

Stage 2: WestConnex M5
King Georges Road Interchange Upgrade

COMPLIANCE TRACKING PROGRAM

JULY 2016

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GLOSSARY / ABBREVIATIONS

Ancillary facility	Temporary facility for construction , including for example an office and amenities compound, construction compound , batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile area
CCS	Community Communication Strategy
CEMP	Construction Environmental Management Plan
CAQMP	Construction Air Quality Management Plan
CFFMP	Construction Flora and Fauna Management Plan
CHMP	Construction Heritage Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CSWQMP	Construction Soil and Water Quality Management Plan
CTAMP	Construction Traffic and Access Management Plan
CWEMP	Construction Waste Management Plan
CoA	Conditions of approval (CoA)
CTP	Compliance Tracking Program
DP&E	Department of Planning and Environment
DP&I	Department of Planning and Infrastructure
EIS	Environmental Impact Statement
EPA	NSW Environment Protection Authority
EMS	Environmental Management System
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental Representative (ER)	A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
Minister, the	Minister for Planning and Environment (formerly Minister for Planning and Infrastructure)
Non-compliance	Failure to comply with the requirements of the Infrastructure Approval or any applicable license, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of Project system documentation including this CEMP or supporting documentation.
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
Project, the	King Georges Road Interchange Upgrade
Infrastructure Approval, the	The written approval from the Minister for Planning and Infrastructure for the Project
Secretary	Secretary of the Department of Planning and Environment
SSI	State Significant Infrastructure
WDA	WestConnex Delivery Authority

1 Introduction

1.1 Background

The NSW Government's Long Term Transport Master Plan sets out a number of projects to meet Sydney's transport challenge. The plan identified WestConnex as one of the highest priorities to meet the future transport needs of Sydney.

The NSW Government will deliver WestConnex in a series of project stages between now and 2023. One of the proposed stages is M5 King Georges Road Interchange Upgrade project (the Project). It involves work to the M5 Motorway carriageways and includes improvements to all on-ramps and off-ramps at the interchange of the M5 with King Georges Road. It also includes modifications to existing roads and associated infrastructure including cycleways, noise walls and drainage facilities.

Some upgrading of the existing M5 dual carriageways would be required to retain two through lanes in each direction and accommodate the future construction of the WestConnex M5 project. It also complements the recent upgrading and expansion of the M5 West between Camden Valley Way and King Georges Road.

The M5 King Georges Road Interchange Upgrade environmental impact statement (EIS) was prepared by Jacobs Group (Australia) on behalf of WDA in October 2014. Approval of the Project was granted by the Minister in March 2015 and construction is scheduled to commence in July 2015.

1.2 Purpose of this CTP

This Compliance Tracking Program (CTP) has been prepared to address the requirements of Condition A12 of the Infrastructure Approval. The CTP describes the approach to be adopted to track compliance with the requirements of the Infrastructure Approval (Appendix A) during construction and operation of the Project.

Fulton Hogan and WDA are jointly responsible for compliance with the CoA. However, Fulton Hogan will be responsible for maintaining the CTP and preparing periodic compliance status reports during construction phase of the Project.

1.3 Environmental management system overview

The CEMP is the primary system to manage and control the environmental aspects of the Project during pre-construction and construction. It provides the overall framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled.

The strategies defined in the CEMP have been developed with consideration of the Infrastructure Approval requirement, safeguards and mitigation measures presented in the environmental assessment and approval documents. The CEMP establishes the system for implementation, monitoring and continuous improvement to minimise impacts from the Project on the environment. This CTP is separate to the CEMP, but is part of the suite of environmental management documents prepared for the Project.

1.4 Infrastructure Approval Documentation

Documentation relevant to this CTP includes:

- *Environmental Impact Statement* (Jacobs, October 2014)
- The Infrastructure Approval (approved by the Minister for Planning and Infrastructure on 3 March 2015).

2 CTP requirements

The requirements of CoA A12 are listed in Table 1 below, together with the cross-reference to where each requirement is addressed in this CTP.

Table 1. CoA A12 Compliance Tracking Program Requirements

Requirement	Reference
<p>The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program shall be submitted to the Secretary for approval prior to the commencement of construction and operate for a minimum of 18 months following commencement of operation.</p> <p>The program shall include, but not necessarily be limited to:</p>	This CTP
a) Provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged);	Section 2.1
b) Provisions for periodic review of the compliance status of the SSI against the requirements of this approval;	Section 2.2
<p>c) Provisions for periodic reporting of compliance status to the Secretary, including but not limited to:</p> <ul style="list-style-type: none"> (i) A Pre-construction Compliance Report prior to commencement of construction (ii) Quarterly Construction Compliance Reports, for the duration of construction; and (iii) A Pre-Operation Compliance Report prior to the commencement of operation; 	Section 2.3
d) A program for independent environmental auditing in accordance with <i>ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing</i> ;	Section 2.4
e) Mechanisms for recording incidents during construction and actions taken in response to those incidents;	Section 2.5
f) Provisions for reporting environmental incidents to the Secretary during construction, in accordance with conditions A13 and A14;	Section 2.6
g) Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and	Section 2.7
h) Provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	CEMP Chapter 5.

2.1 CoA A12 (a) Notification of the Secretary

Provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged).

Construction on the Project will not commence until a written approval by the Secretary of the CEMP, associated environmental plans and other relevant documentation required by the CoA has been received.

WDA (on behalf of Fulton Hogan) will notify the Secretary of Fulton Hogan's intention to commence construction at least one (1) week prior to commencement of construction.

WDA will advise the Secretary in writing at least one (1) month in advance prior to the commencement of operation.

2.2 CoA A12 (b) Periodic compliance review

Provisions for periodic review of the compliance status of the SSI against the requirements of this approval.

WDA will review the status of compliance and submit periodic construction compliance reports to the Secretary for each stage of construction at intervals including:

- At least one (1) week prior to the commencement of construction
- Within four (4) weeks of the completion of each quarter for the duration of construction, and
- At least one (1) month prior to the commencement of operation.

The example compliance tracking table (Appendix A) establishes a format for recording compliance status and will be included in all future compliance tracking reports.

2.3 CoA A12 (c) Periodic compliance reporting

Provisions for periodic reporting of compliance status to the Secretary, including but not limited to:

- (i) a Pre-construction Compliance Report prior to commencement of construction;
- (ii) quarterly Construction Compliance Reports, for the duration of construction; and
- (iii) a Pre-Operation Compliance Report prior to the commencement of operation;

At intervals prescribed in Section 2.2, the status of compliance will be reviewed and reported to the Secretary in the form of compliance status reports. Fulton Hogan will prepare these reports for the duration of construction. Compliance status reports will typically include:

- Scope of the activities undertaken during the reporting period
- Performance of environmental controls that have been implemented
- Compliance with CoA as recorded in the compliance tracking table
- Non-compliances during the reporting period and description of the corrective actions taken against any identified non-compliances
- Details of all incidents recorded and action taken during the reporting period
- Outcomes of monitoring undertaken over the reporting period and review of compliance against relevant criteria
- Significant outcomes of audits and inspections undertaken during the reporting period

- Details of the environmental complaints received during the reporting period, responses taken and their current status (i.e. open or closed).

To enable preparation of the quarterly compliance reports and sufficient WDA and ER review time, submission of these reports to DP&E will occur within four (4) weeks of the completion of each quarter.

2.4 CoA A12 (d) Independent environmental auditing

A program for independent environmental auditing in accordance with *ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing*.

External auditing will be undertaken by an independent environment auditor in accordance with *AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems*. External auditing will be undertaken quarterly, with the first audit being held within three months after the commencement of construction.

Prior to, during and following completion of construction, various reports will be prepared to fulfil internal WDA and CoA reporting requirements.

2.5 CoA A12 (e) Incident reporting and response

Mechanisms for reporting and recording incidents and actions taken in response to those incidents.

All incidents and emergencies will be managed in accordance with the *Incident and Emergency Response Plan*. Fulton Hogan's Case and Action Management system (CAMs) software will be used to record all environment incidents.

Roads and Maritime Services' *Environmental Incident Classification and Reporting Procedure* will be implemented in the event of an environmental incident. A copy of the procedure is provided in Appendix A7 of the CEMP.

The EPA will be notified of any environmental incidents or pollution incidents on or around the SSI via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the *Protection of the Environment Operations Act 1997* (NSW) (POEO Act). Other relevant authorities, defined by Section 148 of the POEO Act, will also be notified immediately.

WDA and ER will be notified verbally immediately of any pollution incident reportable to the EPA and other authorities which occurred as the result of carrying out the SSI. Incident reports will be provided to WDA and ER within 24 hours of Fulton Hogan becoming aware of the incident, including lessons learnt from each environmental incident and proposed measures to prevent the occurrence of a similar incident.

WDA will provide the Secretary with a record of any incident reported to the EPA in accordance with CoA A13.

In accordance with CoA A14 the Secretary will be notified of any incidents (other than those relating to the *Protection of the Environment (Operations) Act 1997*) with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident on weekdays, or the following business day on weekends. WDA will provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred.

2.6 CoA A12 (f) Incident reporting to the Secretary

Provisions for reporting environmental incidents to the Director General during construction, in accordance with conditions A13 and A14.

The Secretary will be notified of any incidents (other than those relating to the *Protection of the Environment Operations Act 1997*) with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident on weekdays, or the following business day on weekends.

The written notification will be provided to the Secretary within seven working days of the date on which the incident occurred.

