractors. CEMP to be updated if required.	Open – Actions being undertaken to include sub-contractor audits into the audit schedule.
Nov 2015	TFNSW-SVC-E-019 / SM15.16-005-SVC-ISJV (ISJV)	Pre-start meeting records did not provide evidence that specific environmental hazards had been identified. CEMP also did not reference SEA cards that are currently in use.	Pre-start form to be updated to facilitate better recording of known environmental hazards. Relevant teams to confirm the intent and relationship between pre-start form and SEA cards and update CEMP Section 5.8.4.	Open – Pre-start form updated to include environmental issues section. Quality Manager currently in process of addressing relationship between pre-start forms and SEA cards.
Jan 2016	NRT 2016/004 (NRT)	Enquiry / Complaint response details and/or the response time had not been recorded in Consultation Manager for four items. NRT is also not reporting response times to TfNSW.	The few exceptions noted in the audit will be updated to reflect all the necessary details within a month. A progressive review of all entries will be undertaken over the next few months to verify completeness.	Closed
Jan 2016	NRT 2016/004 (NRT)	Interactive display material has not been provided at the Community Information Centre.	A new interactive display is being sourced. TfNSW will be kept updated with progress.	Closed

* Indicates audit reports were finalised during this reporting period.

5.5 Incidents

There were no significant incidents (Class 1 or 2) for the reporting period. All environmental incidents that occurred on the project during the reporting period were considered Class 3 only and are displayed in the bar chart in Figure 9.

Figure 9 – Incidents (Class 3) and Issue Rate (issues per inspection per month)



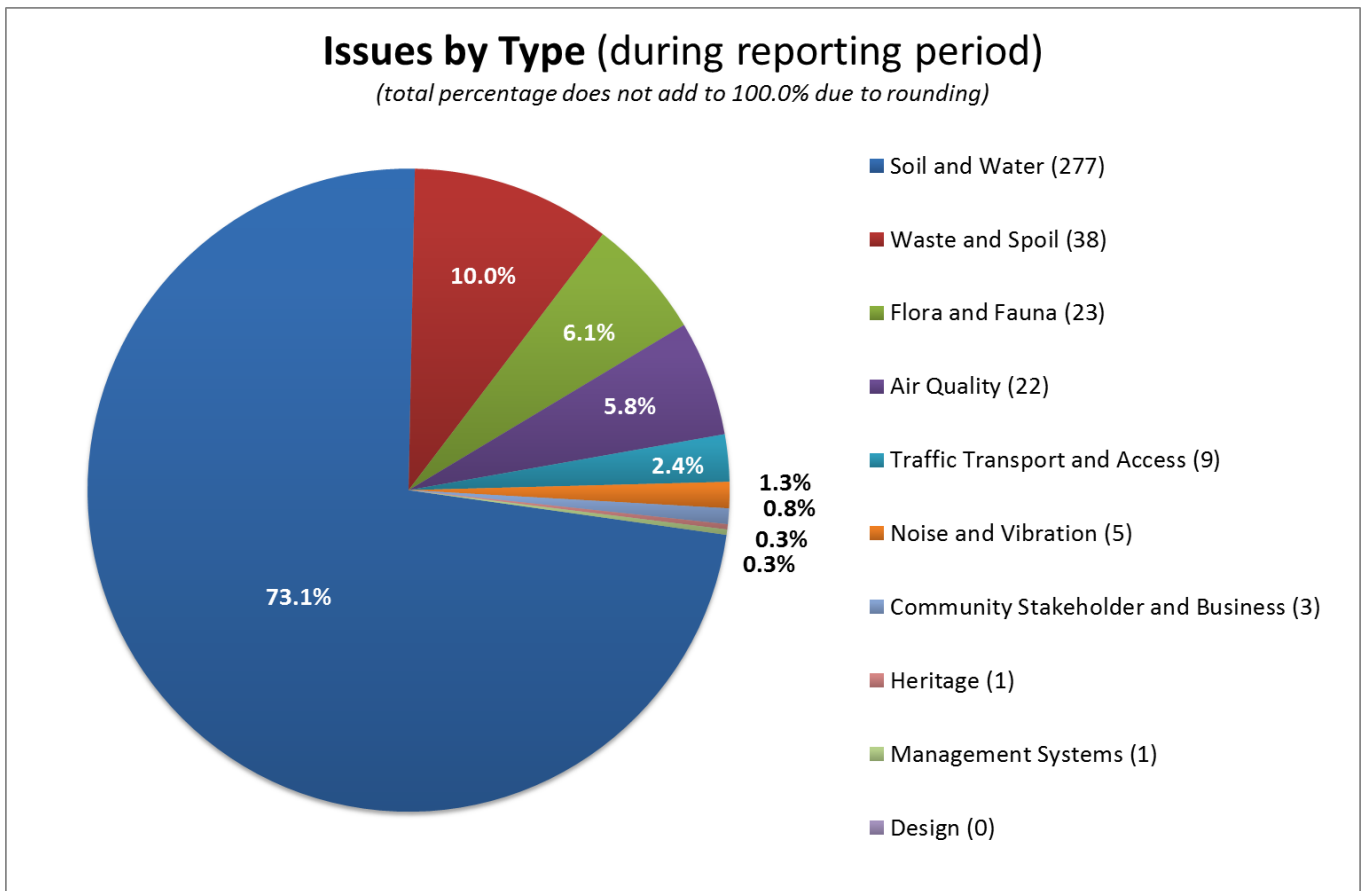
5.6 Independent Environmental Representative Activity

A summary of independent Environmental Representative (ER) activity is provided in Figure 9. Three Independent ERs were working on the Sydney Metro Northwest project and monitored the activities of the three major contractors during the reporting period (CPBJHD, ISJV and NRT).

The Independent ERs conducted a total of 60 environmental inspections and raised 379 issues. During the reporting period, the monthly 'Issue Rate' dropped to 5.0 in November 2015 and has gradually increased since then to 7.5 in March 2016. There is no clear relationship between the number of issues identified during the independent ER inspections and the number of incidents occurring. However, the independent ER participates in other surveillance activities and has directly contributed to the improvement of environmental performance.

During the reporting period, Soil & Water issues comprised over 73% of all issues identified during independent ER inspections. This prevalence is a result of the continual need to expose soil on a linear infrastructure project, in combination with the rainfall patterns in the Sydney region. Combined with Waste & Spoil, Flora & Fauna and Air Quality, these issues represented the vast majority of all issues identified on the project: 95.0%. A breakdown of the type of issues identified on the project during the reporting period is provided in Figure 5.

Figure 10 – Environmental Issues Raised by Type during the Reporting Period



5.7 Complaints

During the reporting period, Sydney Metro Northwest received a total of 86 complaints:

- 60 relating to TSC (refer to Figure 13 for breakdown by site);
- 23 relating to SVC (refer to Figure 14 for breakdown by site); and
- 3 relating to OTS (two concerning the SMTF and one concerning the life-sized train model).

This section summarises these complaints, with further details provided in Appendix A. All the complaints have been actioned and resolved in accordance with the Construction Complaints Management System. There are no matters which are currently subject to mediation.

The total number of complaints decreased during this reporting period (from 126 to 86), which is a welcome result and coincides with the completion of Tunnel Boring Machine (TBM) operations and associated spoil haulage.

Complaints during the reporting period fell into nine categories, with the top category being Noise & Vibration (as it was for the last reporting period) at 31%. Property & Business Impacts was the next highest at 27%, followed by Transport, Traffic & Access at 22%. The majority of complaints received can be attributed to tunnelling operations, gantry crane operations on the skytrain viaduct, spoil haulage from site, site establishment, demobilisation and demolition activities. These activities have been communicated effectively to stakeholders and the community in accordance with the Overarching Stakeholder and Community Involvement Plan (OSCIP) and contractor-specific Community Liaison Implementation Plans (CLIP).

Both SVC and TSC complaints mainly concerned Noise & Vibration. The TSC contractor also recorded 22 Property & Business Impact complaints. It is acknowledged that the TSC contractor carried out a major pre and post condition survey process along the alignment to support the tunnelling program, together with significant 'on the ground' community liaison work.

The three contractors have continued to build strong working relationships with community stakeholders including local residents, council representatives and businesses. A particular focus during this reporting period was on informing stakeholders about changes in site activities, out-of-hour works and deliveries for skytrain viaduct construction.

A program of community notifications, newsletters, door-knocking, forums and one-on-one meetings has helped ensure residents and businesses know what kind of activities to expect and when, and know whom to call if they would like more information.

TfNSW has supported this communication with its Sydney Metro Northwest Community Information Centre at Castle Hill, a program of mobile Community Information Centre engagements at events (such as the Royal Easter Show and the annual Castle Hill Show), fetes, markets, newspaper advertising and a project newsletter distributed to residents and businesses along the alignment.

