

Northern Beaches Hospital Connectivity and Network Enhancement Project

Six Monthly Compliance Report:

September 2018 - February 2019

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PLN_5

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ACRONYMS AND 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
EMS	Environmental management system
Environmental Audit	Verification of how implementation is proceeding with respect to the Project Deed, AS/NZS ISO 14001:2004, CEMP and environmental documents such as CoA
Environmental Incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental Representative (ER)	A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPL	Environment Protection Licence
ERG	Environmental Review Group – comprising representatives of RMS, Environmental Representative, Project delivery team, regulatory authorities (EPA, DPE) and Northern Beaches Council.
FYJV	Ferrovial York Joint Venture
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.
OEH	Office of Environment and Heritage
Project, the	Northern Beaches Hospital – Connectivity and Network Enhancements: <ul style="list-style-type: none"> • Stage 1 – Hospital Connectivity Enhancement Works; and • Stage 2 – Network Enhancement Works.
RSMM	Revised Safeguards and Management Measures
RMS	Roads and Maritime Services
Secretary	Secretary of the NSW Department of Planning and Environment (or delegate)

Contents

1	Introduction	4
1.1	Project.....	4
2	Project description	5
2.1	Project overview	5
3	Project management	6
4	Environmental Management System Overview	6
4.1	Compliance Tracking Program requirements.....	7
4.2	Scope of the activities undertaken during the reporting period – Stage 1.....	7
4.3	Scope of activities undertaken during this reporting period – Stage 2	7
4.4	Approvals	7
4.5	Sustainability.....	8
4.6	Performance of environmental controls.....	8
4.7	Environmental Incidents and actions taken.....	8
4.8	Independent Environmental Auditing.....	11
4.9	Environmental complaints.....	11
4.10	Non-conformance during the reporting period.....	12
4.11	Environmental Training and Awareness.....	12
5	Compliance with the Stage 1 and Stage 2 Project Approvals and RSMs	13

Figures and Tables

Figure 1-1	Project location and staging.....	4
Table 4-1	Approvals.....	7
Table 4-2	Environmental Incidents September 2018 to February 2019.....	9
Table 4-3	Environmental Complaints.....	11
Table 4-4	Close out of non conformance.....	12
Table 4-5	Environmental Training provided.....	13

1 Introduction

This Construction Compliance Report – Stage 2 (CCR) required under condition A11(c)(ii) of Infrastructure Approval SSI-6622 has been prepared covering the six-monthly reporting period from September 2018 to February 2019 to address the requirements of the Concept and Project Conditions of Approval (CoA) and the Revised Safeguards and Management Measures (RSMM) of the Concept and Project Submissions Report / Preferred Infrastructure Report.

On 14 February 2017, the Project wrote to DPE requesting that the Construction Compliance Report (CCR) required under condition A11(c)(ii) of Infrastructure Approval SSI-6434 and SSI-6622 be submitted as one document at six monthly intervals after February and August each year. This request was approved.

This report addresses Stage 2 because Stage 1 is complete.

1.1 Project

The Northern Beaches Hospital – Connectivity and Network Enhancements Project (the Project), comprises road upgrades to enhance connectivity of the existing road network surrounding the Northern Beaches Hospital at Frenchs Forest within Sydney’s Northern Beaches.

Roads and Maritime is planning and delivering the road upgrades in two stages as shown in Figure 1-1. Stage 1 of the Project was granted planning approval on 29th June 2015 and approved for construction in November 2015. Stage 2 was granted planning approval on 25th February 2016 and approved for construction in August 2016.



Figure 1-1 Project location and staging

2 Project description

2.1 Project overview

The Northern Beaches Hospital – Connectivity and Network Enhancements Project (the Project) comprises road upgrades to enhance connectivity of the existing road network surrounding the Northern Beaches Hospital at Frenchs Forest, within the Warringah local government area (LGA) on Sydney's Northern Beaches.