2.7 CoA A12 (g) Rectification of non-compliance

Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management.

Non-compliance is defined as a failure to comply with the applicable legislation, licence or permit, or the relevant CoA. Once identified, the non-complying activities will be stopped by the Environmental Manager or relevant Project / Site Engineer. The works will not commence until a corrective / preventative action has been closed out. The Environmental Representative may also stop works in these circumstances.

Where non-compliance has been identified, a corrective/ preventative action (or actions) will be implemented. The process for rectifying non-compliance will include the following steps:

- Once non-compliance has been identified, engage with relevant discipline manager(s) such as the Environmental Manager for environmental management or legislation related non-compliances
- Investigate the system or activity failure point(s)
- Identify future management and prevention strategies
- Send the non-compliance information including any formal reports to relevant discipline manager(s) for approval
- Implement corrective action and prevention strategies to avoid future non-compliances
- The relevant discipline manager shall review the implementation of corrective actions and any associated records or evidence (e.g. checklists, photos, test results) associated with the non-compliance to show that the corrective actions have been undertaken, and
- Consider whether the knowledge of corrective actions implemented could benefit others, and discuss distribution of lessons learnt to staff and the Proponent.

The close-out of required actions will be reviewed during Environmental Representative inspections, and the Environmental Representative will be actively involved in the review and resolution of non-compliances. All non-compliances and corrective and preventive actions taken to rectify these will be recorded and reported in accordance with Quality Management Plan and Fulton Hogan's *Corrective*..

Corrective/preventative actions and improvement opportunities will be entered into Fulton Hogan's quality system database and include details of the issue, actions required and timing and responsibilities. The record will be updated with date of close out and any necessary notes.

Appendix A

Example SSI Approval Compliance Table

Table 2: Example SSI Approval Compliance Tracking Table

Ref.	Requirement	Proponent/FH Responsibility	Timing	Document Reference	Approval of, or referral to DP&E required?	Status (e.g. Date submitted to DP&E, approval obtained, etc.)	Compliance Status
PART A. COMPLIANCE WITH COA							
OBLIGATIONS TO MINIMISE HARM TO THE ENVIRONMENT							
A1	In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all feasible and reasonable measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the SSI.						
TERMS OF APPROVAL							
A2	The Proponent shall carry out the SSI generally in accordance with the: <ul style="list-style-type: none"> (a) State significant infrastructure application SSI-6547 (b) <i>WestConnex M5 King Georges Road Interchange Upgrade Environmental Impact Statement</i>, prepared by Jacobs Group (Australia) Pty Ltd and dated October 2014; (c) <i>WestConnex M5 King Georges Road Interchange Upgrade Submissions Report</i>, prepared by Jacobs Group (Australia) Pty Ltd and dated January 2015; and (d) conditions of this approval. 						
A3	In the event of an inconsistency between: <ul style="list-style-type: none"> (a) the conditions of this approval and any document listed from condition A2(a) to A2(c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and (b) any document listed from condition A2(a) to A2(c) inclusive, and any other document listed from condition A2(a) to A2(c) inclusive, the most recent document shall prevail to the extent of the inconsistency. 						
A4	The Proponent shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of: <ul style="list-style-type: none"> (a) any reports, plans or correspondence that are submitted in accordance with this approval; and (b) the implementation of any actions or measures contained within these reports, plans or correspondence 						
LIMITS OF APPROVAL							
A5	This approval shall lapse 10 years after the date on which it is granted, unless the works the subject of this SSI approval are physically commenced on or before that date.						
STATUTORY REQUIREMENTS							
A6	The Proponent shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required throughout the life of the SSI. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals.						
STAGING							
A7	The Proponent may elect to construct and/ or operate the SSI in stages. Where staging is proposed, the Proponent shall submit a Staging Report to the Secretary prior to the commencement of the first proposed stage. The Staging Report shall provide details of: <ul style="list-style-type: none"> (a) how the SSI would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and (b) details of the relevant conditions of approval, which would apply to each stage and how these shall be complied with across and between the stages of the SSI. Where staging of the SSI is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).						
SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM							

Ref.	Requirement	Proponent/FH Responsibility	Timing	Document Reference	Approval of, or referral to DP&E required?	Status (e.g. Date submitted to DP&E, approval obtained, etc.)	Compliance Status
A8	<p>The Proponent shall ensure that all plans, sub-plans and other management documents required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) are submitted to the Secretary no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Secretary.</p> <p>Notes:</p> <ul style="list-style-type: none"> While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program shall clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program. 						
COMPLIANCE							
A9	The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the requirements of the conditions of this approval relevant to their respective activities.						
A10	The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.						
A11	In the event of a dispute between the Proponent and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the activity, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.						
Compliance Tracking Program							
A12	<p>The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program shall be submitted to the Secretary for approval prior to the commencement of construction and operate for a minimum of 18 months following commencement of operation.</p> <p>The Program shall include, but not necessarily be limited to:</p> <ol style="list-style-type: none"> provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged); provisions for periodic review of the compliance status of the SSI against the requirements of this approval; provisions for periodic reporting of compliance status to the Secretary, including but not limited to: <ol style="list-style-type: none"> a Pre-Construction Compliance Report prior to the commencement of construction; quarterly Construction Compliance Reports, for the duration of construction; and a Pre-Operation Compliance Report prior to the commencement of operation; a program for independent environmental auditing in accordance with AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems; mechanisms for recording environmental incidents during construction and actions taken in response to those incidents; provisions for reporting environmental incidents to the Secretary during construction, in accordance with conditions A13 and A14 procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities. 						
INCIDENT REPORTING							
A13	The Proponent shall notify the EPA in relation to any pollution incident in carrying out the SSI as required by the <i>Protection of the Environment (Operations) Act 1997</i> as required by that Act. The Proponent shall provide the Secretary with a record of any such notification.						
A14	The Proponent shall notify the Secretary (using the contact name and phone number notified by the Department from time to time) of any incident (other than those relating to the <i>Protection of the Environment (Operations) Act 1997</i>) with actual or potential significant off-site impacts on people or the biophysical environment						

Ref.	Requirement	Proponent/FH Responsibility	Timing	Document Reference	Approval of, or referral to DP&E required?	Status (e.g. Date submitted to DP&E, approval obtained, etc.)	Compliance Status
	within 24 hours of becoming aware of the incident on weekdays, or the following business day on weekends. The Proponent shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred.						
A15	The Proponent shall meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A14, within such period as the Secretary may require						
SOIL, WATER QUALITY AND HYDROLOGY							
B1	Except as may be provided by an EPL, the SSI shall be constructed and operated to comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.						
Flooding							
B2	The SSI shall be designed to not worsen existing flood characteristics in the vicinity of the SSI. Not worsen is defined as: (a) a maximum increase in inundation time of one hour in a 1 in 100 year ARI rainfall event; (b) a maximum increase of 10mm in inundation at properties where floor levels are currently exceeded in a 1 in 100 year ARI rainfall event; and (c) a maximum increase of 50mm in inundation at properties where floor levels would not be exceeded in a 1 in 100 year ARI rainfall event.						
Land Contamination							
B3	Measures to identify, handle and manage any unidentified contaminated soils and materials shall be identified in the Construction Environmental Management Plan required under conditions D30 and D31. Should a Remediation Action Plan be required, this shall be prepared to meet the relevant guidelines of the <i>Contaminated Land Management Act 1997</i> . If required, a Site Audit Statement(s), prepared by an accredited Site Auditor under the <i>Contaminated Land Management Act 1997</i> , shall be prepared verifying that the disturbed contaminated areas have been remediated to a standard consistent with the intended land use and shall be submitted to the Secretary and Relevant Councils prior to operation.						
TRANSPORT AND ACCESS							
B4	The SSI shall be designed so as not to preclude grade separated shared paths across King Georges Road so as to improve cycle and pedestrian safety and connectivity.						
B5	In relation to new or modified local road, parking, pedestrian and cycle infrastructure, the SSI shall be designed: (a) in consultation with the relevant roads authority; (b) to take into consideration existing and future demand, road safety and traffic network impacts; (c) to meet relevant design, engineering and safety guidelines, including <i>Austrroads Guide to Road Design</i> ; and be endorsed by a suitably qualified and experienced person that has considered the above matters.						
B6	A safety audit of the shared paths on both sides of the corridor between Belmore and Bexley Roads shall be undertaken in reference to Austrroads Guides and will inform the preparation of the Cycling and Pedestrian Access Strategy required by condition B8.						
B7	The closure of M5 shoulders to cycle traffic shall not occur until shared paths have been upgraded and the revised crossings over King Georges Rd have been implemented, consistent with the approved Cycling and Pedestrian Access Strategy, unless otherwise agreed by the Secretary. Should the closure of M5 shoulders to cycle traffic be required prior to these actions being undertaken, the Proponent shall demonstrate to the Secretary that existing and/or temporary facilities will be implemented to provide safe and efficient cycle and pedestrian access.						

