Visual Amenity Management Plan

SMCSWSSJ-JHL-WEC-EM-PLN-000006

Document and Revision History

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5.0	7/10/2021	Periodic review	Daniel Keegan	Paul Fields

Management reviews

Review date	Details	Reviewed by

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Terms and definitions

The following terms, abbreviations and definitions are used in this plan.

Terms	Explanation
AHD	Australian Heritage Database
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CoCB	City of Canterbury Bankstown (Council)
CoA	Conditions of Approval
CSSI	Critical State Significance Infrastructure
DPE	Department of Planning & Environment
EIS	Environmental Impact Statement
EPL	Environment Protection Licence
ER	Environmental Representative
IWC	Inner West Council
JH	John Holland Group Pty Limited
JHLOR	John Holland and Laing O'Rourke Joint Venture
Laing O'Rourke	Laing O'Rourke Australia Construction Pty Limited
Minister, the	NSW Minister for Planning
OEH	Office of Environment and Heritage
RTS	Response to Submissions
SMCSW	Sydney Metro City and Southwest
SMEW	Southwest Metro Early Works
VAMP	Visual Amenity Management Plan

1. Introduction

1.1 Purpose

This Visual Amenity Management Plan (VAMP) outlines the Southwest Metro Early Work (SMEW) Project's approach to implementing visual amenity related measures to achieve planning and contractual requirements.

1.2 Background and Scope

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

- Chatswood to Sydenham Project

- Sydenham to Bankstown upgrade, now known as Southwest Metro

The Southwest Metro Early Works (SMEW), referred to as "the Project" or 'the works" in this document, will be undertaken in accordance with the *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Instrument of Approval* (SSI_8256) and will include critical enabling work activities for the greater Southwest Metro Project. The SMEW Project site is located on the T3 Bankstown line between Sydenham and Loch St, Campsie, NSW. SMEW does not include works between Loch St, Campsie and Bankstown.

The works will be undertaken by a John Holland Group Pty Limited (John Holland) and Laing O'Rourke Construction Pty Limited (Laing O'Rourke) joint venture referred to as JHLOR. Laing O'Rourke has been nominated as Principal Contractor and as such, the works will occur under Laing O'Rourke's Management Systems.

The VAMP has been developed for the Construction phase of the project, in compliance with the Client's requirements and Laing O'Rourke's environmental management system. It identifies visual amenity related measures that will be implemented to achieve objectives outlined within Section 1.6 of this plan including processes and measures that will be used to incorporate principles of crime prevention through environmental design in the design and construction of temporary site facilities.

1.3 SMEW Scope of Works

1.3.1 Permanent Works

The works include all permanent new infrastructure and modifications to existing infrastructure. The permanent new infrastructure and modifications to existing infrastructure to be constructed includes;

- Installation and commissioning of Combined Service Route (CSR, GST, GLT, ULXs) – works will occur over a series of zones within the rail corridor, these works will not occur on stations.
- Sydney Trains signalling, communications and HV diversions – site wide
- Rail embankment stabilisation including retaining walls – specifically Retaining Wall 1 (RW1) from the western side of Canterbury Station to the Cooks River, Retaining Wall 2 (RW2) from the Cooks River to Wairoa Street, Canterbury and Retaining Wall 3 (RW3) from Wairoa St to Oswald Lane, Canterbury. All retaining walls are on the southern side (down side) of the track.

- Installation of drainage/works to existing swales (table drains) – an existing vegetated swale conveys water from the southern side of the corridor between Campsie Station and the Cooks River, crossing Wairoa St via a culvert. The swale collects water from the existing embankment that will be stabilised by RW2 and RW3.
- Fencing – works will occur over a series of zones within the rail corridor, these works will not occur on stations.
- Civil enabling works for a traction substation - Campsie
- Vegetation clearing –works will occur over a series of zones within the rail corridor, these works will not occur on stations.

1.3.2 Temporary Works

The SMEW temporary works include:

- Temporary arrangements to divert and control pedestrians, public transport users, cyclists, public transport and traffic and to provide public access, amenity, security and safety during all stages of design and construction of the Works;
- Temporary arrangements for people and vehicles to safely access all property, including publicly accessible space affected by the Contractor's Activities;
- Temporary arrangements for people and vehicles to safely access the Site;
- Temporary access stairs, walkways and platforms within the Site;
- Temporary construction hoardings, fencing, access gates and barriers on and around the Site;
- All environmental safeguards and measures necessary to mitigate environmental effects which may arise during the design and construction of the Works;
- Cleaning, maintenance, repair, replacement and reinstatement, as required, of all areas occupied by the Contractor during design and construction of the Works;
- Temporary site facilities required for design and construction of the Works,;
- Temporary infrastructure, safety screens and ground support installed or erected to undertake design and construction of the Works;
- Temporary arrangements for Utility Services including water, electricity, stormwater, sewerage, gas and electronic communications;
- Temporary works and measures required as a consequence of requirements arising from the stakeholder and community liaison process; and
- All other temporary works and measures required for the construction of the Works.
- Investigation works

In addition to the above works, JHLOR will set-up a main compound area at the Canterbury Bowls Club site, Close Street, Canterbury. This main compound site will be used by the SMC Project, TSOM Project and other Sydney Metro City and Southwest Sydenham to Bankstown projects as directed by Sydney Metro. The area has been leased by Sydney Metro from City of Canterbury Bankstown. JHLOR will comply with the terms of the lease.

The compound set-up will include;

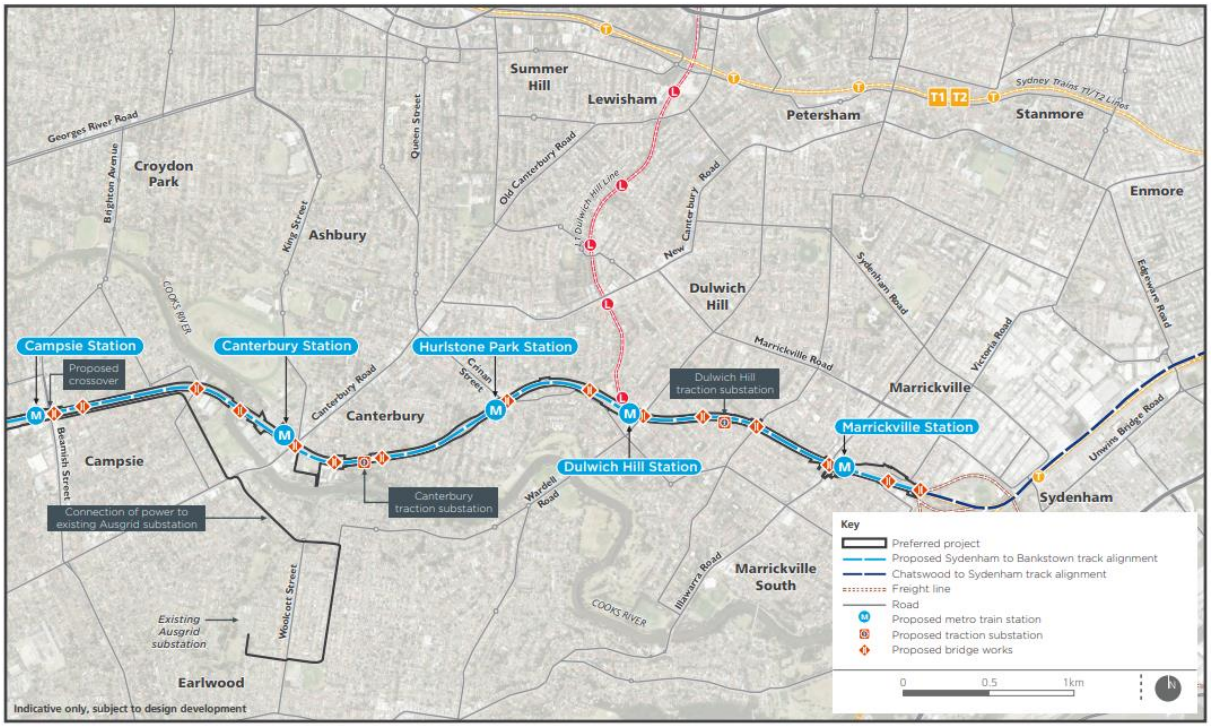
- Archaeological investigations
- Geotechnical and service investigations
- Fencing
- Tree trimming and removal