Roads and Maritime Services (RMS) is delivering the road upgrades in two stages:

- The Stage 1 Project Hospital Connectivity Works which aim to enhance the existing road network to facilitate the opening of the proposed Northern Beaches Hospital by 2018.
- Stage 2 Project Network Enhancement Works which are directed towards broader network capacity enhancement particularly along Warringah Road.
- The Project has been determined as State Significant Infrastructure (SSI) under section 115U (2) of the EP&A Act, and subject to assessment under Part 5.1 of the EP&A Act. The Minister for Planning granted approval for the Concept Plan and Stage 1 Project on 29 June 2015. Approval for Stage 2 was granted on 25 February 2016. The key features of Stage 1 & Stage 2 of the Project which is the subject of this Consistency Assessment comprise:
 - widening and intersection upgrades along sections of Forest Way between about 100 meters north of Warringah Road to south of Adams Street;
 - upgrade of the existing bus stop fronting the Forest Way Shopping Centre on Forest Way, to accommodate two buses within the bay;
 - widening of Naree Road, Frenchs Forest Road West and a section of Frenchs Forest Road East from the Wakehurst Parkway intersection to Allambie Road;
 - provision of traffic signals with pedestrian crossings at Naree Road and Forest Way; at Naree Road, Frenchs Forest Road West and Rabbett Street; on Frenchs Forest Road West at a new access to the hospital opposite Gladys Avenue; at Frenchs Forest Road East and Romford Road; and at Frenchs Forest Road East, Patanga Road and Allambie Road;
 - provision of dedicated curb side bus lanes along approaches and departures to the Frenchs Forest Road intersection with Wakehurst Parkway;
 - widening and upgrades to the intersection of Frenchs Forest Road and Wakehurst Parkway;
 - widening of the Wakehurst Parkway from about 330 metres north of the intersection with Frenchs Forest Road to the intersection with Warringah Road;
 - widening of Allambie Road to the north of the intersection with Warringah Road;
 - widening and upgrade to the Warringah Road and Allambie Road (north) intersection; and
 - widening of Warringah Road west of Allambie Road for about 700 metres just to the east of Courtley Road.
- the removal and replacement of the existing pedestrian overbridge across Warringah Road west of the intersection of Forest Way.
- widening of Wakehurst Parkway from the intersection with Warringah Road to south of Aquatic Drive.
- upgrades to Warringah Road and its intersection with Forest Way, Hilmer Street and Wakehurst Parkway at surface level to provide for all traffic movements and provide for subsurface grade separated through traffic.

- provision of four through lanes on Warringah Road (two lanes in each direction for east-west through traffic) within a grade separated open 'slot' (or underpass) for about 1.3 kilometres. Ingress and egress points from and to the slot include: - Western extent – Warringah Road near Fitzpatrick Avenue East - Eastern extent – Warringah Road from about 350 metres east of the Wakehurst Parkway grade separated intersection - Provision of a two-lane on-ramp (merging into one lane) from Wakehurst Parkway (southbound) into the slot (westbound).
- widening of Warringah Road from west of Fitzpatrick Avenue East to west of Allambie Road to include surface level lanes for the length of the project as follows:
- westbound travel lanes on the southern side of the Warringah Road corridor
- eastbound travel lanes on the northern side of the Warringah Road corridor (generally using existing road pavement)
- the intersections of Warringah Road with Forest Way, Hilmer Street and Wakehurst Parkway to form a surface level bridge over the slot to provide for traffic movements at surface level and allow east-west through traffic in the slot to pass beneath uninterrupted
- upgrades or adjustments to existing intersections of Warringah Road with Fitzpatrick Avenue East, Rodborough Road and Allambie Road
- widening of Wakehurst Parkway from the intersection of Warringah Road to south of Aquatic Drive
- provision of a new connection at Aquatic Drive including right in from Wakehurst Parkway (northbound), left in from Wakehurst Parkway (southbound) and left out from Aquatic Drive onto Wakehurst Parkway (southbound)
- provision of shared (pedestrian and cyclist) bridges at the following locations: - Across Warringah Road west of the intersection of Forest Way (removal and replacement of the existing pedestrian bridge) - Across Warringah Road on the western side of the intersection with Hilmer Street (new pedestrian bridge).
- removal of the existing pedestrian crossing across Warringah Road at Hilmer Street
- shared paths and footpaths on sections of Warringah Road, Wakehurst Parkway, Forest Way, Aquatic Drive and Allambie Road.

The Project is delivered under a design and construct (D&C) contract awarded to the Ferrovial York Joint Venture (FYJV) on 15 June 2015. During this period Stage 1 works were substantially completed.