Ref.	Requirement	Proponent/FH Responsibility	Timing	Document Reference	Approval of, or referral to DP&E required?	Status (e.g. Date submitted to DP&E, approval obtained, etc.)	Compliance Status
B8	<p>Prior to construction, unless otherwise agreed by the Secretary, the Proponent shall prepare a Cycling and Pedestrian Access Strategy with a focus on addressing eastbound and westbound cyclist and pedestrian movements and connections, including at the King Georges Road/ M5 Motorway interchange. This Strategy shall be approved by the Secretary, and shall be prepared in consultation with relevant stakeholders including, but not limited to Relevant Councils, pedestrian and bicycle user groups, community groups, and business associations, and include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (a) options for eastbound and westbound cyclist and pedestrian access along the M5 corridor and across King Georges Road. This shall focus on cyclist and pedestrian safety and efficiency. This shall include the introduction of a new crossing across King Georges Road generally between the M5 eastbound on and off ramps and modifying the signalling sequence at the King Georges Road east-bound off ramp for cyclists exiting the M5 to cross to the shared path with a reduced waiting time; (b) improvements to the shared paths and surrounding environment between Belmore and Bexley Roads and adjoining pedestrian and cycle connections. This shall consider the results of the safety audit required under condition B6 and the upgrade of shared paths between King Georges Road and Bexley Road to meet current cycle and pedestrian standards; (c) defining the existing and proposed cycling network and infrastructure that will be delivered; and (d) endorsement by a suitably qualified and experienced person that has considered the above matters. <p><i>Note: Identified mitigation measures that are not consistent with the environmental impacts described in the documents listed in condition A2, will need to be further assessed under the Environmental Planning and Assessment Act, 1979. Works will need to meet relevant design standards and be subject to independent safety audits.</i></p>						
BIODIVERSITY							
B9	The clearing of native vegetation shall be minimised with the objective of reducing impacts to any threatened species or Endangered Ecological Communities to the greatest extent practicable. Impacted vegetation shall be rehabilitated with endemic species to the greatest extent practicable.						
WASTE MANAGEMENT							
B10	Waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence or waste exemption under the <i>Protection of the Environment Operations Act 1997</i> , if such a licence is required in relation to that waste.						
B11	The reuse and/or recycling of waste materials generated on site shall be maximised as far as practicable, to minimise the need for treatment or disposal of those materials off site.						
B12	All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with <i>Waste Classification Guidelines</i> (Department of Environment, Climate Change and Water, 2009).						
B13	All waste materials removed from the SSI site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.						
UTILITIES AND SERVICES							
B14	Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the SSI shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Proponent.						
URBAN DESIGN AND LANDSCAPE							
B15	The Proponent, shall where feasible and reasonable, give consideration to the opportunities, and implement the mitigation measures identified in the <i>King Georges Road Interchange Upgrade - Visual Amenity, Built Form and Urban Design Report, AECOM 2014</i> . Where an opportunity is not considered feasible or reasonable, this will be clearly demonstrated to the Secretary in conjunction with the submission of the Urban Design and Landscape Plan required by condition B16.						

Ref.	Requirement	Proponent/FH Responsibility	Timing	Document Reference	Approval of, or referral to DP&E required?	Status (e.g. Date submitted to DP&E, approval obtained, etc.)	Compliance Status
B16	<p>Prior to the commencement of permanent built works and/ or landscaping, or as otherwise agreed by the Secretary, an Urban Design and Landscape Plan shall be prepared and implemented (following approval) for the SSI. The Plan shall be prepared by suitably qualified and experienced person(s), in consultation with the Relevant Council and community, for the approval of the Secretary. The Plan shall present an integrated urban and landscape design for the SSI, and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (a) identification of design objectives, principles and standards based on: <ul style="list-style-type: none"> i) environmental and heritage values, ii) urban design context, iii) social context and infrastructure, iv) sustainable design and maintenance, v) community safety, amenity and privacy, including 'safer by design' principles where relevant; vi) relevant design standards and guidelines; and vii) King Georges Road Interchange Upgrade - Visual Amenity, Built Form and Urban Design Report, AECOM 2014. (b) the location of existing vegetation and proposed landscaping (including use of endemic and advanced tree species where practicable) . Details of species to be replanted/ revegetated shall be provided, including their appropriateness to the area and habitat for threatened species (including rehabilitation of aquatic vegetation); (c) a description of disturbed areas (including compounds) and details of the strategies to progressively rehabilitate, regenerate and/ or revegetate these areas; (d) design features, built elements, lighting and building materials (including noise walls, cycle and pedestrian paths); (e) an assessment of the visual screening effects of existing vegetation and the proposed landscaping and built elements. Where receivers have been identified as likely to experience high visual impact as a result of the SSI, the Proponent shall in consultation with affected receivers, identify opportunities for providing at-receiver landscaping to further screen views of the SSI. Where to with the landowner, these measures shall be implemented during the construction of the agreed SSI; (f) graphics such as sections, perspective views and sketches for key elements of the SSI, including, but not limited to built elements of the SSI; (g) monitoring and maintenance procedures for the built elements, rehabilitated vegetation and landscaping (including weed control) including performance indicators, responsibilities, timing and duration and contingencies where rehabilitation of vegetation and landscaping measures fail; and (h) evidence of consultation with the Relevant Council and community on the proposed urban design and landscape measures prior to its finalisation . <p><i>Note: The Plan may be submitted in stages to suit a staged construction program of the SSI.</i></p>						
PROPERTY AND LAND USE							
B17	Any damage caused to property as a result of the SSI shall be rectified or the landowner compensated, within a reasonable timeframe, with the costs borne by the Proponent. This condition is not intended to limit any claims that land owner may have against the Proponent.						
B18	The Proponent shall construct and operate the SSI with the objective of minimising light spillage to residential properties and be generally consistent with the requirements of <i>Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting</i> .						
COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT							
C1	Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a Community Communication Strategy to the satisfaction of the Secretary. The Strategy shall provide mechanisms to facilitate communication between the Proponent (and its contractor(s)), the Environmental Representative (see condition 01), the Relevant Council and community stakeholders (particularly adjoining						

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	<p>landowners) on the construction environmental management of the SSI. The Strategy shall include, but not be limited to:</p> <ul style="list-style-type: none"> (a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners, key community and business groups, and community and social service organisations; (b) procedures and mechanisms for the regular distribution of accessible information to community stakeholders on construction progress and matters associated with environmental management including provision of information in appropriate community languages; (c) the formation of community-based forums that focus on key environmental management issues for the SSI. The Strategy shall provide detail on the structure, scope, objectives and frequency of the community-based forums; (d) procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management and delivery of the SSI; (e) procedures and mechanisms through which the Proponent can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the SSI; and (f) procedures and mechanisms that would be implemented to resolve issues/ disputes that may arise between parties on the matters relating to environmental management and the delivery of the SSL. This may include the use of a suitably qualified and experienced independent mediator. <p>The Proponent shall maintain and implement the Strategy throughout construction of the SSL.</p>						
Complaints and Enquiries Procedure							
C2	<p>Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall ensure that the following are available for community enquiries and complaints for the duration of construction:</p> <ul style="list-style-type: none"> (a) a 24 hour telephone number(s) on which complaints and enquiries about the SSI may be registered; (b) a postal address to which written complaints and enquires may be sent; (c) an-email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system to assist in considering complaints that are unable to be resolved through initial contact. <p>The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.</p>						
C3	<p>Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a Construction Complaints Management System consistent with <i>AS 4269: Complaints Handling</i> and maintain the System for the duration of construction and up to 12 months following completion of construction of the SSI.</p> <p>Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System shall be made available to the Secretary on request.</p>						
Provision of Electronic Information							
C4	<p>Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSI, for the duration of construction and for 12 months following completion of construction of the SSI. The Proponent shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:</p> <ul style="list-style-type: none"> (a) information on the current implementation status of the SSI; (b) a copy of the documents referred to under condition A2 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time; (c) a copy of this approval and any future modification to this approval; (d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSI; (e) a copy of each current strategy, plan, program or other document required under this approval; (f) the outcomes of compliance tracking in accordance with condition A 12 of this approval; and (g) details of contact point(s) to which community complaints and inquiries may be directed, including a 						

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	telephone number, a postal address and an email address.						
ENVIRONMENTAL REPRESENTATIVE							
D1	<p>Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Proponent shall appoint a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel, and that has been approved by the Secretary. The Proponent shall employ an Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Secretary. The Environment Representative(s) shall:</p> <ul style="list-style-type: none"> (a) be the principal point of advice in relation to the environmental performance of the SSI; (b) monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Proponent upon the achievement of these plans/programs; (c) have responsibility for considering, and advising the Proponent on, matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the SSI; (d) ensure that environmental auditing is undertaken in accordance with the Proponent's Environmental Management System(s); (e) be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan; (f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and (g) be available to be consulted in responding to the community concerning the environmental performance of the SSI where the resolution of points of conflict between the Proponent and the community is required. 						
D2	The Environmental Representative shall prepare and submit to the Secretary a monthly report on the Environmental Representative's actions and decision on matters specified in condition 01 for the preceding month. The reports shall be submitted within seven (7) days for the end of each month for the duration of construction of the SSI, or as otherwise agreed by the Secretary. Notwithstanding, the Environmental Representative shall be given the independence to report to the Secretary at any time and/or at the request of the Secretary.						
SOIL, WATER QUALITY AND HYDROLOGY							
Construction Soil and Water Management							
D3	Soil and water management measures consistent with <i>Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition</i> (Landcom, 2004) shall be employed during the construction of the SSI to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.						
D4	Where available and practicable, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources shall be used in preference to potable water for construction activities, including dust control.						
NOISE AND VIBRATION							
Vibration and Building Condition Survey							
D5	Prior to construction, properties that are risk from construction vibration shall be identified and incorporated into the Construction Noise and Vibration Management Plan as required by condition D31.						
D6	Pre and post-construction building condition surveys shall be undertaken by an appropriately qualified professional to identify the condition of at risk buildings. The results of the pre and post construction building condition surveys shall be incorporated into the Construction Noise and Vibration Management Plan as required by condition D31. Measures to address identified degradation in building condition as a result of vibration during construction of the project shall be provided.						
Construction Hours							
D7	<p>Except as permitted by an EPL, construction activities associated with the SSI shall be undertaken during the following standard construction hours:</p> <ul style="list-style-type: none"> (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and 						