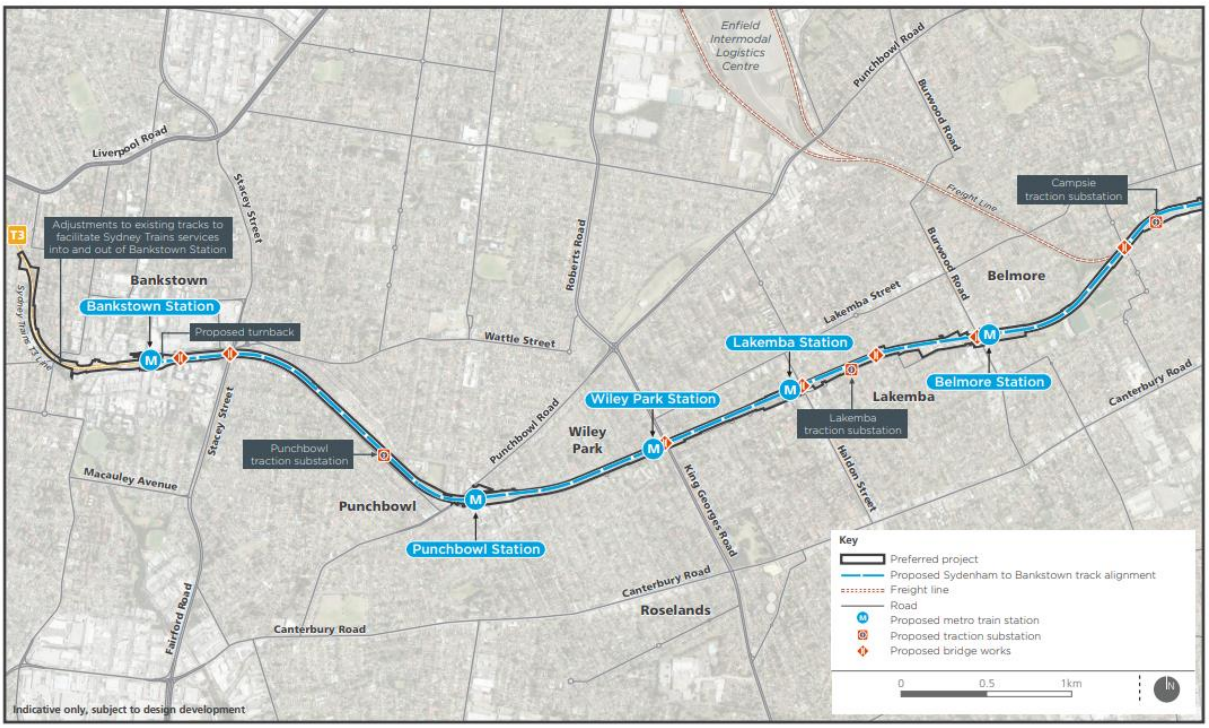
- Installation of hard stand, haul roads and ramps
- Demolition of an existing structure
- Installation of utilities and services for the compound
- Installation of buildings, containers and structures
- Supporting activities required to establish the compound (i.e. road sweeping, dust suppression)

1.4 Works Location and Site Layout

The SMEW work location and site layout is highlighted in Figure 1 below. Note that some supporting works may be undertaken within the *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade* project boundary from Loch St, Campsie to Bankstown as per the Construction Environmental Management Plan.

Figure 1 Southwest Metro Early Works Project Site




Enfield Intermodal Logistics Centre
Punchbowl Road
Burwood Road
Liverpool Road
Stacey Street
Freight Line
Campsie traction substation
Adjustments to existing tracks to facilitate Sydney Trains services into and out of Bankstown Station
Bankstown
Bankstown Station
Proposed turnback
Roberts Road
Wattle Street
Lakemba Street
Belmore
Lakemba Station
Belmore Station
Lakemba
Lakemba traction substation
Canterbury Road
Wiley Park Station
Wiley Park
Punchbowl traction substation
Punchbowl Road
Macauley Avenue
Punchbowl
King Georges Road
Holden Street
Punchbowl Station
Canterbury Road
Roselands
Fairford Road
Canterbury Road
Key
Preferred project
Proposed Sydenham to Bankstown track alignment
Freight line
Road
Proposed metro train station
Proposed traction substation
Proposed bridge works
0
0.5
1km
N
Indicative only, subject to design development

1.5 Objectives and Targets

The objectives of the VAMP are as follows:

- Minimise impacts on existing landscape features as far as feasible and reasonable.
- Ensure the successful implementation of the Landscape Design.
- Reduce visual impact of construction to surrounding community.

These objectives conform to Sydney Metro's objectives as described in the Construction Environmental Management Framework.

The Environmental Performance Outcomes as stated within the Sydney Metro City & Southwest Sydenham to Bankstown Upgrade – Submissions and Preferred Infrastructure Report, states that:

- The preferred project is designed to have regard to the surrounding landscape and visual environment and to minimise the potential for visual impacts.
- The preferred project is visually integrated with its surroundings.
- Vegetation providing screening of the rail corridor is retained where practicable

The Compliance Matrix in Appendix A provides a comprehensive list of compliance requirements, environmental documents and the contract documents

2. Legal and Other Requirements

Table 1 below details the legislation and planning instruments considered during development of this Plan.

Table 1 Legislation and Planning Instruments

Legislation	Description	Relevance to this VAMP
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals for the State.	The approval conditions and obligations are incorporated into this VAMP.
Commonwealth Copyright Act 1968	This Act establishes the notification process in relation to moral rights for public art and architecture under Commonwealth Copyright Act 1968	The notification process for public art.