Figure 11 – Complaints by Type

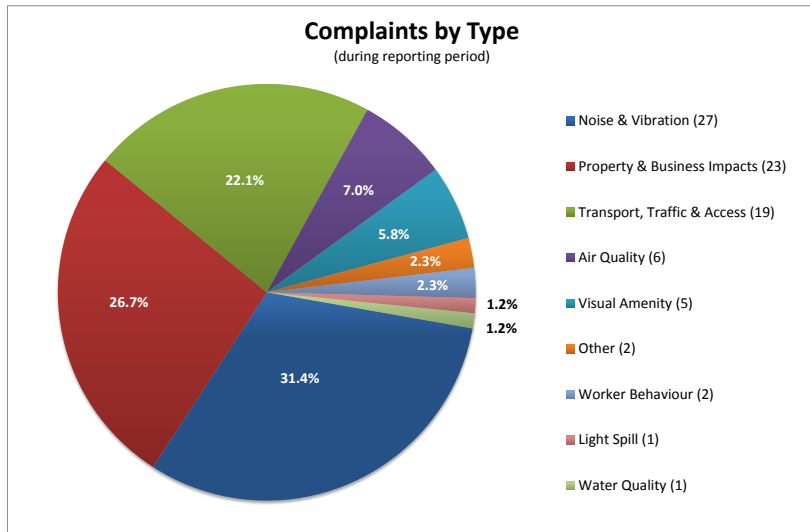


Figure 12 – Complaints by Contract Package

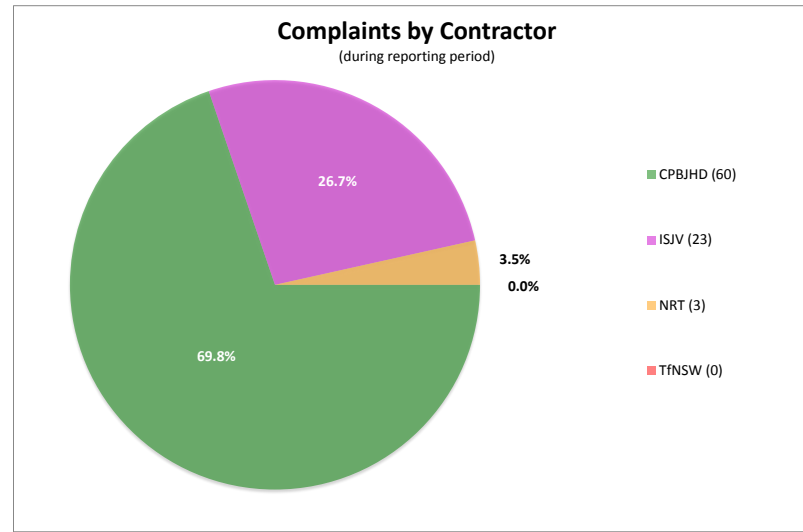


Figure 13 – CPBJHD Complaints by Site

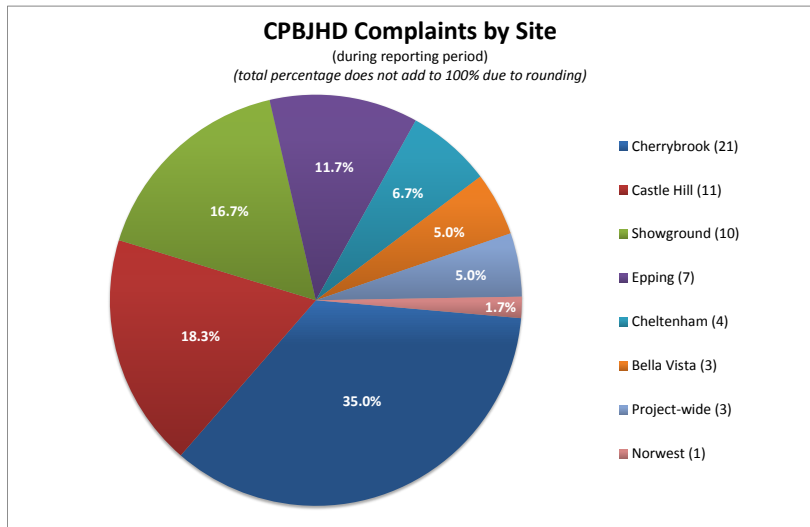
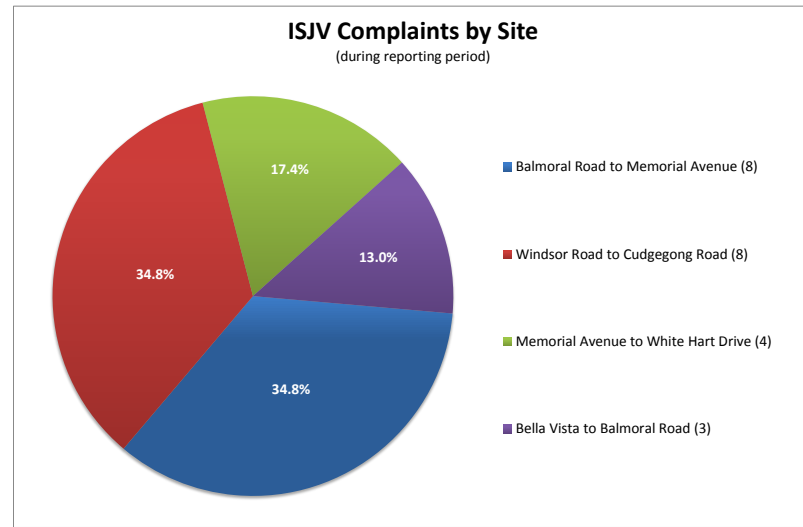


Figure 14 – ISJV Complaints by Site



6 Environmental Monitoring

6.1 Water Quality Monitoring Program

The Sydney Metro Northwest project continues to implement a Water Quality Monitoring Program that monitors surface water and groundwater quality along the alignment. Refer to Section 6.1 of the previous Environmental Construction Compliance Report for details.

During this reporting period, the TSC contractor closely managed an issue around sedimentation in Cattai Creek that was raised in 2015. The TSC contractor identified that sediment had been remobilised during the discharge of compliant water from the two sediment basins located on the Showground Station site. The Environment Protection Agency (EPA) conducted a site inspection of the area and verified that the discharge from site was compliant with the EPL. Notwithstanding this compliance, the TSC contractor has implemented additional mitigation measures to limit sedimentation remobilisation in Cattai Creek.

6.2 Ecological Monitoring Program and Biodiversity Offset Package

The Sydney Metro Northwest project continues to implement an Ecological Monitoring Program and offset potential biodiversity impacts by securing a Biodiversity Offset Package. Refer to Section 6.2 of the previous Environmental Construction Compliance Report for details on each of these.

As of March 2016, the project has:

- Removed 180 hollow-bearing trees and installed over 280 nest boxes;
- Undertaken minimal clearance activities within three riparian zone locations:
 - 1) A small section of Elizabeth Macarthur Creek near the Kellyville Site in order to construct the temporary public carpark to be used during the construction phase. The affected area has since been re-established in accordance with the contractor's Vegetation Management Plan, which was developed in consultation with and approved by Sydney Water (land owner). The area continues to be monitored closely in accordance with the plan.
 - 2) A small section of Second Ponds Creek where it crosses beneath the skytrain viaduct. The affected area remains subject to construction activity and future drainage works. Environmental controls continue to be implemented in order to mitigate impacts that the project may have in this area. Following completion of construction activity, the area will be re-established and rehabilitated in accordance with the contractor's Vegetation Management Plan.
 - 3) A small area within the Caddies Creek catchment in Rouse Hill. The affected area currently remains subject to concrete pier construction activity and environmental controls continue to be implemented in order to mitigate impacts that the project may have in this area. Following completion of construction activity, the area will be re-established and rehabilitated in accordance with the contractor's Vegetation Management Plan.

6.2.1 Next Steps

The OTS contractor is required to prepare a Design and Landscape Plan (DLP) for the SMTF and an Urban Design and Corridor Landscape Plan (UDCLP) for the remainder of the corridor. These plans include a significant planting program, with suitable options for indigenous species at each of the stations and along the rail alignment. Species lists include drought-tolerant native trees, shrubs,

grasses, groundcovers and climbers, as well as a separate list specifically for water courses, detention basins and riparian areas. The OTS contractor has had these species listings incorporated into their contract and must use these as the basis for all plantings.

In accordance with the planning approvals:

- The DLP for the SMTF needs to be submitted to DP&E for approval. The plan was submitted on 28 October 2015 and was approved by DP&E on 9 December 2015.
- The UDCLP needs to be submitted to DP&E prior to the commencement of permanent built works. A UDCLP specific to the Cudgegong Road Station site was submitted to DP&E on 27 October 2015. As approved by DP&E in a letter dated 16 March 2016, TfNSW plan to submit two staged UDCLPs covering the remainder of the corridor no later than 29 July 2016 (Stage 1) and 30 September 2016 (Stage 2).

Also during the reporting period, a certification body was identified to help NRT progress Forest Stewardship Council (FSC) certification of selected project assets. TfNSW has recently focussed NRT's attention on integrating FSC interests into its standard ordering and acceptance practices. NRT are currently assessing how their design packs address FSC timber specifications.

6.3 Heritage

The planning approvals for the project include numerous requirements around heritage impact minimisation and management. These primarily include:

- Preparing and implementing a Visual Impact Strategy;
- Undertaking an Indigenous Archaeological Salvage Program and a European Archaeological Excavation Program;
- Archival recording of affected heritage items (in accordance with the NSW Office of Environment and Heritage guidelines as relevant); and
- Preparing and submitting a report containing the findings of the programs to the Director-General (now Secretary).

6.3.1 Visual Impact Strategy

The Sydney Metro Northwest project is required to prepare and implement a Visual Impact Strategy in consultation with DP&E and the NSW Office of Environment and Heritage (OEH). The strategy is to detail and minimise the visual impacts of the project with respect to specific heritage items identified in the Environmental Impact Statements (EIS). These include Castle Hill Showground, Mungerie House and White Hart Inn (formerly known as Swann Inn).

TfNSW has received Visual Impact Strategies from the major contractors covering the specific heritage items that relate to each of their respective scopes of work. As of the end of March 2016, TfNSW has approved a Visual Impact Strategy prepared by the SVC contractor covering Mungerie House and the White Hart Inn and is in the process of responding to agency comments on a Visual Impact Strategy prepared by the OTS contractor covering the other prescribed heritage items.

6.3.2 Indigenous Archaeological Salvage Program

In accordance with the planning approvals, the project is required to undertake an Indigenous Archaeological Salvage Program prior to the commencement of pre-construction or construction activities that may impact the 27 Indigenous heritage sites that were identified in the EIS. The program

methodology must be prepared in consultation with registered Aboriginal stakeholders and to the satisfaction of the Director-General. The work undertaken as part of the program must be undertaken by an appropriately qualified archaeological heritage consultant.

The Indigenous Archaeological Salvage Program methodology was split into two zones: 'east' (covering three of the 27 sites) and 'west' (covering 24 of the 27 sites). The eastern zone methodology was prepared by RPS (consultants) and the western zone methodology was prepared by Kelleher Nightingale Consulting (KNC). Both methodologies were finalised in the form of Cultural Heritage Assessment Reports (CHAR), which were to the satisfaction of the Director-General. Eleven registered Aboriginal stakeholders (groups or individuals) were consulted in preparation of the methodologies.

No artefacts were recovered from the RPS salvage activities. The three sites were found to be highly disturbed and did not hold any archaeological significance. The KNC salvage program however recovered over 13,000 artefacts, dated more than 4,000 years old in some instances. Artefacts of particular significance include over 250 finely backed artefacts (showing a high level of craftsmanship) and microdebitage (illustrating local site stability over thousands of years). TfNSW intends to deposit all artefacts recovered during the Indigenous Archaeological Salvage Program with the Australian Museum to be accessible to Aboriginal stakeholders and future generations. Options for interpretation within the project are currently being explored by TfNSW.

Figure 15 – Three views of an Axe / Hatchet made of Hornfels recovered from a site in Kellyville



The final Indigenous Archaeological Salvage Program Report was submitted to DP&E and approved on 22 February 2016. The report also contained a comprehensive 'Lithics Database' as an appendix, which detailed key information for each of the artefacts that were recovered from the program. The report will soon be available on the Sydney Metro Northwest website.

6.3.3 European Archaeological Excavation Program

The planning approvals also require the project to undertake a European Archaeological Excavation Program prior to the commencement of pre-construction or construction activities that may impact European heritage sites. The program must be undertaken in accordance with the OEH Archaeological Assessment Guidelines (1996) and the methodology must be prepared in consultation with OEH and to the satisfaction of the Director-General. Work undertaken as part of the program must be undertaken by an appropriately qualified archaeological heritage consultant.