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	(b) 8:00am to 1:00pm Saturdays; and (c) at no time on Sundays or public holidays.						
D8	<p>Except as permitted by an EPL, high noise impact works and activities (including, but not limited to piling and saw cutting) shall only be undertaken:</p> <p>(a) between the hours of 8:00 am to 6:00 pm Monday to Friday; (b) between the hours of 8:00 am to 1:00 pm Saturday ; and (c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.</p> <p>For the purposes of this condition 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.</p>						
D9	<p>Notwithstanding conditions D7 and D8 construction works outside of the standard construction hours may be undertaken in the following circumstances :</p> <p>(a) construction works that generate:</p> <p>(i) LAeq(15 minute) noise levels no more than 5 dB(A) above rating background level at any residence in accordance with the <i>Interim Construction Noise Guideline</i> (Department of Environment and Climate Change, 2009); and (ii) LAeq(15 minute) noise levels no more than the noise management levels specified in Table 3 of the <i>Interim Construction Noise Guideline</i> (Department of Environment and Climate Change, 2009) at other sensitive receivers; and (iii) continuous or impulsive vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.2 of <i>Assessing Vibration: a technical guideline</i>; and (iv) intermittent vibration values, measured at the most affected residence , that are no more than those for human exposure to vibration, specified for residences in Table 2.4 of <i>Assessing Vibration: a technical guideline</i>; or (b) where a negotiated agreement has been reached with affected receivers, where the prescribed noise and vibration levels cannot be achieved; or for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or where it is required in an emergency to avoid injury or the loss of life, property and/or to prevent environmental harm; or (e) construction works approved through an Out-Of-Hours Protocol prepared as part of the Construction Noise and Vibration Management Plan required by condition D31 (approved by the Secretary); or (f) works approved through an EPL.</p>						
Construction Noise and Vibration							
D10	<p>The SSI shall be constructed with the aim of achieving the construction noise management levels detailed in the <i>Interim Construction Noise Guideline</i> (Department of Environment and Climate Change, 2009) . All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan required under condition D31.</p> <p><i>Note: The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the construction NML.</i></p>						
D11	<p>The SSI shall be constructed with the aim of achieving the following construction vibration goals:</p> <p>for structural damage to heritage structures, the vibration limits set out in the German Standard <i>DIN 4150-3: Structural Vibration - effects of vibration on structures</i>;</p> <p>(a) for damage to other buildings and/or structures, the vibration limits set out in the British Standard <i>BS 7385-2:1993 Evaluation and measurement for vibration in buildings – Guide to damage levels from groundborne vibration</i> (as referenced in Australian Standard <i>AS 2187.2-2006 Explosives – Storage and use - Use of Explosives</i>); and (b) for human exposure, the acceptable vibration values set out in the <i>Environmental Noise Management Assessing Vibration: A Technical Guideline</i> (Department of Environment and Conservation, 2006).</p>						

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D12	Where feasible and reasonable, piling activities shall be undertaken using quieter alternative methods than impact or percussion piling, such as bored piles or vibrated piles.						
D13	Where feasible and reasonable, operation noise mitigation measures shall be implemented at the start of construction (or at other times during construction) to minimise construction noise impacts.						
AIR QUALITY							
D14	The SSI shall be constructed in a manner that minimise dust emissions from the site, including wind-blown and traffic-generated dust and tracking of material onto public roads. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.						
HERITAGE							
D15	This approval does not allow the Proponent to destroy, modify or otherwise physically affect human remains as part of the SSI. Where previously un-identified heritage items are discovered during construction of the SSI, all work should stop in the affected area and a suitably qualified and experienced heritage expert should be contacted to provide specialist heritage advice. The measures to consider and manage this process, should be specified in the Construction Heritage Management Plan required by condition D31 including approvals and, where relevant, notification of the Heritage Council of NSW in accordance with section 146 of the <i>Heritage Act 1977</i> or registration in the OEH's Aboriginal Heritage Information Management System (AHIMS) register.						
TRANSPORT AND ACCESS							
D16	The SSI shall be constructed, where feasible and reasonable, to avoid the use of local roads (through residential streets) by heavy vehicles to gain access to ancillary facilities.						
D17	Access to construction compounds via local roads shall be limited to standard construction hours, where practicable.						
D18	Safe pedestrian and cyclist access through or around worksites shall be maintained during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and signposted.						
D19	Construction vehicles (including staff vehicles) associated with the SSI shall be managed to: <ul style="list-style-type: none"> (a) minimise parking or queuing on public roads; (b) minimise idling and queuing in local residential streets where practicable; and (c) adhere to the nominated haulage routes identified in the Construction Traffic Management Plan required under condition D31(c). 						
D20	Access to all properties shall be maintained during construction, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by the SSI shall be reinstated to at least an equivalent standard, unless agreed with by the property owner.						

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D21	<p>Upon determining the haulage route(s) for construction vehicles associated with the SSI, and prior to construction, a suitably qualified and experienced independent expert shall prepare a Road Dilapidation Report for all local roads utilised. The Report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the construction of the SSI. The Report shall be submitted to the Relevant council for review prior to the commencement of haulage.</p> <p>Following completion of construction, a subsequent Report shall be prepared to assess any damage to the road that may have resulted from the construction of the SSI.</p> <p>Measures undertaken to restore or reinstate roads affected by the SSI shall be undertaken in a timely manner, in accordance with the reasonable requirements of the Relevant council, and at the full expense of the Proponent.</p> <p>Note:</p> <ul style="list-style-type: none"> Nothing in this condition restricts the Proponent commencing adjustments and minor upgrades to the existing road network to cater for construction traffic and installation of temporary project signage prior to the commencement of construction. 						
BIODIVERSITY							
D22	The avoidance and mitigation measures identified in section 5 <i>WestConnex M5 – King Georges Road interchange upgrade, Biodiversity Assessment, Jacobs, October 2014</i> shall be implemented, except as required by this approval. These measures will be incorporated into the Construction Flora and Fauna Management Plan required under condition D31.						
Biodiversity Offsets							
D23	<p>The Proponent shall develop and implement a Biodiversity Offset Package. The Package shall detail how the ecological values lost as a result of the SSI will be offset (with a focus on <i>Acacia pubescence</i> (Downy Wattle)). The Package shall be consistent with the <i>NSW Principles for the Use of Biodiversity Offsets in NSW</i> (DECCW, 2008) and align, as far as is feasible and reasonable, with the Biodiversity Offset Strategy requirements of the <i>NSW Biodiversity Offsets Policy for Major Projects, 2014</i>, unless otherwise agreed by the Secretary.</p> <p>The Package shall include, but not necessarily be limited to:</p> <ol style="list-style-type: none"> the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the SSI including the consideration of indirect impacts including weed invasion and potential edge effects; the objectives and biodiversity outcomes to be achieved (including consideration of the Bankstown-Liverpool Management Site of the Saving our Species project (http://www.environment.nsw.gov.au/savingourspeciesapp/ManagementSite.aspx?SiteID=2)); the final suite of the biodiversity offset measures selected and secured; the management and monitoring requirements for the measures proposed to ensure outcomes of the package are achieved; where a vegetation offset is proposed, the monitoring of the condition of species and ecological communities at offset (including translocation) locations; the methodology for the monitoring program(s), including (where vegetation offsets are proposed) the number and location of offset monitoring sites, and the sampling frequency at these sites; provisions for the annual reporting of the monitoring results for a set period of time; and timing and responsibilities for the implementation of the provisions of the Package. <p>Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures shall be provided to collectively deliver an improved or maintained biodiversity outcome for the region.</p> <p>Where monitoring referred to in condition D23(e) indicates that biodiversity outcomes are not being achieved, remedial actions shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved.</p>						
HAZARDS AND RISK							

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D24	Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with: <ul style="list-style-type: none"> (a) all relevant Australian Standards; (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume, within the bund; and (c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997). In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.						
PROPERTY AND LANDUSE							
D25	The Proponent shall provide boundary screening at all construction compounds that adjoin or are adjacent to residential and/or commercial properties, with the objective of being consistent with the surrounding context.						
ANCILLARY FACILITIES							
D26	The location of the ancillary facilities shall be identified in the Construction Environment Management Plan required under condition D30.						
D27	Unless approved by the Secretary, the location of Ancillary Facilities shall comply with the following locational criteria: <ul style="list-style-type: none"> (a) be located more than 50 metres from a waterway; (b) be located within or adjacent to land where the SSI is being carried out; (c) have ready access to the road network; (d) be located to minimise the need for heavy vehicles to travel through residential areas; (e) be sited on relatively level land; (f) be separated from nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant); (g) not require vegetation clearing beyond that already required by the SSI; (h) not impact on heritage items (including areas of archaeological sensitivity) beyond those already impacted by the SSI; (i) not unreasonably affect the land use of adjacent properties; (j) be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and (k) provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours. 						
D28	All ancillary facilities and access points shall be rehabilitated to at least their pre-construction condition or better, unless otherwise agreed by the landowner where relevant.						
D29	The Secretary's approval is not required for minor Ancillary Facilities (e.g. lunch sheds, office sheds, and portable toilet facilities) that do not comply with the criteria set out in condition D28 and: <ul style="list-style-type: none"> (a) are located within an active construction zone within the approved SSI footprint; <u>and</u> (b) have been assessed by the Environmental Representative to be - <ul style="list-style-type: none"> (i) of low amenity risk to surrounding residences, with consideration to matters such as noise and vibration impacts, traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, <u>and</u> (ii) of low environmental risk in respect to waste management and impacts on flora and fauna, soil and water, and heritage; <u>and</u> (c) have environmental and amenity impacts that can be managed through the implementation of environmental measures detailed in the Construction Environmental Management Plan for the project 						
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN							
D30	Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement (following approval) a Construction Environmental Management Plan (CEMP) for the SSI. The CEMP is to be prepared in consultation with relevant agencies and the Relevant Council, for the approval of the						