The VAMP addresses applicable requirements within the following documents:

- The Sydney Metro City & Southwest – Sydenham to Bankstown – State Significant Infrastructure Assessment (SSI 8256), dated 12th December 2018
- The Sydney Metro City & Southwest – Sydenham to Bankstown - Environmental Impact Statement (EIS), dated 7th September 2017;
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Submissions and Preferred Infrastructure Report (SPIR), June 2018;
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Instrument of Approval (CoA), dated 12th December 2018
- Sydney Metro City & Southwest – Sydenham to Bankstown Upgrade Staging Report (Sydney Metro, 2021).
- The Sydney Metro – Sydenham to Bankstown – Bankstown Station Modification Report May 2020
- The Sydney Metro – Sydenham to Bankstown – Modification of Infrastructure Approval, dated 22 October 2020
- The Sydney Metro Construction Environmental Management Framework v3.2 (CEMF);
- The Sydenham Station and Junction Project Deed

2.1 Guidelines

Guidelines and standards relating to the management of visual amenity include:

- Crime Prevention through Environmental Design (CPTED) principles
- Sydney Metro Brand Style Guidelines
- AS4970 the Australian Standard for Protection of Trees on Development Sites and Adjoining Properties
- AS 4282-1997 Control of the Obtrusive Effects of Outdoor Lighting; and
- AS/NZ 1158 - Lighting for Roads and Public Spaces (where relevant Australian Standards are applicable to SMEW works)

3. Roles and Responsibilities

The roles and responsibilities of key SMEW Personnel with respect to visual amenity are as follows:

Table 2 Roles and Responsibilities

Project Director	Managing the delivery of the SMEW Works including overseeing implementation of visual amenity management measures Act as Contractor's Representative
Environment Manager	Oversee the implementation of all visual amenity management initiatives Responsible for managing ongoing compliance with the CoA and environmental document requirements
Commercial Manager	Ensure that relevant visual amenity management requirements are considered in procuring materials and services
Construction Managers **Site Superintendent**	Manage the delivery of the construction process, in relation to visual amenity management across all sites in conjunction with the Environment Manager
Sustainability Manager	Track and report visual amenity elements against sustainability targets
Environment Coordinator	Manage the on-ground application of visual amenity management measures during construction
Project Engineer	Implement visual amenity management activities during construction works
Independent Environment Representative	• Receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI; • Consider and inform the Planning Secretary on matters specified in the terms of this approval; • Consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community; • Review documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: (i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or (ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Secretary); • Regularly monitor the implementation of the documents listed in Conditions C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval; • As may be requested by the Planning Secretary, assist the Department in the resolution of community complaints; • Consider any minor amendments to be made to the documents listed in Conditions C1, C3 and C8 and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and • Prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI.

	Must complete Project induction covering LORs' environmental management system.

4. Existing Environment

The SMEW site is described in Table 3. For the purposes of this plan the project site has been split into five stations and four sections of rail corridor. These descriptions have been taken from the EIS Technical Paper 7.