The European Archaeological Excavation Program methodology was prepared by EMM Consulting in consultation with OEH and to the satisfaction of the Director-General. This was documented by EMM Consulting in the form of five Archaeological Assessment and Research Design (AARD) reports for:

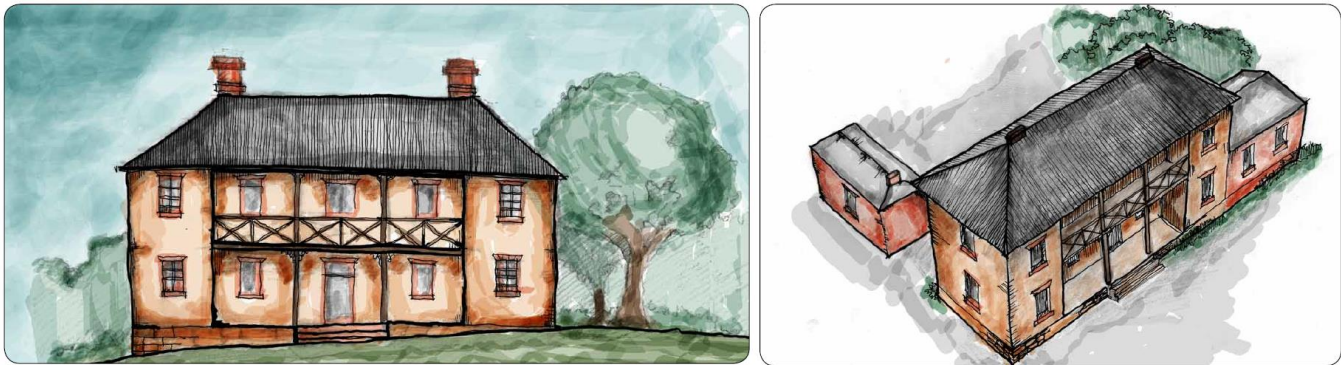
- 1) Castle Hill Station (finalised 18 July 2013);
- 2) Cherrybrook Station (finalised 28 June 2013);
- 3) Kellyville Station (finalised 12 August 2013);
- 4) Showground Station (finalised 10 July 2013); and
- 5) White Hart Inn, formerly known as Swann Inn (finalised 11 September 2013).

The European Archaeological Excavation Program found little evidence of past uses at the Castle Hill, Cherrybrook and Showground Station sites. These sites have been subjected to repeated use and are highly disturbed. No further archaeological investigation of these sites was recommended by EMM Consulting. The Kellyville Station and White Hart Inn sites however, exhibited a high degree of archaeological evidence.

Excavation at the Kellyville Station site allowed for further investigation of an old cottage and associated wells. Following the Archaeological Excavation Program here, EMM Consulting determined that the cottage was built by the James family in 1885, inhabited and then demolished some years later. The site has been recommended for future project interpretation (options currently being explored by TfNSW) and allowance for construction to continue without further archaeological assessment, testing or monitoring (provided that no unexpected finds are experienced).

The European Archaeological Excavation Program at the White Hart Inn site enabled a much greater understanding of the heritage significance at this site. EMM Consulting indicates that the White Hart Inn building would have been a two-storey inn with robust sandstone footings approximately 20m wide and 15m deep. The building would have been made of sandstone and brick, representing a typical colonial inn with a long veranda or front room, with small rooms or wings to the side and rooms to the rear.

Figure 16 – Artist Impressions of the White Hart Inn (circa 1840)



Following excavation, the White Hart Inn site hosted public open days in April 2014. This allowed for members of the public to observe the uncovered remains of the building. The surviving archaeological fabric and deposits have since been covered with a non-woven geotextile to separate relics from redeposited fill and allow filtration in both directions. The site is no longer visible above ground as is secure from destruction, surrounding construction and environmental impacts. At present, the site has been returned almost to its original archaeological form. A skytrain viaduct pier that was originally designed to be positioned directly above the inn was also relocated to conserve the site.

Figure 17 – Southern Section of the Main White Hart Inn Building



A large collection of artefacts retrieved from the White Hart Inn site are currently being securely stored. These include medicine bottles, a doll's leg and coins almost 200 years old. TfNSW is in the process of determining a final repository for these in consultation with local stakeholders and OEH.

European Archaeological Excavation Program Reports for each of the five sites were finalised, submitted to DP&E and approved on 22 February 2016. The reports will soon be available on the Sydney Metro Northwest website.

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7 Sustainability

The Sydney Metro Northwest project implements a Sustainability Policy and a Sustainability Strategy that was outlined in the Environmental Impact Statements and forms part of the contracts with the major works packages. The Sustainability Strategy establishes objectives and targets that were outlined in the previous Environmental Construction Compliance Report. Figure 18 provides a status update of some of the sustainability activity on the Sydney Metro Northwest project as of the end of December 2015.

7.1 Sustainability Initiatives and Performance Highlights

Throughout the Sydney Metro Northwest project construction period, initiatives have been implemented to ensure sustainability requirements of all construction packages are achieved and deed requirements are met. The following subsections provide examples of some of the project's sustainability initiatives and achievements. These topics are also referenced in the EISs.

7.1.1 Spoil Usage

The Sustainability Strategy requires that 100% of clean spoil from the project be beneficially reused. Spoil management details are outlined in the Construction Soil and Groundwater Management Plans for each delivery package. The majority of the TSC spoil material is currently transported to over 50 different external sites across Sydney for reuse, with the remainder used within the project or for environmental works. The SVC spoil material is currently entirely reused within the SVC project sites.

A graphical representation of the combined cumulative spoil data is shown in Figure 18. 100% of the spoil generated throughout the construction phase of the project has been reused. As of the end of 2015 Q4, over five and a half million tonnes of spoil has been reused or stockpiled for reuse. During this quarter, 73% of spoil was reused external to the project and approximately 26% was reused within the project. The remainder was used for environmental works.

7.1.2 Waste Usage

A requirement of the Sustainability Strategy is that 90% of recyclable construction and demolition waste be recycled. Waste material is accumulated from a number of sources on the project, with classification and definition outlined in the Construction Environmental Management Plans. The project deed nominates a benchmark of 90% of all inert and non-hazardous construction waste generated to be recycled or reused. As of 2015 Q4, 95% of total waste material is being recycled.

7.2 Greenhouse Gas Emissions Offset

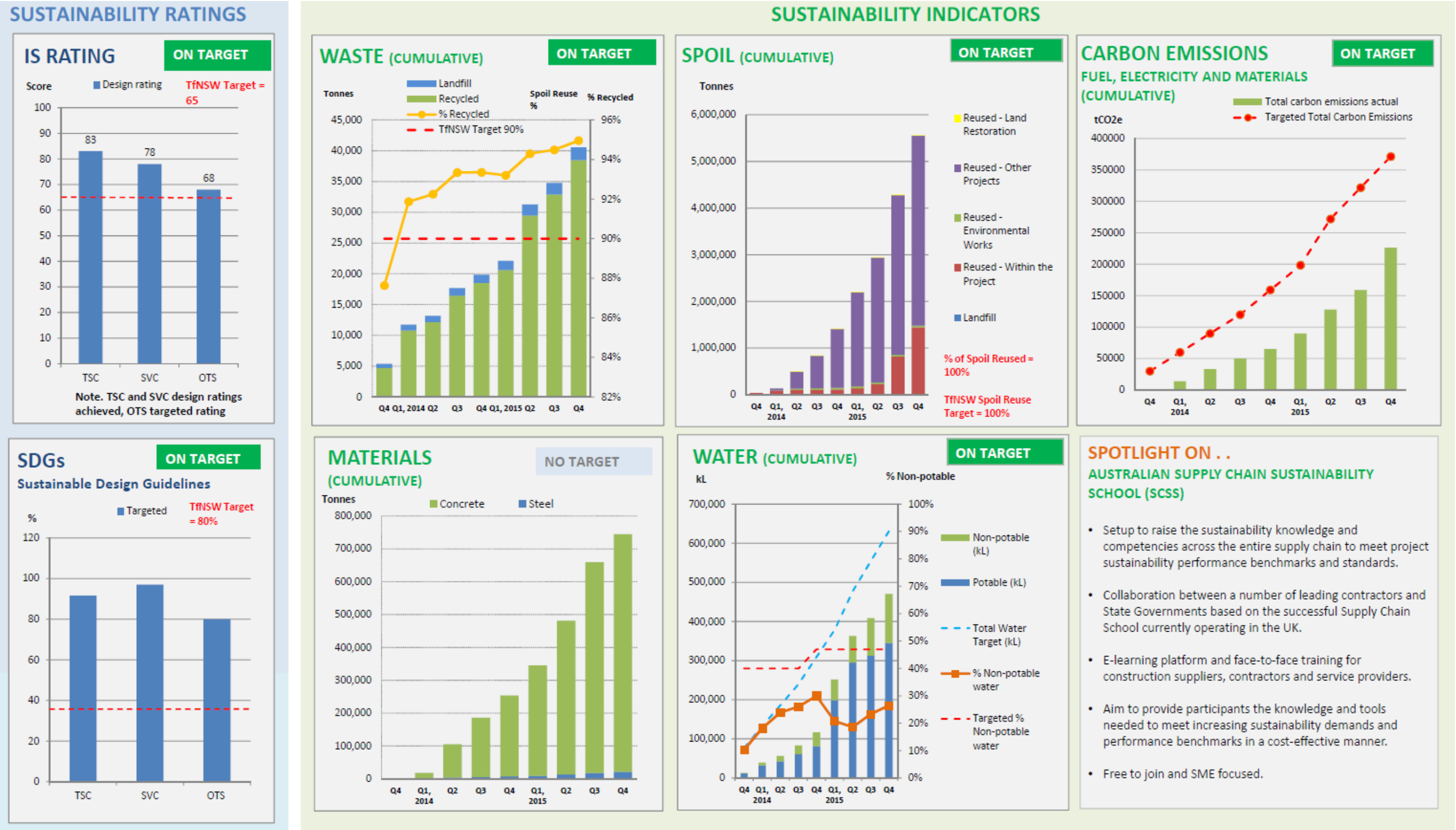
The Sustainability Strategy and the planning approvals require 100% of the project's operational carbon emissions to be offset. On 25 August 2015, the Sydney Metro Delivery Office Executive endorsed offsetting operational greenhouse gas emissions via a renewable energy project. The Secretary TfNSW approved the procurement strategy for a renewable energy project for the Northwest project in January 2016.

A Request for Expression of Interest (REOI) was released on 21 January 2016 for the procurement of electricity from a renewable energy project in NSW. The REOI closed on 16 March 2016. TfNSW is currently in the process of evaluating the EOIs which have been submitted.

