



Transport
Roads & Maritime
Services

Compliance Tracking Program

Windsor Bridge Replacement Project

JULY 2019



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Appendices

Appendix A Conditions of Approval

Appendix B Environmental Management Measures

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Glossary / Abbreviations

CEMP	Construction environmental management plan
CoA	Condition of Approval
CTP	Compliance Tracking Program
DP&E	Department of Planning and Environment
EIS	Environmental Impact Statement
EPA	NSW Environment Protection Authority
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>
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
Georgiou	Georgiou Group
Non-compliance	Failure to comply with the requirements of the Project approvals 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.
Project, the	Windsor Bridge Replacement Project
Roads and Maritime	Roads and Maritime Services
Secretary	Secretary of the NSW Department of Planning and Environment (or delegate)
SPIR	Submissions / Preferred Infrastructure Report

1 Introduction

1.1 Background

This Compliance Tracking Program (CTP) has been prepared to address the requirements of the Condition of Approval (CoA) D6 of the Windsor Bridge Replacement Project (the Project). The CTP describes the approach adopted to track compliance with the requirements of the Project Approvals (Appendix A) and the environmental management measures (Appendix B) during the pre-construction, construction and operation of the Project.

The Project is being constructed by Georgiou Group (Georgiou) with overall project management and supervision of the Project by Roads and Maritime Services (Roads and Maritime).

Georgiou and Roads and Maritime are jointly responsible for compliance under the CTP.

1.2 Project description

This Windsor Bridge Replacement Project (refer Figure 1-1) will involve:

- Construction of a new bridge over the Hawkesbury River at Windsor, around 35 metres downstream of the existing Windsor Bridge;
- Construction of new approach roads and intersections to connect the new bridge to existing road network;
- Modifications to local roads and access arrangements, including changes to the Macquarie Park access and connection of The Terrace;
- Construction of pedestrian and cycling facilities, including a shared pedestrian/cycle pathway for access to and across the new bridge;
- Removal and backfilling of the existing bridge approach roads;
- Demolition and removal of the existing road bridge, known as Windsor Bridge;
- Urban design and landscaping works, including within the parkland area of Thompson Square and adjacent to the northern intersection of Wilberforce Road, Freemans Reach Road and the Macquarie Park access road; and
- Ancillary works such as public utility adjustments, water management measures and scour protection works, as required.

1.3 Construction activities and sequence

Typically, the following sequences of activities are anticipated:

- **Pre-construction** - Salvage and interpret any impacted heritage sites, including historical archaeologically significant sites including sites within the Thompson Square Conservation Area and archaeological sites;
- **Site establishment** – installing boundary fencing, construction facilities, environmental controls and carrying out pre-clearing vegetation fauna surveys;
- **Relocation or protection of services** – relocating and protecting electricity, gas, water and telecommunications infrastructure affected by the Project;
- **Site preparation** – clearing and grubbing, topsoil stripping and storage;
- **Earthworks** – undertaking cut and fill works along the alignment to achieve desired levels, removal of unsuitable material, batter and embankment shaping;
- **Structures** – building the new bridge and drainage;
- **Pavements** – forming sub and base layers and construction final pavement finishes;
- **Road furniture** – installing signage, line marking and safety barriers;
- **Demolition** – demolition of the existing bridge;

- **Landscaping and restoration** – reuse of topsoil, planting of native plants and seeding disturbed areas with native and cover crops species (note this will take place throughout construction as elements of the project are complete where ongoing disturbance is not anticipated); and
- **Open to traffic** – commissioning of the new bridge, bridge approaches, new intersections and related infrastructure.

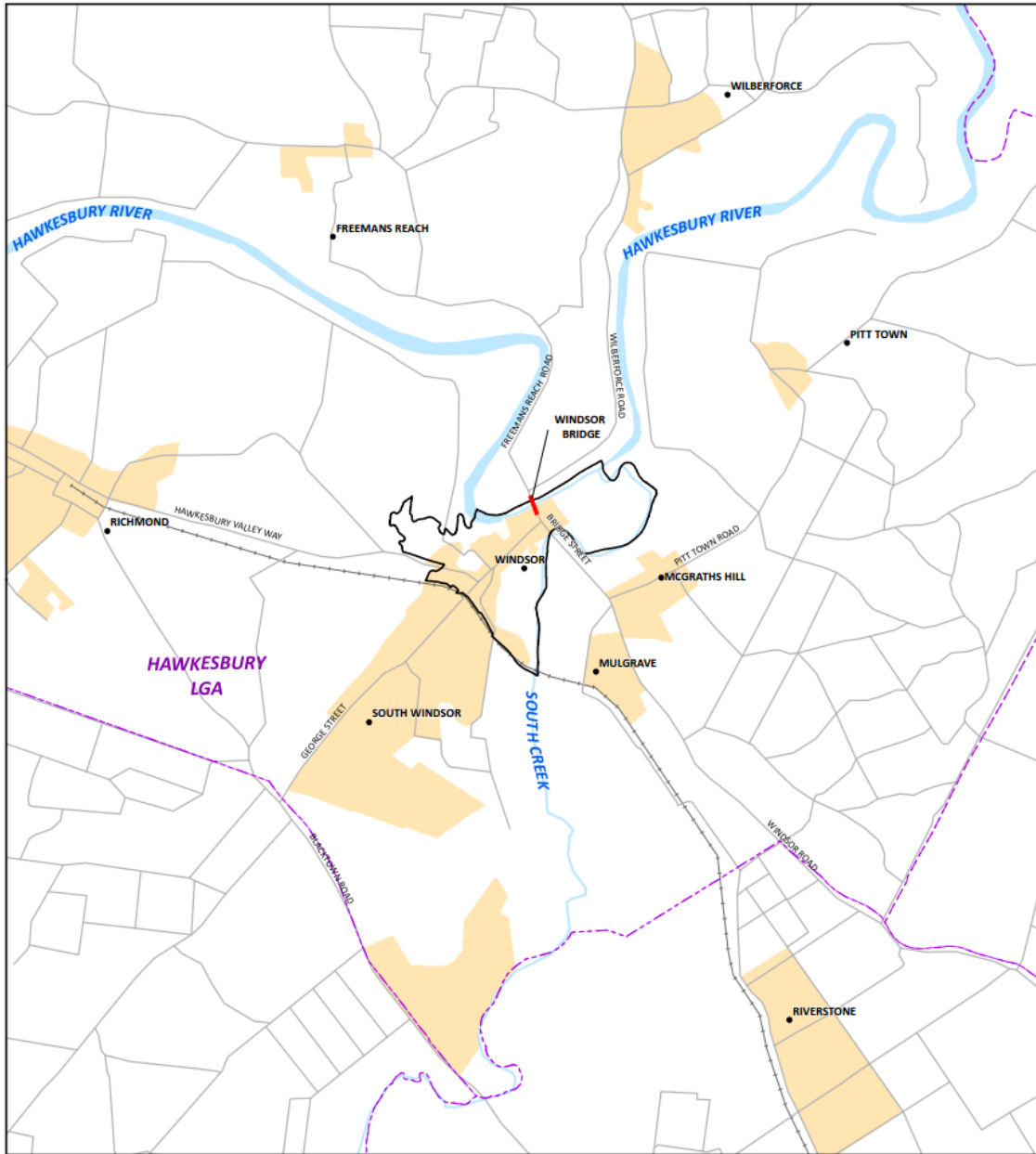
1.4 Environmental management system overview

The Construction Environmental Management Plan (CEMP) is the primary plan to manage and control the environmental aspects of the Project during 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 conditions in the Project Approvals, safeguards and mitigation measures presented in the EIS 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 part of the suite of environmental management documents prepared for the Project.

1.5 Project Approval Documentation

Documentation relevant to the CTP includes:

- Windsor Bridge Replacement Project – Environmental Impact Statement (SKM, November 2012);
- Windsor Bridge Replacement Project – Submissions Report incorporating Preferred Infrastructure Report (SPIR) (SKM, April 2013); and
- Infrastructure Approval SSI-4951 (approved by the Minister for Planning and Infrastructure on 20 December 2013).



- LEGEND**
- Windsor State Suburb Boundary
 - Urban area
 - LGA boundary
 - River
 - Major road
 - Railway

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GDA 1994 | MGA Zone 56
 A4 1:80,000

0 3
 Kilometres



Figure 1-1 Location of the Windsor Bridge Replacement Project

2 Compliance Tracking Program

The requirements of CoA D6 are listed in Table 2-1, together with the cross-reference to where the requirement is addressed in this CTP.

Table 2-1 CoA D6 Compliance Tracking

CoA No.	Condition Requirements	Reference
D6	The Applicant shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this consent. The Program shall be submitted to the Director-General for approval prior to the commencement of construction and relate to both the construction and operational phases of the project, and include, but not necessarily be limited to:	This document
D6(a)	Provisions for the notification of the Director-General of the commencement of works prior to the commencement of construction and prior to the commencement of operation of the project (including prior to each stage, where works are being staged);	Section 2.1
D6(b)	Provisions for periodic reporting of compliance status against the requirements of this consent, including the Statement of Commitments, to the Director-General including at least one month prior to the commencement of construction and operation of the project and at other intervals during the construction and operation, as identified in the Program;	Section 2.2
D6(c)	A program for independent environmental auditing in accordance with /ISO 19011:2003 - <i>Guidelines for Quality and/ or Environmental Management Systems Auditing</i> ;	Section 2.3
D6(d)	Mechanisms for reporting and recording incidents and actions taken in response to those incidents;	Section 2.4
D6(e)	Provisions for reporting environmental incidents to the Director-General during construction and operation; and	Section 2.5
D6(f)	Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management.	Section 2.6

2.1 D6 (a) Notification of the Secretary

D6 (a) Provisions for the notification of the Director-General of the commencement of works prior to the commencement of construction and prior to the commencement of operation of the project (including prior to each stage, where works are being staged);

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

Roads and Maritime will advise the Secretary and Hawkesbury City Council in writing prior to the commencement of construction and prior to the commencement of operation.

2.2 D6 (b) Compliance Reporting

D6 (b) Provisions for periodic reporting of compliance status against the requirements of this consent, including the Statement of Commitments, to the Director-General including at least one month prior to the commencement of construction and operation of the project and at other intervals during the construction and operation, as identified in the Program;

Roads and Maritime with assistance from Georgiou will provide periodic reporting of compliance status against the requirements of the CoA and the revised Environmental Management Measures to the Secretary in the form of a bi-annual Compliance Tracking Report.

The Compliance Tracking Reports will be provided to the Secretary:

- One month prior to the commencement of construction of the project (included as part of the submission of the CTP);
- Bi-annually during construction of the Project (bi-annual Compliance Tracking Report). The next reporting period will be July 2019 to December 2019. The bi-annual report will be submitted within 8 weeks after the end of the reporting period; and
- One month prior to the commencement of operation of the Project (Pre-Operation Compliance Tracking Report).

Operational compliance reporting will consist of the Operational Noise Report as required by CoA D9. This report will be prepared and submitted within 12 months of the commencement of operation of the Project.

The bi-annual and Pre-Operation Compliance Tracking Report will cover:

- Scope of the activities undertaken during the reporting period;
- Performance of environmental controls that have been implemented;
- Compliance with the Project Approvals;
- Any non-compliances during the reporting period;
- Details of any incidents recorded and actions 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; and
- Detail of substantiated environmental complaints received, responses taken and current status (i.e. open or closed).

Specifically, the review of compliance for individual CoAs and revised environmental management measures will include:

- Stage of the Project to which it relates (pre-construction, construction, pre-operation or operation);
- Compliance status (compliant, non-compliant, partially compliant);
- Responsibility for compliance (Georgiou or Roads and Maritime);
- Evidence of compliance; and
- A record of approvals issued to date by the Secretary of the Department of Planning and Environment (DP&E).

2.3 D6 (c) Independent Environmental Auditing

D6 (c) A program for independent environmental auditing in accordance with /ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing

Section 8.3 of the CEMP provides information on auditing.

Roads and Maritime and Georgiou will ensure that independent environmental audits are undertaken in accordance with *ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing* annually during construction.

The scope of the independent environmental audits will include:

- Assessment of compliance with the CoAs and revised environmental management measures;
- Assessment of environmental performance against relevant environmental project criteria; and
- Assessment of environmental mitigation measures and recommendations provided in environmental management plans.

The Auditor will be selected based on the following criteria:

- Suitable environmental qualifications, including current certification as environmental auditor under the Quality Society of Australia;
- Relevant experience in similar types of audits; and
- Independent from the Project.

Independent environmental audits will be undertaken bi-annually during construction of the Project. The next audit will occur September 2019.

2.4 D6 (d) Incident Reporting and Response

D6 (d) Mechanisms for reporting and recording incidents and actions taken in response to those incidents;

Section 7 of the CEMP provides information incidents and emergencies.

In the event of an environmental incident, Road and Maritime's Environmental Incident Classification and Reporting Procedure (Appendix A5 of the CEMP) will be followed for the notification, classification, and investigation and reporting requirements for the incident. For incident response to pollution incidents (including spills) the Pollution Incident Response Plan (Appendix B12 for the CEMP) is to be followed.

The Roads and Maritime Incident Classification and Reporting Procedure (Appendix A5 of the CEMP) provides references to: procedure broadly indicates a process for:

- Types of incidents;
- Criteria for classifying of environmental incidents;
- Processes for systematically responding to and managing emergency situations; and
- Processes, and legal requirements (e.g. Acts, Regulations), for reporting and notification of an environmental incident.

The Pollution Incident Response Plan (Appendix B12 of the CEMP) provides detail for:

- Potential pollution scenarios for the site.
- Risk assessment for potential pollution events on the site.
- Notification requirements and initial response.

- Emergency contacts.
- Spill response procedure.

Typically, environmental incidents will be notified verbally immediately and in writing within one hour of any incident occurring to the Roads and Maritime Representative and the Independent Environmental Representative (ER). Incident reports will be provided to the Roads and Maritime Representative and the ER within 48 hours of the incident occurring, including lessons learnt from each environmental incident and proposed measures to prevent the occurrence of a similar incident. All efforts will be undertaken immediately to avoid and reduce impacts of incidents and suitable controls put in place. Incidents will be closed out as quickly as possible, taking all required action to resolve each environmental incident.

In addition to the above notification process, the EPA will be immediately notified of any pollution incidents on or around the site 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). The circumstances where this will take place include:

- If actual or potential harm to the health or safety of human beings or ecosystems has or is likely to occur and is not trivial.
- If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.

Roads and Maritime Representative and the Georgiou Project team will maintain all records relating to environmental incidents.

All efforts will be immediately undertaken to avoid and reduce impacts of incidents and suitable controls put in place. Incidents will be closed out as quickly as possible, taking all required action to resolve each environmental incident.

All necessary contact numbers will be identified in advance and stored for immediate access should a pollution incident need to be notified. These contact numbers will also be identified in the Pollution Incident Response Management Plan prepared for the Project (Appendix B12 of the CEMP).

2.4.1 Recording Environmental Incidents

All incidents will be documented, and where required, due to the severity or ongoing nature of the incident, investigations conducted and action plans established in order that the event does not occur again.

Where lessons are learnt from the investigation or current procedures are identified as being ineffective, the CEMP will be revised by the Environmental Site Representative and/or Environmental Manager to include the improved procedures or requirement.

An environmental investigation includes the following basic elements:

- Identifying the cause, extent and responsibility of the incident.
- Identifying and implementing the necessary corrective action. Implementing or modifying controls necessary to avoid a repeat occurrence of the incident.
- Identifying the personnel responsible for carrying out the above actions.
- Recording any changes in written procedures required.
- Verification of actions complete and incident close out.

Roads and Maritime form *624 Environmental Incident Report* shall be used when completing an incident investigation.

2.5 D6 (e) Incident Reporting to the Secretary

D6 (e) Provisions for reporting environmental incidents to the Director-General during construction and operation; and

The following notifications to the Secretary will be undertaken in accordance with CoAs D7 and D8:

- The Planning Secretary (DP&E) and other relevant government agencies will be notified of any incident with actual or potential significant off-site environmental impacts on people or the biophysical environment as soon as practicable and within 24 hours of the incident occurrence. The following steps would be undertaken:
 - Following the occurrence of an incident, Roads and Maritime (in consultation with contractor and the ER where necessary) will determine if the incident is considered significant. This will include incidents which cause or threaten to cause material harm to the environment; and/or breaches or exceedances of the limits or performance measures/criteria in the Infrastructure Approval. If the incident is considered significant the Planning Secretary (DP&E) will be notified within 24 hours.
- A full report detailing the incident will be given to the Planning Secretary (DP&E) within seven days of the date on which the incident occurred. The investigation report shall meet the requirements of the DP&E or relevant government agency to address the cause or impact of any incident, as it relates to the project approval.
- Where an incident involves a heritage item site the Planning Secretary (DP&E) and relevant regulatory authority will be informed. In the case of an Aboriginal heritage item, Roads and Maritime will liaise with OEHL and relevant Registered Aboriginal Parties and their input sought in closing out the incident. In the event of European heritage, the relevant regulatory authority to be informed is the OEHL, Heritage Branch.

Where incidents are considered to be minor, i.e. do not meet the criteria above, they will be reported to the Secretary in the bi-annual Compliance Tracking Report.

2.6 D6 (f) Rectification of non-compliance

D6 (f) Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management.

Section 8.6 of the CEMP provides information on non-conformity, corrective and preventative actions.

Any member of the Project team may raise a non-conformance or improvement opportunity. The Quality Management Plan describes the process for managing non-conforming work practises and initiating corrective/preventative actions or system improvements.

The Environmental Representative, Roads and Maritime Representative or public authority may also raise a non-conformance or improvement opportunity using the same process. A non-conformance is the failure or refusal to comply with the requirements of this CEMP and Georgiou's Nonconformity and Corrective and Preventive Action Procedure (Appendix A6 of the CEMP).

For each non-conformance identified a corrective/preventative action (or actions) must be implemented. In addition any environmental management improvement opportunities can be initiated as a result of incidents or emergencies, monitoring and measurement, audit findings

or other reviews. Improvement opportunities may also result in the implementation of corrective/preventative actions.