For the purposes of this environmental assessment, the concept design described and assessed in the Project EIS and consequently approved by the Minister, is referred to as the Approved Project.

3 Project management

The Approved Project is being designed and constructed in a joint venture consisting of Ferrovial Agroman (Australia) Pty Ltd and York Civil (FYJV), with overall project management and supervision of the project by Roads and Maritime Services (RMS).

Ferrovial York Joint Venture (FYJV) and RMS are jointly responsible for compliance with the CoAs and RSMMs.

4 Environmental Management System Overview

The Construction Environmental Management Plan (CEMP) is the primary system to manage and control the environmental aspects of the Project during pre-construction and construction. It provides the overall

framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled.

The strategies defined in the CEMP have been developed with consideration of the conditions of approval, safeguards and mitigation measures presented in the environmental assessment and approval documents. The CEMP establishes the system for implementation, monitoring and continuous improvement to minimise impacts from the Project on the environment.

4.1 Compliance Tracking Program requirements

This compliance report provides a status of compliance of construction in meeting the requirements specified in the Stage 2 CoAs and the RSMMs as a six-monthly reporting cycle.

4.2 Scope of the activities undertaken during the reporting period – Stage 1

Substantial completion of construction for Stage 1 was achieved on 30 October 2018.

4.3 Scope of activities undertaken during this reporting period – Stage 2

During September 2018 to February 2019, Stage 2 construction for the Project has seen the following activities started and progressed towards completion:

- Progress on the bridges at Forest Way and Wakehurst Parkhurst Intersections.
- Completion of the Hilmer Street Bridge
- Completion of Aquatic Drive including the underground detention tank
- Completion of the fauna underpass at Aquatic Drive and Wakehurst Parkway South

4.4 Approvals

The status of approvals achieved for the period of September 2018 - February 2019 are provided in Table 4-1 below:

Table 4-1 Approvals

Item	Status (September 2018 to February 2019)
Consistency Assessment for an advanced direction road sign, where the footing for the sign will extend an additional 1 metre of land outside the SSI footprint.	Consistency assessment approved on 16 November 2018
Consistency Assessment for extending a surface drain beyond a headwall outside the SSI footprint.	Consistency assessment approved on 4 February 2019
Community Agreement for extended hours on weekend works at Aquatic Drive and Wakehurst Parkway	Community agreement approved by the EPA
Community Agreement for extended hours on weekend works at Waringah Road Eastbound	Community agreement approved by the EPA
Community Agreement for slot construction work Monday – Friday 6am-10pm and Saturday 8am-5pm	Community agreement approved by the EPA

4.5 Sustainability

The Project continues to work towards the design stage sustainability assessments, including progress towards the ISCA 'design' and 'as constructed' credits.

4.6 Performance of environmental controls

Key environmental controls have included:

- Fencing, flagging and sign-posting of vegetation protection areas and no-go areas;
- Erosion and sedimentation controls in accordance with Progressive Erosion and Sediment Control Plans (PESCPs). Controls include diversion drains, bunding, sediment fencing and drainage filters, and sediment basins;
- Portable noise mats to suppress noise from mobile plant and equipment;
- Soil binders for dust suppression of temporary spoil stockpiles;
- Mobile water carts and sprinklers for dust suppression of cleared areas;
- Internal environmental permit process developed as part of the CEMP, which targets de-watering, vegetation clearing and out of hours works;
- Weekly environmental monitoring regime to review controls and guide maintenance actions;
- A water treatment plant for the treatment of construction water emanating from the slot.

In general, the above environmental controls have effectively managed construction activities to avoid major environmental pollution impacts or detrimental impacts to surrounding environmental values. Specific case points of active management of environmental controls:

- ERSED controls have been progressively installed and updated across Stage 2 as the project continues earthwork activities.
- The Soil Conservationist visits regularly to align with the current work program. During these visits he reviews current PESCPs and advises the FYJV Construction crew on management methods.
- Watercarts and street sweepers are regularly on site and active in minimising dust generation.
- Weekly, Pre- and Post- rainfall inspections conducted across the Project as per CEMP and sub plans.
- Out of Hours Works continue to be planned and executed. The environment team works on a weekly roster to monitor noise levels and provide environmental surveillance for night works.
- Vibration monitoring occurring regularly as pavement works continuing for Warringah Road westbound continues.
- Ongoing environmental monitoring of works (such as noise, vibration, air quality and water) conducted.