7.3 Reporting

Sydney Metro has engaged Ernst Young (EY) to undertake a performance review and assessment of the 14 objectives and 43 associated targets outlined in the Sydney Metro Northwest Sustainability Strategy. As of the end of March 2016, EY has individually assessed the performance to date of all three major contractors and of the Sydney Metro Northwest project as a whole. TfNSW received draft feedback from EY which indicated a good level of performance overall and highlighted areas for attention as the project progresses. EY is in the process of preparing a draft performance report.

Figure 18 – Sydney Metro March 2016 Sustainability Dashboard (2016 Q1 data not included)



Appendix A Construction Complaints Management Report

Report	Construction Complaints Management Report
Review Period	1 October 2015 – 31 March 2016

Quarter	Site	Classification	Date	Contractor	Nature of Complaint	Event Description
2015 Q4	Epping	Unavoidable	1/10/2015	CPBJHD	Noise & Vibration	Complainant called regarding noise and vibration she was experiencing from cross passage works under her home. She was under the impression works were not due to commence until next week. She says the works are being undertaken before 7am and after 10pm and this is upsetting her and her mother. CPBJHD Community Place Manager called the complainant back and explained that the notifications advised that the works would start on 30 September. Regarding work hours, the Community Place Manager checked with the Project Engineer who confirmed that the works were undertaken well within the times communicated. The complainant indicated she wanted respite in the form of relocation for her and her family and this was arranged for the evening of 2 October. Work was ceasing after that date until 7 Oct 2015.
2015 Q4	Cherrybrook	Unavoidable	6/10/2015	CPBJHD	Property & Business Impacts	Complainant called to report damage to both her glass pool fence which had cracked, then shattered, and to her kitchen floor which has cracks. She has had the post-condition inspection and received the report. Complainant believes these areas were not shown as damaged in the original report. The complainant also explained she had not rung earlier, as she was thinking that her property may have been sold to developers. However this has not happened and now she would like it looked into to see if the damage could be tunnelling related. CPBJHD Community Place Manager asked when she first noticed the damage. The complainant could not recall, but she said probably six months or more ago. The Community Place Manager advised that she should lodge this as a damage claim and she would be contacted by the end of the week to arrange an inspection of the damage by a Senior Project Engineer. The claim was referred to the CPBJHD commercial team for follow up in line with the property damage claim process. The complaint was closed following inspection on 9 Oct 2015 as damage was determined to not be attributable to CPBJHD works.
2015 Q4	Memorial Avenue to White Hart Drive	Avoidable	7/10/2015	ISJV	Noise & Vibration	Stakeholder advised they heard approximately 4 or 5 loud banging sounds which woke occupants of the house before 4am and that the noise sounded like banging from a metal pole. ISJV Community Place Manager called stakeholder to confirm details of the complaint and offered noise monitoring. Stakeholder mentioned that they had no issues previously with work and declined noise monitoring. Stakeholder was concerned that this would become a regular noise to expect at that time of morning. ISJV Place Manager investigated the complaint and confirmed the noise was a result of small amount of hammering and apologised to the stakeholder as this is not

Quarter	Site	Classification	Date	Contractor	Nature of Complaint	Event Description
						normal practice. Stakeholder was also advised that supervisors and night crews were going to be reminded not to undertake these activities.
2015 Q4	Cherrybrook	Unavoidable	7/10/2015	CPBJHD	Property & Business Impacts	Complainant called stating that she had a post-condition survey report done but wants further investigations as she has noticed bulging between the ground and the first floor of her home which had not been recorded in the report. CPBJHD Community Place Manager called complainant and advised how she could make a claim. Arrangements were made with the complainant for an engineer and Community Place Manager to meet onsite on 14 Oct 2015 (claim process initiated).
2015 Q4	Memorial Avenue to White Hart Drive	Unavoidable	8/10/2015	ISJV	Noise & Vibration	Stakeholder called and complained about loud banging noises heard from their residence. Stakeholder mentioned that at 2:50am he heard approximately 4 or 5 sounds of metal against metal "like driving pins" which woke occupants of the house. ISJV Community Place Manager investigated the complaint and advised that there was no noise and the crew had been on a dinner break for 30 minutes. Stakeholder was concerned that this noise was a regular part of night works and was not aware night works had commenced. On 9 Oct 2015, ISJV undertook noise monitoring outside the stakeholder's property. ISJV Place Manager called the stakeholder to advise noise monitoring had taken place and low levels of noise were recorded. ISJV advised they would continue random monitoring and update in the event of changes.
2015 Q4	Showground	Unavoidable	9/10/2015	CPBJHD	Air Quality	The Hills Shire Council received a complaint from a resident about the removal of asbestos following the demolition of a cottage on the Showground Station site. The resident had said there was something not quite right about the works. The council officer visited the site and spoke with a CPBJHD representative working on the demolition. CPBJHD Community Place Manager followed up with a call to the council officer who indicated that he was satisfied with the information he received. He was satisfied that everything was being done properly. He said it really was a WorkCover issue, but in the interest of responding to the community call, he wanted to see if the code of best practice was being followed. The Council Officer was informed of the community notifications and doorknocks that had been carried out prior to the work commencing and also of the measures such as the presence of an occupational hygienist throughout the asbestos removal. The officer said he had observed the hygienist and he had full confidence in the way the activity was being carried out and that nothing more needed to be done.
2015 Q4	Showground	Unavoidable	9/10/2015	CPBJHD	Transport, Traffic & Access	The complainant contacted CPBJHD regarding the behaviour of a truck driver. Registration details were provided. The complainant stated that she had witnessed the truck driver go through a red light. CPBJHD Community Place Manager contacted the complainant and also investigated whether the driver was part of the contract, which he was. The driver says a vehicle in front of him had stopped suddenly for no apparent reason and he had to take evasive action to avoid a collision. He insisted that he did not go through a red light. The complainant was advised that the drivers are required to sign and adhere to a code of conduct.
2015 Q4	Bella Vista	Unavoidable	12/10/2015	CPBJHD	Visual Amenity	Complainant called about large amounts of rubbish piling up on the access road to the segment Pre-Cast Facility. She said that it was starting to smell. CPBJHD Community Place Manager called the complainant to establish exactly where the rubbish was and to verify it was onsite. It was explained to the complainant that the public often dump rubbish in this area as the gate is unable to be locked because of the need to maintain access for truck movements. The complainant said the pile was hidden behind dirt mounds and agreed that it looked like it came from the public. She also asked if grass and weeds on the CPBJHD side of the fence could also be

Quarter	Site	Classification	Date	Contractor	Nature of Complaint	Event Description
						cleaned up. Community Place Manager advised that the rubbish would be cleaned up and the grass/weeds mowed and removed. The complainant was satisfied with the response.
2015 Q4	Cherrybrook	Unavoidable	12/10/2015	CPBJHD	Transport, Traffic & Access	Complainant called to ask CPBJHD to install signage advising that U-turns by sub-contractors accessing the Cherrybrook Station site are illegal. This follows an encounter the complainant had where a sub-contractor's truck made a U-turn to access the site in front of his property and where the complainant says he feared being hit by the vehicle. CPBJHD Community Place Manager investigated the matter and informed the complainant that a U-turn in front of his property was not illegal and in fact for this particular sub-contractor it was necessary to enable the contractor to enter the site in some circumstances. The sub-contractor has been spoken to and asked where possible to please avoid making U-turns in this area. The complainant was informed that in this matter CPBJHD was unable to provide further assistance.
2015 Q4	Windsor Road to Cudgegong Road	Avoidable	14/10/2015	ISJV	Light Spill	Resident complained about light spill caused by a lighting tower which was located against the adjoining noise wall. Resident stated that the lighting tower was considerably high and positioned so that it lit up her entire living room at the front of the house. Resident requested that the lighting tower be relocated or repositioned so that it did not cause excessive light spill into her property. ISJV Place Manager investigated the complaint and arranged for the lighting tower to be repositioned onsite. The resident acknowledged this has been done.
2015 Q4	Windsor Road to Cudgegong Road	Avoidable	19/10/2015	ISJV	Noise & Vibration	Stakeholder advised that noise from the works was continuing on the night of 16 Oct 2016 until 1.00am the following morning near Terry Road. This included "metal on metal" noises, believed to be coming from the gantry. Also advised workers were communicating loudly with each other. ISJV Community Team member thanked the stakeholder for raising these issues and said she would pass these details onto the construction team. ISJV Community Team member advised the stakeholder to contact the 1800 number at the time of the issue so that it could be addressed immediately.
2015 Q4	Bella Vista	Unavoidable	19/10/2015	CPBJHD	Visual Amenity	Complainant called stating that the rubbish referred to in his earlier complaint had not been removed. CPBJHD had undertaken to clean it up despite it not being rubbish generated from the tunnelling and stations civil works. CPBJHD Community Place Manager contacted the complainant and advised that the rubbish had been removed however on closer inspection another pile of rubbish had been located and arrangements were being made to remove it.
2015 Q4	Cherrybrook	Unavoidable	19/10/2015	CPBJHD	Property & Business Impacts	Complainant called stating while he had a post-condition survey report done that indicated there were no tunnelling related problems with his property, he had recently discovered a leak in his roof. Another family member had brought it to his attention and said that the leak had been detected by that family member a few weeks ago but he had only just been advised about it. CPBJHD Community Place Manager spoke to the complainant and asked him to submit details in writing so that this could be referred through the proper channels. Complainant intends to do this and was satisfied with the response from CPBJHD.
2015 Q4	Epping	Unavoidable	19/10/2015	CPBJHD	Noise & Vibration	Complainant called and said his windows were vibrating and that he was hearing noise. His wife who had been home all day was disturbed by this. CPBJHD Community Place Manager rang the complainant and explained that it was likely he was hearing the noise from TBM4 which was passing across the road from his property. Complainant had been away during the traverse of TBM3 and so had not experienced this previously. He was