Corrective/preventative actions and improvement opportunities will be entered into Georgiou's quality system database (QHEST) and include detail of the issue, action required and timing and responsibilities. The record will be updated with date of close out and any necessary notes. The database will be reviewed regularly to ensure actions are closed out as required.

Non-conforming activities may be stopped, if necessary, by the Environmental Site Representative, Environmental Manager or Project / Site Engineer following consultation with the Construction Manager or delegate. The works will not commence until a corrective / preventative action has been closed out. In such circumstances a non-conformance report must be prepared in accordance with the Quality Plan.

Appendix A

Conditions of Approval

Legend	
DD	Detailed Design
BPC	Before Pre-construction
PC	Pre-construction
C	Construction
PoC	Post-construction
OP	Operation
D	Demolition

PART A. ADMINISTRATIVE CONDITIONS		Phase of Project						Compliance Status	Comment	
		DD	BPC	PC	C	PoC	O			D
Terms of Approval										
A1.	The Applicant shall carry out the SSI generally in accordance with the:	x	x	x	x	x	x	x	Compliant & Ongoing	The CEMP and sub-plans address all requirements of SSI-495 I, the EIS, SPIR and the pre-construction documentation.
	(a) State Significant Infrastructure Application SSI-495 I;	x	x	x	x	x	x	x		
	(b) Windsor Bridge Replacement Project Environmental Impact Statement Volumes 1, 2, 3 and 4 prepared by Sinclair Knight Merz for Roads and Maritime Services, dated November 2012;	x	x	x	x	x	x	x		
	(c) Windsor Bridge Replacement Project Submissions Report incorporating Preferred Infrastructure Report, dated April 2013 prepared by Sinclair Knight Merz for Roads and Maritime Services, including the revised Statement of Commitments contained therein;	x	x	x	x	x	x	x		
	(d) Any plans and/or documentation submitted to satisfy the Pre-Construction Conditions of this consent as approved in writing by the Director-General; and	x	x	x	x	x	x	x		
	(e) The conditions of this consent.	x	x	x	x	x	x	x		
A2.	If there is any inconsistency between the plans and documentation referred to in condition A1, the most recent document shall prevail to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency.	x	x	x	x	x	x	x	Compliant & Ongoing	This condition is noted for the project.
A3.	The Applicant shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:	x	x	x	x	x	x	x	Compliant & Ongoing	This condition is noted for the project.
	(a) any reports, plans or correspondence that are submitted in accordance with this consent; and	x	x	x	x	x	x	x		
	(b) the implementation of any actions or measures contained within these documents.	x	x	x	x	x	x	x		
Limits on Approval										
A4.	This consent shall lapse 5 years after the date on which it is granted, unless the works the subject of this SSI consent are physically commenced on or before that date.		x	x	x				Compliant	Archaeological investigations commenced August 2016.
Staging										
A5.	The Applicant may elect to construct and/or operate the SSI in stages. Where staging is proposed, the Applicant shall submit a Staging Report to the Director-General prior to the commencement of the first proposed stage. The Staging Report shall provide details of:				x	x	x	x	Compliant	Roads and Maritime does not propose to construct and/or operate the SSI in stages.
	(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				x	x	x	x		
	(b) details of the relevant conditions of consent, which would apply to each stage and how these shall be complied with across and between the stages of the SSI.				x	x	x	x		
	Where staging of the SSI is proposed, these conditions of consent are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).				x	x	x	x		
	The Applicant shall ensure that an updated Staging Report (or advice that no changes to staging are proposed) is submitted to the Director-General prior to the commencement of each stage, identifying any changes to the proposed staging or applicable conditions.				x	x	x	x		
A6.	The Applicant shall ensure that all plans, sub-plans and other management documents required by the conditions of this consent and relevant to each stage (as identified in the Staging Report) are submitted to the Director-General no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Director-General.				x	x	x	x		

PART A. ADMINISTRATIVE CONDITIONS		Phase of Project						Compliance Status	Comment	
		DD	BPC	PC	C	PoC	O			D
Staged Submission of Plans or Programs										
A7.	With the approval of the Director-General, the Applicant may: (a) submit any strategy, plan or program required by this consent on a progressive basis; and/or (b) combine any strategy, plan or program required by this consent.	x	x	x	x	x	x	x	Compliant & Ongoing	The staged approval of Interpretation Plan required under Condition B1 was approved by DP&E on 11 May 2018. The staged approval of the Construction Heritage Management Plan required under Condition D5(e) was approved by DP&E on 18 September 2018. Other staged submissions of plans/programs will be approved by DP&E as required.
Compliance										
A8.	In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this consent or relevant matter relating to the activity, either party may refer the matter to the Director-General for resolution. The Director-General's determination of any such dispute shall be final and binding on the parties.	x	x	x	x	x	x	x	Compliant & Ongoing	This condition is noted for the project.

PART B. PRE-CONSTRUCTION		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
<p>Conditions B1 to B8 have been imposed in accordance with the following objectives:</p> <p>(a) To minimise impacts on heritage sites, including sites within the Thompson Square Conservation Area and archaeological sites in, and in the vicinity of, the site;</p>			x	x	x				Compliant & Ongoing	<p>A series of investigations have been undertaken to minimise the heritage impact of the works. Given the nature of the approved bridge project, it is not possible to fully mitigate or eliminate heritage impacts.</p> <p>An Archaeological Investigation Program (historic, maritime and Aboriginal heritage) was undertaken between August and October 2016.</p> <p>The following reports have been prepared to date:</p> <ul style="list-style-type: none"> - SCMP - Detailed Archival Recording - Archaeological Research Designs - Aboriginal Test Excavation Report - Historical Test Excavation Report - Maritime Test Excavation Report - Interpretation Strategy and Interpretation Plan (Stage 1) - Heritage input to the Urban Design and Landscape Plan (UDLP).
<p>(b) To salvage and interpret any impacted heritage sites, including historical archaeologically significant sites within, and in the vicinity of, the site;</p>			x	x	x				Compliant & Ongoing	<p>An Archaeological Investigation Program was undertaken between August and October 2016.</p> <p>A salvage archaeological excavation commenced in late 2017. Further archaeological salvage and monitoring will occur during construction.</p> <p>An Interpretation Plan (Stage 1) has been prepared and interpretation will be implemented as a part of this project. Stage 2 of the Interpretation Plan will be prepared in the coming months.</p>
<p>(c) To conduct archival recording and further research of the Thompson Square Conservation Area;</p>			x	x	x				Compliant & Ongoing	<p>A Detailed Archival Recording has been prepared.</p> <p>The SCMP Volume 1 provides a highly detailed, in-depth history of Thompson Square and the study area and a more detailed significance assessment.</p> <p>Further archival recording of the existing bridge will be undertaken during demolition as required by EIS mitigation measure HH11.</p>
<p>(d) To enhance and conserve the Thompson Square Conservation Area, the heritage items identified in Table 1 of Appendix 1, with the exception of Item 3 (the Thompson Square lower parkland area) and Item 20 (Windsor Bridge) and any archaeological sites within, and in the vicinity of, the site, while providing for the construction of a replacement bridge at Windsor; and</p>			x	x	x				Compliant & Ongoing	<p>The WBRP will have no physical impact on the heritage items identified in Table 1 of Appendix 1, with the exception of the lower parkland areas (Item 3) and Windsor Bridge (Item 20).</p> <p>The visual amenity of the heritage items will be unavoidably impacted upon by the approved bridge project. The height of the new bridge has been lowered as far as technically feasible to reduce visual impact. The western bridge abutment will be the subject of interpretive masonry treatment to reduce visual impact.</p> <p>While there will be impacts to the upper parkland area from the new bridge, the WBRP presents the opportunity to reshape and reconfigure the two reserves of Thompson Square, consolidating the upper and lower sections and reinstating the unified nature of Thompson Square's formative years.</p> <p>An Interpretation Plan (Stage 1) has been prepared for the study area, which aims to interpret the history and significance of Thompson Square and Windsor Bridge. Stage 2 of the Interpretation Plan will be prepared in the coming months.</p>

PART B. PRE-CONSTRUCTION		Phase of Project						Compliance Status	Comments
		DD	BPC	PC	C	PoC	O		
	(e) To incorporate changes in the final design of the SSI, where practical, to achieve Objectives (a), (b) and (d) above.	x						Compliant & Ongoing	Addressed above and in the Design Compliance Report prepared under Condition B8.
Cultural Heritage									
B1.	<p>The Applicant shall submit a Strategic Conservation Management Plan (CMP) to the Director-General for the project area on the southern side of the Hawkesbury River as shown in Appendix 2 Strategic Conservation Management Plan study area. The CMP shall be prepared by appropriately qualified and/or experienced heritage consultants. The nominated heritage consultant(s) is to have appropriate experience and skills including land and maritime archaeology, landscape, engineering and built heritage expertise and documented experience in the preparation and implementation of CMPs.</p> <p>The Applicant shall not carry out any pre-construction or construction activities on the southern side of the Hawkesbury River for the SSI before the CMP has been approved by the Director-General. The CMP is to provide for the heritage conservation of the Thompson Square Conservation Area. The CMP shall be prepared in consultation with the Heritage Branch, OEH and in accordance with the relevant guidelines of the NSW Heritage Council and include, but not be limited to:</p> <p>(a) identification of the heritage value of the Thompson Square Conservation Area, including statements of significance for the Thompson Square Conservation Area and any individual listings within the conservation area of any local, state or national heritage items;</p> <p>(b) the development of heritage design principles for the project to retain the heritage significance of the Thompson Square Conservation Area and any individually listed item within the conservation area or in proximity to the site, with the exception of Item 3 (the Thompson Square lower parkland area) and Item 20 (Windsor Bridge) in Table 1 of Appendix 1;</p> <p>(c) specific mitigation measures for the Thompson Square Conservation Area and individually listed items to minimise impact and to ensure that final measures selected are appropriate and the least intrusive option; and</p> <p>(d) changes to the detailed design of the SSI to mitigate heritage impacts.</p>		x					Compliant	<p>The Strategic Conservation Management Plan (January 2018) was approved by DP&E on 23 February 2018 which includes the following volumes:</p> <ul style="list-style-type: none"> - Vol 1: Site ID, Historical and Heritage Status, Rev 4.4 - Vol 2: Physical analysis and Policy, Rev 3.7 - Vol 3: Specific Information Rev 3.5 - Vol 4: Consultation Report (Issue 2, February 2018).
	The Applicant shall prepare and submit a detailed Interpretation Plan prior to the commencement of pre-construction and construction activities for the Thompson Square Conservation Area including individually listed sites, non-Aboriginal archaeology and Aboriginal archaeology for the approval of the Director-General. The detailed Interpretation Plan must be prepared in consultation with the OEH and include specific media design, content, location and materials, prepared in accordance with the Guidelines of the NSW Heritage Council.		x	x	x			Compliant & Ongoing	<p>The Interpretation Strategy (Rev 3 February 2017) was submitted to DP&E for information on 28 March 2017.</p> <p>The Interpretation Plan (Stage 1) (version 10.0, May 2018) was approved by DP&E on 11 May 2018.</p> <p>Stage 2 of the Interpretation Plan will be prepared in the coming months.</p>
B2.	<p>Prior to the commencement of pre-construction works on the southern side of the Hawkesbury River, the Applicant shall complete a detailed Archival Recording of all historic heritage sites within the Strategic Conservation Management Plan study area in accordance with the Guidelines issued by the NSW Heritage Council and to the satisfaction of the Director-General and in consultation with the NSW Heritage Council. The recording shall include, but not be limited to:</p> <p>(a) detailed survey and analysis of Thompson Square Conservation Area, Windsor Bridge and the immediate surrounds using 3D laser scanning; and</p> <p>(b) photographic and archival recording of all affected heritage sites, as identified in the specialist reports prepared as part of the Environmental Impact Statement for the project. Recording is to be completed. Copies of these recordings should be made available to the Director-General, the NSW Heritage Council, the Local Studies Library and the Local Historical Society in Windsor.</p>		x					Compliant	The Detailed Photographic Archival Recording (Rev 6, 12 February 2018) was approved by DP&E on 16 February 2018.

PART B. PRE-CONSTRUCTION		Phase of Project						Compliance Status	Comments
		DD	BPC	PC	C	PoC	O		
Archaeology									
B3.	The Applicant shall undertake an Archaeological Investigation Program comprising Aboriginal and non-Aboriginal Heritage in the project area on the southern side of the Hawkesbury River, prior to the commencement of preconstruction and construction activities in the southern area. The program shall be conducted to the satisfaction of the Director-General and in accordance with: (a) the Heritage Council's Archaeological Assessments Guideline (1996) using a methodology prepared, in consultation with the NSW Heritage Council for non- Aboriginal heritage; and (b) prepared in consultation with the OEH (Aboriginal heritage) and the Aboriginal stakeholders.		x					Compliant	The Aboriginal Archaeological Research Design and Excavation Methodology (v3, 5 July 2016) was approved by DP&E on 13 July 2016. The Historical and Maritime Archaeological Research Design (4 October 16) was approved by on DP&E 20 June 16.
	The Archaeological Investigation Program is to be undertaken by an archaeological heritage consultant approved by the Director-General in consultation with the NSW Heritage Council and by the OEH (Aboriginal heritage) and by an Excavation Director who shall demonstrate an ability to comply with the Heritage Council's Criteria for the Assessment of Excavation Directors (July 2011) and in particular must be able to demonstrate compliance with Criterion A.4 that: 'work under any approvals previously granted by the Heritage Council has been completed in accordance with the conditions of that consent and the final report has been submitted to the NSW Heritage Council.		x					Compliant	The AAJV was approved by DP&E as the Heritage consultant to prepare the Archaeological Program on 22 March 2016. Anita Yousif, Matthew Kelly, Graham Wilson were approved by DP&E as the co-excavation Directors on the 11 May 2016, 30 May 2016 and 24 August 2016 respectively.
	The Archaeological Investigation Program shall include archaeological testing and geophysical investigation, as required for the significance assessment. The results of the Archaeological Investigation Program are to be detailed in a Historic Archaeological Report and a Detailed Salvage Strategy comprising the non-Aboriginal and Aboriginal heritage findings. These are to be prepared in consultation with the OEH (Heritage Branch and Aboriginal heritage) and to the satisfaction of the Director-General, and shall include, but not necessarily be limited to: (a) detailed recommendations for further archaeological work; (b) consideration of measures to avoid or minimise disturbance to archaeology sites, where archaeology of historical and Aboriginal heritage archaeological significance are found to be present; (c) where impacts cannot be avoided by construction of the SSI, recommend actions to salvage and interpret salvaged sites, conduct further research and archival recording of the historic heritage and Aboriginal heritage value of each site, and to enhance and preserve the archaeology of historical non-Aboriginal and Aboriginal heritage significance; (d) consideration of providing visual evidence of heritage sites within the final landscape design of the SSI to preserve and acknowledge the heritage value of the Thompson Square Conservation Area and the site; (e) management and mitigation measures to minimise impacts due to preconstruction and construction activities; and		x					Compliant	The Test Excavation Report – Historical Archaeology (24 May 2017), the Test Excavation Report – Aboriginal Heritage (version A, 23 May 2017), and the Detailed Salvage Strategy for Aboriginal and Historical Archaeological Heritage (v 2.5, 13 November 2017) was approved by DP&E on 1 December 2017. The Maritime Archaeological Testing Report and Detailed Salvage Strategy for Maritime Archaeological Excavation (version F, March 2018) was approved by DP&E on 23 March 2018. OEH were consulted on the development of all documents.

PART B. PRE-CONSTRUCTION		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
	<p>(f) preparation of a Hawkesbury Region Sand Bodies Study to the satisfaction of the Director-General and undertaken by suitably qualified and experienced persons whose appointment has been approved by the Director-General, in the event that any Pleistocene and/or early Holocene is encountered during the works referred to in condition B3. This study is required to be prepared in consultation with the Department, the OEH and Aboriginal stakeholders and is required to:</p> <p>(i) be undertaken in accordance with a research design and action plan approved by the Director-General prior to the study commencing;</p> <p>(ii) be directed towards locating and evaluating sand bodies likely to contain evidence of early Aboriginal habitation in the Hawkesbury River area, in the project location in areas disturbed by construction of the project, including the existing Windsor Bridge and new bridge locations;</p> <p>(iii) findings are to be made publicly available; and</p> <p>(iv) make recommendations concerning the preservation and future management of any finds.</p> <p>In the event that any Pleistocene and/or early Holocene is encountered, the recommendations of the Hawkesbury Region Sand Bodies Study are to be fully complied with.</p>		x						Compliant	<p>Alan Williams was approved by DP&E as the Sand Bodies Expert on 22 March 2016.</p> <p>The Hawkesbury Region Sand Body Study - Research Design and Action Plan (v 4, 16 June 2016) approved by DP&E on 8 August 2017.</p> <p>The Hawkesbury Region Sand Bodies Study (v 1.4, 1 November 2017) was approved by DP&E on 1 December 2017.</p> <p>OEH were consulted with on the development of the Sand Bodies Study.</p>
B4.	<p>The Applicant shall undertake an Archaeological Investigation Program comprising Aboriginal Heritage in the northern side of the Hawkesbury River project area, prior to the commencement of pre-construction and construction activities in the northern area. The program shall be conducted to the satisfaction of the Director-General and prepared in consultation with the OEH (Aboriginal heritage) and the Aboriginal stakeholders.</p> <p>The results of the Archaeological Investigation Program conducted in the project area on the northern side of the Hawkesbury River are to be detailed in a Historic Archaeological Report and a Detailed Salvage Strategy comprising the Aboriginal heritage findings in northern side of the Hawkesbury River. These are to be prepared in consultation with the OEH (Aboriginal heritage) and to the satisfaction of the Director-General, and shall include but not necessarily be limited to:</p> <p>(a) detailed recommendations for further Aboriginal archaeological work;</p> <p>(b) consideration of measures to avoid or minimise disturbance to Aboriginal sites, where archaeology of Aboriginal heritage archaeological significance are found to be present;</p> <p>(c) where impacts cannot be avoided by construction of the SSI, recommend actions to salvage and interpret salvaged sites, conduct further research and archival recording of the Aboriginal heritage value of each site, and to enhance and preserve the Aboriginal heritage significance;</p> <p>(d) consideration of providing visual evidence of heritage sites within the final landscape design of the SSI to preserve and acknowledge the Aboriginal heritage value of the northern project area;</p> <p>(e) management and mitigation measures to minimise impacts due to preconstruction and construction activities; and</p> <p>(f) preparation of a Hawkesbury Region Sand Bodies Study as detailed in Condition B3(f)</p>		x						Compliant	<p>As per Condition B3</p> <p>Combined documents for B3 & B4</p>
Hydrology										
B5.	<p>The Applicant shall not commence construction of the project on or within those areas likely to alter flood conditions until such time as works identified in the Hydrological Mitigation Report, required under condition C27, have been completed, unless otherwise agreed by the Director-General.</p>			x					Compliant	<p>The Hydrological Mitigation Report (Rev F, 15 November 2017) submitted to DP&E for information 17 November 2017.</p>