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	<p>Secretary. The CEMP shall outline the environmental management practices and procedures that are to be followed during construction. The CEMP is to be prepared in accordance with the <i>Guideline for the Preparation of Environmental Management Plans</i> (Department of Infrastructure, Planning and Natural Resources, 2004). The CEMP shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (a) a description of activities to be undertaken during construction of the SSI (including staging and scheduling); (b) statutory and other obligations that the Proponent is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies; (c) a description of the roles and responsibilities for relevant employees involved in the construction of the SSI, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors, are aware of their environmental and compliance obligations under these conditions of approval; (d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; (e) and details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the SSI). These should include consideration of cumulative impacts in relation to staging or other major potential construction activities in the project area. In particular, the following environmental performance issues shall be addressed in the CEMP: <ul style="list-style-type: none"> (i) measures for the handling, treatment and management of hazardous and contaminated materials, if any are identified during construction; (ii) measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealing with green waste including timber and mulch from clearing activities ; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins); (iii) measures to monitor and manage hazard and risks; and (iv) the issues identified in condition D31. <p>The CEMP shall include procedures for its periodic review and update (including the sub-plans required under condition 031), as necessary (including where minor changes can be approved by the Environmental Representative) . The CEMP shall be submitted for the approval of the Secretary no later than one month prior to the commencement of construction, or as otherwise agreed by the Secretary. The CEMP may be prepared in stages; however, construction works shall not commence until written approval of the relevant stage has been received from the Secretary.</p> <p><i>Note: The approval of a CEMP does not relieve the Proponent of any requirement associated with this SS/ approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this SS/ approval, the requirements of this SS/ approval shall prevail.</i></p>						
CEMP – Sub plans							
D31	<p>As part of the CEMP for the SSI, the Proponent shall prepare and implement (following approval):</p> <ul style="list-style-type: none"> (a) a Construction Compound and Ancillary Facilities Management Plan to detail the management of site compounds associated with the SSI. The Plan shall and include but not be limited to: <ul style="list-style-type: none"> (i) a description of the facility , its components and the surrounding environment; (ii) details of the activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods; (iii) an assessment of the facility against the criteria provided in condition 027. Where proposed facilities do not meet those criteria, the assessment must justify and (where relevant) quantify potential impacts of the facility ; (iv) details of the mitigation and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts and an assessment of the adequacy of the mitigation or offsetting measures; (v) identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation) ; and (vi) appropriate monitoring, review and amendment mechanisms 						

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	<p>(b) a Construction Noise and Vibration Management Plan to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the Interim Construction Noise Guidelines (OECC, 2009) and shall include, but not be limited to:</p> <ul style="list-style-type: none"> (i) identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSI Stipulated in this approval; (ii) details of construction activities and an indicative schedule for construction works; including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas; (iii) an Out-of-Hours Work Protocol for the assessment, management and approval of works outside of standard construction hours as defined in condition D7 of this approval, for the Secretary's approval. The Out-of-Hours Work Protocol must detail: <ul style="list-style-type: none"> (A) assessment of out-of-hours works against the relevant noise and vibration criteria, (B) detailed mitigation measures for any residual impacts (that is, additional to general mitigation measures), including extent of at-receiver treatments, and (C) proposed notification arrangements; (iv) identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts); (v) procedures and mitigation measures to ensure relevant vibration criteria are achieved, including applicable safe working distances for vibration intensive works, use of low-vibration generating equipment vibration dampeners or alternative construction methodology, and pre- and post-construction dilapidation surveys of at risk structures where vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria); and (vi) a program for construction noise and vibration monitoring (including the monitoring of the effectiveness of noise and vibration mitigation measures) during construction, clearly indicating the monitoring frequency, monitoring locations, how the monitoring results would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified; (viii) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for managing and responding to noise complaints; and (ix) mechanisms for the monitoring, review and amendment of this plan. 						
	<p>(c) a Construction Traffic and Access Management Plan to ensure traffic and access controls are implemented to avoid or minimise impacts on traffic, pedestrian and cyclist access, and the amenity of the surrounding environment. The Plan shall be developed in consultation with the Traffic and Transport Liaison Group, Relevant council, emergency services, and pedestrian and bicycle user groups, and include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle/spoil haulage) on these routes; (ii) details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points; (iii) discussion of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, access to public land, property access, including details of oversize load movements, and the nature and duration of those impacts; (iv) details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cycle access; (v) details of measures to maintain or provide alternative safe and accessible routes for pedestrians throughout the duration of construction, including provision of alternate pedestrian paths where necessary; (vi) details of measures to maintain connectivity for cyclists, with particular emphasis on providing adequate access between key existing cycle routes; (vii) details of measures to manage traffic movements, parking, loading and unloading at ancillary facilities during out-of-hours work; (viii) details of methods to be used to communicate proposed future traffic changes to affected road users, pedestrians and cyclists, consistent with the Community Communication Strategy required under condition C1; (ix) an adaptive response plan which sets out a process for response to any traffic, construction or other incident; and (x) mechanisms for the monitoring, review and amendment of this plan. 						

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	<p>(d) A Construction Soil and Water Quality Management Plan to manage surface and groundwater impacts during construction of the SSI. The plan shall be developed in consultation with the EPA, and DPI (Office of Water) , Sydney Water, and Relevant councils and include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities , stormwater flows, including identification of pollutants that may be introduced into the water cycle; (ii) surface water impact assessment criteria; (iii) management and mitigation measures; (iv) a contingency plan to be implemented in the case of impacts to groundwater; (v) a contingency plan to be implemented in the case of unanticipated discovery of contaminated material; (vi) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any pollution is detected how any non- compliance can be rectified; and (vii) mechanisms for the monitoring, review and amendment of this plan. 						
	<p>(e) a Construction Heritage Management Plan to ensure construction impacts on Aboriginal and non-Aboriginal heritage will be appropriately avoided, minimised and managed. The Plan shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (i) in relation to Aboriginal Heritage: <ul style="list-style-type: none"> procedures for dealing with previously unidentified Aboriginal objects (excluding human remains), including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures, including when works can recommence , by a suitably qualified and experienced archaeologist in consultation with Department of Planning and Environment, and Aboriginal stakeholders, and assessment of the consistency of any Aboriginal heritage impacts against the approved impacts of the SSI; 						
	<ul style="list-style-type: none"> (D) procedures for dealing with human remains, including cessation of works in the vicinity, notification of Department of Planning and Environment, NSW Police Force, OEH and Aboriginal stakeholders, and commitment to cease recommending any works in the area unless authorised by the OEH and/or the NSW Police Force; (E) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal cultural heritage; and (F) procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI, in the event that previously unidentified Aboriginal objects are discovered; and <p>(ii) in relation to non-Aboriginal Heritage:</p> <ul style="list-style-type: none"> (A) procedures for dealing with previously unidentified heritage objects, (including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re- commence by a suitably qualified and experienced archaeologist in consultation with the OEH, NSW Heritage Council and Department of Planning and Environment, and assessment of the consistency of any heritage impacts against the approved impacts of the SSI; and (B) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under this approval including site identification , protection and conservation of non-Aboriginal cultural heritage; and <p>(iii) mechanisms for the monitoring, review and amendment of this plan.</p> <p>(f) a Construction Flora and Fauna Management Plan to detail how construction impacts on ecology will be minimised and managed. The Plan shall be endorsed by an appropriately qualified and experienced ecologist and in consultation with Relevant Councils, and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (i) plans for impacted and adjoining areas showing vegetation communities, important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including pre-clearing surveys to confirm the location of threatened flora and fauna species and associated habitat features ; (ii) the identification of areas to be cleared and details of management measures to avoid residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat such as: <ul style="list-style-type: none"> (A) clearing minimisation procedures(including fencing), 						