Quarter	Site	Classification	Date	Contractor	Nature of Complaint	Event Description
						advised that TBM4 was moving away and the noise and vibration would diminish soon. Complainant had not provided contact details and was not receiving regular email updates. He was asked to provide his details but declined. The Community Place Manager has undertaken to phone the complainant the following evening and give an update.
2015 Q4	Bella Vista to Balmoral Road	Avoidable	20/10/2015	ISJV	Transport, Traffic & Access	Stakeholder complained that ISJV staff park their private vehicle in the Balmoral Tway car park. ISJV Community Relations Manager advised stakeholder that their message was passed onto the supervisors of this work area and the skytrain management team to ensure all workers are reminded at their morning pre-start meetings and toolbox talks that the Balmoral T-way car park is for the use of T-way commuters only and staff are to park their personal vehicles at another location.
2015 Q4	Windsor Road to Cudgegong Road	Avoidable	20/10/2015	ISJV	Noise & Vibration	Stakeholder called and advised that the work undertaken on the night of 16 Oct 2015 was considerably noisy and continued until 1.00am the following morning near Terry Road. ISJV Place Manager investigated and advised the stakeholder that the noisy work had been discussed with the site supervisor and that the site crews were making every effort to minimise noise generated by their activities. ISJV Place Manager advised that the activities for the gantry would likely change as it approaches the caravan park, as there are no segments to be lifted in that area and that more information will be provided about movement of the gantry as it approaches the caravan park.
2015 Q4	Castle Hill	Unavoidable	20/10/2015	CPBJHD	Transport, Traffic & Access	A local bus driver complainant visited the Community Information Centre. He said he didn't want to complain and so this is being recorded anonymously. The driver said he was cut-off by a truck-and-dog while operating a bus route along Showground Road. The driver of the truck also made a rude gesture to him. The truck-and-dog has distinct markings. It is painted with ANZAC pictures. The matter was referred to CPBJHD Community Place Manager for further investigation as it is not clear if the truck-and-dog is contracted to CPBJHD. This was followed up with the driver whose account of events was that the bus indicated that it was pulling over and then didn't, cutting off the truck. CPBJHD advises the truck driver is well respected and has a very good record. He has been reminded of the code of conduct.
2015 Q4	Bella Vista to Balmoral Road	Unavoidable	22/10/2015	ISJV	Transport, Traffic & Access	Stakeholder complained that the current construction of the railway has eliminated the options for the public to park. Stakeholder mentioned that council advised fines would not be applicable however caller has received a fine. ISJV Place Manager informed the stakeholder that ISJV is not responsible for the fine and couldn't comment in regards to the council's decisions around issuing fines. The Place Manager advised the stakeholder of alternate solutions for parking around the area including another T-way stop to utilise. The Place Manager also advised that ISJV were maintaining previous numbers of car spaces available to commuters.
2015 Q4	Cherrybrook	Unavoidable	23/10/2015	CPBJHD	Air Quality	Complainant called concerning dust which he says has come from the site into his home on Franklin Road, Cherrybrook. He claims that his new carpet has to be cleaned and the outside of his home washed due to the amount of dust. CPBJHD Community Place Manager contacted the complainant by email providing a description of the dust mitigation measures in place and stating that it is not possible to provide carpet or home cleaning. This response was sent on 26 Oct 2015 and no further correspondence or complaint was received from the complainant about this issue.

Quarter	Site	Classification	Date	Contractor	Nature of Complaint	Event Description
2015 Q4	Windsor Road to Cudgegong Road	Unavoidable	24/10/2015	ISJV	Noise & Vibration	Stakeholder called and explained that she had lost reception to TV channels and stated that she started to experience problems with her TV reception about two weeks ago when the launching gantry was approaching closer to the caravan park. Stakeholder also stated that noise from night works was very loud and having an impact on her sleep, and that the works at night were generally noisy from Monday to Friday but not as bad on Saturdays. ISJV Place Manager advised he will follow up the TV reception issue and the stakeholder was fine to be updated on Monday. ISJV Place Manager advised that the skytrain team has become aware of the noise issues near Terry Road over the past few weeks and is implementing mitigation measures to reduce noise impacts as much as possible. ISJV Place Manager also explained that noise monitoring had been undertaken numerous times and has not exceeded the management levels. ISJV Place Manager advised that the site crew would be reminded again in each pre-start meeting about working conditions at night to limit the amount of unnecessary noise impacts.
2015 Q4	Castle Hill	Unavoidable	27/10/2015	CPBJHD	Noise & Vibration	Complainant heard a very loud noise from the Castle Hill site causing her concern that there may have been an incident. CPBJHD Community Place Manager checked with the site foreman who said the noise was caused by the removal of steel modules which are then placed into a bin on the surface. This work will continue over the next few weeks. The complainant was contacted and the source of the noise explained. She was also informed that TBM2 had recommenced tunnelling. She was happy that there was no incident onsite and satisfied with the explanation.
2015 Q4	Epping	Unavoidable	27/10/2015	CPBJHD	Noise & Vibration	Complainant called about the noise and vibration she experienced last night and was experiencing this evening. She said this was disturbing her son who was studying for his HSC exams. CPBJHD Community Place Manager called complainant and explained that the noise and vibration was from TBM4 which was passing under her apartment block. The complainant was not aware that there was a second machine as she was not registered to receive email updates which had been sent out that day about TBM4 activity. The Community Place Manager offered to forward the most recent email update and also offered to relocate the complainant and her son for the evening. The complainant declined the relocation offer but agreed to receive the email update. The Community Place Manager will also send a letter explaining the disturbance in case the complainant needs to use it in future.
2015 Q4	Castle Hill	Unavoidable	27/10/2015	CPBJHD	Noise & Vibration	Complainant heard a very loud noise from the Castle Hill Station site and wanted to know what was causing it. CPBJHD Community Place Manager checked with the site foreman who said the noise was caused by the removal of steel modules which are then placed into a bin on the surface. This work will continue over the next few weeks. The complainant was contacted and the source of the noise explained. She said that it was not something she had heard before and that it was a very loud crash like a shipping container being dropped. She was now hearing it intermittently. She said she didn't want to lodge a complaint; just that the noise was unusual and she was interested in knowing what it was. The complainant indicated that she was satisfied with the response.

Quarter	Site	Classification	Date	Contractor	Nature of Complaint	Event Description
2015 Q4	Bella Vista	Unavoidable	28/10/2015	CPBJHD	Property & Business Impacts	The complainant called as she had noticed cracks in her property a few weeks ago and today they seem to be getting worse. She had a pre and post condition survey report done but is not clear if the changes are outlined in the post-condition survey report. She has asked for an engineer to attend and inspect the property and as she is not fluent in English has asked for an interpreter as well. CPBJHD arranged an engineer and interpreter to visit the property. The claim process was initiated.
2015 Q4	Cherrybrook	Unavoidable	28/10/2015	CPBJHD	Noise & Vibration	Complainant called regarding noise from the Cherrybrook Station site. She wished to remain anonymous but stated that she lives in Fernleigh Close, Cherrybrook. She heard banging up until 9:30pm the previous evening and that this noise started again at 6:30am that morning. She described it as clanging and creaking like a building falling over and that it was unacceptable. CPBJHD Community Place Manager spoke to the site manager who advised that the noise was due to demobilisation and excavation works. The noisy works cease at 10pm and recommence at 7am. This information was relayed to the complainant who acknowledged that she had received notification of these works but that the noise was still unacceptable. She was provided with a timeline of upcoming noisy works but declined to receive regular email updates. She appreciated the return call and information provided.
2015 Q4	Castle Hill	Unavoidable	29/10/2015	CPBJHD	Noise & Vibration	Complainant lives within the Anglican Retirement Village at Castle Hill and has been experiencing noise and vibration as TBM1 passes close to her property. CPBJHD Community Place Manager spoke to the complainant and advised that the vibration was from TBM1 as it tunnels towards Cherrybrook. She was advised that retirement village management was not keen for CPBJHD to doorknock residents and provide information; preferring for information to be left with them, which CPBJHD has done. The Community Place Manager sent a map showing the location of TBM1 and arranged a time to visit the complainant to discuss the works.
2015 Q4	Castle Hill	Unavoidable	30/10/2015	CPBJHD	Noise & Vibration	Complainant came into the Community Information Centre in relation to his house rattling. He is located in Melia Court, around 80 metres from where TBM1 is tunnelling at present. CPBJHD Community Place Manager contacted complainant to explain the works and offered to email him details, including where the TBM is in relation to his property. CPBJHD offered to include the complainant on the regular email distribution list so he can stay informed of when the next TBM is tunnelling through the area (expected in about 3-4 weeks). The complainant was appreciative, and took up the offer to receive regular tunnelling progress emails on the tunnelling activities.
2015 Q4	Cherrybrook	Unavoidable	31/10/2015	CPBJHD	Water Quality	Resident emailed that they had been walking down Robert Road and noticed a high volume of water moving through the stormwater system, with heat coming off the water that also smelled strongly alkaline. CPBJHD Community Place Manager followed up with CPBJHD Environment Manager who advised that water would most likely be being released from the Water Treatment Plant located at the Cherrybrook Station site. He advised that the water being discharged is compliant under the project's Environmental Protection Licence. CPBJHD has been in contact with the complainant to provide more information about the water treatment and discharge compliance process, offering this both by phone and email.
2015 Q4	Project-wide	Unavoidable	2/11/2015	CPBJHD	Transport, Traffic & Access	Complainant called to express concern about trucks (possibly spoil trucks) travelling along Norwest Boulevard using exhaust braking. Complainant lives one street back in Ibis Place and he and his neighbours had been discussing the issue as it's annoying them. Complainant is also a professional driver and says that drivers should not be using this braking system in residential areas. CPBJHD Community Place Manager contacted

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						complainant and advised that spoil truck movements had decreased with two of the four TBMs recently completing their tunnelling. He was also informed that CPBJHD drivers must adhere to the Code of Conduct and this requires drivers not to use compression braking where possible when noise is likely to adversely impact residents. Finally he was also made aware that there are other developments in the area which are contributing to trucks on the road. The complainant was satisfied with this information.
2015 Q4	Castle Hill	Unavoidable	4/11/2015	CPBJHD	Noise & Vibration	Complainant emailed about noise and vibration that he had been experiencing during the past week. He lives in Winchcombe Place and is seeking an explanation for it. CPBJHD Community Place Manager emailed the complainant back and explained that TBM2 was close to his property. The Community Place Manager also explained that she had doorknocked his property a few times and left information asking the complainant to contact her so she could talk to him about the tunnelling works and what to expect. She provided the complainant with information and also asked if he would provide his phone number so she could call to discuss the works. A response to the email and request for a phone number appears not to have been responded to. Complainant is considered to have been satisfied with the response.
2015 Q4	Showground	Unavoidable	5/11/2015	CPBJHD	Transport, Traffic & Access	Complainant called about spoil trucks parking in the volunteers' area at Showground and users were having an issue with accessing parking facilities. CPBJHD Community Place Manager investigated the issue and spoke with CPBJHD Senior Project Engineer. There had been a significant amount of spoil as both TBMs are operational and tunnelling 100 metres combined on average each day (more than usual). This required more trucks than usual to remove the backlog of spoil. The issue had cleared by 8:30am. The complaint was made at 7:40am. The Community Place Manager contacted the complainant and explained the situation. An undertaking has been given by the haulage contractor to refrain from using this area in future. CPBJHD will monitor the situation going forward.
2015 Q4	Castle Hill	Unavoidable	6/11/2015	CPBJHD	Noise & Vibration	Complainant called as he was experiencing vibration which he had not experienced when the first tunnel boring machine went through. CPBJHD Community Place Manager called the complainant and explained where TBM2 was in relation to his property: that it is a little closer than TBM1 was. The Community Place Manager undertook to provide the complainant with more information about the tunnel in relation to his property.
2015 Q4	Cherrybrook	Unavoidable	10/11/2015	CPBJHD	Transport, Traffic & Access	Complainant has raised the issue of trucks making a U-turn in front of his property previously. He claims it is an illegal practice and mentions that he took photos but failed to forward them. CPBJHD Community Place Manager has advised that this is not an illegal practice and that if he has concerns about road usage he should direct this to either the local council or RMS with a view to finding a solution to his concerns. The Place Manager asked for the photos to be forwarded. Complainant has to date declined to send the photos. CPBJHD Stakeholder and Community Manager subsequently sent an email on 13 Nov 2015 to the complainant stating that his frustration is understood and detailed CPBJHD's position as to why CPBJHD is unable to assist him. He was also provided with the contact details of the Project Director which he had asked for in his second email. No other correspondence has been received from the complainant on this matter.