PART B. PRE-CONSTRUCTION		Phase of Project						Compliance Status	Comments
		DD	BPC	PC	C	PoC	O		
Urban Design & Landscape Plan									
B6.	Terracing is not approved as part of landscaping for the SSI.	x						Compliant	The detailed design removed the terracing which was proposed at Thompson Square during the concept design and EIS.
B7.	The Applicant shall prepare an Urban Design and Landscape Plan prior to the commencement of pre-construction and construction activities in the southern side of the Hawkesbury River to guide the landscaping for the project. The Plan shall be prepared in consultation with the OEH, and Hawkesbury Council and shall present an integrated urban design for the project that is sympathetic to the heritage values and significance of the Thompson Square Conservation Area and shall be prepared in accordance with the requirements of condition C47.		x					Compliant	The Urban Design and Landscape Detailed Design Report (September 2017) was submitted to DP&E for information on 13 October 2017. The Urban Design and Landscape Plan Submissions Report (September 2017) submitted to DP&E for information on 13 October 2017.
Revised Design									
B8.	The project is to be revised to incorporate the following amendments. The new design of the SSI shall be provided to the Director-General for approval prior to the commencement of pre-construction and construction activities in the southern side of the Hawkesbury River: (a) the raising of the southern approach road by approximately 1 metre is not approved. The height/clearance of the southern approach road shall be designed ensure consistency with the EIS; (b) public access to the existing wharf is to be maintained and alternative coach access, arrangements for pedestrians/cyclists and consultation undertaken are to be detailed; (c) access to numbers 4 and 6 Bridge Street is to be maintained at all times. Alternative access arrangements to those proposed shall be investigated to the satisfaction of the Director-General; (d) the northern roundabout shall be designed to ensure consistency with the Austroads Guide to Road Design: Part 4B, particularly in relation to geometry and lane designations. In the event that further design amendments are required as a consequence of compliance with conditions B1 to B7, any such revised designs must be approved by the Director-General.		x					Compliant	The CoA B8 Design Compliance Report (version 5, 26 April 2018) was approved by DP&E on 25 May 2018.

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
Heritage Impacts										
C1.	During all stages of the project, the Applicant must comply with all programs and reports prepared by the Applicant in accordance with conditions B1 to B8 of this consent.	x	x	x	x	x	x	x	Compliant & Ongoing	All mitigation measures from reports prepared in accordance with conditions B1 to B8 have been incorporated into construction management documentation where relevant.
C2.	In the event that any Pleistocene and/or early Holocene is encountered during any construction activities, condition B3(f) applies as if the relevant construction works were works carried out under condition B3.				x				Compliant & Ongoing	The Hawkesbury Region Sand Bodies Study, required under condition B3(f), has been included as Appendix G to the Construction Heritage Management Sub-Plan required under condition D5(e).
C3.	This consent does not allow the Applicant to disturb any human remains found on the site without further approval from the Director-General, and/or the NSW Police Force		x	x	x				Compliant & Ongoing	Procedures for handling human remains are outlined in the Construction Heritage Management Sub-Plan: <ul style="list-style-type: none"> o Section 6.6.1 (Human Remains Procedure) o Table 7-1 (Mitigation measure AH8) o Section 8-2 (Training) o Appendix E: RMS Standard Management Procedure – Unexpected Archaeological Finds.
C4.	Prior to the commencement of pre-construction works the Applicant shall nominate, for the approval of the Director-General, a specialist Heritage Manager and Heritage Consultant team for the construction works. The consultant(s) shall have appropriate qualifications and experience commensurate with the scope of the works, which shall include land and maritime archaeology, landscape, engineering and built heritage expertise and have demonstrated experience in the implementation of CMPs. During pre-construction and construction works, the specialist Heritage Manager and heritage consultant team shall: (a) advise on the detail design resolution of new works, inspect new works, advise on design and installation of services (to minimise impacts on significant fabric and views) and undertake on-site Heritage inductions; (b) provide input to the compliance reporting required under condition D6; and (c) prepare a report (illustrated by works' photographs) to be submitted to the Director-General for approval within 6 months of the completion of the works which describes the work, any impacts/damage and corrective works carried out and includes a revised Statement of Significance in accordance with NSW Heritage Council guidelines.		x						Compliant & Ongoing	The Heritage Manager and Heritage Consultant Team was approved by DP&E on 1 May 2018. The key personnel are as follows: <ul style="list-style-type: none"> o Heritage Manager: David Marcus (AAJV) o Heritage Consultant Team: <ul style="list-style-type: none"> - Land Archaeology: Alan Williams (AAJV) - Maritime archaeology: Cosmos Coroneos (Cosmos Archaeology) - Landscape: Darren Mansfield (Context Landscape Architects) - Engineering: Bruno Della Palma (Jacobs) - Built Heritage: Kylie Christian (AAJV) - CMP: MacLaren North (AAJV). The Alternate Heritage Manager Kylie Christian (AAJV) was approved by DP&E on 9 July 2018.

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments		
		DD	BPC	PC	C	PoC	O			D	
C5.	<p>Within 12 months of completing the work required under conditions B3 and B4, the Applicant shall, in consultation with the NSW Heritage Council, the OEH (Aboriginal heritage) and to the satisfaction of the Director-General, prepare and submit a further report containing:</p> <p>(a) an executive summary of the archaeological programme;</p> <p>(b) the findings of the excavations, including detailed artefact analysis for non- Aboriginal and Aboriginal heritage;</p> <p>(c) the identification of a final repository for finds of non-Aboriginal heritage significance;</p> <p>(d) artefact analysis and Aboriginal Site Impacts Recording Forms (ASIR), and the identification of final storage location for all Aboriginal objects recovered (testing and salvage), prepared in consultation with the Aboriginal stakeholders, the OEH (Aboriginal heritage) and to the satisfaction of the Director-General.</p> <p>(e) detailed information on the excavation including the aim, the context for the excavation, procedures, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale photographs and/or drawings, location of repository) and analysis of the information retrieved;</p> <p>(f) nominated repository for the items, which has agreed to take the items;</p> <p>(g) conclusions from the archaeological programme. This information must include a reassessment of the site's heritage significance comprising non-Aboriginal and Aboriginal heritage, statement(s) on how archaeological investigations at this site have contributed to the community's understanding of the Site and other Comparative Site Types and recommendations for the future management of the site/s;</p> <p>(h) details of how this information about the excavations have been publicly disseminated (for example, include copies of press releases, public brochures and information signs produced to explain the archaeological significance of the sites).</p>				x	x			Compliant & Ongoing	The Salvage Report will be completed within 12 months of completing works required under conditions B3 and B4.	
Air Quality											
C6.	The Applicant shall carry out all reasonable and feasible measures to minimise dust generated by the SSI, including wind-blown and traffic-generated dust.		x	x	x				x	Compliant & Ongoing	Procedures for dust mitigation are outlined in the Construction Air Quality Management Sub-Plan: <ul style="list-style-type: none"> o Table 6-1 (various mitigation measures) o Section 7.2 (Training) o Section 7.3 (Monitoring).
C7.	<p>During construction, the Applicant shall ensure that:</p> <p>(a) all vehicles on site do not exceed a speed limit of 30 kilometres per hour;</p> <p>(b) all loaded vehicles entering or leaving the site have their loads covered; and</p> <p>(c) all loaded vehicles leaving the site are cleaned of dirt, sand and other materials before they leave the site, to avoid tracking these materials on public roads.</p>		x	x	x					Compliant & Ongoing	These mitigation measures are outlined in Table 6-1 (AQ12, AQ13, AQ15) of the Construction Air Quality Management Sub-Plan.

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
Ancillary Facilities										
C8.	<p>Unless otherwise approved by the Director-General, the location of Ancillary Facilities shall:</p> <p>(a) be located more than 50 metres from a waterway;</p> <p>(b) be located within or adjacent to land where the SSI is being carried out;</p> <p>(c) have ready access to the road network or direct access to the construction corridor;</p> <p>(d) be located to minimise the need for heavy vehicles to travel through residential areas;</p> <p>(e) be sited on relatively level land;</p> <p>(f) be separated from nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant);</p> <p>(g) not require vegetation clearing beyond that already required by the SSI;</p> <p>(h) not be located within the Thompson Square Conservation Area;</p> <p>(i) not impact on Heritage items (including identified Aboriginal cultural value and archaeological sensitivity) beyond those already impacted by the SSI and not have any additional impacts to those heritage items impacted by the proposal;</p> <p>(j) not unreasonably affect the land use of adjacent properties;</p> <p>(k) be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and</p> <p>(l) 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.</p> <p>The location of the ancillary facilities shall be identified in the Construction Environment Management Plan.</p>								Compliant & Ongoing	Location of the main ancillary facility has been evaluated against these criteria. As the facility does not meet criteria C8(a), C8(f) and C8 (k), an Ancillary Facility Assessment (AFA) was prepared and approved by DP&E, 8 August 2018. The location of the main and minor ancillary facilities are included in Section 2.3 of the CEMP.
C9.	<p>Ancillary sites that do not meet the criteria set out in this consent shall be approved by the Director-General prior to establishment. In obtaining this approval, the Applicant shall assess the ancillary facility against the criteria set out in this consent to demonstrate how the potential environmental impacts can be mitigated and managed to acceptable standards. Such assessment(s) can be submitted separately or as part of the Construction Environment Management Plan required under this consent. The assessment shall include, but not necessarily be limited to:</p> <p>(a) a description of the Ancillary Facility, its components and the surrounding environment;</p> <p>(b) details on the activities to be carried out at the facility, including the hours of use and the storage of dangerous and hazardous goods;</p> <p>(c) an assessment of the environmental impacts on the site and the surrounding environment, including, but not limited to noise, vibration, air quality, traffic access, flora and fauna, heritage and light spill;</p> <p>(d) details on the mitigation, monitoring and management procedures specific to the Ancillary Facility that would be implemented to minimise the environmental impacts or, where this is not possible, feasible and reasonable measures to offset these impacts and an assessment of the adequacy of the mitigation or offsetting measures. This shall include consideration of restrictions on the hours of use or exclusion of certain activities;</p> <p>(e) details on the timing for the completion of activities at the ancillary facility and how the site will be decommissioned (including any necessary rehabilitation); and</p> <p>(f) demonstrated overall consistency with the approved project. The Applicant shall demonstrate to the satisfaction of the Director-General that there will be no additional significant adverse impact from that Ancillary Facility's construction or operation.</p>								Compliant & Ongoing	The Ancillary Facility Assessment (AFA) for the main compound site was approved by D&E on 8 August 2018.

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
C10.	The Director-General's approval is not required for minor Ancillary Facilities (e.g. lunch sheds, office sheds, and portable toilet facilities, etc.) that do not comply with the criteria set out in condition C8 of this consent and which: (a) are located within an active construction zone within the approved project footprint; and (b) have been assessed by the Environmental Representative to have: (i) no additional adverse impact on the Thompson Square Conservation Area; (ii) minimal amenity impacts 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, and (iii) minimal environmental impact in respect to waste management, and no impacts on flora and fauna, soil and water, and heritage beyond those approved for the project; and (c) have environmental and amenity impacts that can be managed through the implementation of environmental measures detailed in a CEMP for the project.				x			x	Compliant & Ongoing	The potential locations for the minor Ancillary Facilities are shown in Section 2.3 of the CEMP. Section 3.7.2 of the CEMP outlines the process of approval by the Environmental Representative for minor Ancillary Facilities.
C11.	All Ancillary Facilities shall be rehabilitated to at least their pre-construction condition, unless otherwise agreed by the Director-General.				x			x	Compliant & Ongoing	Rehabilitation will be undertaken at the end of construction. This requirement is noted in Section 4.5 of the Ancillary Facility Assessment (AFA).
Hazards and Risks										
C12.	Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with: (a) all relevant Australian Standards; (b) for liquids, a minimum bund volume requirement of 110o/o 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.				x			x	Compliant & Ongoing	This requirement is provided in Table 6-1 (mitigation measure SW45) of the Construction Soil and Water Management Sub-Plan.
Noise and Vibration										
C13.	Construction activities associated with the SSI shall be undertaken during the following standard construction hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and (b) 8:00am to 1:00pm Saturdays; and (c) at no time on Sundays or public holidays.				x			x	Compliant & Ongoing	The construction hours are provided in Table 8-1 (mitigation measure NV2) of the Construction Noise and Vibration Management Sub-Plan
C14.	Construction works outside of the standard construction hours identified in condition C13 may be undertaken in the following circumstances: (a) construction works that generate noise that is: (i) no more than 5 dB(A) above rating background level at any residence in accordance with the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009); and (ii) no more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) at other sensitive receivers; or (b) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or (d) works as approved through the out-of-hours work protocol outlined in the CEMP.				x			x	Compliant & Ongoing	Procedures for construction work outside of standard hours are documented in the Construction Noise and Vibration Management Sub-Plan: o Table 8-1 (mitigation measure NV2) o Appendix B: Out of Hours Works Protocol.

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments
		DD	BPC	PC	C	PoC	O		
C15.	Activities resulting in impulsive or tonal noise emission (such as rock breaking, rock hammering, pile driving) shall only be undertaken: (a) between the hours of 8:00 am to 5:00 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. 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.				x			x	Compliant & Ongoing These mitigation measures are documented in the Construction Noise and Vibration Management Sub-Plan: o Table 8-1 (mitigation measure NV4 and NV5) o Appendix B: Out of Hours Works Protocol.
C16.	Wherever feasible and reasonable, piling activities shall be undertaken using quieter alternative methods than impact or percussion piling, such as bored piles or vibrated piles.				x			x	Compliant & Ongoing Provided in Table 8-1 (mitigation measure NV26) of the Construction Noise and Vibration Management Sub-Plan. It is noted in Section 6.1 that impact piling shall only be used for non-terrestrial piling, bored piling shall be used for terrestrial works.
C17.	Where feasible and reasonable, operational noise mitigation measures shall be implemented at the start of construction (or at other times during construction) to minimise construction noise impacts.			x	x				Compliant Architectural treatments for noise mitigation have been installed at residential properties, as outlined in the EIS. One resident declined the offer.
C18.	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 CEMP. 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.				x			x	Compliant & Ongoing Provided in Table 8-1 (mitigation measure NV6) of the Construction Noise and Vibration Management Sub-Plan.
C19.	The SSI shall be constructed with the aim of achieving the following construction vibration goals: (a) for structural damage, the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures; and (b) for damage to other buildings and/or structures, the vibration limits set out in the British Standard BS 7385-1:1990 — Evaluation and measurement for vibration in buildings. Guide for measurement of vibration and evaluation of their effects on buildings; and (c) for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006).				x			x	Compliant & Ongoing Section 5.4 of the Construction Noise and Vibration Management Plan.
C20.	Unless otherwise agreed by the Director-General, within 6 months of commencing construction, the Applicant shall, in consultation with the EPA, prepare and submit for the approval of the Director-General, a review of the operational noise mitigation measures proposed to be implemented for the project. The review shall: (a) confirm the operational noise predictions of the project based on detailed design. This operational noise assessment shall be based on 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 condition C14 based on the operational noise performance of the project predicted under (a) above; and (c) where necessary, investigate additional feasible and reasonable noise mitigation measures to achieve the criteria outlined in the Road Noise Policy (DECCW, 2011).				x				Compliant & Ongoing An operational noise review will be submitted to the DP&E for approval within 6 months of commencing construction.
C21.	During construction, affected educational institutions shall be consulted and reasonable steps taken to ensure that noise generating construction works in the vicinity of affected buildings are not timetabled during examination periods where practicable, unless other reasonable arrangements to the affected institutions are made at no cost to the affected institution.				x				Compliant & Ongoing Provided in Table 8-1 (mitigation measure NV9) of the Construction Noise and Vibration Management Sub-Plan. It is noted that nearest educational facility is approximately 850m distant and is not anticipated to be impacted by noise or vibration.
C22.	The SSI shall be operated with the objective of not exceeding the road noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).	x							Compliant & Ongoing The SSI will be operated with the objective of not exceeding the road noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
Soil and Water Quality										
C23	Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vol 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.		x	x	x	x		x	Compliant & Ongoing	Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vol I (Landcom, 2004) are outlined in the Construction Soil and Water Management Sub-Plan.
C24	The Applicant shall prepare and implement a Water Quality Management Program to monitor and minimise the impacts of the project on surface and groundwater quality and resources and wetlands, during construction and operation of the SSI. The Program shall be developed in consultation with the OEH, EPA, DPI (Fishing and Aquaculture) and NOW and shall include but not necessarily be limited to: (a) identification of surface and groundwater quality monitoring locations (including watercourses and waterbodies) which are representative of the potential extent of impacts from the project; (b) the results of the groundwater modelling undertaken under this consent; (c) identification of works and activities during construction and operation of the project, including emergencies and spill events, that have the potential to impact on surface water quality of potentially affected waterways; (d) development and presentation of parameters and standards against which any changes to water quality will be assessed, having regard to the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (Australian and New Zealand Environment Conservation Council, 2000); (e) representative background monitoring of surface and groundwater quality parameters for a minimum of six months (considering seasonality) prior to the commencement of construction, to establish baseline water conditions, unless otherwise agreed by the Director-General; (f) a minimum monitoring period of three years following the completion of construction or until the affected waterways and/ or groundwater resources are certified by an independent expert as being rehabilitated to an acceptable condition. The monitoring shall also confirm the establishment of operational water control measures (such as sedimentation basins and vegetation swales); (g) contingency and ameliorative measures in the event that adverse impacts to water quality are identified; (h) reporting of the monitoring results to the Department, OEH, EPA and NOW. The Program shall be submitted to the Director-General for approval 6 months prior to the commencement of construction of the project, or as otherwise agreed by the Director-General. A copy of the Program shall be submitted to the OEH, EPA, DPI (Fishing and Aquaculture) and NOW prior to its implementation.		x	x	x	x	x	x	Compliant & Ongoing	The Water Quality Management Program (WQMP)(Rev 0, June 2017) was approved by DP&E on 2 Aug 17. Updated WQMP (Rev 1, 12 Jan 18) was submitted to DP&E for information on 29 Jan 18 outlining the change in location of bore NP-RBH01. Baseline water quality monitoring has been undertaken in accordance with the approved WQMP and water quality monitoring will continue during construction, demolition and operation as outlined in the WQMP.
C25	Prior to the commencement of site preparation and excavation activities, or as otherwise agreed by the Director-General, in areas identified as having a moderate to high risk of contamination, a site audit shall be carried out by a site auditor. A site audit report is to be prepared by the site auditor detailing the outcomes of Phase 2 contamination investigations within these areas. The site audit report shall detail, where relevant, whether the land is suitable (for the intended land use) or can be made suitable through remediation. A site audit statement(s) must be prepared verifying that the site has been remediated to a standard consistent with the intended land use. The site audit statement(s) shall be submitted to the Director-General prior to operation of the SSI, unless otherwise agreed by the Director-General. Note: Terms used in this condition have the same meaning as in the Contaminated Land Management Act 1997.			x	x	x			Compliant	A Stage 2 detailed site investigation was undertaken on 28 May 2012 as part of the EIS and only a low risk of contamination was identified. As such, a site audit report and audit statement was not required under CoA C25.
Hydrology and Flooding										
C26	The Applicant shall ensure, where feasible and reasonable, that the project is designed to not exceed the efflux and other flooding criteria within the vicinity of the project as identified or predicted in the documents listed under condition A2.	x							Compliant	The Hydrological Mitigation Report (Rev F, 15 November 2017) was submitted to DP&E for information on 17 November 2017.