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	(B) pre-clearing and clearing procedures, (C) removal and relocation of fauna during clearing, (D) habitat tree management, and (E) construction worker education; (iii) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas; (iv) a Weed Management Strategy , incorporating weed management measures focusing on early identification of invasive weeds and effective management controls (including for those related to aquatic and riparian zones); (v) a description of how the effectiveness of these management measures would be monitored; (vi) a procedure for dealing with unexpected EEC/ threatened species identified during construction, including cessation of work and notification of the OEH, determination of appropriate mitigation measures in consultation with the OEH (including relevant re-location measures) and updating of ecological monitoring and/ or biodiversity offset requirements, and (vii) mechanism for the monitoring, review and amendment of this plan. (g) a Construction Air Quality Management Plan to detail how construction impacts on air quality will be minimised and managed. The Plan shall be developed in consultation with the EPA and shall include, but not necessarily be limited to: <ol style="list-style-type: none"> I. the identification of potential sources of dust and other emissions; II. key performance indicators; III. measures to monitor and manage dust emissions, including dust from stockpiles, and materials tracking from construction sites onto public roads; IV. strategies to minimise air emissions from off road diesel equipment , including but not limited to graders, bulldozers and loaders; V. mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds in dry weather); VI. mechanisms and procedures to be implemented in the event that adverse air quality impacts arise; VII. record keeping procedures; VIII. methods for assessing compliance against the identified key performance indicators; IX. mechanisms for reporting against key performance indicators; and X. mechanism for the monitoring, review and amendment of this plan. 						
NOISE							
Operational noise							
E1	The SSI shall be designed and operated with the objective of meeting the requirements of the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011).						
Operational Noise Review							
E2	Unless otherwise agreed by the Secretary, within six months of commencing construction, the Proponent shall, in consultation with the EPA, submit for the approval of the Secretary, a review of the operational noise mitigation measures proposed to be implemented for the SSI. The review shall: <ol style="list-style-type: none"> a) confirm the operational noise predictions of the SSI based on detailed design, including maximum night time noise events (utilising an appropriately calibrated noise model which has incorporated additional noise monitoring where necessary for calibration purposes); b) review the suitability of the operational noise mitigation measures identified in the documents listed under condition A2 to achieve the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water , 2011), based on the operational noise performance of the SSI predicted under condition E1; and c) where necessary, investigate and identify additional feasible and reasonable noise mitigation measures to achieve the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011); and d) identify all sensitive receiver locations eligible for architectural treatments . The review shall be undertaken by a suitably qualified and experienced acoustic specialist.						
Architectural Treatment at Sensitive Receivers							

Ref.	Requirement	Proponent/FH Responsibility	Timing	Document Reference	Approval of, or referral to DP&E required?	Status (e.g. Date submitted to DP&E, approval obtained, etc.)	Compliance Status
E3	Within four weeks of the Secretary's approval of the report required by condition E2, the Proponent shall write to each landowner whose property is identified as eligible for architectural treatment. If eligible, the proponent will offer to provide and fund feasible and reasonable architectural noise mitigation treatments to reduce the impact of operational traffic noise at the affected premises. The Proponent's offer shall remain open for acceptance by the affected landowner for at least six months from the date of the notification required under this condition.						
E4	Architectural treatments agreed between the parties shall be implemented within six months of reaching such an agreement.						
Operational Noise Compliance							
E5	<p>Within 12 months of the commencement of operation of the SSI, or as otherwise agreed by the Secretary, the Proponent shall undertake operational noise monitoring to compare actual noise performance of the SSI against noise performance predicted in the review of noise mitigation measures required by condition E2, and prepare an Operational Noise Compliance Report to document this monitoring. The Report shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (a) noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under condition E2 and documents specified under condition A2 of this approval; (b) a review of the operational noise levels in terms of criteria established in the NSW <i>Road Policy</i> (Department of Environment, Climate Change and Water, 2011); (c) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which SSI noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers; (d) details on average daily traffic volumes across the project area once operational during the daytime and night-time periods based on recorded observations; (e) details of any complaints and enquiries received in relation to operational noise generated by the SSI between the date of commencement of operation and the date the report was prepared; (f) any required recalibrations of the noise model taking into consideration factors such as actual traffic numbers and proportions; (g) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of feasible and reasonable mitigation measures; and (h) identification of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition E2, if required, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011), when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA. <p>The Proponent shall provide the Secretary and the EPA with a copy of the Operational Noise Report within 60 days of completing the operational noise monitoring referred to in (a) above or as otherwise agreed by the Secretary.</p>						
URBAN DESIGN AND LANDSCAPING							
E6	The ongoing maintenance of urban design and landscaping items and works implemented as part of this infrastructure approval shall remain the Proponent's responsibility unless satisfactory arrangements have been put in place for the transfer of ownership of the item or work to another authority. The Proponent will maintain items and works to the standards established in the Urban Design and Landscape Plan required under condition 816, unless and until landscaping items have been transferred						
OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN							
E7	Prior to the commencement of operation, or as otherwise agreed by the Secretary, the Proponent shall review and (if necessary) revise the Operational Environmental Management Plans that cover the project area. Any revised Operational Environmental Management Plan shall be provided to the Secretary.						
PART B. COMPLIANCE WITH EIS AND SUBMISSIONS REPORT							
TRAFFIC AND ACCESS							
TT-1	A traffic and transport liaison group would be established prior to commencement of construction. The traffic and transport liaison group would be consulted during preparation of the construction traffic management plan to ensure impacts are minimised.						
TT-2	A construction traffic management plan would be developed, approved, implemented and monitored as part of the project. The construction traffic management plan would focus on maintaining general traffic flow and specifying appropriate site						

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	<p>accesses and construction traffic routes. It would include:</p> <ul style="list-style-type: none"> • Traffic Control Plans showing the access arrangements and the detail of required signs and devices • Traffic Control Plans showing the access arrangements and the detail of required signs and devices • Vehicle Management Plans showing access to work sites and direction of travel • Pedestrian and Cyclist Management Plans • Management strategy for other road users • Management strategy for access to adjacent properties • Hours of operation, including prohibitions on queuing outside sites prior to commencement of working hours • Road safety audit requirements • Any localised improvements/ adjustments to existing traffic management arrangements. 						
TT-3	Construction staging and temporary works would be developed and implemented to minimise conflicts with the existing road network and to maximise the separation between work areas and travel lanes						
TT-4	Lane occupancies would be planned with the aim of minimising the actual work area, limiting obstructions and restrictions, maximising road capacity and avoiding peak traffic periods.						
TT-5	Existing motorway capacity would be maintained during the morning peak and evening peak periods by maintaining the number of through lanes.						
TT-6	Monitoring of the motorway and work sites would be undertaken using CCTV and mobile patrols where required to assist management of incidents.						
TT-7	A Pedestrian and Cyclist Management Plan would be prepared as part of the Traffic Management Plan. Alternate routes would be communicated to pedestrians and cyclists.						
TT-8	Access to existing shared paths would be maintained subject to the need for temporary diversions.						
NOISE AND VIBRATION							
NV-1	Implementation of new noise barrier and increased height of existing noise barrier as identified in Table 5.4 and shown on Figure 5.1 to Figure 5.3, and subject to refinement during detailed design.						
NV-2	<p>Within 12 months of the commencement of operation of the project an operational noise review would be undertaken. This would include:</p> <ul style="list-style-type: none"> • Monitoring to compare actual noise performance of the project against predicted noise performance. • An assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of all feasible and reasonable mitigation measures. • Identification of any additional feasible and reasonable measures that would be implemented with the objective of meeting the criteria in the NSW Road Noise Policy (EPA 2011), when these measures would be implemented and how their effectiveness would be measured and reported. 						
NV-3	<p>A Construction Noise and Vibration Management Plan (CNVMP) would be prepared for the project. The CNVMP would:</p> <ul style="list-style-type: none"> • Assist in ensuring that the noise during construction complies where possible with the construction noise management levels set for the project • Determine noise and vibration monitoring, reporting and response procedures • Describe specific mitigation treatments, management methods and procedures to be implemented to control noise and vibration during construction such as those identified in this EIS • Describe construction timetabling to minimise noise impacts including time and duration restrictions, respite periods and frequency • Describe procedures for notifying residents of construction activities likely to affect their amenity through noise and vibration • Define contingency procedures to be implemented in the event of non-compliances and/or noise complaints. <p>In developing the CNVMP, the construction contractor must identify measures to minimise noise impacts associated with removing existing noise walls. Measures may include use of temporary noise barriers where feasible.</p>						
NV-4	<p>The following vibration mitigation measures would be specifically considered during the preparation of the CNVMP:</p> <ul style="list-style-type: none"> • Relocate vibration generating plant and equipment to areas within the site in order to lower the vibration impacts • Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment • Use lower vibration generating items of excavation plant and equipment e.g. smaller capacity rock breaker hammers • Minimise consecutive works in the same locality (if applicable) • Use dampened rock breakers and/or 'city' rock breakers to minimise the impacts associated with rock breaking works • If vibration intensive works are required within the safe working distances, conduct vibration monitoring or attended vibration trials to ensure that levels remain below the cosmetic damage criterion 						