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2015 Q4	Cherrybrook	Unavoidable	11/11/2015	CPBJHD	Property & Business Impacts	Complainant called concerning his post-condition survey report. He says he has property damage that he wishes to discuss that was not covered in the report he received. CPBJHD Community Place Manager contacted the complainant and provided guidance on the process for lodging a claim.
2015 Q4	Cherrybrook	Unavoidable	11/11/2015	CPBJHD	Property & Business Impacts	Complainant called concerning an appointment with Opus for a property survey at her property in Romford Road, Epping, which was booked for 11am that day. It was 11am and no one had turned up. CPBJHD Community Place Manager contacted the independent company undertaking the property reports and ascertained that an administrative error had occurred and that the booking was actually for the following week. The Place Manager advised the complainant of this and the contractor also contacted her and apologised. The appointment was reconfirmed for the correct date.
2015 Q4	Cherrybrook	Unavoidable	11/11/2015	CPBJHD	Property & Business Impacts	Complainant emailed regarding the post-construction survey report as she has noticed cracking in her property in Cardinal Avenue, Beecroft. CPBJHD Community Place Manager contacted the complainant and provided guidance on the process for lodging a claim. The matter is now with the CPBJHD commercial team.
2015 Q4	Cherrybrook	Unavoidable	15/11/2015	CPBJHD	Property & Business Impacts	Complainant called to say that the cornice (12 feet long) in the kitchen that goes across from fridge to pantry had fallen away. The complainant said she had felt vibrations from the construction works several months ago but could not provide an exact timing, and believes it may have loosened the cornice as the vibrations also caused the internal lights of the house to shake. The complainant also said she felt vibrations about a year ago and said maybe they were from truck movements. Complainant said the cornice located at the front of the house is loose and is concerned it may also fall and asked if the project could have a look from a safety point of view. She said during the pre-condition survey inspection that she pointed out this loose cornice. CPBJHD Community Place Manager contacted the complainant and provided guidance on the process for lodging a claim. The matter was directed to the CPBJHD commercial team.
2015 Q4	Windsor Road to Cudgegong Road	Avoidable	16/11/2015	ISJV	Air Quality	Complainant lives at the Caravan Park (51 Terry Road) and called about dust being generated from the jack-hammering activities associated with the demolition of temporary piers. CPBJHD Community Place Manager contacted the site supervisor to request that the matter be investigated. The site supervisor advised that he would speak with the water cart operator to be more vigilant and ensure that the area was watered down while jack-hammering activities occurred. The Community Place Manager advised the complainant that the site supervisor has been asked to ensure that the water carts were being used during jack-hammering activities. The resident was satisfied with the response.
2015 Q4	Cherrybrook	Unavoidable	19/11/2015	CPBJHD	Property & Business Impacts	Complainant alleged property damage as a result of tunnelling. Complainant has received a post-condition survey report and notes some areas in her home that require patching because of cracks or tile replacement. CPBJHD Community Place Manager contacted the complainant and provided guidance on making a claim. The matter has since been referred to the CPBJHD property team for further investigation.
2015 Q4	Castle Hill	Unavoidable	23/11/2015	CPBJHD	Noise & Vibration	Complainant lives within the Anglican Retirement Village at Castle Hill and has been hearing the tunnel boring machines. Complainant wants to know how long he can expect to hear them for. CPBJHD Community Place Manager advised that the TBM was currently around 65m past their property and that as the TBM moved away from their property, the noise would reduce. The Community Place Manager met with the complainant, discussed the activities and provided a map showing the location and distance from their property. During the meeting a slight rumbling noise could be heard, however the complainant advised that they were ok with the

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						noise and that they were more interested to know what level of impact they would experience. They also discussed cross passage excavation works and what to expect. The complainant thanked the Community Place Manager for providing information.
2015 Q4	Norwest	Unavoidable	27/11/2015	CPBJHD	Transport, Traffic & Access	Complainant emailed about a truck possibly carrying segments, encroaching on the next lane and cutting across the lane as both vehicles drove around a roundabout. The complainant only provided an email address. CPBJHD Community Place Manager has attempted to contact the complainant via email asking for a phone number so she can call him and discuss the incident and get more details. The complainant had not responded by midday 30 Nov 2015 and is assumed to be satisfied.
2015 Q4	Castle Hill	Unavoidable	30/11/2015	CPBJHD	Property & Business Impacts	Complainant called regarding floor tiles that had lifted and a door not closing properly in his property at Melia Court, Castle Hill. He says this has recently occurred after the TBMs passed under his property. CPBJHD Community Place Manager asked the complainant to put his concerns in writing after which a post-condition survey report will be arranged and a meeting with the complainant to explain the steps for making a claim. The matter was then forwarded to the commercial team.
2015 Q4	Life-Sized Train Model	Unavoidable	1/12/2015	NRT	Other	Complainant is member of ATAC and took part in the life-sized train model acceptance process. Complainant was disappointed that no refreshments were provided and no thank you cards given to those participants who took the time to assess the train, as well as the fact that on the day it was very hot. NRT contacted the complainant and advised that thank you cards would be issued to all participants once the process is complete. NRT acknowledged the hot tent and advised that bottled water was provided on the day, as well as a water station in the tent. NRT advised that tea and coffee was available near the induction room, but the ATAC members went straight to the tent. NRT provided all ATAC members with taxi vouchers to get to and from the site.
2015 Q4	Showground	Unavoidable	2/12/2015	CPBJHD	Property & Business Impacts	Complainant was driving his car, which is classified as a luxury car, along Showground Road when he drove through some water mixed with spoil that splashed on his car. He took it to a prestige car dealer who was unsure what the residue was and told the complainant not to clean his car without finding out what it was. The complainant contacted The Hills Shire Council which referred the matter to CPBJHD. CPBJHD Community Place Manager contacted the complainant and advised him on the process for making a property damage claim. The matter was referred to the commercial team for resolution.
2015 Q4	Project-wide	Unavoidable	4/12/2015	CPBJHD	Visual Amenity	Complainant called about the landscaping at Castle Hill, Showground and Norwest, stating that the grass and gardens around the sites need some tending as they are untidy. CPBJHD Community Place Manager advised the complainant that there is a maintenance schedule and will check to see if that schedule can be brought forward for those sites. The complainant was satisfied with this response. As some areas of the sites are the responsibility of TfNSW, this was also referred for review by the property services group.
2015 Q4	Cheltenham	Unavoidable	8/12/2015	CPBJHD	Property & Business Impacts	Complainant called regarding damage to his home that he believes is as a result of tunnelling. CPBJHD Community Place Manager contacted the complainant and advised how to go about making a claim for property damage. The complaint has been registered with the CPBJHD property team.

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2015 Q4	Windsor Road to Cudgegong Road	Avoidable	11/12/2015	ISJV	Noise & Vibration	Complainant called to report the use of noisy equipment, namely a rattling gun, on the launching gantry at 8:45pm. The complainant lives on Windsor Road at Rouse Hill and says the noise is loud and has woken his children. ISJV Community Place Manager called the complainant to apologise, advise that the activity had ceased immediately and ensure the workforce was reminded that noisy activity is not to be undertaken at night. The complainant was satisfied with the response.
2015 Q4	Sydney Metro Train Facility	Unavoidable	11/12/2015	NRT	Air Quality	Resident complained about high levels of dust impacting on the ability to open windows and hang washing. Resident acknowledged that she is next door to a number of construction sites, however she thought some dust was coming from SMTF stockpiles. NRT contacted the resident and commenced investigation. NRT advised the resident that four water carts are currently operating on site, with the number of carts increasing the following week. All trucks leaving site are covered and dust generating activities are being shut-down during high wind. To minimise dust over the Christmas shut-down period, dust block (a layer of 'glue') is being applied to all exposed areas onsite and the stockpiles have been seeded and covered in mulch to minimise dust. This complaint is unavoidable due to current weather conditions (high winds) and mitigation measures currently in place.
2015 Q4	Showground	Unavoidable	11/12/2015	CPBJHD	Noise & Vibration	Complainant lives in Carrington Road, Castle Hill and called about a siren-type noise intermittently sounding in the early hours of the morning. The complaint was initially referred to NRT for investigation as NRT was moving the train model at the time. The noise was not a part of the NRT works. The matter was then referred to CPBJHD to follow up and investigate. CPBJHD Community Place Manager contacted the complainant twice that day to follow up on the noise and get more details but has not been able to make contact. Once contact was made on 14 Dec 2015, the noise was determined to be most likely from the site demobilisation works that had recently commenced. Noise monitoring at night was undertaken from the premises with the permission of the complainant. All results came back within normal range. Complainant has since been kept up to date with all site activity.
2015 Q4	Cherrybrook	Unavoidable	12/12/2015	CPBJHD	Visual Amenity	Complainant lives in Oliver Way at Cherrybrook and called about the amenity of the station site which backs onto his property. He called recently regarding this issue and had been told that the site would be tidied. He fears that with the site shutdown approaching, that no work will be done until the new year and this will affect his property. CPBJHD Community Place Manager contacted the complainant and assured him the work to remove the weeds had started and that the landscaper would return once the weed sprayer had the chance to work and remove the remaining weeds. The Community Place Manager followed up with the landscaping contractor and confirmed the works would be undertaken on 18 Dec 2015. She conveyed this to the complainant who was satisfied with the response.
2015 Q4	Windsor Road to Cudgegong Road	Avoidable	14/12/2015	ISJV	Noise & Vibration	Complainant had previously called to report the use of a rattling gun on the launching gantry. This time he and his children had been disturbed by the use of an angle grinder at 9:30pm. ISJV Community Place Manager contacted the site manager and confirmed that an angle grinder was being used. He reminded the Site Manager that no noisy activity was to be undertaken at night. The Community Place Manager contacted the complainant and apologised. He advised that this matter would be escalated to the project management team. The complainant was also offered alternative accommodation but declined as this was not feasible for the complainant.