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments	
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C27	The Applicant shall develop a Hydrological Mitigation Report for properties in the Hawkesbury River floodplain areas where flood impacts are predicted to increase as a result of the project. The Report shall be based on detailed floor level survey and associated assessment of potentially flood affected properties in those areas. The Report shall: (a) identify properties in those areas likely to have an increased flooding impact and detail the predicted increased flooding impact; (b) identify mitigation measures to be implemented where increased flooding is predicted to adversely affect access, property or infrastructure; (c) identify measures to be implemented to minimise scour and dissipate energy at locations where flood velocities are predicted to increase as a result of the project and cause localised soil erosion and/or pasture damage; (d) be developed in consultation with the relevant Council, NSW State Emergency Service and directly-affected property owners; and (e) identify operational and maintenance responsibilities for items (a) to (c) inclusive.			x					Compliant	The Hydrological Mitigation Report (Rev F, 15 November 2017) was submitted to DP&E for information on 17 November 2017.
C28	Based on the mitigation measures identified in this consent, the Applicant shall prepare a final schedule of feasible and reasonable flood mitigation measures proposed at each directly-affected property in consultation with the property owner. The schedule shall be provided to the relevant property owner(s) prior to the implementation/ construction of the mitigation works, unless otherwise agreed by the Director-General. A copy of each schedule of flood mitigation measures shall be provided to the Department and the relevant Council prior to the implementation/ construction of the mitigation measures on the property.			x					N/A	Not required as no 'at property' mitigation works are required under the Hydrological Mitigation Report (CoA C27).
C29	In the event that the Applicant and the relevant property owner cannot agree on feasible and reasonable flood mitigation measures to be applied to a property within one month of the first consultation on the measures (as required by this consent), the Applicant shall employ a suitably qualified and experienced independent hydrological engineer, who has been approved by the Director-General, to resolve this dispute prior to the commencement of construction in the floodplain areas affected by increased afflux from the project. The independent hydrological engineer shall advise and assist affected property owners in negotiating feasible and reasonable mitigation measures.			x					N/A	Not required as no 'at property' mitigation works are required under Hydrological Mitigation Report (CoA C27).
C30	The Applicant shall provide assistance to the relevant council and/ or NSW State Emergency Service, to assist in the preparation of any new or necessary update(s) to the relevant plans and documents in relation to flooding, to reflect changes in flooding levels, flows and characteristics as a result of the project.			x					Compliant	Council and the SES were consulted with during the development of the Hydrological Mitigation Report, and were provided a copy of the final report.
C31	If a flood event occurs during construction the works on-site shall be suspended if instructed by either the Applicant or emergency services. The Applicant shall keep Hawkesbury City Council informed of the status of the works during a flood event and before recommencing activity after the peak of a flood event.				x				Compliant & Ongoing	Both the Hawkesbury City Council and the SES will be continually informed during a flood event. Mitigation measures (F17 and F39) are provided in Table 5-1 of the Flood Warning and Evacuation Plan to address this requirement.
C32	A flood warning sign of durable material shall be permanently fixed in a prominent location within the vicinity of the SSI. The sign shall advise members of the public that the area may be subject to inundation during times of flood. The design and location of this sign shall be determined in consultation with Hawkesbury City Council, the OEH and submitted for the approval of the Director-General prior to operation.	x				x			Compliant & Ongoing	Council and OEH have been consulted regarding the design and location of the flood signs. Details will be submitted to DP&E for approval prior to operation.
C33	The outlet structure for the water quality basin must be consistent with the Controlled Activities on Waterfront Land: Guidelines for Outlet Structures on Waterfront Land (NSW Office of Water, July 2012).	x							Compliant	The proposed water quality basin discharges upstream of an existing outlet structure on the northern bank of the river. The existing outlet structure is considered to be in consistent with the "Guidelines for Outlet Structures on Waterfront Land".

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments	
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Biodiversity										
C34	A riparian corridor consisting of vegetation from the relevant local native vegetation communities shall be established along the Hawkesbury River bank areas disturbed by the project with the exception of those areas required for scour protection for the safety of the bridge. The riparian corridor is to be consistent with the Controlled Activities on Waterfront Land: Guidelines for Riparian Corridors on Waterfront Land (NSW Office of Water, July 2012).				x	x		Compliant & Ongoing	Refer Section 3 of the Vegetation Management Plan (Rev 0, June 18) and the Urban Design and Landscape Detailed Design Report (September 2017).	
C35	A Vegetation Management Plan (VMP) is to be prepared consistent with the Controlled Activities on Waterfront Land: Guidelines for Vegetation Management Plan on Waterfront Land (NSW Office of Water, July 2012) that demonstrates the protection of remnant native riparian vegetation and the rehabilitation of the riparian corridor. The VMP must be complied with.				x	x		Compliant & Ongoing	The Vegetation Management Plan (Rev 0, June 18) was submitted to DP&E for information on 4 June 18.	
C36	Seed sources used for the rehabilitation of the riparian corridor are to be from local native botanical provenance where possible.				x	x		Compliant & Ongoing	Seed sources are considered in: o Table 6-1 (mitigation measure FF14) in the Construction Flora and Fauna Management Sub-Plan. o Section 6 of the Vegetation Management Plan (Rev 0, June 18).	
C37	A minimum two year monitoring and maintenance period is required for the riparian zone commencing after final planting, or until such time as a minimum 80 per cent survival rate of each species planted and a maximum 5 per cent weed cover for the treated riparian corridor is achieved. The monitoring program is to include weed control monitoring.					x	x	Compliant & Ongoing	Refer Section 7.5 of the Flora and Fauna Management Plan and Section 9 and 11 of the Vegetation Management Plan (Rev 0, June 18).	
Waste Management										
C38	The Applicant shall maximise the reuse and/or recycling of waste materials generated on site as far as practicable, to minimise the need for treatment or disposal of those materials off site.		x	x	x			x	Compliant & Ongoing	Refer Section 5.4 and Table 6.1 (mitigation measure WM7) of the Construction Waste Management Sub-Plan
C39	All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.		x	x	x			x	Compliant & Ongoing	Refer Section 5.6 and Table 6.1 (mitigation measure WM23) of the Construction Waste Management Sub-Plan
C40	All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2009), or any superseding document.		x	x	x			x	Compliant & Ongoing	Refer Section 5.3 and Table 6.1 (mitigation measure WM8) of the Construction Waste Management Sub-Plan
Utilities and Services										
C41	Utilities, services and other infrastructure potentially affected by construction and operation of the SSI shall be identified prior to construction to determine requirements for access to, diversion, protection, and 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 Applicant, or carried out in accordance with existing agreements.				x				Compliant	All relevant utility service providers were consulted during the detailed design process. These service providers are required to approve the utility adjustments.
C42	The cost of repairing any damage to existing utilities or services shall be borne by the Applicant.			x	x			x	Compliant & Ongoing	This condition is noted.
C43	The existing 50mm rising sewer main that is attached to the existing Windsor Bridge that services Hawkesbury City Council's toilet block in Macquarie Park is to be relocated prior to the commencement of works at the existing Windsor Bridge.			x	x			x	Compliant & Ongoing	This condition has been considered in the detailed design.
Transport and Access										
C44	The SSI shall be designed with the objective of minimising adverse changes to existing access and services for other transport modes and, where feasible, and reasonable facilitate an improved level of access and service to other transport modes compared to the existing situation.	x							Compliant	The new bridge will provide improved access for all transport modes, including but not limited to: an additional lane, greater lane widths, improved approaches and a shared use pathways.
C45	Access to private property shall be maintained during construction unless otherwise agreed with the property owner in advance. A landowner's access that is physically affected by the SSI shall be reinstated to at least meet the relevant Australian standard, in consultation with the property owner.				x			x	Compliant & Ongoing	Access to private property shall be maintained during construction, as outlined in Section 5.5 of the Construction Traffic Management Sub-Plan

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments
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C46	Any proposed closure of the right turn movement from Bridge Street southbound into George Street shall be sequenced to occur outside business hours (9:00am to 5:00pm Monday to Friday). Hawkesbury City Council shall be provided with a minimum one month notice of any planned closure in writing.				x			Compliant & Ongoing	This closure has been considered during preparation of the Construction Traffic Management Sub-Plan
Urban Design and Landscaping									
C47	<p>The Urban Design and Landscape Plan referred to in condition B7 must be prepared and implemented and the works approved by that Plan must be completed within 12 months of the commissioning of the project. The Plan shall be prepared in consultation with the OEH, and Hawkesbury Council and shall be consistent with the CMP referred to in condition B1 and include, but not necessarily be limited to:</p> <p>(a) the proposed landscaping of Thompson Square Conservation Area, as shown on the map in Appendix 2 Strategic Conservation Management Plan study area;</p> <p>(b) use of the heritage design principles developed under the CMP, and take into account appropriate landscaping in the vicinity of heritage items to minimise heritage impacts;</p> <p>(c) a description of locations along the project corridor directly or indirectly impacted by the construction of the project (e.g. temporary ancillary facilities, access tracks, etc.) and details of the strategies to progressively rehabilitate regenerate and/or revegetate the locations with the objective of promoting biodiversity outcomes and visual integration. Details of species to be replanted/ revegetated shall be provided, including their appropriateness to the area and considering existing vegetation and habitat for threatened species; NSW (d) location of existing vegetation and proposed landscaping (including use of indigenous and endemic species where possible) and design features;</p> <p>(e) graphics such as sections, perspective views and sketches for key elements of the project (including, but not limited to built elements such as retaining walls, cuttings, abutments and street furniture);</p> <p>(f) final design details of the proposed external materials and finishes, including schedules and a sample board of materials and colours; including justification for sustainability of materials including design and installation techniques as well as long term maintenance and their suitability in terms of:</p>		x		x	x		Compliant & Ongoing	The Urban Design and Landscape Detailed Design Report (September 2017) was submitted to DP&E for information on 13 October 2017. Consultation on the Urban Design and Landscape Plan was undertaken and outcomes of the consultation is provided in the Urban Design and Landscape Plan Submissions Report (September 2017), which was submitted to DP&E for information on 13 October 2017.

PART C. ENVIRONMENTAL PERFORMANCE		Phase of Project						Compliance Status	Comments	
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	<p>(i) function (ability to withstand heavy vehicle usage and public setting);</p> <p>(ii) architectural period/style (respecting the simple Colonial Georgian style);</p> <p>(iii) landscape suitability (i.e. suited to both usage and context); and</p> <p>(iv) heritage context.</p> <p>(g) location and design treatments for any associated footpaths and cyclist elements, and other features such as seating, lighting (in accordance with AS 4282-1997 Control of the Obtrusive Effect of Outdoor Lighting), fencing, and signs;</p> <p>(h) take into account appropriate roadside plantings and landscaping in the vicinity of heritage items and ensure no additional heritage impacts;</p> <p>(i) detailed design drawings of the proposed works including, but not limited to, road pavements, pedestrian pavements, kerb treatments, abutments, garden beds;</p> <p>(j) strategies for progressive landscaping of other environmental controls such as erosion and sedimentation controls, drainage and noise mitigation;</p> <p>(k) the lighting, street furniture and other fixtures shall be consistent with Crime Prevention Through Environmental Design Principles (CPTED) where possible;</p> <p>(l) the installation of services to support events such as lighting, electricity, water, sewer, vehicle access and communications technology should be considered and be inherent in the design. Refer to Council's Sustainable events Policy (on Council's web site: http://council.hawkesburv.nsw.00v.au/masterviewui/modules/documentmaster/getdocument.aspx?docsetid=3701656);</p> <p>(m) monitoring and maintenance procedures for the vegetated 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</p> <p>(n) evidence of consultation with the NSW Heritage Council, Hawkesbury City Council and community on the proposed strategy prior to its finalisation.</p>								As above	
C48	<p>External Lighting shall comply with AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting. Upon installation of External Lighting, but before it is finally commissioned, the Applicant shall submit to the Certifying Authority, in consultation with the relevant Council, evidence from an independent qualified practitioner demonstrating compliance in accordance with this condition.</p>				x				Compliant & Ongoing	Independent certification will be produced once the street lights are installed by the contractor but prior to commissioning.

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments	
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Environmental Management										
D1	The Applicant shall engage a suitably qualified person to prepare a pre-construction dilapidation report prior to the commencement of construction and a post-construction dilapidation report at the completion of construction works. These reports are to ascertain the: (a) structural condition of local roads likely to be used by the project's construction traffic identified in the Traffic Management Sub-plan required under condition D5(a). (b) structural condition of footpaths, buildings and other utilities in the vicinity of the SSI; (a) whether the construction works resulted in any structural damage to roads, buildings and other utilities in the vicinity of the SSI. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the post-construction dilapidation report must: (i) compare the post-construction with the pre-construction dilapidation report; and (ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads. The pre-construction and post-construction dilapidation reports shall be prepared in consultation with Hawkesbury City Council and submitted for the approval of the Director-General.		x	x			x		Compliant & Ongoing	Pre-construction dilapidation reports have been prepared for the project and submitted to the DP&E for approval where owner consent was obtained.
D2	The Applicant shall undertake road pavement deflection testing of the construction truck routes at 20 metre intervals along all wheel paths prior to commencement of construction. At completion of construction, the Applicant shall undertake road pavement deflection testing of the truck routes. If the deflection tests show an increase in deflection, the Applicant shall undertake pavement rehabilitation of the affected road pavements to achieve the pavement deflection that existing prior to the commencement of works.			x		x		Compliant & Ongoing	Road deflection testing has been undertaken for the project.	
D3	The Applicant shall bear the cost of all repair works to Hawkesbury City Council's property damaged during the course of construction of the SSI.				x			Compliant & Ongoing	This condition is noted for the project.	
Construction Environmental Management Plan (CEMP)										
D4	The Applicant shall prepare and (following approval) implement a Construction Environmental Management Plan for the project. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant agencies and in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to: (a) a description of activities to be undertaken during construction of the project or stages of construction, as relevant; (b) statutory and other obligations that the Applicant is required to fulfil during construction including approvals, consultations and agreements required from agencies and key legislation and policies. Evidence of consultation with relevant agencies shall be included identifying how issues raised by these agencies have been addressed in the CEMP; (c) a description of the roles and responsibilities for relevant employees involved in the construction of the project 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 consent; (d) identification of ancillary facility site locations, including an assessment against the location criteria outlined in this consent;			x	x			x	Compliant & Ongoing	The Construction Environmental Management Plan (Rev H, August 2018) was approved by DP&E on 14 Sept 2018.