Table 3 Description of SMEW Site

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
Marrickville Station	Marrickville Station has a State heritage listing and includes several ornate platform buildings, booking office and overbridge of 'aesthetic significance'. East and west bound passenger rail uses are on the south side of the island platform, with the Metropolitan Goods Line running to the north. There has been a recent upgrade at Marrickville Station which includes new platform stairs, lifts and entry concourse on Illawarra Road. The rail corridor is in a cutting adjacent to the station and is set below Illawarra Road so that the heritage station buildings are not visually prominent. Furthermore, the new station entry can be seen clearly from Illawarra Road and further limits views into the station and to the platform buildings from the west. The surrounding land use includes a local commercial precinct along Illawarra Road, consisting predominantly of single and double storey terrace buildings with shop-fronts. Adjacent residential areas comprise of a mix of terraces, detached houses and unit blocks. A multi-storey mixed-use development has recently been built on the triangular site immediately north of the station, including seven storeys of apartments which overlook the corridor. To the east of the station the rail corridor rises on an embankment so that it is elevated generally around two metres above the adjacent residential properties, and continues to rise to meet a steel truss bridge over Victoria Road. A pedestrian footpath runs between the existing station and Victoria Road to the south of the corridor. In this area, the rail corridor is enclosed by security fencing. Residential boundary walls and fences include graffiti, particularly between Riverdale Avenue and the station. To the northeast a widened area of rail corridor is created by the Metropolitan Goods Line as it diverges from the suburban lines. Several mature trees are located alongside the northern and southern side of the rail corridor, which filter views from nearby streets and properties.	The following elements and activities are likely to be visible during construction: Temporary fencing at access points to prevent public access during possessions	Surrounding residents and businesses
Dulwich Hill Station	Dulwich Hill is a predominantly residential area with a character of early twentieth century detached houses. The rail corridor is in a cutting and divides the village	The following elements and activities are likely to be visible during construction:	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
	centre, which includes a small precinct of heritage character shopfronts and modern development along Wardell Road. Dulwich Hill Station has a local heritage listing, it includes a single island platform with original platform building, an overhead booking office, access stairs and overbridge of 'aesthetic significance'. The booking office is an understated building, providing station access from Wardell Road. East and west bound passenger rail lines are located either side of the island platform, with the Metropolitan Goods Line further to the north. Commuter car parking is located to the north and south of the rail corridor, shaded by small trees. Further to the north, the Sydney Light Rail follows the former Rozelle freight rail corridor. The light rail stop includes a single platform connected to a drop off one and parking at Bedford Crescent by a combined lift and stair structure. The Dulwich Hill Light Rail Stop is located a short distance from the station, however, the pedestrian connection is indirect being via Bedford Crescent and Wardell Road. To the west, Jack Shanahan Park is a local skatepark located between the light rail and the metropolitan goods and T3 Bankstown Line at Ness Avenue and with a pathway connection to the Dulwich Hill Light Rail Stop. The South Dulwich Hill HCA is located to the north and south of the corridor. In this area, a high concentration of early twentieth century detached Federation style houses create a unified heritage character. The streetscapes possess an open, suburban quality due to the low density and single storey residential development with wide verges and generous building setbacks. In the remaining areas to the north and south of the rail corridor a variety of residential buildings including flats and apartments (up to three storeys), duplexes and detached houses surround Wardell Road commercial precinct. There are two commuter car parks in Bedford Crescent and Ewart Lane, north and south of the rail corridor respectively, overlooking the station	Temporary fencing at access points to prevent public access during possessions	
Hurlstone Park Station	Hurlstone Park is a predominantly residential suburb consisting of mainly detached houses. Hurlstone Park Station and its underbridge at Foord Avenue have local historical importance and are on the RailCorp S170. Heritage and Conservation register. The station concourse building is a simple brick structure creating an understated address to Floss Street. Within the Station, the platform buildings (c1915) have a historic character, with	The following elements and activities are likely to be visible during construction: Temporary fencing at access points to prevent public access during possessions	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
	gabled roof and decorative mouldings. A distinct excavated sandstone rock face is located to the rear of platform 2, and is identified as a 'landscape/natural feature' within the heritage listing. East and west bound passenger rail uses are on the southern side of the island platform, with the Metropolitan Goods Line running to the north. The rail corridor is in a cutting and the station is accessed via an overbridge and overhead booking office on Floss Street. The overbridge provides elevated views to the northeast and southwest along the rail corridor, with clear views to the station buildings. The Hurlstone Park commercial centre is located along Crinan Street, spreading north and south of the station, consisting predominantly of single and double storey terrace buildings with shopfronts amidst a low density suburban setting.		
Canterbury Station	Canterbury Station has a Sate heritage listing and includes several ornate platform buildings, overhead booking office, signal x and an overbridge of 'aesthetic significance'. East and west bound passenger rail uses are located to the south of the island platform, with the Metropolitan Goods Line running to the north. The rail corridor is in cutting and the station platforms are set below Canterbury Road. Canterbury's commercial and retail centre extends north and south from the train station and contains a mixture of commercial, retail, industrial and residential developments. To the north, the streetscape consists of mainly double storey terraces with heritage character shopfronts facing Canterbury Road. Larger modern development sits behind this 'high street'. To the south, the land between the station and Cooks River consists of light industry, which is undergoing renewal for mixed use and higher density residential development, featuring buildings with a larger footprint and rising to eight storeys. A multi-storey mixed use development has been recently built along Charles Street, immediately to the south of the station and extends along the rail corridor. It includes eight storeys of apartments and ground level retail. There are extensive areas of parkland on the banks of the Cooks River, including Canterbury Park Racecourse, Tasker Park, Heynes Reserve and Suton Reserve, linked by the Cooks River Cycleway. Several mature trees are located alongside the rail corridor and along Broughton Street, filtering views to the station and corridor.	The following elements and activities are likely to be visible during construction: Temporary fencing at access points to prevent public access during possessions	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
Campsie Station	Campsie is a major hub for bus and rail interchange. The commercial centre of Campsie is centred on Beamish Street, extending north and south of the station. It has a built form of traditional terraces with ground level shopfronts and mature street trees. The rail corridor is in a cutting and the station is set below Beamish Street. The station is accessed via a recently upgraded entry concourse on Beamish Street, including new platform stairs and lifts. This entry is integrated into the surrounding built form and is not visually prominent. Campsie Station has local historical significance and is on the RailCorp S170 Heritage and Conservation register. It is not visible from the main street, although esplanade streets along the north and south of the rail corridor allow neighbourhood views towards the heritage station buildings, filtered through chainmesh fencing, mature street trees and on street car parking. There are slot views to the rail corridor, from Anzac and Carrington Squares in the south. Local visual landmarks include the War Memorial clock tower and inter-war period commercial building on the Anzac Mall to the south of the station, which are also local heritage items. The residential areas surrounding the commercial core consist of a mix of two to three storey residential units and single detached houses on large blocks. Surrounding the commercial precinct, residential areas to the north and south of the rail corridor comprise of a variety of residential buildings including medium rise flats and apartment buildings, duplexes and detached houses. This precinct contains two key public open spaces, Anzac and Carrington Squares. The location of streets and associated built form allows slot views to the rail corridor from both squares. There are several commuter car parks alongside the rail corridor, in North and South parades, Wilfred Avenue and Lilian Street. The proposed substation is located west of Campsie Station, in an elevated location along Lilian Street, at the top of the rail cutting. It is a visually prominent location, situated across the road from residential properties in Lilian Street. Mature street trees along Lilian Street provide streetscape planting and partial screening of the rail corridor.	The following elements and activities are likely to be visible during construction: Temporary fencing at access points to prevent public access during possessions	Surrounding residents and businesses
Rail Corridor - Marrickville Station to	The project area extends through a typical cross section of south western Sydney, with a mix of low and medium density residential areas, rail side industry and	The following elements and activities are likely to be visible during construction:	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
Dulwich Hill Station	local commercial town centres built around the stations. The topography is undulating, resulting in a series of rail embankments and cuttings, with several points of exposed sandstone rock face and shale rock embankments along the rail corridor, providing local visual features. Vegetation within and adjacent to the existing rail corridor boundary is mature and dense in several locations, screening views from adjacent residential and commercial properties, streets and parkland. McNeilly Park is located west of Marrickville Station on Warburton Street, adjoining the southern boundary of the metro corridor. This park includes a playground, picnic shelters and large formal lawn areas. The rail corridor is generally at the same level as the park in this area, however, mature vegetation within the park largely filers views to the corridor. Further west along the corridor, in the vicinity of Marrickville Avenue, the rail corridor is in cutting with a mix of vegetated banks and stone cuttings. In areas where the permanent way is in cutting, the overhead lines and support structures are set low and sit mainly below the line of view. Most properties back on to the corridor in this section, so that vegetation in private backyards and fences filter views to the corridor. Street trees and vegetation within this corridor also filter views to the corridor along this section. Mature street trees provide an avenue setting to Randall Street and are near the location of the proposed substation and southern rail corridor boundary. Further west at the Albermarle Street overbridge, the rail corridor is in cutting with the exposed sandstone rock face along the northern rail corridor boundary providing a local visual feature, visible from the bridge. Mature trees line the adjacent streets and corridor, further filtering views and include mature Casuarina trees and large Eucalypt trees along Challis Avenue. These trees are near the rail corridor and provide local amenity and filtering of views to the rail corridor. To the south of the corridor, between Albermarle Street and Kays Avenue East, a narrow linear park runs parallel to the rail corridor. It includes feature planting and a pathway linking west from the overbridge.	Temporary fencing and hoarding Temporary closure of existing footpath between Albermarle Street and Kays Avenue East. Combined Service Route works on bridges and under road crossings – including lane or full road closures Removal of some corridor vegetation. Installation of Combined Service Route Installation of corridor boundary fencing and security fencing	
Rail Corridor – Dulwich Hill Station to Hurlstone Park Station	Jack Shanahan Park is located on rail corridor land to the north of the project area and west of the Dulwich Hill Light Rail Stop. The permanent way is elevated through this section and views to the embankments of the corridor can be seen	The following elements and activities are likely to be visible during construction: Temporary fencing and hoarding	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
	through mature vegetation within the park. Further to the west, somewhat open views are available from residential properties along The Parade, which runs along the northern boundary of the rail corridor. Properties on Ewart, Floss and Hampton streets back on to the corridor in this section, so that vegetation in private backyards and fences filer views to the corridor. The corridor is set within some shallow cutting through much of this area. These views are further filtered by existing mature trees.	Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing	
Rail Corridor – Hurlstone Park to Canterbury Station	This section of the study area is characterised by elevated residential areas, with a number of pocket parks offering views across the surrounding landscape towards the Cooks River. In some sections, deep sandstone cuttings and mature vegetation along the corridor create local visual interest and allow the corridor to be visually absorbed into the surrounding landscape. There are numerous properties which back onto the corridor in this section, so that vegetation in private backyards and fences filter views to the rail infrastructure. Sawyer Reserve, on Dunstafenage Street is a small local park with children's playground, adjoining the northern boundary of the rail corridor. This park offers elevated south-easterly views over the corridor and Foord Avenue rail underbridge (local heritage asset) towards the Cooks River. The park includes several mature trees (mostly Eucalyptus) within the park at the top of the rail cutting, in close proximity to the rail corridor boundary. Similarly, the Warwick Reserve is located at the intersection of Church and Canberra streets, adjoining the northern boundary of the rail corridor. There are several mature trees (mostly Eucalyptus) within the park at the top of the rail cutting, near the rail corridor boundary. From this vantage point, glimpses to the (former) Canterbury Sugar Mill (State heritage asset) can be seen, as can parkland along the Cooks River. A pedestrian bridge between Church and Huton streets provides north-south access between this park and parkland along the Cooks River. The rail corridor at this point is in a deep cutting, with the exposed sandstone rock face along the northern rail corridor boundary providing a local visual feature seen particularly from the pedestrian bridge. The northern side of the rail corridor is also adjacent to the Electrical substation no.275 building (State	The following elements and activities are likely to be visible during construction: Temporary fencing and hording Removal of some corridor vegetation. Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
	heritage listed) at the end of Church Street, which adds to the historic character of this area.		
Rail corridor - Canterbury Station to Campsie Station	West of Canterbury Station, the corridor crosses the Cooks River with a historic bridge built in 1916 (Canterbury Underbridge). The corridor passes through Tasker Park on embankments extending from the Cooks River Bridge. A pedestrian bridge is aligned parallel to the rail bridge and connects Tasker Park on the northern banks of the River with Charles Street, in the south. The bridge is visually prominent from the river and Tasker Park, with the embankments mainly vegetated within this area and reducing the visual prominence of the rail corridor itself. Further to the west, from residential properties along North and South Parade, there are open views across the rail corridor. The corridor is on a small cut and fill though much of this area and some mature trees are scattered along the adjacent streets and surface parking areas. A pedestrian bridge provides access between North and South Parades, near Campsie Station.	The following elements and activities are likely to be visible during construction: Temporary fencing and hording Temporary construction compound Removal of some corridor vegetation. Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Earthworks and stabilisation of embankments. Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses

5. Crime Prevention Through Environmental Design Principles

The principle of *Crime Prevention Through Environmental Design* will be incorporated throughout the design and construction of temporary and permanent facilities. The key principles adopted in relation to the public realm at the Project site include:

- Increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture.
- Increasing the effort required to commit crime by increasing the time, energy of resources which need to be expended.
- Reducing the potential rewards of crime minimising by removing or concealing “crime benefits”.
- Removing conditions that create confusion about required norms of behaviour.

Access control minimise opportunities for crime and increase the effort required to commit crime. By making it clear where people are permitted to go or not go, it becomes difficult for potential offenders to reach and victimise people and their property. Fence and barriers are required to be secure however not create a hostile environment. It is noted that the majority of the SMEW works will be undertaken within the existing rail corridor that is not accessible to the general public.

Natural surveillance increases the threat of apprehension by taking steps to increase the perception that people can be seen. Natural surveillance occurs by designing the placement of physical features, activities and people in such a way as to maximize visibility and foster positive social interaction among legitimate users of private and public space. Potential offenders feel increased scrutiny and limitations on their escape routes.

Territorial reinforcement promotes social control through increased definition of space and improved proprietary concern. By using fences, pavement, signs, lighting and landscape to express ownership and define public, semi-public and private space, natural territorial reinforcement occurs. Territorial reinforcement measures make the normal user feel safe and make the potential offender aware of a substantial risk of apprehension or scrutiny. Display security system signage at access points.

More detail is contained in the Security Management Plan (SMCSWSSJ-JHL-WSS-HS-PLN-000510).

6. Aspects and Potential Impacts

The key aspects and potential impacts associated with the management of visual amenity during the delivery of Southwest Metro Early Works are listed in Table 4.

These identified impacts and opportunities have been taken into account in the development of the Visual Amenity management strategy and site-specific procedures for the works.

Table 4 Summary of Overall Aspects and Potential Impacts

Aspects	Potential impacts/opportunities
Litter	• Potential for waste to not be placed in appropriate bins and result in litter around the construction worksites • Increase security/surveillance may reduce illegal dumping
Graffiti	• Potential for site hoardings or other exposed surfaces to be vandalised.
Lighting	• Potential for site lighting to effect the amenity of surrounding land uses
Traffic and transport	• Potential for required traffic control signage to increase visual clutter surrounding construction sites
Landscaping	• Potential for landscaping not being implemented as per design • Potential for landscaping features to conceal people or funnel them into an area • Potential for privacy impacts if vegetation is removed adjacent to residential properties
Fencing/Hoarding/Temporary Site Sheds	• Potential to create visual impacts and graffiti space
Building Materials	• Potential for building materials to be left on-site in unkempt manner • Potential for building material selection to create visual impacts
Stockpiles	• Potential for stockpiles to create visual impacts, block views
Temporary construction compounds and storage containers	• Potential for construction compounds and containers to create visual impacts
Plant and equipment movement	• Potential for plant and equipment movement to create visual impacts

Visual amenity related risks are assessed within Appendix 3 of the Construction Environmental management Plan (CEMP).

7. Visual Amenity Management

7.1 Visual Amenity Mitigation Measures

Table 5 lists the visual amenity mitigation measures to be implemented during the course of the project works.

Table 5 Visual Amenity Mitigation Measures

Item	Responsibility
General	
Visual mitigation measures will be implemented as soon as feasible and practicable and remain in place during the construction period.	Environment Manager Communications and Community Liaison Manager Project Engineer Site Superintendent
Good housekeeping to be maintained to ensure visual impacts from building materials are minimised	Construction Manager/ Superintendent /
Building materials to be chosen to complement existing project area, where possible	Design Manager
Stockpiles to be positioned to mitigate visual impacts (behind trees). Stockpiles to be covered.	Construction Manager/ Superintendent / Environmental Manager
Construction compounds and containers are to be positioned to mitigate visual impacts where possible (i.e. behind trees, in locations where such items are regularly placed)	Construction Manager/ Superintendent / Environmental Manager
Plant and equipment to be moved internally within the project site where possible to mitigate visual impacts. Plant and equipment to be stored outside of sight from public, where possible.	Construction Manager/ Superintendent /
Opportunities for the retention and protection of existing trees will be identified during detailed construction planning	Construction Manager/ Superintendent / Environmental Manager
Existing trees to be retained (within the Project Footprint) will be protected with suitable tree protection measures prior to the commencement of construction (refer AS 4970 the *Australian Standard for Protection of trees on Development Sites and Adjoining Properties*)	Environment Manager Project Engineer Site Superintendent
JHLOR will; - keep the Construction Site, Extra Land and the Project Works clean and tidy and free of refuse; - regularly remove rubbish, litter, graffiti and surplus material from the Construction Site and Extra Land; and - as a condition precedent to Construction Completion of a Portion, remove all rubbish, surplus materials, Construction Plant and Temporary Works from the Construction Site and Extra Land or the part of the Construction Site or Extra Land relevant to the Project Works or the Portion, except where the retention of any of these are required for the correction of Defects during the Defects	Site Superintendent

Correction Period and this is approved in writing by the Principal's Representative.	
JHLOR will; - install hoardings and fencing from new materials and must at all times be maintained in a neat and tidy condition and be sympathetic with the surroundings. Hoardings are to be clean, painted free of snagging or sharp protrusions on both the worksite side and the public side and also comply with the relevant hoarding standards; - maintain hoardings, fencing or walls on or around the Site free of graffiti and any advertising material not authorised by the Principal's Representative until the Date of Construction Completion of the last Portion to achieve Construction Completion;	Site Superintendent
JHLOR will: - not store rubbish or loose items on the Site for any extended period; - maintain existing landscaping and ground vegetation within the Site;	Superintendent
JHLOR will: • Temporary construction works including site hoardings and acoustic sheds consider urban design and visual impacts, including: • Artwork, graphics and images to enhance the visual appearance of temporary works in high visibility locations. • Project information to raise awareness on benefits, explain the proposed works at each site and provide updates on construction progress; • Community information, including contact numbers for enquiries / complaints; • Signage and information to mitigate impacts on local business which may be obscured by the construction site; • Sydney metro advertising / public awareness campaigns; and, Logos / branding, including Sydney Metro, NSW Government, and Contractor branding	
Visual and landscape measures will be incorporated into the Principal Contractor's regular inspections including checking the health of retained vegetation around site boundaries, checking the condition of any site hoarding and acoustic sheds, and checking the position and direction of any sight lighting.	Superintendent Environmental Coordinator
The Contractor will retain compliance records of any inspections undertaken in relation to visual and landscape measures.	Environmental Manager Environmental Coordinator
JHLOR will implement the following mitigation measures; • Wherever feasible and reasonable, vegetation around the perimeter of the construction sites will be maintained. • Temporary construction works will be designed with consideration of urban design and visual amenity as per Section 4.4.	Superintendent Project Engineer Environmental Manager