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2015 Q4	Cherrybrook	Unavoidable	14/12/2015	CPBJHD	Property & Business Impacts	Complainant has returned to his home from hospital and noticed a crack that was not there before. His property is located in Rorke Street, Beecroft. CPBJHD Community Place Manager called the complainant and has arranged for a post-condition survey report to be carried out. She also provided information on how to make a claim for property damage. The matter has been referred to the property team.
2015 Q4	Castle Hill	Unavoidable	16/12/2015	CPBJHD	Property & Business Impacts	Complainant is the manager of the Anglican Retirement Village at Castle Hill. He called about property damage to one of the villas. Some cornices in a villa at Edgewood Avenue had come free following the passing of a TBM. CPBJHD Community Place Manager contacted the complainant to arrange an investigation by the property team. She also explained that work on Cross Passage 79 (located near the property) was underway and would finish in early Jan 2016. An inspection of the damage is to be arranged after 4 Jan 2016 when the contractor resumes work after the shutdown.
2015 Q4	Sydney Metro Train Facility	Avoidable	18/12/2015	NRT	Property & Business Impacts	An NRT sub-contractor truck struck the overhead Telstra copper cable on Tallawong Road around 1:45pm, affecting connection to the complainant's property. The affected property was door-knocked immediately by a NRT representative and NRT contacted Telstra. The resident has a child with a medical condition so was keen to get the home phone service restored ASAP, together with other internet/cable services. NRT community relations staff followed up with the resident, Telstra and NBN, and kept the resident up to date with efforts to get the cable repaired over the following days. NRT will reimburse the resident the cost of an extra wifi upload during this time. NBN staff attended to mend the cable on 22 Dec 2015 but could not do so due to the weather and need for a truck and cherry-picker. NRT staff delivered some gift vouchers to the resident on 24 Dec 2015 to acknowledge the inconvenience of not having NBN. Note: NRT contacted the resident to follow up on 4 Jan 2016. The service was restored on 29 Dec 2015. He thanked NRT for their help with the service providers and the vouchers for his family.
2016 Q1	Project-wide	Unavoidable	8/01/2016	CPBJHD	Transport, Traffic & Access	Complainant represents The Hills Shire Council and was calling following a complaint to Council from a resident in Hynds Road about the number of truck movements along Windsor Road, into Nelson and Hynds Road and into Terry Road at Box Hill. CPBJHD investigated the matter with its Senior Project Manager and advised the council representative that its truck contractor had been required by RMS and NSW Police to send all vehicles through the Windsor Road weighbridge to check axle loads. The only way the trucks can access the weighbridge is via this route. The situation was outlined to the Council representative who was also advised that truck movements would decrease after this week as there would be no more spoil from tunnelling.
2016 Q1	Showground	Unavoidable	11/01/2016	CPBJHD	Other	CPBJHD received a complaint from The Hills Shire Council about the water cart CPBJHD has engaged to assist with dust mitigation; connecting a delivery hose from the truck to a fire hydrant located within the Showground area (not the station site) to fill the cart. The complaint was directed at the fire hydrant being a non-metered stand pipe and concern that CPBJHD's contractor may not be paying for the water it was using. CPBJHD contacted its water cart contractor. CPBJHD investigated the matter with the contractor that advised that its driver had mistakenly used the hydrant to access water. He has since been spoken to and told not to use this. Instead he and any other drivers have been instructed to use the water pipe off Carrington Road for which they have a permit. Council has been updated on the investigation outcomes.

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2016 Q1	Showground	Unavoidable	12/01/2016	CPBJHD	Property & Business Impacts	Complainant is concerned that the recent tunnelling near her property located on Showground Road, Castle Hill, has caused her front and back yards to become uneven and the vibrations she felt caused a door to fall off a cabinet in her home. CPBJHD Community Place Manager contacted the complainant and explained the process for making a property damage claim, which includes taking photos of the damaged property which the complainant says she is unable to do. She is an elderly lady. The matter has been referred to the CPBJHD property team to add to the property claims register and follow up.
2016 Q1	Epping	Avoidable	19/01/2016	CPBJHD	Noise & Vibration	Complainant contacted CPBJHD regarding noise from the Epping Services Facility site prior to the operational hours of 7:00am. The complainant is a resident adjacent to the site and said he had heard a truck onsite with concrete before working hours. He was also disturbed by noise from reversing beepers later that morning and wanted to know why non-tonal beepers were not used. CPBJHD Community Place Manager spoke to the complainant undertaking to investigate the matter and report back. The Community Place Manager contacted the site manager who advised that a truck had been allowed on site earlier than the scheduled time. The foreman had noted the truck waiting to come on to the site at 6:45am and decided to let him in because he was concerned the truck may interfere with traffic. The foreman has been counselled about this and the entire workforce has been tool-boxed that only approved works can take place out of hours. The complainant was advised of the actions taken.
2016 Q1	Cherrybrook	Unavoidable	21/01/2016	CPBJHD	Property & Business Impacts	Complainant contacted CPBJHD concerning a blocked waterway which he believes is located on the Cherrybrook Station construction site and causing water to overflow onto his property located next to the site. He says weeds growing around this area are the cause and that these need to be removed. CPBJHD Community Place Manager spoke to the complainant undertaking to investigate the matter and report back. The Community Place Manager confirmed the waterway in question is not blocked but that there are weeds which require removing and this has been arranged to occur over the next few weeks. Hornsby Shire Council has also been contacted as there is a large amount of leaf litter that may be contributing to the water problem.
2016 Q1	Castle Hill	Unavoidable	28/01/2016	CPBJHD	Property & Business Impacts	Complainant contacted CPBJHD concerning cracks in his investment property located on Showground Road at Castle Hill. He attributes these cracks to recent tunnelling activity and would like an inspection. CPBJHD Community Place Manager spoke to the complainant and provided information about the claims process including the need for a post-condition survey report. She has also arranged for a post-condition survey to be undertaken on the complainant's property.
2016 Q1	Cherrybrook	Unavoidable	1/02/2016	CPBJHD	Property & Business Impacts	Complainant called to report suspected property damage to his property located in Cardinal Avenue, Beecroft as a result of tunnelling. Complaint says a pillar at the start of a pathway at the front of his home has twisted. It is a rendered brick pillar which sits on a concrete slab. CPBJHD's Community Place Manager contacted the complainant and arranged for an inspection of his property to be made by a member of the property team the following day.
2016 Q1	Windsor Road to Cudgegong Road	Unavoidable	3/02/2016	ISJV	Transport, Traffic & Access	Complainant called concerned about the behaviour of a truck driver who was described as transporting a large concrete section of the elevated rail near the Annangrove and Windsor Road intersections. The complainant says he witnessed the driver driving in a dangerous manner. ISJV Community Place Manager has contacted the complainant in an effort to get more details such as the nature of the dangerous driving and any details that may assist in identifying the vehicle. To date no response from the complainant has been provided which would

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						assist in following this matter up further.
2016 Q1	Cheltenham	Unavoidable	3/02/2016	CPBJHD	Property & Business Impacts	Complainant called to dispute the findings of a recent post-condition survey undertaken on her property on Cheltenham Road, Cheltenham. CPBJHD's Stakeholder and Community Manager contacted the complainant, explained the property survey process and discussed whether she wanted to make a property damage claim. The claims process was then explained to her during a phone call and in a subsequent email. The complainant was also offered the opportunity to discuss at a time more convenient to her. She has been followed up and again had the process for making a claim explained. The complainant has made no further contact with the project.
2016 Q1	Epping	Unavoidable	8/02/2016	CPBJHD	Property & Business Impacts	Complainant says there is a discrepancy in the clarity of some of the photos taken in the post-construction report of a property in Edensor Street, Epping. He is calling on behalf of the property owner who is his daughter. The property is tenanted and the complainant is unable to inspect the areas that have been noted as having damage or change. CPBJHD Community Place Manager undertook to obtain a copy of the report and call again the following day to discuss the caller's concerns further. The Community Place Manager liaised with the post-construction inspection contractor. The report says the changes in the property are due to existing circumstances and not as a result of tunnelling. She followed up with the complainant advising on the feedback and the claims process.
2016 Q1	Cheltenham	Unavoidable	12/02/2016	CPBJHD	Noise & Vibration	Complainant lives in Castle Howard Road, Cheltenham and complained about the noise from works at the Cheltenham Services Facility. CPBJHD Community Place Manager called and emailed the complainant to discuss potential respite including provision of noise cancelling headphones. Arrangements made for the Community Place Manager to call on the complainant at home on 15 Feb 2016.
2016 Q1	Epping	Unavoidable	12/02/2016	CPBJHD	Property & Business Impacts	Complainant says a large picture frame had fallen from the wall at the time the second TBM was passing under her home in Fernhill Avenue, Epping and was damaged. It fell and hit a power point on the way down. She meant to point it out to the property condition survey inspector, but was late for work and thought her husband would do this. She has now received her survey report and this prompted her to contact the project as her husband forgot to point it out and it is not included in the report. CPBJHD Community Place Manager outlined the damage complaint process and followed up with an email.
2016 Q1	Cherrybrook	Unavoidable	16/02/2016	CPBJHD	Visual Amenity	Complainant called regarding maintenance of property boundary between the Cherrybrook Station construction site and Oliver Way. Caller says that the weed growth is such that he is concerned about holding it back from entering his property. CPBJHD Community Place Manager contacted the complainant and explained that the recent weather conditions had contributed to rapid weed growth but that CPBJHD will roll out an updated weed management program across the Cherrybrook Station site. The complainant was satisfied with the response.
2016 Q1	Bella Vista to Balmoral Road	Unavoidable	17/02/2016	ISJV	Transport, Traffic & Access	Complainant initially lodged a complaint with The Hills Shire Council concerning the upcoming temporary closure of Balmoral Road T-way bus stop. The council forwarded the complaint to ISJV. The complainant walks 1.6km to the T-way each morning and having to walk further to the Burns T-way which he was unhappy about as it would add time to his trip. ISJV Community Place Manager contacted the complainant and explained the closure was temporary for a period of seven months while work was being done to construct the skytrain viaduct. The