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING	Phase of Project							Compliance Status	Comments
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<p>(e) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance would be monitored and managed to meet acceptable outcomes including what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:</p> <p>(i) measures to monitor and manage dust emissions including dust from stockpiles, blasting, traffic on unsealed public roads and materials tracking from construction sites onto public roads;</p> <p>(ii) measures to minimise hydrology impacts, including measures to stabilise bed and bank structures as required,</p> <p>(iii) measures to monitor and manage impacts associated with the construction and operation of ancillary facilities,</p> <p>(iv) measures for the handling, treatment and management of contaminated materials,</p> <p>(v) 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 for dealing with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including the potential for reuse of treated water from sediment control basins);</p> <p>(vi) measures to monitor and manage spoil, fill and materials stockpile sites including details of how spoil, fill or material would be handled, stockpiled, reused and disposed and a stockpile management protocol detailing locational criteria that would guide the placement of stockpiles and management measures that would be implemented to avoid/ minimise amenity impacts to surrounding residents and environmental risks (including to surrounding water courses). Stockpile sites that affect heritage, threatened species, populations or Endangered Ecological Communities require the approval of the Director-General, in consultation with the OEH;</p>								As above	
<p>(vii) measures to monitor and manage hazard and risks including emergency management; and</p> <p>(viii) the issues identified in condition D7;</p> <p>(f) details of community involvement and complaints handling procedures during construction, consistent with the requirements of conditions D11 to D13;</p> <p>(g) details of compliance and incident management consistent with the requirements of conditions D7 and D8 ; and</p> <p>(h) procedures for the periodic review and update of the CEMP and sub-plans required under this consent respectively, as necessary (including where minor changes can be approved by the Environmental Representative).</p> <p>The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of construction, or within such period otherwise agreed by the Director-General. Construction works shall not commence until written approval has been received from the Director-General.</p>								As above	

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments	
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D5	<p>As part of the CEMP for the project, the Applicant shall prepare and implement the following sub plan(s):</p> <p>(a) a Construction Traffic Management Sub-plan, prepared in accordance with the Roads and Maritime Service's QA Specification G10 — Control of Traffic and Traffic Control at Work Sites Manual (2003) to manage disruptions to traffic movements as a result of construction traffic associated with the project. The sub-plan shall be developed in consultation with the relevant council and shall include, but not necessarily be limited to:</p> <p>(i) identification of construction traffic routes and quantification of construction traffic volumes (including heavy vehicle/spoil haulage) on these routes;</p> <p>(ii) details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points;</p> <p>(iii) details of potential impacts to traffic on the existing road network, including, intersection level of service and potential disruptions to pedestrians, public transport, parking, cyclists and property access;</p> <p>(iv) details of temporary and interim traffic arrangements to address potential impacts;</p> <p>(v) a response procedure for dealing with traffic incidents; and</p> <p>(vi) mechanism for the monitoring, review and amendment of this sub-plan.</p>			x	x				Compliant & Ongoing	The Construction Traffic Management Sub Plan (Rev E, Sept 2018) was approved by DP&E on 14 Sept 2018.
	<p>(b) a Construction Flora and Fauna Management Sub-plan to detail how construction impacts on ecology will be minimised and managed. The sub-plan shall be developed in consultation with the OEHL and DPI (Fishing and Aquaculture) and shall include, but not necessarily be limited to:</p> <p>(i) details of pre-construction surveys undertaken by a suitably qualified and experienced ecologist to verify the construction boundaries/ footprint of the project based on detailed design and to confirm the vegetation to be cleared as part of the project (including tree hollows, threatened flora and fauna species and riparian vegetation);</p> <p>(ii) updated sensitive area/ vegetation maps based on (i) above and previous survey work;</p> <p>(iii) details of general work practices and mitigation measures to be implemented during construction to minimise impacts on native fauna and native vegetation (particularly threatened species and EECs) not proposed to be cleared as part of the project, including, but not necessarily limited to: fencing of sensitive areas, a protocol for the removal and relocation of fauna during clearing, engagement of a suitably qualified and experienced ecologist to identify locations where they would be present to oversee clearing activities and facilitate fauna rescues and re-location, clearing timing with consideration to breeding periods, measures for maintaining existing habitat features (such as bush rock and tree branches etc), seed harvesting and appropriate topsoil management, construction worker education, weed management (including controls to prevent the introduction or spread of <i>Phytophthora cinnamomi</i>), erosion and sediment control and progressive re-vegetation;</p> <p>(iv) specific procedures to deal with EEC/ threatened species anticipated to be encountered within the project corridor including re-location, translocation and/or management and protection measures;</p> <p>(v) a procedure for dealing with unexpected EEC/threatened species identified during construction including cessation of work and notification of the OEHL, determination of appropriate mitigation measures in consultation with the OEHL (including relevant re-location measures); and</p> <p>(vi) mechanism for the monitoring, review and amendment of this sub-plan;</p>			x	x				Compliant & Ongoing	The Construction Flora and Fauna Management Sub Plan (Revision 0, August 2018) was approved by DP&E on 14 Sept 2018.

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments	
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<p>(c) a Construction Noise and Vibration Management Sub-plan to detail how construction noise and vibration impacts will be minimised and managed. The sub-plan shall be developed in consultation with the EPA and include, but not necessarily be limited to:</p> <p>(i) identification of nearest sensitive receptors and relevant construction noise and vibration goals applicable to the project;</p> <p>(ii) identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to impact on surrounding sensitive receivers including expected noise/ vibration levels;</p> <p>(iii) identification of feasible and reasonable measures proposed to be implemented to minimise construction noise and vibration impacts (including construction traffic noise impacts);</p> <p>(iv) procedures for dealing with out-of-hours works in accordance with condition C14, including procedures for notifying the Director-General concerning complaints received in relation to the extended hours approved under condition C14;</p> <p>(v) procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved, including a suitable blast program, applicable buffer 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 sensitive structures where blasting and/ or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedence of the criteria);</p> <p>(vi) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints; and</p> <p>(vii) a program for construction noise and vibration monitoring clearly indicating monitoring frequency, location, how the results of this monitoring would be recorded and, procedures to be followed where significant exceedences of relevant noise and vibration goals are detected;</p>				x	x				Compliant & Ongoing	The Construction Noise and Vibration Management Sub Plan (Revision I, Sept 2018) was approved by DP&E on 19 Sept 2018.
<p>(d) a Construction Soil and Water Quality Management Sub-plan to manage surface and groundwater impacts during construction of the project. The subplan shall be developed in consultation with the OEH, EPA, DPI (Fishing and Aquaculture) and NOW and include, but not necessarily be limited to:</p> <p>(i) identification of potential sources of erosion and sedimentation, and water pollution (including those resulting from maintenance activities);</p> <p>(ii) details of how construction activities would be managed and mitigated to minimise erosion and sedimentation consistent with condition C23;</p> <p>(iii) where construction activities have the potential to impact on waterways or wetlands (through direct disturbance such as construction of waterway crossings or works in close proximity to waterways or wetlands), site specific mitigation measures to be implemented to minimise water quality, riparian and stream hydrology impacts as far as practicable, including measures to stabilise bed and/ or bank structures where feasible and reasonable, and to rehabilitate affected riparian vegetation to existing or better condition. The timing of rehabilitation of the waterways shall be identified in the sub-plan; a contingency plan, consistent with the Acid Sulfate Soils Manual, to deal with the unexpected discovery of actual or potential acid sulfate soils, including procedures for the investigation, handling, treatment and management of such soils and water seepage;</p> <p>(iv) a contingency plan, consistent with the Acid Sulfate Soils Manual, to deal with the unexpected discovery of actual or potential acid sulfate soils, including procedures for the investigation, handling, treatment and management of such soils and water seepage;</p>				x	x				Compliant & Ongoing	The Construction Soil and Water Quality Management Sub Plan (Revision I, Sept 2018) was approved by DP&E on 14 Sept 2018.

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments
		DD	BPC	PC	C	PoC	O		
	<p>(v) a tannin leachate management protocol to manage the stockpiling of mulch and use of cleared vegetation and mulch filters for erosion and sediment control;</p> <p>(vi) construction water quality monitoring requirements consistent with condition C24; and</p> <p>(vii) a groundwater management strategy, including (but not necessarily limited to):</p> <p>i. description and identification of groundwater resources (including depths of the water table and water quality) potentially affected by the project based on groundwater modelling undertaken in accordance with this consent;</p> <p>ii. identification of surrounding licensed bores, dams or other water supplies and groundwater dependant ecosystems and potential groundwater risks associated with the construction of the project on these groundwater users and ecosystems;</p> <p>iii. measures to manage identified impacts on water table, flow regimes and quality and to groundwater users and ecosystems;</p> <p>iv. groundwater inflow control, handling, treatment and disposal methods; and</p> <p>v. a detailed monitoring plan to identify monitoring methods, locations, frequency, duration and analysis requirements; and</p>								As above
	<p>(e) a Construction Heritage Management Sub-plan to detail how construction impacts on Aboriginal and non-Aboriginal heritage will be avoided, minimised and managed. The sub-plan shall be prepared by an appropriately qualified heritage consultant(s) approved by the Director-General and the OEH (Aboriginal heritage) and be developed in consultation with registered Aboriginal stakeholders, and include, but not necessarily be limited to:</p> <p>(i) details of management measures and strategies for protection, excavation, salvage and archival recording, and/or conservation of heritage items and sites that will be directly or indirectly impacted during construction (including further archaeological investigations, salvage measures and/ or measures to protect unaffected sites during construction works in the vicinity);</p> <p>(ii) procedures for dealing with previously unidentified non-Aboriginal and 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 re-commence by a suitably qualified and experienced archaeologist in consultation with the Department, OEH and registered Aboriginal stakeholders and assessment of the consistency of any new non-Aboriginal and Aboriginal heritage impacts against the approved impacts of the project, and notification to the Department, and the OEH for Aboriginal heritage (in accordance with section 89A of the National Parks and Wildlife Act 1974) and the OEH for non-Aboriginal heritage (in accordance with Section 146 of the NSW Heritage Act 1977);</p> <p>(iii) procedures for dealing with human remains, including cessation of works in the vicinity and notification of the Department, NSW Police Force, OEH and registered Aboriginal stakeholders and not recommencing any works in the area unless authorised by the Department and/ or the NSW Police Force); and</p> <p>(iv) induction processes (identification, protection) for construction personnel (including procedures for keeping records of inductions) and procedures for ongoing Aboriginal consultation and involvement.</p>			x	x			x	Compliant & Ongoing The Heritage consultant(s) preparing the HMP was approved by DP&E 13 Jul 2018. The Construction Heritage Management Sub Plan (Revision H, Sept 2018) was approved by DP&E on 18 Sept 2018.

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
Reporting										
D6	<p>The Applicant shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this consent. The Program shall be submitted to the Director-General for approval prior to the commencement of construction and relate to both the construction and operational phases of the project, and include, but not necessarily be limited to:</p> <p>(a) provisions for the notification of the Director-General of the commencement of works prior to the commencement of construction and prior to the commencement of operation of the project (including prior to each stage, where works are being staged);</p> <p>(b) provisions for periodic reporting of compliance status against the requirements of this consent, including the Statement of Commitments, to the Director-General including at least one month prior to the commencement of construction and operation of the project and at other intervals during the construction and operation, as identified in the Program;</p> <p>(c) a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing;</p> <p>(d) mechanisms for reporting and recording incidents and actions taken in response to those incidents;</p> <p>(e) provisions for reporting environmental incidents to the Director-General during construction and operation; and</p> <p>(f) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management.</p>			x	x	x	x	x	Compliant & Ongoing	A Compliance Tracking Program (rev C, Sept) was approved by DP&E on 20 Sept 2018.
D7	<p>The Applicant shall notify the Director-General and other relevant government agencies of any incident with actual or potential significant off-site environmental impacts on people or the biophysical environment as soon as practicable and within 24 hours after the occurrence of the incident. The Applicant shall provide full written details of the incident to the Director-General within seven days of the date on which the incident occurred.</p> <p>Note: Where an incident also requires reporting to the NSW Heritage Council, the OEH and/or EPA the incident report prepared for the purposes of notifying the NSW Heritage Council, the OEH and/or EPA would meet this requirement.</p>		x	x	x	x		x	Compliant & Ongoing	This requirement is outlined in the Compliance Tracking Program and Section 7 of the CEMP.
D8	<p>The Applicant shall meet the requirements of the Director-General or relevant government agency (as determined by the Director-General) to address the cause or impact of any incident, as it relates to this consent, reported in accordance with this consent, within such period as the Director-General may require.</p>		x	x	x	x		x	Compliant & Ongoing	This requirement is outlined in the Compliance Tracking Program and Section 7 of the CEMP.

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
Auditing										
Operational Noise										
D9	<p>Within 12 months of the commencement of operation of the project, or as otherwise agreed by the Director-General, the Applicant shall undertake operational noise monitoring to compare actual noise performance of the project against noise performance predicted in the review of noise mitigation measures required by this consent, and prepare an Operational Noise Report to document this monitoring. The Report shall include, but not necessarily be limited to:</p> <p>(a) noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under consent and documents specified under condition A2 of this consent;</p> <p>(b) a review of the operational noise levels in terms of criteria and noise goals established in the NSW Road Noise Policy (EPA, 2011);</p> <p>(c) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which project noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers;</p> <p>(d) details of any complaints and enquiries received in relation to operational noise generated by the project between the date of commencement of operation and the date the report was prepared;</p> <p>(e) any required recalibrations of the noise model taking into consideration factors such as actual traffic numbers and proportions;</p> <p>(f) 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; and</p> <p>(g) identification of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by this consent that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy (EPA, 2011), when these measures would be implemented and how their effectiveness would be measured and reported to the Director-General and the EPA.</p> <p>The Applicant shall provide the Director-General 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 Director-General.</p>							x	Compliant & Ongoing	Operational noise monitoring will be undertaken within 12 months of the commencement of operation.
Community Information and Involvement										
Provision of Electronic Information										
D10	<p>Prior to the commencement of construction, the Applicant shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the project. The Applicant shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:</p> <p>(a) information on the current implementation status of the project;</p> <p>(b) a copy of the documents referred to under condition A2 of this consent, and any documentation supporting modifications to this consent that may be granted from time to time;</p> <p>(c) a copy of this consent and any future modification to this consent;</p> <p>(d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;</p> <p>(e) a copy of each current strategy, plan, program or other document required under this consent; and</p> <p>(f) the outcomes of compliance tracking in accordance with the requirements of condition D6.</p>			x	x			x	Compliant & Ongoing	This requirement is outlined in Section 4.5 of the Community Communication Strategy required under condition D13. Roads and Maritime has and will continue to place all relevant documents onto the project website, as required.

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
Complaints and Enquiries Procedure										
D11	<p>Prior to the commencement of construction, the Applicant shall ensure that the following are available for community complaints and enquiries during the construction period:</p> <p>(a) a 24 hour telephone number on which complaints and enquiries about construction and operation activities may be registered;</p> <p>(b) a postal address to which written complaints and enquiries may be sent; and</p> <p>(c) an email address to which electronic complaints and enquiries may be transmitted.</p> <p>The telephone number, the postal address and the email address shall be published in a newspaper circulating in the local area prior to the commencement of construction and prior to the commencement of project operation. The above details shall also be provided on the website (or dedicated pages) required by this consent.</p>			x	x				Compliant & Ongoing	<p>A telephone number, the postal address and the email address have been provided for the project.</p> <p>Enquiries and Complaints Management is outlined in Section 5.2 of the Community Communication Strategy required under condition D13.</p> <p>The project telephone number, postal address and email address will be published in the local paper prior to construction commencing.</p>
D12	<p>The Applicant shall prepare and implement a Construction Complaints Management System consistent with AS 4269 Complaints Handling prior to the commencement of construction activities and must maintain the System for the duration of construction activities. Information on all complaints received, including the means by which they were addressed and whether resolution was reached and whether mediation was required or used, shall be maintained by the Applicant and included in a Complaints Register. The information contained within the System shall be made available to the Director-General on request.</p>			x	x				Compliant & Ongoing	<p>Construction Complaints Management System has been prepared and implemented for the project.</p> <p>This requirement is outlined in Section 5.2 and Appendix D of the Community Communication Strategy required under condition D13.</p>
Community Involvement										
D13	<p>The Applicant shall prepare and implement a Community Communication Strategy for the project. This Strategy shall be designed to provide mechanisms to facilitate communication between the Applicant, the Contractor, the Environmental Representative, the relevant council and the local community (broader and local stakeholders) on the construction and environmental management of the project. The Strategy shall include, but not necessarily be limited to:</p> <p>(a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners;</p> <p>(b) procedures and mechanisms for the regular distribution of information to stakeholders on the progress of the project and matters associated with environmental management;</p> <p>(c) procedures and mechanisms through which stakeholders can discuss or provide feedback to the Applicant and/ or Environmental Representative in relation to the environmental management and delivery of the project;</p> <p>(d) procedures and mechanisms through which the Applicant can respond to enquires or feedback from stakeholders in relation to the environmental management and delivery of the project; and</p> <p>(e) 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 project. This may include the use of an appropriately qualified and experienced independent mediator.</p> <p>(f) consultation to be undertaken for the bridge naming process. Key issues that should be addressed in the Community Communication Strategy should include (but not necessarily be limited to):</p> <p>(i) traffic management (including property access, pedestrian access);</p> <p>(ii) heritage matters;</p> <p>(iii) landscaping/urban design matters;</p> <p>(iv) construction activities; and</p> <p>(v) noise and vibration mitigation and management.</p> <p>The Applicant shall maintain and implement the Strategy throughout construction of the project. The Strategy shall be approved by the Director General prior to the commencement of construction.</p>			x	x				Compliant & Ongoing	<p>The Community Communication Strategy (version 5, Sept 2018) was approved by DP&E on 14 Sept 2018 .</p>

PART D. ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING		Phase of Project						Compliance Status	Comments	
		DD	BPC	PC	C	PoC	O			D
Environmental Representative										
D14	<p>Prior to the commencement of construction, or as otherwise agreed by the Director- General, the Applicant shall nominate for the approval of the Director-General a suitably qualified and experienced Environment Representative(s) that is independent of the design and construction personnel. The Applicant shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Director-General. The Environment Representative(s) shall:</p> <p>(a) be the principal point of advice in relation to the environmental performance of the SSI;</p> <p>(b) monitor the implementation of environmental management plans and monitoring programs required under this consent and advise the Applicant upon the achievement of these plans/ programs;</p> <p>(c) have responsibility for considering and advising the Applicant on matters specified in the conditions of this consent, and other licences and approvals related to the environmental performance and impacts of the SSI;</p> <p>(d) ensure that environmental auditing is undertaken in accordance with the Applicant's Environmental Management System(s);</p> <p>(e) be given the authority to approve/ reject minor amendments to the CEMP. What constitutes a "minor" amendment shall be clearly explained in the CEMP required under this consent;</p> <p>(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</p> <p>(g) be consulted in responding to the community concerning the environmental performance of the SSI where the resolution of points of conflict between the Applicant and the community is required.</p>		x	x	x	x		x	Compliant	The Project Environmental Representative (ER), Toby Hobbs (Vantage Environmental Management Pty Ltd) was approved by DP&E on 6 April 2016. Alternate ER's, Cameron Weller (Hutchinson Weller) and Peter Morrall (Hutchinson Weller) were approved by DP&E on 26 June 18 and 6 July 2018, respectively.
Operational Management System										
D15	Prior to the commencement of operation, the Applicant shall incorporate the project into its existing environmental management systems.					x			Compliant & Ongoing	This condition will be complied with prior to the commencement of operation.