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	<ul style="list-style-type: none"> Conduct building condition surveys both before and after the works to identify existing damage and any damage due to the works. 						
NV-5	All work would be undertaken in accordance with <i>RMS Practice Note VII of the ENMM – Roadworks Outside Normal Working Hours</i> . Practice Note VII outlines a series of construction programming requirements to assist mitigating noise impacts to nearby receivers.						
FLORA AND FAUNA							
FF-1	Existing cleared areas would be used for laydown and stockpile sites and existing access roads and tracks would be utilised for site access where possible.						
FF-2	There would be no vegetation removal to accommodate the Penshurst Road construction site (Windara Reserve) and no compound or laydown facilities under the drip-line of trees.						
FF-3	A Flora and Fauna Management Plan would be developed for the project. The plan would include procedures for pre-clearance surveys that are consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011).						
FF-4	A detailed landscape plan would be prepared for the project. The landscape plan would build on the findings of the Urban Design, Landscape Character and Visual Working Paper (Appendix I) and would include detailed species and planting guides.						
FF-5	Pre-clearing surveys would be undertaken by an experienced ecologist to identify any nesting/roosting animals present in the project area.						
FF-6	The construction footprint would be identified and marked before construction and exclusion zones established in retained areas of habitat particularly in remnant vegetation and Downy Wattle locations.						
FF-7	An unexpected threatened species finds procedure would be developed consistent with the Roads and Maritime Biodiversity Guidelines and incorporated into project environmental management documentation.						
FF-8	Alternate mitigation measures to protect Downy Wattle plants, such as contributions to the improvement of local populations would be investigated						
FF-9	In circumstances where the handling of fauna is completely unavoidable, best practice methods need to be followed as outlined in the Roads and Maritime Biodiversity Guidelines – Guide 9 Fauna Handling (RTA 2011).						
FF-10	A weed management plan consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011) would be developed as part of the construction environmental management plan. The weed management plan would include descriptions and mapping of major weed infestations and appropriate management actions to be undertaken in relation to each infestation.						
FF-11	Measures to prevent the spread of pathogens would be detailed in the construction environmental management plan. Measures would be consistent with Roads and Maritime Biodiversity Guidelines – Guide 7 Pathogen Management (RTA 2011).						
FF-12	Upgrading the water quality pond (near Kirrang Street) would include revegetation post-construction to reinstate the habitat value at the site.						
SOCIO ECONOMIC							
SE-1	Undertake on-going consultation, in accordance with the Draft Community Consultation Framework (refer Appendix D), with local business owners about the timing, duration and likely impact of construction activities and to identify appropriate measures to manage potential impacts.						
SE-2	Any community areas that are impacted during construction would be restored to their original condition and use after construction. Develop and implement traffic management plans with particular consideration to school pick-up and drop-off times. The design and layout of the compound sites would seek to minimise potential impacts on public reserve areas						
SE-3	Where feasible and reasonable construction parking would be limited to facility sites to minimise the impact on public parking. Where this is not feasible and reasonable, measures would be implemented to support construction worker access to the site while retaining local parking facilities for local residents and businesses. Construction worker parking would be restricted on Shorter Avenue Access to properties near the project during construction would be maintained at all times. Where temporary changes to property access are required, alternate access would be determined in consultation with affected property owners and tenants.						
SE-4	Where access cannot be maintained along existing pedestrian and cycle paths during construction, users would be consulted regarding alternate routes, timing for their implementation and the alternate routes would be clearly sign-posted.						
VISUAL AMENITY, BUILT FORM AND URBAN DESIGN							

Ref.	Requirement	Proponent/FH Responsibility	Timing	Document Reference	Approval of, or referral to DP&E required?	Status (e.g. Date submitted to DP&E, approval obtained, etc.)	Compliance Status
V-1	Design of project elements would be consistent with the urban design vision, objectives and principles for the project and the <i>WestConnex Draft Urban Design Framework (RMS 2013)</i> .						
V-2	The landscape design for the project would consider the M5 South.						
V-3	Incorporate landscape maintenance and management requirements into the existing landscape maintenance plans for the M5 Motorway.						
V-4	A detailed landscape plan would be prepared for the project. The landscape plan would build on the findings of the Urban Design, Landscape Character and Visual Working Paper (Appendix I) and the RMS Landscape Guidelines. The landscape plan would include detailed species and planting guides and consideration of refurbishment of existing landscaped areas in the project area.						
V-5	Noise walls would be designed and constructed consistent with the RMS Noise Wall Guidelines (RMS 2007). Where an existing noise wall requires removal prior to the introduction of a new noise wall, the new walls would be introduced as soon as practicable following removal of existing noise walls to ensure minimal impact on residents						
V-6	Consideration would be given to reducing the gradient of existing steep batter slopes to facilitate an increased planting response and greater accessibility for maintenance.						
V-7	The widening of bridges at Peshurst Road and Cooloongatta Road would be consistent with RMS <i>Bridge Aesthetics Design Guideline (RMS 2012b)</i>						
V-8	Design for the Peshurst Road and Cooloongatta Road bridges would incorporate CPTED principles						
V-9	Design of pedestrian and bicycle ways would incorporate CPTED principles.						
V-10	Provide tree protection to significant trees and vegetation to protect trees from damage during construction and retain trees and vegetation to minimise visual impacts.						
V-11	All vegetation between construction sites and adjacent residential areas would be retained where practicable to screen views.						
V-12	Landscaping and restoration would occur at each site upon completion of construction activities.						
ABORIGINAL HERITAGE							
AH-1	Before the start of construction, all personnel working on site would be trained regarding the procedure for unexpected finds of Aboriginal objects and about their responsibilities in accordance with the <i>National Parks and Wildlife Act 1974</i> .						
AH-2	Should Aboriginal cultural heritage items be uncovered during construction, the RMS Unexpected Archaeological Finds Procedure (RMS 2012) would be followed. All work in the vicinity of the find would cease and the RMS Aboriginal Cultural Heritage Advisor would be contacted immediately. Works in the vicinity of the find would not recommence until clearance is received.						
AH-3	Project environmental management plans would identify procedures for management of any possible human skeletal remains. In the event that possible human skeletal remains are revealed, work would cease in the affected area and the reported to the NSW Police, the Office of Environment and Heritage and Aboriginal stakeholders.						
NON-ABORIGINAL HERITAGE							
HH-1	Before the start of construction, all personnel working on site would be trained regarding the procedure for unexpected finds of archaeological objects and about their responsibilities in accordance with the Heritage Act 1977.						
HH-2	If any unanticipated archaeological deposits are identified within the study area during construction, works should cease in the immediate area and the Roads and <i>Maritime Unexpected Archaeological Finds Procedure 2012</i> should be followed.						
AIR QUALITY							
AQ-1	Emissions from construction activities would be managed by: <ul style="list-style-type: none"> Engines of on-site vehicles and plant would be switched off when not in use. Where practicable, vehicles would be fitted with pollution reduction devices. Vehicles would be maintained and serviced according to manufacturer's specifications. All off road diesel equipment will meet best available diesel emissions standards or be fitted with an appropriate diesel exhaust treatment device where possible. Where possible lower vibration generating items of excavation plant and equipment would be used (eg smaller capacity rockbreaker hammers). 						
AQ-2	Dust from construction activities would be managed by:						

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	<ul style="list-style-type: none"> Area of exposed surfaces would be minimised during construction Measures (including watering or covering exposed areas) would be used to minimise or prevent dust. Stockpiles or areas that may generate dust are to be managed to suppress dust emissions in accordance with the Roads and Maritime Stockpile Site Management Guideline (2011). Communications material such as the project website and community notification would include a contact person and phone number to enable complaints to be received and responded to Rehabilitation of completed sections would be undertaken as soon as practicable. 						
AQ-3	Dust from construction haulage activities would be managed by: <ul style="list-style-type: none"> Vehicle traffic would be restricted to designated routes which can be managed by regular watering or street cleaning and with appropriate speed limits. Wheel wash or grids would be located near exit points to minimise mud/ dirt track out. Street cleaning would be undertaken to remove dirt tracked onto sealed roads. Vehicle loads would be covered when transporting material off site. 						
HYDROLOGY AND FLOODING							
HF-1	Drainage structures would be designed to convey flows with consideration of appropriate blockage factors and overflow/diversion routes. Appropriate scour protection measures would be implemented along any temporary drainage lines within the project construction area.						
HF-2	The key recommendations of the pavement drainage strategy would be considered throughout detailed design and construction to minimise impacts to infrastructure and receivers located near the project						
HF-3	Any disturbance to the vegetated drainage line in Windara Reserve would be rehabilitated post construction						
GEOLOGY, SOILS AND WATER							
GSW-1	A Soil and Water Management Plan (SWMP) would be prepared to identify all risks relating to soil erosion, and pollution caused by sediments and other materials, and describe how these risks would be addressed during construction. The SWMP would be guided by: <ul style="list-style-type: none"> Roads and Maritime Code of Practice for Water Management, the Roads and Maritime Erosion and Sedimentation Procedure The NSW Soils and Construction – Managing Urban Stormwater Volume 1 “the Blue Book” (Landcom, 2004) and Volume 2 (DECC, 2008). Roads and Maritime Technical Guideline: Temporary Stormwater Drainage for Road Construction, 2011. Roads and Maritime Technical Guideline: Environmental Management of Construction Site Dewatering, 2011. 						
GSW-2	Construction activities would be staged in a manner that would minimise areas of soil exposed during construction wherever practicable						
GSW-3	All stockpiles would be designed, established, operated and decommissioned in accordance with <i>the Roads and Maritime Draft Stockpile Management Procedures, 2011</i> .						
GSW-4	Emergency wet and dry spill kits would be kept on site at all times and all staff would be made aware of the location of the spill kit and trained in its use.						
GSW-5	Should any groundwater be encountered and need to be disposed during construction, disposal would be undertaken in accordance with Technical Guideline – Environmental management of construction site dewatering (EMS-TG-011) (RMS 2011).						
CWR-1	Excavated material (contaminated or potentially contaminated) that is not suitable for on-site reuse or that cannot be retained/managed on site would be transported to a site that can legally accept that material for disposal. Soils/construction materials leaving the site would be waste classified and/or assessed so that correct resource recovery and or off-site disposal occur.						
CWR-2	The waste minimisation hierarchy principles of avoid/reduce/re-use/ recycle/dispose would be used						
CWR-3	A project-specific <i>Construction Waste and Energy Management sub-plan</i> (RWMP) would be prepared before construction						
CWR-4	All wastes, including contaminated wastes, would be identified and classified in accordance with Environmental Guidelines: <i>Assessment, Classification and Management of Liquid and Non-Liquid Wastes</i> .						
CWR-5	Trees and plant material would be mulched or chipped on-site and used in landscaping where practicable to stabilise disturbed soils where possible.						