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						complainant was not satisfied with the explanation. The Community Place Manager and Stakeholder and Community Relations Manager phoned the complainant and spoke to his son who also had some concerns the following day. The son understood the need for the works and detour and has promised to speak with his father further.
2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	18/02/2016	ISJV	Transport, Traffic & Access	Complainant walks to the bus stop each day to catch a bus to Parramatta. He is upset by the temporary closure of the Balmoral Road T-way bus stop and wants better alternatives made available to him than being directed to Burns or Celebration T-way stops. ISJV Community Place Manager spoke to complainant and explained the works, the reasons for the temporary closure, the scope of community consultation and a solution for him which might be catching a local bus at Hector Court. The complainant was not satisfied and said he would take it up with the local council. The complainant has made no further contact with the project.
2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	23/02/2016	ISJV	Transport, Traffic & Access	Complainant had received the notification about the temporary closure of Balmoral Road to pedestrians from 1 Mar 2016. She was not happy with the diversions and requested a shuttle bus be provided or pedestrian use of the haul road. ISJV Community Place Manager advised that it was not safe for pedestrians to use the haul road. Complainant accepted that she would temporarily have to make alternative arrangements.
2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	23/02/2016	ISJV	Noise & Vibration	Complainant called at 5am as she was hearing banging sounds of metal on metal. ISJV Community Place Manager contacted the complainant and advised that segments had been lifted over Memorial Avenue during the night and that this is likely to have been the source of the noise. The Community Place Manager further advised that the work in the area was expected to be completed in around two weeks' time. In the meantime, investigations into the source of the noise would be undertaken and workers reminded of the need to keep work as quiet as possible. The complainant was satisfied with the response.
2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	23/02/2016	ISJV	Transport, Traffic & Access	Complainant was riding his bike along the temporary bike path between Balmoral Road and Memorial Avenue and nearly came off his bike because of loose gravel. ISJV Community Place Manager contacted the complainant and advised that there is signage requesting riders to dismount but she would investigate whether that signage had been damaged or removed. She informed the complainant that it was best to use the shared path along the other side of Old Windsor Road for the time being and that the permanent path would re-open soon.
2016 Q1	Cheltenham	Unavoidable	25/02/2016	CPBJHD	Noise & Vibration	Complainant says noise from the Cheltenham Services Facility site has intensified and is disturbing him greatly. CPBJHD Community Place Manager advised the works are very close to completion. Complainant appreciated the call but did not want to continue the discussion about the current works. A follow-up email was sent to the resident to provide an update of the works and advise that noise monitoring was being undertaken.
2016 Q1	Showground	Unavoidable	25/02/2016	CPBJHD	Property & Business Impacts	Complainant noticed new cracks in the stone paving last year (around August) but was unsure of the exact time. He has since received the post condition survey report that also reports the cracks. He would like the cracks to be repaired. He said he was unable to make a request until now as he was been away. CPBJHD Community Place Manager advised the summary of the report notes the cracks are related to age, use or maintenance performed, however she also outlined the damage complaint process and followed up with an email.

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2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	1/03/2016	ISJV	Transport, Traffic & Access	Complainant called about trucks parking in and around Hector Court, Kellyville, stating that it was dangerous for drivers and pedestrians. ISJV Community Place Manager called complainant and explained that road improvements currently occurring in Hector Court were taking place over three days but that she would look into the issue regarding truck parking and safety. The Community Place Manager checked on parking near the worksite. Seven vehicles were parked in the street and four belonged to other contractors. Two of the ISJV contractor vehicles were parked within the work area. Traffic control was also directing vehicle movements. Complainant was advised of this. He also raised a separate matter of pedestrian access along Memorial Avenue and was advised this was a matter best referred to the local council and RMS.
2016 Q1	Epping	Unavoidable	4/03/2016	CPBJHD	Air Quality	Complainant called about dust coming from the Epping Services Facility site. She was concerned that dust controls were not in place. She had observed concrete hammering on the surface at the site. CPBJHD Community Place Manager called complainant after checking with the site team, who advised her that measures were in place including dampening of the concrete. Complainant said she had later observed the use of a hose but that earlier there had been no controls in place. However she was happy both with the response and the dust mitigation measures in place.
2016 Q1	Cherrybrook	Unavoidable	10/03/2016	CPBJHD	Noise & Vibration	Complainant called to state that he can hear a fan noise when standing in his yard and that this has been constant all day. He is concerned the noise will continue throughout the night. CPBJHD Community Place Manager spoke to the Cherrybrook Project Manager who advised the tunnel fans were recently re-installed and are operating for the tunnel workers. The fans were operating in the same position throughout tunnelling operations but had been temporarily relocated within the tunnel near Epping for logistical reasons. Complainant was informed that the tunnel fans were recently re-installed into the tunnels however they have been operating in the same location during TBM operations. The resident enquired into the duration of the noise as he could not hear the fans about 6 weeks ago and also said the noise is intrusive compared to when tunnelling was carried out. A further investigation into the noise will be undertaken to determine any change to the installation. Noise monitoring was offered and accepted by the resident who also asked that the monitoring occur in the evening after the traffic on Castle Hill Road has lessened. This was confirmed to the resident. The fans are to remain onsite for the next contractor and will be used whenever there are works occurring in the tunnel.
2016 Q1	Cherrybrook	Unavoidable	10/03/2016	CPBJHD	Noise & Vibration	Complainant called to state that he has had trouble sleeping during the last couple of nights. In particular, early morning on 10 Mar 2016 he was woken at 12:30am to the noise of fans. He explains it is a constant noise and more noticeable now that infrastructure has been removed. The complainant wishes to sleep with the windows open due to the hot weather however with the windows open he can hear the fan. CPBJHD Community Place Manager explained to the resident that the fans are within the tunnels to provide ventilation to the workers. She informed the complainant that noise monitoring was being undertaken tonight. Noise monitoring results were within the noise goals predicted. Significant background noise from traffic travelling along Castle Hill Road and insects in adjacent vegetation was noted, which is consistent with descriptions from previous noise monitoring events. Traffic noise reduced late in the night but insect noise did not. Community Place Manager advised complainant that engineering controls were being installed to reduce the speed of the fan whilst maintaining the

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						effectiveness of the ventilation. The outcome is that the controls will reduce fan noise. The fans are to remain onsite for the next contractor and will be used whenever there are works in the tunnels. Complainant was appreciative.
2016 Q1	Cherrybrook	Unavoidable	11/03/2016	CPBJHD	Noise & Vibration	Complainant called to state that she has had trouble sleeping during the last couple of nights as she can hear a generator-like noise from the site. The complainant closed her windows last night but could still hear the noise and had more trouble sleeping with the windows closed due to the hot weather. CPBJHD Community Place Manager explained that the noise was from fans that are within the tunnels to provide ventilation to the workers. She informed the complainant that noise monitoring had been undertaken. Significant background noise from traffic travelling along Castle Hill Road and insects in adjacent vegetation was noted, which is consistent with descriptions from previous noise monitoring events. Traffic noise reduced late in the night but insect noise did not. Community Place Manager advised complainant that engineering controls were being installed to reduce the speed of the fan whilst maintaining the effectiveness of the ventilation. Outcome is the controls will reduce the noise of the fans. The fans are to remain onsite for the next contractor and will be used whenever there are works in the tunnels. Complainant was satisfied with the response.
2016 Q1	Showground	Unavoidable	13/03/2016	CPBJHD	Noise & Vibration	Complainant had arrived home from night shift and was finding the demolition work at the Showground Station site noisy. It was 8:00am on a Sunday. CPBJHD Community Place Manager contacted the Project Manager and initiated an investigation with the Site Engineer at 8:40am. Site reported works involved excavators using shears for demolition of the night time spoil shed. A notification advising of this work was delivered to the local residents on 4 Mar 2016. Community Place Manager phoned the resident at 9:03am, who said she was woken up by the demolition noise. She had been on night shift and was surprised to hear construction noise on a Sunday morning. It was explained that the current works were required to be completed out of hours. She was advised that a notification was delivered to residents the week before. The complainant said she had been away and didn't receive the notification. Complainant was offered ear plugs as noise mitigation but the offer was declined. The resident required no further action.
2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	16/03/2016	ISJV	Transport, Traffic & Access	Complainant is the son of the above complainant from 13 Mar 2016 and was calling about the same issue. Complainant will be provided with a response by his mother when he gets home.
2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	16/03/2016	ISJV	Transport, Traffic & Access	Complainant called about the closure of Balmoral Road bus stop; claiming she was not notified and would like to know what work-around will be put in place. ISJV Community Place Manager contacted complainant and explained the reasons for the bus stop closure. He also highlighted the level of notification to households and commuters over the last five weeks, including the signs erected at the bus stop. Complainant mentioned that her children didn't read the sign and that she saw a letterbox notification but doesn't read them. Complainant was satisfied with response.
2016 Q1	Balmoral Road to Memorial Avenue	Unavoidable	17/03/2016	ISJV	Transport, Traffic & Access	Complainant called to say there were not enough car spaces at the re-opened Burns T-way car park. She was advised by ISJV Community Place Manager that an additional 60 spaces would be available in around four weeks. Complainant was satisfied with the response.

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2016 Q1	Memorial Avenue to White Hart Drive	Unavoidable	17/03/2016	ISJV	Worker Behaviour	Complainant says his wife had her car covered in mud and possible damage following two workers leaving the work site in a dangerous manner. ISJV Community Place Manager advised an investigation into who owns the vehicles would be undertaken. In addition to this, the workforce was reminded of their responsibilities to the community. The drivers of the other vehicles were unable to be identified. The Community Place Manager went to the car parking area for the project on several occasions to try and identify the vehicles and also spoke to the site manager. Neither was able to locate any worker vehicles that fitted the description. It was also noted that there was no mud at all on the road or the site. The complainant was contacted again and advised of this. He indicated that there was no damage to his wife's car and that he didn't think it was as big an issue as she had made out to him. He was however grateful for the additional follow up.
2016 Q1	Showground	Unavoidable	22/03/2016	CPBJHD	Air Quality	Complainant came in to the Showground project office to report a bad smell around her house on Showground Road. She believes the smell is coming from the Showground site and invited CPBJHD to attend her home to verify. Two site inspections were carried out in the morning and in the afternoon by CPBJHD's Environment Co-ordinator. No smell was detected the first time but it was detected during the second investigation. It was traced back to the transfer of solids from the Water Treatment Plant from one storage pit for treatment. This activity is infrequent and is part of the final removal of solids as part of the site demobilisation which is expected to be completed in April. Complainant was advised of the investigation outcomes by the Community Place Manager. She was satisfied with the response and understands that the odour will cease by the end of April 2016.
2016 Q1	Memorial Avenue to White Hart Drive	Avoidable	31/03/2016	ISJV	Worker Behaviour	Complainant emailed the project after witnessing a near accident in which a Galea plant hire vehicle (possibly a water cart) turned from the T-way onto Windsor Road at the intersection of Windsor Road and Merriville Road (opposite McDonalds). Windsor Road through-traffic was stopped on a red signal. Traffic was turning left from Merriville Road onto Windsor Road. At the same time, the truck entered Windsor Road heading towards Rouse Hill (same direction as the traffic entering from Merriville Road) from either the T-way or the rail construction access gate on the T-way. It entered Windsor Road into the middle lane, as did a car, and the driver swerved to avoid a collision. The complainant said that either the truck driver disobeyed traffic signals from the T-way at this intersection or there is a traffic signalling issue here that needs to be resolved. ISJV Community Place Manager followed up. The driver was identified and spoken to about his actions and poor driving behaviour. The complainant was contacted and advised that the lights at the intersection had not been altered and therefore the driver had not observed the road rules. She was advised the driver was spoken to and reminded of the need for safe driving. The complainant was satisfied with the response.