Appendix B

Environmental Management Measures

Legend	
DD	Detailed Design
BPC	Before Pre-construction
PC	Pre-construction
C	Construction
PoC	Post-construction
OP	Operation
D	Demolition

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
HISTORIC HERITAGE										
HH1	During detailed design additional investigations will be undertaken that seek to further reduce the size and visual impact of the roundabout at Freemans Reach Road and Wilberforce Road.	x							Compliant	The northern roundabout has been designed in accordance with the Austroads Guide to Road Design (AGRD).
HH2	Opportunities to relocate above-ground utilities underground will be investigated during detailed design.	x							Compliant	Opportunities to relocate utilities underground was considered during the detailed design process.
HH3	Measures will be undertaken to ensure that the landscape scheme for the Thompson Square parkland area retains its informal character.			x		x			Compliant & Ongoing	The landscape scheme for Thompson Square was considered in the Strategic Conservation Management Plan (SCMP) required under condition B1 and the Urban Design and Landscape Plan prepared for the project under condition B7.
HH4	Prior to construction dilapidation reports will be prepared as identified in Section 7.5.6 (generally receivers within 50 metres of piling, rock breaking and vibratory compaction activities). These will be undertaken in consultation with the relevant property owners.			x					Compliant & Ongoing	Pre-construction dilapidation reports have been prepared for the project and submitted to the DP&E for approval where owner consent was obtained.
HH5	Prior to commencing work on the project construction site all construction personnel will undergo a heritage induction which would contain information on heritage values and items in the area and on environmental management measures to minimise potential heritage impacts.		x	x					Compliant & Ongoing	Details of heritage training and induction are outlined in the Construction Heritage Management Sub-Plan: o Section 8.2 (Training) o Appendix A – Heritage Education and Training Package.
HH6	All heritage items within the study area will be clearly identified on construction plans to minimise the risk of inadvertent impacts.		x	x	x				Compliant & Ongoing	Heritage items are identified on the Sensitive Area Plans included in Appendix A4 of the CEMP.
HH7	Environmental management measures identified in Section 7.5.5 of the EIS will be implemented to minimise vibration risks and impacts on heritage items.		x	x	x				Compliant	Refer to condition NV1 and NV2 below.
HH8	Heritage items at risk of vibration impacts will be inspected and monitored periodically during construction to identify any construction-related impacts. If impacts are detected, work in the area will cease and appropriate environmental management measures will be implemented such as using alternative low vibration construction techniques.		x		x				Compliant & Ongoing	Detailed in the Construction Noise and Vibration Management Sub-Plan.
HH9	Architectural noise environmental management measures for heritage listed buildings will be developed in agreement with property owners and installed by suitably qualified professionals.			x					Compliant	Architectural treatments for noise mitigation have been installed at residential properties, as outlined in the EIS. One resident declined the offer.
HH10	An integrated archaeological project and research design will be developed in conjunction with heritage agency stakeholders. The research design will seek to investigate the project footprint and realise its archaeological potential. The archaeological project and research design will set out in detail the archaeological program, the research objectives and questions, and methods of analysis and dissemination of the results.		x						Compliant	The Aboriginal Archaeological Research Design and Excavation Methodology (v 3, 5 July 2016) was approved by DP&E on 13 July 2016 under condition B3. The Historical and Maritime Archaeological Research Design (4 October 16) was approved by DP&E on 20 June 16 under condition B3. The above research design methodologies were prepared in consultation with heritage agency stakeholders.
HH11	The 1874 bridge will be dismantled in a manner that allows its construction methods and evolution to be appropriately documented as an archival record prior to, and during its demolition.							x	Compliant & Ongoing	Archival recording of the bridge was included in the Detailed Photographic Archival Recording report (Rev 6, 12 February 2018) required under condition B2. Further archival recording will be undertaken during demolition as required by mitigation measure HH11 in the Construction Heritage Management Sub-Plan.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
HH12	Further consultation with utility providers will be undertaken to confirm the feasibility of reducing the number of trenches required for the installation of utilities.			x					Compliant & Ongoing	Consultation with utility providers has been undertaken. Some utilities have been relocated to the existing road cutting to avoid excavation in areas with potential heritage.
HH13	Prior to commencing works and during works, an archival record of the project footprint and the immediate vicinity will be undertaken in accordance with Heritage Council guidelines for items of State significance.		x	x					Compliant & Ongoing	The Detailed Photographic Archival Recording (Rev 6, 12 February 2018) has been undertaken and was approved by DP&E on 16 February 2018, under condition B2. Further archival recording will be undertaken during demolition as required by mitigation measure HH11 in the Construction Heritage Management Sub-Plan.
HH14	The Heritage Branch (on behalf of the Heritage Council), the Hawkesbury Museum and Hawkesbury City Council will be consulted on the level of appropriate archival recording. At a minimum archival recording will be undertaken in accordance with the Heritage Council guidelines for recording items of State significance prior to any further works.		x	x					Compliant & Ongoing	The Detailed Photographic Archival Recording (Rev 6, 12 February 2018) under condition B2 was undertaken in accordance with the Heritage Council guidelines. The interpretation and preservation of heritage items will be undertaken in consultation with the Heritage Branch, Hawkesbury Museum and Council.
HH15	Archival recording prior to, during demolition and construction of the project and after completion of the project will be undertaken.		x	x	x				Compliant & Ongoing	The Detailed Photographic Archival Recording (Rev 6, 12 February 2018) was approved by on DP&E on 16 February 2018. Further archival recording of the bridge will be undertaken prior to demolition.
HH16	A social record of Thompson Square and the building of the replacement bridge will be prepared to capture community views on the change to the environment.		x						Compliant & Ongoing	Strategic Conservation Management Plan (SCMP) required under condition B1. Urban Design and Landscape Plan prepared for the project under condition B7.
HH17	Consultation with Hawkesbury City Council, relevant heritage agencies and the community on the urban design and landscape concept for Thompson Square will be undertaken during the detailed design phase of the project. The urban design landscaping principles and objectives will be used to further develop the detailed design of the project.			x					Compliant & Ongoing	Consultation with Hawkesbury City Council, relevant heritage agencies and the community was undertaken during preparation of the Urban Design and Landscape Detailed Design Report (September 2017), required under condition B7. The outcomes of consultation are contained in the Urban Design and Landscape Plan Submissions Report (September 2017).
HH18	The concept of an informal landscape will be the basis of the final landscape plan for Thompson Square.			x					Compliant & Ongoing	The final landscape plan is outlined in the Urban Design and Landscape Detailed Design Report (September 2017), required under condition B7.
HH19	Post-construction landscaping will be prioritised where it would provide residences and businesses with a visual buffer to the completed project.			x					Compliant & Ongoing	Urban Design and Landscape Detailed Design Report (September 2017), required under condition B7.
HH20	An interpretation strategy within the archaeological project plan and research design, will be developed to identify opportunities for public understanding and engagement with the archaeological investigation process. This will assess and recommend strategies.			x					Compliant & Ongoing	The Interpretation Strategy (Rev 3 February 2017) was prepared and submitted to DP&E for information on 28 March 2017.
HH21	An interpretation plan will be prepared based upon all of the heritage assessments to provide a framework for making information about the site's significance publicly accessible. The interpretive plan will be informed by the <u>landscape masterplan that is proposed for Thompson Square.</u>			x					Compliant & Ongoing	The Interpretation Plan (Stage 1) (version 10.0, May 2018) was prepared and submitted to DP&E as required under condition B1.
HH22	Where possible, excess materials such as the iron piers on the existing Windsor bridge, would be re-used within the project. If re-use is not possible within the project, re-use opportunities offsite would be investigated. All components would be properly labelled with provenance.				x				Compliant & Ongoing	This will be considered as required by the Construction Waste Management Sub-Plan.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
MARITIME ARCHAEOLOGY										
MH1	An above and below water maritime archaeological salvage excavation will be undertaken within the area considered to have a high potential to contain archaeological remains associated with the c.1814 wharf where impacts from the project are anticipated. This includes the area immediately behind the southern bank of the river within footprint of the project. The salvage excavation will be conducted by a qualified maritime archaeologist in accordance with an appropriate research design. The research design would include, as a minimum, an excavation methodology, research questions and provisions for artefact analysis.		x						Compliant & Ongoing	Maritime archaeological excavations have been undertaken. These works were undertaken in accordance with: <ul style="list-style-type: none"> Historical and Maritime Archaeological Research Design (4 October 16) approved by DP&E 20 June 16. Maritime Archaeological Testing Report and Detailed Salvage Strategy for Maritime Archaeological Excavation (version F, March 2018) approved by DP&E 23 March 2018.
MH2	An archaeological excavation report will be prepared at the conclusion of the salvage excavation, and submitted to the Office of Environment and Heritage for their records.		x						Compliant & Ongoing	A salvage report will be prepared following completion of the salvage excavations, as required under condition C5.
MH3	The results of the excavation and artefact analysis will be used in on-site interpretation of the maritime history and heritage of the Windsor area.		x						Compliant & Ongoing	Results of the maritime excavation will be used in on-site interpretation of maritime history which will be outlined in the Interpretation Plan (Stage 2) required under the staged approval of condition B1.
MH4	Archaeological monitoring by a qualified archaeologist will be undertaken in conjunction with earthworks and landscaping on the northern side of the existing bridge in the general location of the c.1835 punt landing. Any archaeological remains or relics associated with the punt crossing will be recorded and/or salvaged.		x						Compliant & Ongoing	The general location of the punt landing on the northern side of the river is outside the limit of construction works (including scour protection). Under the Detailed Salvage Strategy the area is subject to the unexpected find procedure if construction was to extend into this area.
MH5	An archaeological monitoring report will be prepared at the end of monitoring works, and submitted to the Office of Environment and Heritage for their records.				x	x	x		Compliant	The results of the maritime archaeological monitoring are outlined in the following documents: <ul style="list-style-type: none"> Test Excavation Report – Historical Archaeology (24 May 2017) approved by DP&E 1 December 2017. Maritime Archaeological Testing Report and Detailed Salvage Strategy for Maritime Archaeological Excavation (version F, March 2018) approved by DP&E 23 March 2018. These documents have been submitted to OEH.
ABORIGINAL HERITAGE										
AH1	A salvage excavation plan will be developed in consultation with NSW Office of Environment and Heritage which would include the following considerations: <ul style="list-style-type: none"> In the upper portion of W-SP 45-5-3581, at the corner of George and Bridge Streets, the entire extent of the archaeologically significant deposit will be salvaged via open excavation. The area of excavation would be about 100 square metres or as otherwise agreed with OEH during detailed design. In the lower portion of W-SP 45-5-3581, in the area between Bridge Street, Old Bridge Street and the wharf carpark, a representative sample of archaeological material will be taken to further investigate the relationship between the identified stone artefacts and shell lenses. The area of excavation would be about 25-50 square metres or as otherwise agreed with OEH during detailed design. Field and analysis methods for the salvage excavations will be consistent with the Department of Planning and Infrastructure approved methodology set out in Volume 2 - working paper 3 and Department of Planning and Infrastructure will be consulted during the salvage process. A suitably qualified and experienced archaeologist will be appointed to oversee the salvage activities. 		x	x	x				Compliant	The Detailed Salvage Strategy for Aboriginal and Historical Archaeological Heritage (v 2.5, 13 November 2017) prepared under Condition B3 was prepared in consultation with OEH and approved by DP&E on 1 December 2017.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project						Compliance Status	Comment	
		DD	BPC	PC	C	PoC	O			D
Measure										
AH2	<ul style="list-style-type: none"> Aboriginal objects recovered during salvage activities would be transferred to the Australian Museum in accordance with legislative requirements, Australian Museum Archaeological Collection Deposition Policy v1.0 January 2012. In the event the Australian Museum is unable to accept the objects, the objects will be transferred in accordance with a Care Agreement or similar agreement to an Aboriginal community. In the event that neither the Australian Museum nor the Aboriginal community are able to accept the archaeological objects, the suitably qualified and experienced archaeologist appointed to oversee the salvage activities would seek a Care Agreement or similar agreement to curate the objects. 		x					Compliant & Ongoing	The future curation of the cultural materials is yet to be determined. Initial discussions indicate a preference to submit the cultural material to a museum or repository for future care, with the Windsor Museum mentioned. However, final curation of the cultural material will be determined in consultation with the RAPs at the completion of the post-excavation analysis and reporting.	
AH3	A written archaeological excavation report will be provided to RMS within a reasonable time following the completion of the archaeological program.		x	x				Compliant & Ongoing	A salvage report will be prepared following completion of the salvage excavations, as required under condition C5.	
AH4	In the areas where archaeological salvage is proposed, no construction or demolition activities (including preliminary and preparatory activities such as fencing, investigative drilling, minor clearing, establishing site compounds and adjustment of services and utilities) will occur until the salvage activities have been completed in that area.		x					Compliant & Ongoing	The proposed Aboriginal cultural heritage salvage program has now been completed. As such, the site is considered to have been cleared of constraints associated with Aboriginal cultural heritage and no additional Aboriginal salvage works are considered required during construction unless excavation works are to occur outside of the construction buffer zone which is detailed in Figure 16 of the DSS.	
AH5	Prior to the commencement of preliminary and preparatory construction or demolition activities, a construction heritage site map identifying the known Aboriginal heritage sites and the areas to undergo salvage excavation will be prepared.		x	x				Compliant & Ongoing	The Detailed Salvage Strategy (DSS) prepared under Condition B3 outlines the known Aboriginal heritage sites and the area to undergo salvage excavation. Sensitive Area Plans identifying are included in Appendix A4 of the CEMP.	
AH6	Registered Aboriginal stakeholders will be provided with the opportunity to assist with the salvage excavation.		x					Compliant & Ongoing	Registered Aboriginal stakeholders assisted in the Aboriginal salvage operations in Area I.	
AH7	Incident reporting procedures for the project will cover incidents involving Aboriginal heritage.		x	x	x			x	Compliant	An Incident Reporting Procedure (CEMP Appendix A6) has been developed for the project and covers incidents involving Aboriginal and non-Aboriginal heritage.
AH8	Project environmental management plans will identify procedures for handling human remains, including an immediate stop to work in the vicinity of the find, and reporting to appropriate authorities.		x	x	x			x	Compliant	The Construction Heritage Management Sub-Plan outlines the procedure to follow in the event of discovery of human remains during construction works (RMS Standard Management Procedure – Unexpected Archaeological Finds).

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
TRAFFIC AND TRANSPORT										
T1	A Construction Traffic Management Plan will be prepared and implemented which would enable the safe management of traffic and minimise impacts on the local community. The plan will be structure to address the following issues: · Identification of public roads to be utilised by construction traffic. · Management measures so that construction traffic utilise the identified roads. · Identification of any public roads that may be partially or completely closed during the construction phase and the relevant expected timings and duration of closures. · Identification of sources of major construction materials and routes for their delivery to site. · Temporary access and traffic arrangements to be implemented during construction. · Access arrangements to construction sites and compounds and measures to prevent construction traffic from obstructing traffic flow inadvertently. · Parking for construction workers. · A response plan for any construction traffic incident. · Monitoring, review and amendment mechanisms.		x	x	x				Compliant & Ongoing	A Construction Traffic Management Sub-Plan (Rev E, Sept) was approved by DP&E on 14 Sept 2018.
T2	Traffic Control Plans will be developed and implemented for specific areas and/or phases of construction. These will be prepared in accordance with relevant guidelines and by appropriately qualified personnel.		x	x	x				Compliant & Ongoing	The requirements for Traffic Control Plans (TCP) are outlined in Section 7 of the Construction Traffic Management Sub-Plan
T3	Traffic control schemes will be inspected regularly and modified if required.		x	x	x				Compliant & Ongoing	This mitigation measure is addressed in Sections 9.3 and 10.1 of the Construction Traffic Management Sub-Plan.
T4	Drivers and construction workers will be inducted in the requirements of the traffic management plan.		x	x	x				Compliant & Ongoing	This mitigation measure is addressed in Section 1.4 of the Construction Traffic Management Sub-Plan.
T5	Deliveries and other major construction traffic movements will be timed to occur outside peak traffic periods, where possible.		x	x	x				Compliant & Ongoing	This mitigation measure is addressed in Section 5.1.2 of the Construction Traffic Management Sub-Plan.
T6	Queuing on public roads will be avoided by the use of two-way radios to call up haulage trucks from layover areas on a 'just in time' basis.				x				Compliant & Ongoing	This mitigation measure is addressed in Section 5.1.6 of the Construction Traffic Management Sub-Plan.
T7	Dilapidation surveys of roads around the project site will be undertaken prior to their use for construction as well as after construction is complete. Any damage to roads will be repaired.			x	x	x			Compliant & Ongoing	Pre-construction road dilapidation reports have been submitted to the DP&E for approval.
T8	Consultation will be undertaken with the emergency services, bus operators, local business and other major stakeholders to inform them on changes in traffic management during construction.			x	x				Compliant & Ongoing	This mitigation measure is addressed in Section 9.2 of the Construction Traffic Management Sub-Plan.
T9	Construction related parking in local areas will be in accordance with the relevant parking restrictions. Opportunities to limit the impact this may have on the community will be investigated in consultation with the Hawkesbury City Council.				x				Compliant & Ongoing	This mitigation measure is addressed in Section 5.6 of the Construction Traffic Management Sub-Plan.
T10	Environmental management measures may include introducing a temporary navigational speed limit (4 knots or below) within the construction zone and/or introducing a temporary no wash zone. Exclusion zones around marine construction sites will be required, however at all stages passage up and downstream would be provided to watercraft. Other RMS maritime requirements will be complied with.		x	x	x				Compliant & Ongoing	This mitigation measure is addressed in Section 5.8 of the Construction Traffic Management Sub-Plan.
T11	Consultation with Maritime operations will be undertaken so that impacts are minimised.		x	x	x			x	Compliant & Ongoing	Consultation with maritime operations has commenced and will continue throughout construction.
T12	Operational traffic levels and delays will be monitored. When delays due to traffic growth become unacceptable reconfiguration of the lanes on the bridge and approach roads from the initial two lane configuration to two southbound and one northbound lane will be undertaken.							x	Pending	Traffic levels and delays will be monitored during operation.
VISUAL IMPACT, URBAN DESIGN, AND LANDSCAPING										