4.7 Environmental Incidents and actions taken

Environmental incidents on the project are reported to the RMS, who keeps a record and reports these to the DP&E. Incidents are reported and classified as per RMS' [Environmental Incident Classification and Reporting Procedure](#). The following are incidents that occurred during the reporting period.

Table 4-2 Environmental Incidents September 2018 to February 2019

No.	Description of Incident	Date	Action
123	Oil leak from burst hydraulic hose	06-09-18	Spill was contained and cleaned up. No material left the Project boundary.
124	Barrier Water onto Road	05-09-18	Site Environmental Advice (SEA) was given at pre-start.
125	Concrete Pump Washout 49 FFRE Compound	07-09-18	Contractor emailed and toolbox about controls. Toolbox included locations of wash out areas and equipment available for concrete wash outs
126	OOHW Permit signed by ER late	03-09-18	Training sessions has been undertaken to ensure the OOHW Protocol is implemented.
127	Truck idling in Rabbett St at night	09-09-18	Trucks were moved, and staff reminded to take care in residential areas.
128	Trucks parked in Bantry Bay Road	10-09-18	Trucks were moved, and staff reminded to take care in residential areas.
129	Delivery occurred at night in respite area	05-09-18	Trucks were moved, and staff reminded to take care in residential areas.
130	Stormwater at Wakehurst Parkway	26-09-18	Due to a blockage in the stormwater system, the drain was cleaned out after rainfall event. Stormwater and sediment controls were reviewed/refreshed.
131	Concure spill at main compound	04-10-18	Toolbox staff to take care when pouring concure. Area cleaned up and bunding re-erected.
132	OOHW permits signed late	16-10-18	Meeting with the site team to remind everyone to get OOHW Permits submitted early and ahead of the works.
133	Residents not accurately notified for out of hours works	17-10-18	Apology provided to residents, and a review of community notification procedures undertaken.
134	Minor vegetation trimming occurred for new traffic signs on Wakehurst Parkway	17-10-18	No clearing was undertaken outside of the Project boundary. A reminder given to all involved, that a Vegetation Clearing Permit is required.
135	Bathroom water overflow main compound	23-10-18	Faulty float switch replaced, and reviewed maintenance regime.
136	Concrete pump spray	29-10-18	Area cleaned up and toolbox provided to ensure team take extra care in future.

No.	Description of Incident	Date	Action
137	Trucks idling in Adams Road, and complaint one day late.	29-10-18	All asphalt suppliers were contacted, and asked that their trucks not to wait or idle in residential streets around the project site.
138	Hydraulic hose split, Truck and Dog	30-10-18	Bund created to contain spill and cleaned up. Spill did not leave site boundary
139	Trucks in Wareham and Adams St Complaint	02-11-18	All asphalt companies have been contacted and reminded not to use residential streets. A follow up by letter was sent to Subcontractors.
140	Diesel spill in main compound	13-11-18	Absorbant material used to manage spill. Hose coupling will be replaced. No material left the Project boundary
141	Bathroom overflow Main Compound	29-11-18	Spill cleaned up, and plumbing repaired.
142	Diesel spill at gate 34	07-12-18	Spill was cleaned up. Maintain access roads free of debris for telehandlers going forward.
143	Diesel spill Aquatic Drive	05-12-18	Spill was contained and spill kit used to soak up spill, Pre-start checks ongoing
144	Spill in main compound	10-12-18	Site toolboxed on correct decanting and cleaning procedures when using 'concrete'
145	Oil hose split on backhoe	08-01-19	Spill was contained and spill kit used to soak up spill, Pre-start checks ongoing
146	Concrete waste Aquatic Drive	18-01-19	The concrete waste was cleaned up, and team toolboxed.
147	Hydraulic ram spill	30-01-19	Spill contained and clean up. No material left the Project boundary
148	Spill at disconnection of attachment	31-01-19	Spill contained and clean up. No material left the Project boundary
149	Vegetation clearing commenced based on verbal rather than Clearing Permit	18-01-19	Project team reminded that a Clearing Permit is required. No clearing was undertaken outside of the Project boundary.
150	Spill from hydrant offtake riser covered by a temporary stockpile	15-02-19	Sediment controls installed and stormwater system inspected. Review of procedures, and care when locating stockpiles in the vicinity of watermain valves.
151	Concrete spill in main compound	18-02-19	Area washed, using a vac truck to collect the wash water and spilled liquid. A project wide reminder in the weekly toolbox.