• Temporary site lighting, for security purposes or night works will be installed and operated in accordance with AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting.	
Tree management, particularly the approach to limiting tree removal (including on the project boundary) will be managed via the Tree Report.	Design Manager Construction Manager Environmental Manager
Temporary Works	
Temporary Works to be designed and constructed in accordance with the CPTED principles, including the use of Exterior surfaces and finishes with a high level of vandal resistance (graffiti shield)	Construction Manager / Design Manager
Elements (for example material stockpiles) within construction sites would be located to minimise visual impacts, where feasible and reasonable	Superintendent / Environmental Coordinator
Site sheds will be located to minimise visual impact where it is feasible and reasonable to do so.	Project Engineer Environmental Coordinator
Site sheds to be maintained in an appropriate condition. Existing buildings will be used where practical and feasible will be maintained to a high standard.	Construction Manager
Temporary impacts to public open space would be rehabilitated in consultation with the relevant local council and /or landowner	Construction Manager/ Project Engineer/ Environmental Coordinator
Temporary site facilities must satisfy the sustainability requirements of C1 - SWTC Appendix B7.0 - Sustainability Requirements.	Construction Manager Sustainability Manager
Lighting Consideration	
CoA-E54 states “The Proponent must construct and operate the CSSI with the objective of minimising light spillage to surrounding properties. All lighting associated with the Construction and Operation of the CSSI must be consistent with the requirements of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces.” JHLOR’s scope does not include installation of operational lighting. Lighting of construction sites will be oriented to minimise glare and light spill impact on adjacent receivers, where practical and safe to do so and in accordance with Australian Standard 4282-1997.	Superintendent / Project Engineer / Environmental Coordinator
REMM LV5 states “Lighting would be designed in accordance with AS 4282 Control of the Obtrusive Effects of Outdoor Lighting. Lighting would be designed to minimise light spill and glare into adjoining areas.” There is no lighting design as part of the JHLOR scope. Construction lighting will be managed in accordance with CoA-54 as stated above.	N/A
Hoarding Banners, Fencing and Signs	
The selection of materials and colours for noise barriers and hoardings would aim to minimise their visual prominence.	Design Manager Construction Manager Environmental Manager

The selection of materials and colours would aim to minimise their visual prominence.	Design Manager Construction Manager Environmental Manager
The design and maintenance of construction site hoardings will aim to minimise visual amenity and landscape character impacts, including the prompt removal of graffiti (refer section on Graffiti within this table). Public art opportunities would be considered	Environment Manager Site Superintendent Project Engineer Communications and Community Liaison Manager Site Superintendent Project Engineer Communications and Community Liaison Manager
Site hoarding and fencing banners including vinyl (on solid hoarding), shade cloth or other material on the external face of any hoarding or fence will be installed within 30 days of Site establishment.	Construction Manager / Project Engineer/ Site Superintendent
Site hoarding and fencing banners must be replaced every 12 months to ensure they remain clean and appropriate for their intended use.	Construction Manager / Project Engineer / Site Superintendent
Hoarding / noise barriers (during construction phase) will be maintained in an excellent condition with prompt removal of graffiti.	Superintendent / Environmental Coordinator
Fencing, walls, and hoarding will be designed and implemented to increase natural surveillance with straight runs.	Construction Manager / Design Manager/ Communications and Community Liaison Manager/Project Engineer
Signage will be utilised to clearly define and designate areas with respect to their intended use to the public and construction workers on access.	Superintendent / Project Engineer / Communications and Community Liaison Manager
Installation plans for all hoardings or fencing banners, including shade cloth or other material on the external face of any hoarding or fence, must be submitted to and approved by the Principal's Representative prior to being erected by the Contractor. The Principal's Representative must be given a minimum of 10 Business Days to review and comment on banner installation plans. The Contractor must address the Principal's comments on the submitted Documents to the satisfaction of the Principal's Representative, prior to them being approved	Superintendent / Project Engineer / Communications and Community Liaison Manager
Submit the following: • Installation plans for all hoardings or fencing banners, including shade cloth or other material on the external face of any hoarding or fence • Banner artwork print proofs / plans and details of all signage (other than signage containing safety advice or instruction only), advertising or branding on the external face of any hoarding, fence or structure to the Principal for review. The banner artwork print proofs/plans must be approved by the Principal's Representative prior to being used for their intended purpose.	Construction Manager / Project Engineer / Communications and Community Liaison Manager
Install and maintain hoarding banners for the external faces (visible to the public) of hoardings and fences that are constructed as well as signage that provides the community with details of the Southwest Metro Early Works information line and out of hours contact details. The hoarding and fencing banners must be in full colour and produced in accordance with designs provided by TfNSW and to comply with the hoarding	Construction Manager / Project Engineer/ Communications and Community Liaison Manager

requirements of the Sydney Metro Brand Style Guidelines.	
Provision of viewing holes and transparent panels in hoardings at various locations will be considered in consultation with the Principal's Representative and installed where appropriate taking into consideration compliance with safety requirements and commuter/pedestrian flow	Construction Manager / Project Engineer/ Communications and Community Liaison Manager
Install way-finding signage to direct pedestrians, commuters and vehicles around the Construction Site.	Construction Manager / Project Engineer / Communications and Community Liaison Manager
Hoardings and fencing installed must be made from as-new materials and must at all times be maintained in a neat and tidy condition and be sympathetic with the surroundings.	Construction Manager / Project Engineer/Superintendent
Graffiti	
SMEW must monitor and remove graffiti within the following timeframes: Offensive graffiti must be removed or covered within 24 hours Highly visible yet non-offensive graffiti must be cleaned or covered within one week; Graffiti that is neither offensive nor highly visible must be cleaned or covered during normal operations within one month; and Any advertising material including bill posters must be removed or covered within 24 hours.	Construction Manager / Project Engineer/Site Superintendent
Construction hoardings, scaffolding and acoustic sheds will be regularly inspected and kept clean and free of dust build up. Graffiti on construction hoardings, scaffolding or acoustic sheds will be removed or painted over promptly.	Construction Manager / Project Engineer/Site Superintendent
Site Restoration	
Surfaces will be stabilised in accordance with the relevant design package associated with the works. Where works inadvertently cause surface disruption and there is no detail within a relevant design package, JHLOR will reinstate the site to a condition not less than that existing immediately prior to the JHLOR obtaining access to the Site.	Design Manager Construction Manager Environmental Manager
In accordance with REMM LV16 "Following completion of construction, site restoration would be undertaken in accordance with the visual amenity management plan."	Design Manager Construction Manager Environmental Manager

8. Training

All personnel working on the site will undertake a site induction, which will provide initial training on various environmental aspects including visual amenity.

Additional training will be provided to the workforce during toolbox talk, which will explain the visual amenity requirements related to issues such as

- Hoarding
- Graffiti removal
- Lighting direction
- Vegetation planted/retained for screening purposes.