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
V1	<ul style="list-style-type: none"> Refinement of the bridge, its abutments and constituent parts and details to ensure a high quality outcome in response to its prominence within the Hawkesbury River's landscape setting and the township of Windsor. Lighting design would be refined to integrate with the design and character of the bridge, approach roads and public domain, with consideration of minimising potential impacts associated with light spill and glare. 			x					Compliant & Ongoing	Urban Design and Landscape Detailed Design Report (September 2017) was submitted to DP&E for information on 13 October 2017.
V2	<ul style="list-style-type: none"> Further consultation would be undertaken with Hawkesbury City Council and other relevant stakeholders to develop an urban design, landscape and open space use plan for Thompson Square and adjacent areas on the southern foreshore. The concept design of Thompson Square presented in this proposal would form the basis for ongoing consultation. Retention and protection of as many trees as possible will be undertaken but in particular the most significant existing trees would be incorporated into the design wherever possible. Review the potential benefits of locating the shared path on the eastern side of the proposed bridge to increase the area of green space in Thompson Square. New tree planting would be consistent and complement the existing species that are to be retained. Planting locations would facilitate direct views to the river and screen the replacement bridge where possible. Any new lighting would strike a balance between illumination for safety and the context of the parkland and its adjoining areas. 			x					Compliant & Ongoing	Urban Design and Landscape Detailed Design Report (September 2017) was submitted to DP&E for information on 13 October 2017. Urban Design and Landscape Plan Submissions Report (September 2017) was submitted to DP&E for information on 13 October 2017.
V3	<ul style="list-style-type: none"> Further consultation would be undertaken with Hawkesbury City Council to develop an urban design, landscape plan for the southern foreshore and adjacent areas. Further design refinement of The Terrace and foreshore area to achieve high quality public access and amenity along the river's edge and to the river, including the appropriate provision of lighting where required. Detailed design of the form, materials and finishes of the foreshore retaining wall would be undertaken to maximise the integration of the wall into the river setting. Consideration would be given to the design of The Terrace roadway including materials and form and to integrate it into the surrounding parkland. New tree, shrub and groundcover planting would be incorporated in the foreshore areas to enhance the parkland setting and views to the river. 			x					Compliant & Ongoing	The Urban Design and Landscape Plan Submissions Report (September 2017) was submitted to DP&E for information on 13 October 2017.
V4	<ul style="list-style-type: none"> Further consultation would be undertaken with Hawkesbury City Council to develop an urban design, landscape plan for the northern foreshore and adjacent areas. Further design refinement would be undertaken to improve the integration of the northern intersection responding to its location and role as the northern arrival point to Windsor and Macquarie Park Safe pedestrian and cycle connections throughout the project and links with existing path network within Macquarie Park would be further examined. Appropriate provision for lighting would be considered and lighting infrastructure utilised only where 			x					Compliant & Ongoing	The Urban Design and Landscape Plan Submissions Report (September 2017) was submitted to DP&E for information on 13 October 2017.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
V5	Further consultation would be undertaken with Hawkesbury City Council to develop a pedestrian and cycle access plan for the project and the surrounding area, in order to integrate the pedestrian and cycle connections into the surrounding network.	x							Compliant & Ongoing	Council was included in the consultation during preparation of the Urban Design and Landscape Plan for the project.
V6	Construction facilities will be contained within the construction works zone boundary and occupy the minimum area practicable.				x				Compliant & Ongoing	Construction facilities will be contained within the construction works zone boundary and occupy the minimum area practicable.
V7	During construction, suitable barriers will be provided to screen views from adjacent areas.				x				Compliant & Ongoing	Construction hoarding will be provided where required.
V8	Temporary construction facilities and compound areas will be returned to their pre-construction state or better, either at the completion of the construction phase or progressively throughout the construction period where possible and practicable.		x	x	x				Compliant & Ongoing	This requirement is addressed in Section 4.5 of the Ancillary Facility Assessment. Before approval of other compound sites, how the site will be decommissioned (including any necessary rehabilitation) will be considered.
V9	Pollution and dust will be kept to a minimum through the application of pollution management measures and monitoring.		x	x	x					Pollution and dust mitigation measures are provided in the Construction Air Quality Management Plan.
V10	Footpaths that will be affected by construction activities would be temporarily diverted to maintain suitable alternative access routes for pedestrians.		x	x	x				Compliant & Ongoing	Footpaths will be temporarily diverted if affected by construction activities, as outlined in Section 5.4 of the Construction Traffic Management Plan.
V11	Existing trees within construction area and compounds that do not need to be removed will be identified, protected and maintained throughout the construction period.				x				Compliant & Ongoing	This requirement is addressed in the Construction Flora and Fauna Management Plan.
V12	Temporary lighting will be screened or diverted to reduce unnecessary light spill.		x	x	x				Compliant & Ongoing	Security lighting will be installed at the main ancillary facility. Lighting will be directed away from residential properties to ensure any light spill impact is minimised, as outlined in Section 5.8 of the Ancillary Facility Assessment. Any lighting required for night works is considered in the 'Out of Hours Work Protocol' in Appendix B of the Construction Noise and Vibration Management Plan.
V13	Material used for temporary land reclamation will be removed once the works are complete.				x				Compliant & Ongoing	There will be no temporary land reclamation during the project.
NOISE AND VIBRATION										
NV1	A Construction Noise and Vibration Management Plan (CNVMP) will be prepared and will include general controls such as:								Compliant & Ongoing	The Construction Noise and Vibration Management Sub-Plan (Rev 1, Sept 2018) was approved by DP&E on 19 Sept 2018.
	Further detailed noise impact assessments will be undertaken of all construction works and works outside standard construction hours once detailed construction planning is complete as the location and type of construction works may change. These detailed noise impact assessments will be used to identify affected sensitive receivers and develop detailed mitigation measures.		x	x	x				Compliant & Ongoing	Section 7 of the Construction Noise and Vibration Management Plan
	The nearest noise sensitive receivers will be notified of future works and expected levels of noise well in advance of the works occurring.		x	x	x				Compliant & Ongoing	Mitigation measure NV7 of the Construction Noise and Vibration Management Sub-Plan.
	Construction programming will be developed to minimise noise impacts - this may include time and duration restrictions and respite periods, and will be developed after consultation with affected receivers.		x	x	x				Compliant & Ongoing	Mitigation measure NV8 of the Construction Noise and Vibration Management Sub-Plan.
	Where possible, works outside of standard construction hours will be planned so that noisier works are carried out in the earlier part of the evening or night time.		x	x	x				Compliant & Ongoing	Construction Noise and Vibration Management Sub-Plan: o Mitigation measure NV10 o Out of Hours work protocol (Appendix B)
	Where noisy works are required outside of standard construction hours, negotiated agreements will be sought with affected sensitive receivers.		x	x	x				Compliant & Ongoing	Construction Noise and Vibration Management Sub-Plan: o Mitigation measure NV10 o Out of Hours work protocol (Appendix B)
	Where possible, the use of noisy plant simultaneously and/or close together will be avoided.		x	x	x				Compliant & Ongoing	Mitigation measure NV17 of the Construction Noise and Vibration Management Sub-Plan.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
Measure										
	Equipment and excavation work sites will be orientated away from sensitive receivers where possible to reduce noise emissions.		x	x	x				Compliant & Ongoing	Mitigation measure NV18 of the Construction Noise and Vibration Management Sub-Plan.
	Equipment will be maintained in efficient working order.		x	x	x				Compliant & Ongoing	Mitigation measure NV19 of the Construction Noise and Vibration Management Sub-Plan.
	Quieter construction methods will be used where feasible and reasonable. This may include grinding, rock splitting or terrain levelling instead of rock breaking where it is feasible and reasonable.		x	x	x				Compliant & Ongoing	Mitigation measure NV20 of the Construction Noise and Vibration Management Sub-Plan.
	Where acceptable from a work health and safety perspective, quieter alternatives to reversing alarms (such as spotters, closed circuit television monitors and 'smart' reversing alarms) will be used particularly during out of hours activities.		x	x	x				Compliant & Ongoing	Mitigation measure NV21 of the Construction Noise and Vibration Management Sub-Plan.
	All noise complaints will be investigated and appropriate mitigation measures implemented where practicable to minimise further impacts.		x	x	x				Compliant & Ongoing	Mitigation measure NV22 of the Construction Noise and Vibration Management Sub-Plan.
	Noise monitoring will be undertaken to assess compliance with NMLs and assess the effectiveness of noise mitigation. The use of temporary noise shielding will be considered at locations along Bridge Street where substantial exceedances of noise criteria are predicted. In addition where work is undertaken in close proximity to Thompson Square or along Freemans Reach Road, temporary noise barriers will be considered.		x	x	x				Compliant & Ongoing	Mitigation measure NV23 of the Construction Noise and Vibration Management Sub-Plan.
	Buildings/structural conditions surveys will be undertaken prior to and following construction works at receivers within 50 metres of piling, rock breaking and vibratory compaction activities, including the heritage retaining wall at 4 Bridge Street.			x	x				Compliant & Ongoing	Pre-construction dilapidation reports have been prepared for the project and submitted to the DP&E for approval where owner consent was obtained. Mitigation measure NV24 of the Construction Noise and Vibration Management Sub-Plan.
	No impact piling works will be undertaken within 20 metres of any heritage structure, unless additional assessment and monitoring confirm that vibration levels will be below project specific criteria.			x	x				Compliant & Ongoing	Mitigation measure NV25 of the Construction Noise and Vibration Management Sub-Plan.
	Rock breaking/hammering will not be undertaken within seven metres of any heritage item or building unless additional assessment and monitoring confirm that vibration levels will be below project specific criteria.			x	x				Compliant & Ongoing	Mitigation measure NV27 of the Construction Noise and Vibration Management Sub-Plan.
	Rock breaking/hammering will not be undertaken within five metres of any non heritage building unless additional assessment and monitoring confirm that vibration levels will be below project specific criteria.			x	x				Compliant & Ongoing	Mitigation measure NV28 of the Construction Noise and Vibration Management Sub-Plan.
	Where heavy plant is used within seven metres of a heritage structure, attended vibration monitoring will be undertaken to assess compliance with project specific vibration criteria.		x	x	x				Compliant & Ongoing	Mitigation measure NV30 of the Construction Noise and Vibration Management Sub-Plan.
NV2	Architectural treatments for noise mitigation would be identified by appropriate qualified professional and installed in consultation with property owners.			x	x				Compliant	Architectural treatments were installed by appropriately qualified professionals, who consulted with residents.
SOIL AND WATER										
SW1	An erosion and sediment control plan will be developed during detailed design in accordance with Managing Urban Stormwater – Soils and Construction Volume 1 (Landcom, 2004) and Volume 2D (DECC, 2008). This plan will incorporate erosion control measure to limit the movement of soil from disturbed areas, and sediment control measures to remove any sediment from runoff prior to discharge into the river.		x	x	x				Compliant & Ongoing	The Construction Soil and Water Management Plan contains: o Progressive erosion and sediment control (Section 1.3.2) o Table 6-1: Mitigation measure SW2 o Primary Sediment and Erosion Control Plans (Appendix H)
SW2	Appropriate measures will be implemented to contain any turbid water by applying best management practices such as silt curtains or similar.		x	x	x				Compliant & Ongoing	The Construction Soil and Water Management Plan contains: o Table 6-1: Mitigation measure SW9
SW3	A water quality monitoring program in compliance with RMS guidelines will be developed and implemented to assist in identifying water quality issues during construction and assessing the effectiveness of mitigation measures.			x	x				Compliant & Ongoing	The Construction Soil and Water Management Plan contains: o Table 6-1: Mitigation measure SW5 o Water Quality Management Program (Appendix A)