No.	Description of Incident	Date	Action
152	Concrete waste not contained within provided bunds	18-02-19	Area cleaned up and the crew toolboxed about utilising designated bunded areas
153	Water discharge reading error	18-02-19	Toolbox training with project crew, along with a review of procedures.

4.8 Independent Environmental Auditing

Environmental audits during this period include:

- Waste disposal audit – 12/9/18
- EPL Conditions Audit – 14/9/18
- Internal Waste Audit – 14/9/18
- SGS Ferrovial ISO Systems Audit – 12/10/18
- Internal Procurement Process Audit – 26/10/18
- Ferrovial Waste Audit – 30/10/18
- Internal ICNG Audit – 20/11/18
- RMS Systems Audit – 4/12/18
- ER Waste Audit – 13/12/18
- ISCA Credit Dis-2 Noise Management Process Audit – 8/1/19
- Internal CEMP Audit – 18/2/19

4.9 Environmental complaints

The following environmental complaints were lodged with the project over the six-month period. These have been itemised in Table 4-3 below.

Table 4-3 Environmental Complaints

Month	No. of Community Environmental Complaints	Type/ Nature
September 2018	14	OOHW, Noise
October 2018	28	OOHW, Noise, Lighting
November 2018	11	OOHW, Noise
December 2018	0	N/A
January 2019	4	OOHW, Noise
February 2019	1	OOHW, Noise

The staging of night-time activities have been programmed, assessed and monitored in accordance with the Noise and Vibration Management Plan and the Out of Hours Working Protocol. While activities were monitored and shown to comply with predicted noise levels, the inherent noisy nature of these activities had

given rise to complaints. All complaints are recorded and tracked within the project Consultation Manager system.

4.10 Non-conformance during the reporting period

Non-conformance is the failure to comply with the requirements of the CEMP and supporting documentation. Where a non-compliance has been identified, a corrective / preventative action (or actions) were implemented. Within the reporting period there has been the following non-compliances.

Table 4-4 Close out of non conformance

Date	Type of non-conformance	Response
4/10/2018	Late community complaints submission	Re-affirm commitment by officer in charge of complaint report submissions
16/10/2018	Inaccurate Community notification to describe asphaltting work extent	Project Managers reminded to take care when planning works and notifications
30/10/2018	Report of the daily complaints report was one day late	Training provided to Community Officer
1/11/2018	Letterbox distribution for nightworks not broad enough and didn't go up on website	Community Coordinator informed and training conducted with new acting Community Manager
12/11/2018	Noise complaint and no receipt of night works notification	Complaint report prepared, and extra notifications delivered to complainant's street
30/11/2018	Failure to meet reporting requirements of 6-monthly sustainability report.	Advised RMS representative. Sustainability Report completed by December 2018.
18/02/2019	Transcription error in water quality monitoring	Toolbox training with project crew, with a review of procedures.

4.11 Environmental Training and Awareness

In accordance with Section 5.1 of the CEMP, all personnel, including employees, contractors and sub-contractors, have attended a compulsory environmental site induction prior to commencement on-site. The induction includes:

- relevant details of the CEMP including purpose and objectives;
- key environmental issues;
- key conditions of environmental licences, permits and approvals;
- specific environmental management requirements, internal permits and responsibilities;
- mitigation measures for the control of environmental issues;

- incident reporting requirements; and
- information relating to the location of environmental constraints.

A record of all environment inductions are maintained within the Project Comply-Flow system and kept on-site. Environmental officers continue to present the environmental component of the induction on a regular basis, as new personnel commence on the project. Further to the induction, field crews and staff are reminded regularly of the environmental controls which are relevant and specific to the project.

The following is a list of training sessions in line with the work fronts and response to current issues.