9. Monitoring, Auditing and Reporting

Weekly Environmental Site inspections will be undertaken by the Environmental Manager / Coordinator, Site Supervisor and nominated Site and Project Engineers. The visual inspections will target:

- Rubbish
- Litter
- Graffiti
- Surplus Material

Daily inspections by Site Supervisors, including inspection of the following:

- Construction site hoarding and perimeter site areas
- Scaffolding, and other site structures
- Lighting structures

Periodic Joint Environment Inspections attended by representatives of the Environment and Sustainability Team, Environment Representative, and representatives from Sydney Metro. This will include inspection of the following:

- Health of retained vegetation around site boundaries
- The condition of any site hoarding and fencing
- Position and direction of any site lighting
- Landscaping works.

Inspection reports will be prepared following site inspections to document any relevant observations made and identify any issues to be rectified in relation to visual amenity and timing for rectification.

Typical Compliance records would consist of:

- Inspections undertaken in relation to visual amenity measures management measures (such as graffiti and deterioration of hoarding or vegetation)
- Weekly Environmental Inspection forms
- Toolbox training records.

Results and outcomes of inspections, monitoring and auditing will be reported internally on a monthly basis. Six-monthly construction compliance reports will be prepared to report on compliance with the Project Approval.

10. Review and Improvement

The VAMP will be reviewed and updated at least annually. JHLOR will undertake the ongoing development, amendment and updating of the VAMP to ensure it remains consistent with Project priorities, risk management, client requirements and Project objectives, taking into account:

- The status and progress of JHLOR's activities
- Changes in the design, delivery and operations processes and conditions
- Lessons learnt during delivery and operations
- Changes in other related Project Plans
- Requirements and matters not covered by the existing Project Plans
- Changes to Project Plans as directed by TfNSW's Representative under the Deed.
- Where deemed appropriate in relation to items raised within inspections or audits

10.1 Review of Mitigation Measures

Where a review of visual amenity performance, based on inspection and audit results, indicates that current mitigation measures are not effective (i.e. they are not meeting the Planning Approval or Contractual requirements), the Environmental Manager will consult with the construction team in regards to additional mitigation measures. These additional mitigation measures may include additional controls or changed work practices.

10.2 Records

Records associated with this management plan and monitoring programme will be maintained in accordance with Section 13 of the CEMP.

11. Enquiries, Complaints and Incident Management

Environmental incidents and complaints are to be investigated, reported, documented, actioned and closed out as per the details provided in the SMEW Community Consultation Strategy and the CEMP.

Appendix A - Visual Amenity Management Measures and Compliance Matrix

No.	Measure	Timing	Requirement	Responsibility	Reference
	Project Approval – Specific Management Plan Requirements				
1.	The Proponent must construct and operate the CSSI with the objective of minimising light spillage to surrounding properties. All lighting associated with the Construction and Operation of the CSSI must be consistent with the requirements of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces.	During Construction	S2B SSI 8256 COA – E54	Environment Manager Project Engineer Site Superintendent TfNSW (operational)	Section 7
	SPIR Environmental Management Measures				
2.	The management of trees during detailed design and construction planning would be guided by the project's Tree Management Strategy, which would be developed in consultation with councils and include consideration of relevant local plans and strategies. Where removal cannot be avoided, trees would be replaced in accordance with the Tree Management Strategy, including replacement of removed trees in a two for one ratio. Opportunities to retain and protect existing trees would be defined during detailed design and construction planning, in accordance with the project's Tree Management Strategy. The design would aim to reduce tree removal to the extent practicable, particularly where they contribute to screening vegetation or landscape character.	Prior to and During Construction	S2B SPIR REMM LV4	Environment Manager Project Engineer Design Manager/Project Design Team Site Superintendent TfNSW (develop Tree Management Strategy)	Section 7
3.	Lighting would be designed in accordance with AS 4282 Control of the Obtrusive Effects of Outdoor Lighting. Lighting would be designed to minimise light spill and glare into adjoining areas.	Prior to and During Construction	S2B SPIR REMM LV5	Environment Manager Design Manager/Project Design Team Site Superintendent TfNSW (operational)	Section 7

No.	Measure	Timing	Requirement	Responsibility	Reference
4.	The selection of materials and colours for noise barriers and hoardings would aim to minimise their visual prominence.	Prior to construction	S2B SPIR REMM – LV6	Design Manager/Project Design Team	Section 7
5.	The use of transparent panels in noise barriers would be considered where views to local landscape features and district views would be obstructed.	Prior to construction	S2B SPIR REMM - LV7	Design Manager/Project Design Team	Not relevant to scope of works
6.	Fencing would be designed to be of a high quality urban finish near stations.	Prior to Construction	S2B SPIR REMM - LV8	Design Manager/Project Design Team	Not relevant to scope of works
7.	A visual amenity management plan would be prepared and implemented during construction, to define the measures to minimise visual impacts during construction. The plan would include requirements in relation to construction site remediation.	During Construction	S2B SPIR REMM – LV10	Environment Manager Project Engineer Site Superintendent	This Plan
8.	Mitigation measures for landscape and visual impacts would be implemented as soon as feasible and reasonable after the commencement of construction, and remain for the duration of the construction period.	During Construction	S2B SPIR REMM – LV11	Environment Manager Project Engineer Site Superintendent	Section 7
9.	Trees to be retained would be protected prior to the commencement of construction in accordance with AS4970-2009 Protection of trees on development sites and the project's Tree Management Strategy.	During Construction	S2B SPIR REMM – LV12	Environment Manager Site Superintendent Project Engineer	Section 7
10.	The design and maintenance of construction compound hoardings would aim to minimise visual amenity and landscape character impacts. Graffiti would be removed promptly, and public art opportunities would be considered.	During Construction	S2B SPIR REMM – LV13	Environment Coordinator Project Engineer Construction Manager	Section 7
11.	The selection of materials and colours would aim to minimise their visual prominence.	During Construction	S2B SPIR REMM - LV14	Design Manager/Project Design Team	Section 7

No.	Measure	Timing	Requirement	Responsibility	Reference
12.	Lighting of work areas, compounds and work sites would be oriented to minimise glare and light spill impact on adjacent receivers.	During Construction	S2B SPIR REMM - LV15	Environment Manager Project Engineer Site Superintendent	Section 7
13.	Following completion of construction, site restoration would be undertaken in accordance with the visual amenity management plan.	During Construction	S2B SPIR REMM - LV16	Environment Manager Project Engineer Site Superintendent	Section 7
*	**SPIR Environmental Performance Outcomes**				
16.	The preferred project is designed to have regard to the surrounding landscape and visual environment and to minimise the potential for visual impacts. The preferred project is visually integrated with its surroundings. Vegetation providing screening of the rail corridor is retained where practicable	During Construction	S2B SPIR EPO – Landscape character and visual amenity	Design Manager Environment Manager Project Engineer	Section 1.5
*	**Contractual Requirements**				
17.	In carrying out the SSJ Contractor's Activities, the SSJ Contractor must: (a) keep the Construction Site, Extra Land and the Project Works clean and tidy and free of refuse; (b) regularly remove rubbish, litter, graffiti and surplus material from the Construction Site and Extra Land; and (c) as a condition precedent to Construction Completion of a Portion, remove all rubbish, surplus materials, Construction Plant and Temporary Works from the Construction Site and Extra Land or the part of the Construction Site or Extra Land relevant to the Project Works or the Portion, except where the retention of any of these are required for the correction of Defects during the Defects Correction Period and this is approved in writing by the Principal's Representative.	During Construction	General Conditions – 3.10	Environment Manager Project Engineer Site Superintendent	Section 7
19.	The SSJ Contractor must: (iv) install hoardings and fencing from new materials and must at all times be maintained in a neat and tidy condition and be sympathetic with the surroundings. Hoardings are to be clean, painted free of snagging or sharp protrusions on both the worksite side and the public side and also comply with the relevant hoarding standards;	During Construction	Schedule Part C SWTC Main Body – 5.10 Hoarding and Temporary Fencing	Environment Manager Project Engineer Site Superintendent	Section 7