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CWR-6	A dedicated washout facility that is impervious would be provided during construction so that runoff from the washing of concrete machinery, equipment and concrete trucks can be collected and disposed of at an appropriate waste facility.						
CWR-7	All wastes would be managed in accordance with the <i>Protection of the Environment Operations Act 1997</i> .						
CWR-8	Types of waste collected, amounts, date/time and details of disposal are to be recorded in a waste register.						
CWR-9	Workspaces would be maintained, kept free of rubbish and cleaned up at the end of each working day.						
CWR-10	Wherever feasible and reasonable, construction material would be sourced from within the Sydney region.						
CWR-11	Recovery of resources for reuse. Waste materials generated by the project would be re-used either on-site or off-site where possible, including the re-use of top soil in landscape works, and the use of mulch for erosion and sediment controls. Where applicable, wastes would be re-used in accordance with the conditions attached to relevant Resource Recovery Exemptions issued by the EPA.						
GREENHOUSE GAS							
GHG-1	The construction contractor would identify recycled materials (such as recycled aggregates in road pavement and surfacing; steel with recycled content) for use in construction or operation of the project where they are cost, quality and performance competitive (refer CWR-4 in section 9.11).						
GHG-2	The procurement process would consider the fuel efficiency of construction plant, equipment and vehicles in selecting a preferred supplier. Where the most fuel efficient item is not selected, justification must be documented and approved as part of the procurement process prior to purchase.						
GHG-3	The feasibility of using biofuels (biodiesel, ethanol, or blends such as E10 or B80) would be investigated by the contractor, taking into consideration the capacity of plant and equipment to use these fuels, ongoing maintenance requirements, and local sources of biofuel.						
GHG-4	A Resource and Waste Management Plan (RWMP) would be prepared to maximise re-use and recycling of construction and demolition waste. Re-use of excavated road materials would be maximised as far as possible where it is cost, quality and performance competitive to reduce material use (and embedded energy).						
GHG-5	Locally produced goods and services would be procured where feasible and cost effective to reduce transport fuel use.						
GHG-6	Assess opportunities to use renewable energy sources to power control systems, lighting and signage.						
CUMULATIVE IMPACT							
CI-1	Consultation will be undertaken with local communities potentially affected by the impact of multiple projects in addition to the M5 King Georges Road Interchange Upgrade.						
CI-2	Where relevant, consultation will be undertaken with proponents of other nearby projects to increase the overall awareness of project timeframes and impact.						

Appendix B

Nonconformity Procedure

PURPOSE

The purpose of this procedure is to ensure that all defects, shortcomings or failures to meet requirements (nonconformities) associated with Fulton Hogan's systems, processes, products or services are dealt with in a consistent and effective manner.

Nonconformities are identified by observations, reviews, inspections, tests, audits, or concerns raised by Clients or other parties.

When nonconformity is identified it shall be:

- recorded and reported
- reviewed
- investigated (where appropriate)
- defects shall be rectified or resolved, and
- corrective or preventive actions shall be implemented and their effectiveness verified

SCOPE

This procedure applies to all Fulton Hogan employees addressing nonconformity.

This procedure outlines the specific requirements for all actual or potential nonconformities. Nonconformities may occur in relation to quality, safety, environment or any other matter.

Fulton Hogan uses CAMs (the Case and Action Management system) for the capture, management and action of ALL nonconformities and as well as other types of case. The use of this system is described in the *Case and Action Management Procedure*.

PROCEDURE

Responsibility

Overall responsibility for dealing with nonconformity rests with the line manager to which the nonconformity applies. That manager should be selected as the Case Owner in CAMs. Refer to *Case and Action Management Procedure* for the more details of the responsibilities of the Case Owner.

It is the responsibility of the Case Owner to:

- review and, if necessary, edit the recorded details
- liaise with relevant stakeholders and determine the appropriate action to rectify or correct the detected nonconformity
- facilitate an investigation into the nonconformity (if required) and determine the root cause and any contributing factors
- determine what corrective action should be taken to eliminate the cause and prevent recurrence of the nonconformity
- assign tasks for the corrective actions, and
- close the CAMs case.

Raising a Nonconformity Report

The person raising a nonconformity report shall record the details:

- directly into CAMs
- on a CAMs Report Form, and
- in another approved electronic system when specifically required.

Notwithstanding the above, all nonconformities must be captured as cases in CAMs regardless of whether they have also been recorded in system or form.

Nonconformity of Product or Service

Where nonconformity of product or service is detected the product will be "quarantined" or the service put on hold until the necessary rectification and corrective actions (if relevant) have been agreed, implemented and verified to the satisfaction of the Client or authority.

If the line manager determines that nonconformity can be rectified by using the original process, this need not be referred to the Client. However, all rework will be subject to inspection and the prescribed testing and approval prior to work progressing to the next stage.

If the nonconformity cannot be rectified by simple rework, details of the case, including rectification and corrective actions, will be submitted to the Client or authority for their information, agreement and approval as required.

The estimated cost for any product or service nonconformities should be recorded in CAMs. A mandatory process for this is being considered as part of the quality strategy.

Nonconformity of System or Process or Potential Nonconformity

In some cases nonconformity does not give rise to a defective product or service; it may be that a system or process is noncompliant or has the potential to give rise to a nonconforming product or service.

Such cases are dealt with in a similar manner to other nonconformities except that the focus is on identifying appropriate corrective actions to make sure the system or process is compliant or preventive actions to ensure that potential nonconformity is avoided.

Witness Points and Hold points

Continuing work beyond a witness point or hold point without prior authorisation by the Client constitutes a deviation from the specification. However, there may be a number of reasons that this may be considered, such as:

- the Client or the Client's representative being unavailable at the time the authorisation is required
- time lag for producing/obtaining evidentiary documentation.
- weather conditions
- follow on of trades
- avoidance of delays.

In such circumstances the line manager should consider the potential consequences, taking into account:

- the likelihood of non-acceptance of the work, product or service by the Client;
- the cost of any rework required to ensure compliance and acceptance;
- the need to supply additional supporting test data;
- costs of delaying the work;
- the effect on the relationship with the Client;
- safety, environmental and follow-on quality issues;
- any other relevant issues.
- the risk of adverse consequences is significant but the line manager decides to proceed with the work, they shall classify this as a nonconformity and create a CAMs case accordingly.

Client Concerns

Where a Nonconformity Report (NCR), Non-compliance (NC), or Corrective Action Request (CAR) has been raised by the Client, Fulton Hogan shall record this as nonconformity in CAMs and manage the case accordingly. For Potential Nonconformities and Opportunities for Improvement, these shall be addressed as per Section 3.4.

Closing the CAMs Case for a Nonconformity

Prior to closing the case the Case Owner shall confirm that:

- requirements have been met
- actions have been properly completed and verified
- required agreements and approvals have been obtained
- the necessary details have been properly recorded.

Potential Nonconformities and Opportunities for Improvement

The quality managers and line managers shall where necessary identify opportunities for improvement, and analyse and eliminate potential causes of nonconformities by reviewing available information such as:

- specifications and drawings
- processes
- concerns
- suggestions for improvement
- reports (CAMs cases)
- reporting and trend analysis from CAMs
- reports (internal, second and third party)

Proposals for eliminating potential for nonconformities or suggestions for improvement shall be reviewed by the relevant managers and, if viable, recorded in CAMs for action.

Preventive measures or improvements can be implemented by:

- of work methods, business systems, operational tasks, use of plant & equipment and other activities

- toolbox meetings
- focus groups
- operational improvement programmes
- and implementation of procedures and associated documents
- and training
 - dissemination of information at toolbox meetings
 - development of skills and competence
 - applicable details of Potential Nonconformities and Opportunities for Improvement can be raised and discussed at Management Review Meetings.

Nonconformity Registers

A register of nonconformities related to a particular project or department can be generated through the **Reports** tab in CAMs.

Management Review

The quality managers and line managers will report to management review meetings on:

- schedule and results
- of nonconformity cases
- of rectification
- in nonconformity
- for nonconformity and opportunities for improvement

(refer to the *Management Review Procedure* for further information on this process).

Monthly Reporting

The Regional Quality Manager is required to report the status of nonconformity cases to Fulton Hogan's Quality Management Representative on a monthly basis for review by the Executive.

Reports and Dashboards

CAMs can provide an extensive range of reports and views information. These include:

- Register
- reports for client or authority approval of case and actions

DEFINITIONS

CAMs

Case and Action Management System; Fulton Hogan's electronic system for recording and managing nonconformities, incidents and other opportunities for improvement

Case

A CAMs case is used to record nonconformity but may also refer to:

- that happened – an incident
- observation
- comment, suggestion or idea
- query or problem.

Hold Point

A mandatory verification point beyond which a work process may not proceed without the authorisation of the Client's representative.

Client

A person or party having a signed agreement for Fulton Hogan to provide products or services.

Nonconformity

Also referred to as 'non-compliance', nonconformity is the result of non-fulfilment of a specified requirement and includes defects in product or service.

Project Centre

A web-based project delivery system for project management, document control, contract administration, financial management etc., used by Fulton Hogan Construction.

Qantrol

A database required to be used by some Fulton Hogan construction projects in NSW and Qld for managing quality assurance

Rectification

Also referred to as 'correction', rectification is an action to fix a nonconforming product or service. This may involve repair, upgrade, replacement, or modification, and may require the approval from a client or authority before the correction can be implemented.

Witness Point

A Witness point is an identified point in the work process where the Client may review, witness, inspect or undertake tests on any component, method or process of works.