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
SW4	Water quality controls will be incorporated into the drainage design. This will include controls such as: · An end of pipe net type gross pollutant trap connected to the stormwater outlet will be provided. · A lockable shut-off valve will be provided at the stormwater pit immediately upstream of the outlet to mitigate the potential impact of spills of hazardous liquids. · The water quality basin on the northern bank will be fitted with an underflow baffle arrangement to provide accidental spill capture.	x			x	x			Compliant	The following water quality controls have been proposed: · An end of pipe net type Gross Pollutant Trap (GPT) connected to the stormwater outlet on the southern side of the Hawkesbury River has been considered in the earlier development of the design for the outlet. However, following extensive consultation with RMS and Hawkesbury Council a "Continuous Deflection Separation type of GPT (Rocla CDS0708) has been proposed in lieu of the net type. · To mitigate the potential impact of spills of hazardous liquids, two lockable shut-off valves (Penstock Valves) have been proposed at main following outlets: - Southern bank outlet: At pit 1.11 just upstream of the outlet. Refer to Drawing No NB98005-ECC-DG-0320 and DG-0322. - Northern bank outlet: At the water quality basin outlet structure; Pit 18.01. Refer to Drawing No NB98005-ECC-DG-0314. · A wet permanent basin with an underflow baffle arrangement has been considered in the earlier development of the design for the on the northern bank to provide accidental spill capture. However, following consultation with RMS environmental representatives a biofiltration water quality basin was preferred and therefore has been proposed. As a result, an underflow baffle arrangement is not suitable for a dry basin.
SW5	The existing bridge will demolished in a way to reduce the risk of debris falling into the river.							x	Compliant & Ongoing	Mitigation measure SW24 of the Construction Soil and Water Management Sub-Plan.
SW6	Debris and rubble will be prevented from entering the river.							x	Compliant & Ongoing	Mitigation measure SW25 of the Construction Soil and Water Management Sub-Plan.
SW7	Disturbance or turbidity will be contained by installing self-containment equipment such as silt curtains.							x	Compliant & Ongoing	Mitigation measure SW9 of the Construction Soil and Water Management Sub-Plan.
SW8	Water quality in the river will be monitored in accordance with the RMS Guideline for Construction Water Quality Monitoring to assess the effectiveness of water quality mitigation measures.							x	Compliant & Ongoing	A Water Quality Monitoring Program (WQMP) has been prepared under condition C24. Mitigation measures SW41, SW54 of the Construction Soil and Water Management Plan.
SW9	Demolition activities will be scheduled to avoid or minimise works taking place during times of higher rainfall and river flows.							x	Compliant & Ongoing	Mitigation measure SW27 of the Construction Soil and Water Management Sub-Plan.
SW10	During excavations, soil and fill material will be visually monitored to identify the potential contaminated material or soils.		x	x	x				Compliant & Ongoing	Mitigation measure CLM2 of the Construction Contaminated Land Management Sub-Plan.
SW11	If potentially contaminated material or soils is suspected, works will cease in the area and additional investigations and monitoring will be undertaken.		x	x	x				Compliant & Ongoing	Mitigation measure CLM3 of the Construction Contaminated Land Management Sub-Plan. Unexpected Finds Procedure (Appendix B) Construction Contaminated Land Management Sub-Plan
SW12	If it is confirmed that contaminated material or soils is present on site, an appropriate remediation plan will be developed and implemented.		x	x	x				Compliant & Ongoing	Should contaminated materials or soils be present on site a Remediation Action Plan will be prepared as outlined in the Unexpected Finds Procedure is provided as Appendix B to the Construction Contaminated Land Management Sub-Plan.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
SW13	All fuels and chemicals will be stored and used in compliance with appropriate guidelines and standards. A spill management procedure will be developed and implemented if required.		x	x	x				Compliant & Ongoing	A Pollution Incident Response Management Plan is provided as Appendix B12 to the CEMP. Mitigation measures SW8 and SW45, SW46, SW48 of the Construction Soil and Water Management Sub-Plan.
SW14	Detailed waste management measures and procedures will be included in the CEMP for the project.		x	x	x				Compliant & Ongoing	Detailed waste management measures are outlined in the Construction Waste Management Sub-Plan.
SW15	Waste management measures will be based upon the philosophy of reduce, reuse, recycle and appropriate disposal.		x	x	x				Compliant & Ongoing	Mitigation measure WM7 and Section 7.3 (Training) of the Construction Waste Management Sub-Plan.
SW16	The project induction will cover waste management measures in the CEMP.		x	x	x				Compliant & Ongoing	Mitigation measure WM1 and Section 7.3 (Training) of the Construction Waste Management Sub-Plan.
SW17	All waste material requiring off-site disposal will be classified using the Waste Classification Guidelines and disposed of at an appropriately licensed facility.		x	x	x				Compliant & Ongoing	Mitigation measure WM8 and Section 5.1 (Classification of waste streams) of the Construction Waste Management Sub-Plan.
SW18	Procurement and waste management strategies will be based upon the philosophy of reduce, reuse, recycle and appropriate disposal.		x	x	x				Compliant & Ongoing	Mitigation measure WM3-WM8 of the Construction Waste Management Sub-Plan.
SW19	Where applicable, waste that is to be re-used will comply with the conditions attached to EPA resource recovery exemptions for specific materials.		x	x	x				Compliant & Ongoing	Section 5.2 of the Construction Waste Management Sub-Plan.
SW20	Further acid sulfate soils investigations would be undertaken during detailed design of the project.	x							Compliant	Acid sulfate soils were undertaken by Jacobs during detailed design. Refer to the Geotechnical Factual Report - Windsor Bridge Replacement Detailed Design (Jacobs 2017)
SW21	If the presence of ASS is confirmed in the river sediment near the existing bridge, an ASS management plan will be developed and implemented. The plan will detail the management, handling, treatment and disposal of ASS and will be prepared in compliance with the Acid Sulfate Soils Assessment Guidelines (ASSMAC, 1998) and the Guidelines for Managing Acid Sulfate Soils (RTA, 2005).		x	x	x				Compliant & Ongoing	A Construction Acid Sulfate Soil Management Sub-Plan has been prepared for the project.
SW22	Monitoring of groundwater at piezometers installed for project and the adjacent groundwater bore will be undertaken to identify any impacts during construction. If any impacts on groundwater levels or quality are detected, the potential cause and environmental management measures will be identified and developed.			x	x		x	x	Compliant & Ongoing	A Water Quality Monitoring Program for the project was prepared and approved by DP&E under condition C24. Mitigation measure SW39 of the Construction Soil and Water Management Plan.
SW23	Demolition of bridge structures containing lead based paints will be undertaken in accordance with the following: · Australian Standard AS 4361.01 – 1995 Guide to lead paint management, Part 1: Industrial applications. · Australian Standard AS 4361.2 – 1998, Guide to lead paint management, Part 2: Residential and commercial buildings. · Australian Standard AS 2601 – 2001, The demolition of structures. The preferred option for management of lead based paints and the associated mitigation measures will be identified during the construction and demolition planning process. The demolition plan for the existing Windsor bridge would include the details on the reuse, recycling and/or disposal of the demolished components.							x	Compliant & Ongoing	Mitigation measure AQ28 of the Construction Air Quality Management Plan. An EWMS for bridge demolition will be prepared prior to demolition of the exiting bridge.
HYDROLOGY										
HI	The extent of obstructions within the river will be minimised as far as practicable at all times during construction and demolition.				x			x	Compliant & Ongoing	An EWMS for bridge demolition will be prepared prior to demolition of the exiting bridge.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
H2	The time between completion of construction of the replacement bridge and demolition of the existing bridge will be minimised as far as practicable.				x			x	Compliant & Ongoing	In the project program, the time between completion of construction of the replacement bridge and demolition of the existing bridge has been minimised as far as practicable.
H3	Construction infrastructure and equipment will be removed from the river channel and floodplain in the event of a forecast flood to minimise both the risk of damage to infrastructure/equipment and the risk of flood impacts on properties.				x				Compliant & Ongoing	A Flood Warning and Evacuation Plan has been prepared for the project which outlines when construction infrastructure will be removed from the river channel and floodplain.
H4	Appropriate procedures to manage the effects of flooding during construction, and minimise any associated adverse environmental impacts to the greatest extent practicable, will be incorporated into a construction environmental management plan and emergency response plan (to be prepared and approved before the start of construction). The emergency response plan would include procedures to ensure adequate warning of floods is obtained and that appropriate emergency response procedures are implemented in a timely manner.		x	x	x				Compliant & Ongoing	A Flood Warning and Evacuation Plan has been prepared for the project. For incident response to pollution incidents (including spills) the Pollution Incident Response Plan (Appendix B12 of the CEMP) has been prepared.
H5	Flood impact mitigation requirements and options for buildings potentially impacted by increased flooding will be investigated during detailed design in consultation with the landholder. Appropriate measures would be identified, developed and implemented, as required, to minimise impacts on the building structure, building access and business opportunities.				x	x			N/A	Strikethrough text reflects changes made under the submissions report and PIR
H6	During the detailed design of the new bridge, detailed flood modelling will be undertaken on the final design of the project to identify any additional impacts. This will include collecting survey data at potentially impacted properties with buildings upstream of the bridge. Where impacts are identified, appropriate measures will be identified, developed and implemented, as required, to minimise impacts on the building structures, building accesses and business opportunities.				x				Compliant & Ongoing	Strikethrough text reflects changes made under the submissions report and PIR. A Hydrological Mitigation Report has been prepared under condition B5 during detailed design. No 'at property' mitigation works are required under this report.
H7	Suitable scour protection would be provided to protect the bridge abutments, piers and banks during construction and operation.				x				Compliant & Ongoing	Suitable scour protection has been provided, as outlined in the Volume 9 Scour Protection of the detailed design.
LANDUSE, PROPERTY AND SOCIOECONOMIC										
SE1	Early and ongoing consultation and communication with residents and local businesses will be undertaken to provide information on construction activities, including timing, duration and likely impacts.		x	x	x			x	Compliant & Ongoing	Early and ongoing consultation/communication has been undertaken with residents and local business during the before pre-construction and pre-construction activities. This will continue during construction and demolition works. The requirements for consultation and communication with stakeholders is outlined in the Section 3.4, Section 4 and Appendix B of the Community Communication Strategy (CCS) required under condition D13.
SE2	Affected local business owners will be consulted prior to construction to identify appropriate measures to manage potential impacts.		x	x	x			x	Compliant & Ongoing	Consultation/communication has been undertaken with local business. The requirements for consultation and communication with stakeholders is outlined in the Section 3.4, Section 4 and Appendix B of the Community Communication Strategy (CCS) required under condition D13.
SE3	Operators of the Hawkesbury Paddle Wheeler will be consulted prior to construction to identify appropriate measures to manage the temporary access changes to Windsor wharf.		x	x	x			x	Compliant & Ongoing	Consultation/communication has been undertaken with the Hawkesbury Paddle Wheeler regarding temporary access changes to Windsor Wharf. This consultation will continue throughout construction. The requirements for consultation and communication with stakeholders is outlined in the Section 3.4, Section 4 and Appendix B of the Community Communication Strategy (CCS) required under condition D13.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project						Compliance Status	Comment	
		DD	BPC	PC	C	PoC	O			D
SE4	Public access will be maintained to key areas of the Hawkesbury River during existing planned events.			x					Compliant & Ongoing	Public access to key areas of the Hawkesbury River will be maintained during construction.
SE5	Appropriate compensation will be provided in accordance with the Land Acquisition (Just Terms Compensation) Act 1991 for properties acquired as a result of the project.			x					Compliant & Ongoing	Land acquisition has been undertaken in accordance with the Land Acquisition Act 1991.
SE6	The town centre and businesses will be protected from the visual impacts of construction through careful placement of appropriate and visually sensitive screening wherever possible.			x					Compliant & Ongoing	Placement of appropriate and visually sensitive screening will be installed wherever possible to reduce visual impacts of construction on the town centre and businesses.
SE7	Visitor access to key tourist areas and attractions will be assisted throughout the construction period through the placement of appropriate signage.			x	x				Compliant & Ongoing	Public access to key tourist attractions will be maintained during construction as outlined in Chapter 5 of the Construction Traffic Management Plan.
SE8	Strategies for enhancing the local economic benefits of project construction, such as local employment strategies and sourcing materials from existing local industries, will be considered in the detailed design.	x				x	x		Compliant & Ongoing	The contractor has a subcontractor/supplier procurement process pre award review that considers these things and a project workplace relations management plan that covers direct labour engagement
SE9	Areas affected by construction will be reinstated and restored in accordance with the urban design and landscape concept for the project as soon as practicable.					x	x		Compliant & Ongoing	Areas affected by construction will be reinstated and restored as soon as practicable.
FLORA AND FAUNA										
FF1	The project induction will include relevant information, mitigation measures and procedures on protecting the biodiversity of the area during construction.		x	x	x			x	Compliant & Ongoing	The project induction is outlined in Chapter 5 of the CEMP. Details on the flora and fauna component of the site induction is outlined in Section 7.2 of the Construction Flora and Fauna Management Sub-Plan.
FF2	Temporary infrastructure (plant sites and offices etc) will be located in cleared areas away from vegetation. Clear boundaries will be applied for construction and exclusion zones for equipment, machinery and traffic to prevent unnecessary damage to native vegetation and fauna habitats.		x	x					Compliant & Ongoing	Mitigation measure FF2 of the Construction Flora and Fauna Management Sub-Plan
FF3	Clearing limits will be accurately and clearly marked including trees/vegetation to be retained including riparian zones.			x					Compliant & Ongoing	Mitigation measure FF3 of the Construction Flora and Fauna Management Sub-Plan.
FF4	· Once construction areas have been surveyed and marked, a suitably qualified and experienced fauna ecologist will undertake a pre-clearing survey to identify any concerns to specific species.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan" - Mitigation measure FF4 (Table 6-1) - Pre-Clearing Survey (Appendix G) - Pre-clearing Checklist (Appendix A)
	· A survey of the existing bridge structure will be undertaken by boat by an ecologist to confirm the bridge is not providing habitat for microchiropteran bats or other roosting bats.			x					Compliant & Ongoing	During the Pre-clearance Survey, no nests were observed in this area and it is unlikely that any nests are present due to high noise and vibration disturbance from heavy traffic across the bridge. An additional preclearing survey of Windsor Bridge will be undertaken to check for fauna and nests prior to bridge removal works. This is required by mitigation measure FF4 of the Construction Flora and Fauna Management Sub-Plan
	· Should the results of the bat survey and roost assessment indicate that the existing bridge occupied by microbats, a bat management plan will be prepared to mitigate the potential impacts on bats. The plan would include details of an appropriate work schedule, any further close inspections that may be required and exclusion and relocation of fauna away from the construction site.			x					Compliant & Ongoing	A Bat Management Plan will be prepared to mitigate potential impacts to bats, in the event they are identified in the ecologist survey prior to demolition, roosting in the existing bridge. As required by mitigation measure FF4 of the Construction Flora and Fauna Management Sub-Plan
	· WIRES will be made aware of the project and consulted if any injured fauna are encountered or if any fauna are injured as a result of the works.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan: - Mitigation measure FF5 (Table 6-1) - Fauna Handling and Rescue Procedure (Appendix C)

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
	· An ecologist or WIRES representative will be present during the clearing of suspected vegetation that may support a habitat for fauna to manage and/or relocate any fauna present.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan: - Mitigation measure FF5 (Table 6-1) - Pre-clearing Checklist (Appendix A)
FF5	Management plans and measures will be developed and implemented to minimise water quality impacts from construction. A discussion on water quality mitigation measures has been provided in Section 7.6.6.			x					Compliant & Ongoing	Refer to mitigation measures SW1, SW2 and SW3.
FF6	· Minimise the area of disturbance in riparian zones by clearly marking out work zones in riparian areas and protect areas with para-web fencing or similar material.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan: - Mitigation measure FF6 (Table 6-1) - Section 6.1 of the Construction Flora and Fauna Management Plan - Clearing and Grubbing Plan (Appendix F)
	· All works near riparian zones will have adequate sediment and erosion control.			x					Compliant & Ongoing	Mitigation measure FF6 of the Construction Flora and Fauna Management Sub-Plan. Progressive Erosion and Sediment Control Plan will be developed throughout construction.
FF7	· Establish a noxious weed management protocol.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan: - Noxious Weed Management Protocol (Appendix E) - Vegetation Management Plan (CEMP Appendix B11)
	· All noxious weeds which are cleared as part of the project will be disposed of appropriately.			x					Compliant & Ongoing	Detailed in: - Construction Flora and Fauna Management Sub-Plan (Mitigation measure FF10) - Noxious Weed Management Protocol (Appendix E) - Vegetation Management Plan (CEMP Appendix B11).
	· Inspection/maintenance procedures will be implemented to reduce the carriage of weed material on machinery.			x					Compliant & Ongoing	Detailed in: - Construction Flora and Fauna Management Sub-Plan (Mitigation measure FF10) - Noxious Weed Management Protocol (Appendix E) - Vegetation Management Plan (CEMP Appendix B11).
FF8	· A monitoring program (including a weekly checklist) will be developed to check that all proposed impact mitigation measures have been effectively implemented.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan: - Mitigation measure FF11 (Table 6-1) - Section 7 of the Construction Flora and Fauna Management Plan Vegetation Management Plan (CEMP Appendix B11)
	· In the event that impact mitigation measures do not perform effectively, the management program will be adjusted with further appropriate measures.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan: - Mitigation measure FF11 (Table 6-1) - Review and Improvement (Section 8)
FF9	· While no substantial trees with hollows were identified during the survey, if trees with hollows are found, their removal will be avoided where practicable. Where this is not possible, the tree will be maintained intact as far as possible and placed on the ground in adjoining vegetation.			x					Compliant & Ongoing	No hollow bearing trees or logs were identified during the pre-clearing survey; however, it was noted in the pre-clearance survey that potential habitat may exist for bird and bat species amongst the girders and pylons underneath the existing Windsor Bridge.
	· Habitat trees will be inspected for fauna by ecologist or WIRES carer and habitat trees will be felled carefully to minimise impact.			x					Compliant & Ongoing	Detailed in the Construction Flora and Fauna Management Sub-Plan: - Mitigation measure FF5 (Table 6-1) - Clearing and Grubbing Plan (Appendix F)
FF10	· In-stream and riparian disturbance will be minimised during construction through clearly delineated working areas.			x					Compliant & Ongoing	Mitigation measure FF7 of the Construction Flora and Fauna Management Sub-Plan.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
Measure										
	· Removal of instream woody snags (>3 m in length and >300 mm diameter) will be avoided where practicable. Any woody snags that require removal during construction will be relocated insitu.			x					Compliant & Ongoing	Mitigation measure FF8 of the Construction Flora and Fauna Management Sub-Plan.
FF11	· In-stream disturbance from dredging will be managed and mitigated as appropriate to minimise impacts. Appropriate measures will include insitu measures to limit the risk of sediment plumes and increased turbidity, such as silt curtains (or similar).			x					Compliant & Ongoing	Mitigation measure FF9 of the Construction Flora and Fauna Management Sub-Plan.
FF12	· Areas disturbed as a result of the project will be stabilised and rehabilitated through a progressive landscaping program that takes advantage of optimal growing conditions and is appropriate to the final land use.			x					Compliant & Ongoing	Mitigation measure FF12 of the Construction Flora and Fauna Management Sub-Plan. Vegetation Management Plan (CEMP Appendix B11)
	· Where possible riparian zone rehabilitation will include appropriate native species.			x					Compliant & Ongoing	Vegetation Management Plan (CEMP Appendix B11) Windsor Bridge Replacement 100% Landscape Design Drawings

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
AIR QUALITY										
AQ1	<p>Dust control measures will be included in the Construction Environmental Management Plan to minimise the risk of impacts on sensitive receivers. Dust environmental management measures will include:</p> <ul style="list-style-type: none"> · Covering of all materials transported to and from the construction site. · Covering of or spraying water on stockpiles of soil or other erodible materials, particularly during dry or windy conditions. · Suppressing dust on unsealed surfaces, temporary roadways, and other exposed areas using water trucks, hand held hoses, temporary vegetation or other appropriate practices. · Imposing work vehicle speed limits on unsealed surfaces. · Locating stockpiles as far away from residences as practically possible. · Minimising the extent of disturbed areas as far as practicable. · Rehabilitating disturbed areas as quickly as possible. · Modifying or stopping dust generating activities during very windy conditions. · Operating and maintaining vehicles and equipment in accordance with manufacturer's specifications. · Visual monitoring of air quality to verify the effectiveness of controls and enable early intervention. · Installing wheel wash facilities to reduce tracking of mud and soil off-site. · A procedure to receive, respond and monitor complaints about air quality and other environmental issues. 		x	x	x				Compliant & Ongoing	These management measure is included in Table 6-1 of the Construction Air Quality Management Plan.
AQ2	<p>Demolition of existing bridge structures containing lead based paints will be undertaken in accordance with the following:</p> <ul style="list-style-type: none"> · Australian Standard AS 4361.1 – 1995 - Guide to lead paint management, Part 1: Industrial applications. · Australian Standard AS 4361.2 – 1998 - Guide to lead paint management, Part 2: Residential and commercial buildings. · Australian Standard AS 2601 – 2001 - The demolition of structures. 							x	Compliant & Ongoing	This management measure is included in the Construction Air Quality Management Plan as mitigation measure AQ28.
AQ3	<p>The options for the management of lead based paints during the demolition of the existing bridge structure (based on the respective Australian standards) are as follows:</p> <ul style="list-style-type: none"> · Containment – this option will involve the implementation of a high level of containment to prevent dust and debris spreading beyond the immediate works site during demolition. · Paint stabilisation – paint stabilisation will require the existing surfaces to be stabilised with another non-hazardous covering. During both stabilisation and structure removal, a moderate level of containment will be required. · Paint removal – paint removal will require the existing painted surfaces to be removed prior to demolition. During paint removal, a high level of containment will be required. Little to no containment will be required to manage the demolition of the structure following removal of the lead based paints. 							x	Compliant & Ongoing	An EWMS for bridge demolition will be prepared prior to demolition of the exiting bridge.
AQ4	<p>Regardless of the implementation of either of these options, the management of lead based paints will entail:</p> <ul style="list-style-type: none"> · Containment of the work area and implementation of procedures and systems to prevent dust and debris spreading beyond the immediate work area. · Exclusion of the public from the work area · Regular clean-up and disposal of debris during the work period. 							x	Compliant & Ongoing	An EWMS for bridge demolition will be prepared prior to demolition of the exiting bridge.

Environmental Management Measures from the Environmental Impact Statement (EIS)		Phase of Project							Compliance Status	Comment
		DD	BPC	PC	C	PoC	O	D		
AQ5	In the unlikely event that asbestos is discovered, the subject works will be carried out in accordance with the Guide to the Control of Asbestos Hazards in Buildings and Structures (NOHSC, 1988) and Code of Practice for the Safe Removal of Asbestos (NOHSC, 2002). An employer must ensure that air monitoring is carried out if a risk assessment as described by the Occupational Health and Safety Regulation 2001 indicates the need for one.				x				Compliant & Ongoing	Mitigation measure CLM7 in the Construction Contaminated Land Management Plan.
CLIMATE CHANGE										
CCI	The potential for increased scour of bridge piers, bridge abutments and increased frequency of inundation of flood affected properties will be considered in the detailed design process.	x							Compliant & Ongoing	Scour protection and inundation of properties were considered during detailed design: - Southern River Bank Stability and Scour Protection - Detailed Design Report. - Hydrological Mitigation Report has been prepared under condition B5.
GREENHOUSE GASES										
GHG1	Construction material selection will include recycled material and local materials where possible including: · Concrete with a greater proportion of flyash. Higher flyash content would lower the carbon footprint of the mix. · Recycled steel as opposed to virgin steel. · Sourcing local materials.				x				Compliant & Ongoing	Mitigation measure WM35 of the Construction Waste Management Sub-Plan.
GHG2	Fuel efficient plant and equipment will be selected, where practicable.				x				Compliant & Ongoing	Mitigation measure WM36 of the Construction Waste Management Sub-Plan.
GHG3	Biofuels will be used where practicable.				x				Compliant & Ongoing	Mitigation measure WM37 of the Construction Waste Management Sub-Plan.
GHG5	Where practicable, waste materials will be reused on site such as general fill, rock, aggregate and mulch from cleared vegetation.				x				Compliant & Ongoing	Mitigation measure WM38 of the Construction Waste Management Sub-Plan.
GHG6	Use of LED or other energy efficient lighting will be investigated during detailed design. This has the potential to reduce electrical energy consumption. Appropriate energy efficient lighting would only be used where the standard of lighting can meet AS/NZS lighting design standards for major roads and pedestrians.	x						x	Compliant & Ongoing	The use of energy efficient and other energy efficient lighting was addressed in the detailed design.