No.	Measure	Timing	Requirement	Responsibility	Reference
	(v) maintain hoardings, fencing or walls on or around the Site free of graffiti and any advertising material not authorised by the Principal's Representative until the Date of Construction Completion of the last Portion to achieve Construction Completion;				
20.	The SSJ Contractor must: (v) not store rubbish or loose items on the Site for any extended period; (vi) maintain existing landscaping and ground vegetation within the Site;	During Construction	Schedule Part C SWTC Main Body – 5.11 Maintenance	Environment Manager Project Engineer Site Superintendent	Section 7
21.	The Contractor must arrange for the production and installation of any site hoarding and fencing banners including vinyl (on solid hoarding), shade cloth or other material on the external face of any hoarding or fence within 30 days of Site establishment.	During Construction	Schedule Part D – MR-C -12.1a)	Construction Manager Project Engineer Site Superintendent	Section 7
22.	Site hoarding and fencing banners must be replaced every 12 months to ensure they remain clean and appropriate for their intended use.	During Construction	Schedule Part D – MR-C -12.1b)	Construction Manager Project Engineer Site Superintendent	Section 7
23.	All banner artwork print proofs must be must be submitted to and approved by the Principal's Representative prior to being used by the Contractor in the production of banner artwork. The Principal's Representative must be given a minimum of five Business Days to review the banner artwork print proofs. The Contractor must address all the Principal's comments on the print proofs to the satisfaction of the Principal's Representative, prior to being approved.	During Construction	Schedule Part D – MR-C -12.1c)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer SMEW Community Communication Strategy
24.	The Principal's Representative's approval of banner artwork print proofs is a Hold Point.	During Construction	Schedule Part D – MR-C -12.1d)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer SMEW Community Communication Strategy

No.	Measure	Timing	Requirement	Responsibility	Reference
25.	Installation plans for all hoardings or fencing banners, including shade cloth or other material on the external face of any hoarding or fence, must be submitted to and approved by the Principal's Representative prior to being erected by the Contractor. The Principal's Representative must be given a minimum of 10 Business Days to review and comment on banner installation plans. The Contractor must address the Principal's comments on the submitted Documents to the satisfaction of the Principal's Representative, prior to them being approved.	During Construction	Schedule Part D – MR-C -12.1e)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer to SMEW Community Communication Strategy
26.	The Principal's Representative's approval of banner installation plans is a Hold Point.	During Construction	Schedule Part D – MR-C -12.1f)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer SMEW Community Communication Strategy * (Section 7.4 and Appendix A for Approvals Process)
27.	Viewing holes and transparent panels must be provided in the hoardings at various locations, to be determined by the Principal's Representative in consultation with the Contractor.	During Construction	Schedule Part D – MR-C -12.1g)	TfNSW in consultation with the Project Engineer / Communications and Community Liaison Manager	Section 7
28.	12.1 Visual Amenity Management Objectives 12.2 Visual Amenity Management Implementation 12.3 Visual Amenity Mitigation	During Construction	Schedule Part D – MR-E	Environment Manager Project Engineer	This Plan
Construction Environmental Management Framework					
29.	Principal Contractors will develop and implement a Landscape and Temporary Works Management Plan for their scope of works. The Landscape and Temporary Works Management Plan will ensure as a minimum: • Temporary construction works including site hoardings and acoustic sheds consider urban design and visual impacts, including: • Artwork, graphics and images to enhance the visual appearance of temporary works in high visibility locations.	During Construction	CEMF Section 4.4a)	Environment Manager Project Engineer Communications and Community Liaison Manager	This Plan Section 7 Section 4 of the Community Communication Strategy

No.	Measure	Timing	Requirement	Responsibility	Reference
	• Project information to raise awareness on benefits, explain the proposed works at each site and provide updates on construction progress; • Community information, including contact numbers for enquiries / complaints; • Signage and information to mitigate impacts on local business which may be obscured by the construction site; • Sydney metro advertising / public awareness campaigns; and, • Logos / branding, including Sydney Metro, NSW Government, and Contractor branding				
30.	The design of all temporary works will require TfNSW approval in relation to urban design and visual impacts	During Construction	CEMF Section 4.4b)	Environment Manager Design Manager Communications and Community Liaison Manager Project Engineer	Noted and also refer SMEW Community Communication Strategy (Appendix A for Approvals Process)
31.	Construction hoardings, scaffolding and acoustic sheds will be regularly inspected and kept clean and free of dust build up. Graffiti on construction hoardings, scaffolding or acoustic sheds will be removed or painted over promptly.	During Construction	CEMF Section 4.4c)	Environment Manager Project Engineer Site Superintendent	Section 7
32.	The principles of Crime Prevention Through Environmental Design will be applied to all works, including temporary works, which have a public interface.	During Construction	CEMF Section 4.4d)	Environment Manager Project Engineer Site Superintendent	Section 5
33.	The following visual and landscape management objectives will apply to the construction of the project: • Minimise impacts on existing landscape features as far as feasible and reasonable. • Ensure the successful implementation of the Landscape Design. • Reduce visual impact of construction to surrounding community.	During Construction	CEMF Section 12.1		Section 1.5
34.	Principal Contractors will develop and implement a Visual Amenity Management Plan for temporary works which will include as a minimum: • The visual mitigation measures as detailed in the environmental approval documentation for construction.	During Construction	CEMF Section 12.2a)	Environment Manager	i) This Plan

No.	Measure	Timing	Requirement	Responsibility	Reference
	• Input from an experienced Landscape or Urban Designer. • The maintenance of outward facing elements of site hoarding or noise barriers, including the removal of graffiti and weeds. • Apply the principles of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant safety design requirements and detail mitigation measures to minimise lighting impacts on sensitive receivers for all permanent, temporary and mobile light sources. • Apply the principals of the NSW Government Crime Prevention through Environmental Design guidelines. • Monitoring requirements. • Compliance record generation and management.				ii) Not relevant to the scope of works. To be reassessed if scope changes require temporary works in prominent area iii) Section 7 iv) Section 7 v) Section 5 vi) Section 9 vii) Section 9
35.	Visual and landscape measures will be incorporated into the Principal Contractor's regular inspections including checking the health of retained vegetation around site boundaries, checking the condition of any site hoarding and acoustic sheds, and checking the position and direction of any sight lighting.	During Construction	CEMF Section 12.2b)	Environment Manager Project Engineer Site Superintendent	Section 7
36.	The Contractor will retain compliance records of any inspections undertaken in relation to visual and landscape measures.	During Construction	CEMF Section 12.2c)	Environment Manager	Section 7
37.	Examples of visual amenity mitigation measures include: • Wherever feasible and reasonable, vegetation around the perimeter of the construction sites will be maintained. • Temporary construction works will be designed with consideration of urban design and visual amenity as per Section 4.4. • Temporary site lighting, for security purposes or night works will be installed and operated in accordance with AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting.	During Construction	CEMF Section 12.3	Environment Manager	Section 7