Table 4-5 Environmental Training provided

Specific Environmental Training	Date	Training Content
Pump Operations VOC	3/9/18, 2/10/18, 27/11/18, 29/11/18, 19/12/18, 8/2/19, 27/2/19	<ul style="list-style-type: none"> • EPL discharge requirements • Pump operation • Pump vigilance • Pump positioning
Out of Hours Works Training	29/1/19	OOHW Procedures. The requirements of the environmental Work Method Statement and the CEMP with respect to nightworks
Community notifications	30/10/18, 6/11/18, 13/12/18	EPL requirements for community notification, and the need for advance notifications

5 Compliance with the Stage 2 Project Approvals and RSMMs

The six monthly report on compliance with the Stage 2 Project Approvals and RSMMs are provided in:

- Appendix A - summary of Stage 2 Project compliance against the Conditions of Approval
- Appendix B - summary of the Stage 2 compliance against each of the RSMMs from the Concept and Stage 1 SPIR.

Appendix A - summary of Stage 2 Project compliance against the Conditions of Approval

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Schedule 2: Conditions of Approval for Stage 2 SSI Approval				
Part A - Administrative Conditions				
A1		The Proponent must carry out the SSI generally in accordance with the application SSI-6622;	Compliant and Ongoing	CEMP was approved for Stage 2 (& Stage 1 Update) on 5th August 2016. CEMP addresses all requirements of the SSI-6622, EIS, PIR and CoA. Approvals and dates are outlined in 1.2 Purpose of CEMP. Stage 1 of the Project was granted planning approval on 29th June 2015 and approved for construction in November 2015. Stage 2 was granted planning approval on 25th February 2016 and approved for construction in August 2016.
	(a)	State significant infrastructure		
	(b)	Environmental Impact Statement; and		
	(c)	Submissions Report		
A2		In the event of an inconsistency between:	Compliant and Ongoing	The condition is noted for both Stage 1 & Stage 2 construction works
	(a)	the conditions of this approval and any document listed from condition A1(a) to A1(c) inclusive, the conditions of this approval prevail to the extent of the inconsistency; and		
	(b)	any document listed from condition A1(a) to A1(c) inclusive, and any other document listed from condition A1(a) to A1(c) inclusive, the most recent document prevails to the extent of the inconsistency.		
A3		The Proponent must comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:	Compliant and Ongoing	Stage 1 & Stage 2 project subject to CEMP and Project Plans covering all SSI approval requirements.
	(a)	any reports, plans or correspondence that are submitted in accordance with this approval; and		
	(b)	the implementation of any actions or measures contained within these reports, plans or correspondence.		
A4		This approval lapses 5 years after the date on which it is granted, unless the works the subject of this SSI approval are physically commenced on or before that date.	Compliant and complete	Project has commenced and is anticipated to be completed by early 2020.
A5		The Proponent must ensure that all licences, permits and approvals are obtained as required by law and maintained as required throughout the life of the SSI. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals.	Compliant and Ongoing	Environment Protection Licence 20673 issued for Stage 1 Project on 19 October 2015. The licence was amended to incorporate Stage 2. Other licences and approvals are gained as required including but not limited to approval of the Sydney Waste Trade Waste Agreement
A6		The Proponent may elect to construct and/ or operate the SSI in stages. Where staging is proposed, the Proponent must submit a Staging Report to the Secretary prior to the commencement of the first proposed stage. The Staging Report must provide details of:	Compliant and complete	Agreement was made for the Project to be completed in 2 stages. CEMP was approved for Stage 2 (& Stage 1 Update) in August 2016. CEMP addresses all requirements of the SSI-6434, EIS, PIR and CoA. Approvals and dates are outlined in 1.2 Purpose of CEMP.
	(a)	how the SSI would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and		
	(b)	b) details of the relevant conditions of approval, which would apply to each stage and how these will be complied with across and between the stages of the SSI.		
		Where staging of the SSI is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).		
A7		The Proponent may revise any documentation prepared for the Stage 1 Project to incorporate the requirements of this SSI Approval.	Compliant and Ongoing	
A8		The Proponent must ensure that all plans, sub-plans and other management documents required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) are submitted to the Secretary no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Secretary. Notes: While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.	Compliant and Ongoing	CEMP for Stage 2 Project works submitted to DP&E at least one month prior to commencement of construction and approved for use in August 2016.
A9		The Proponent must ensure that employees, contractors and sub-contractors are aware of, and comply with, the requirements of the conditions of this approval relevant to their respective activities.	Compliant and Ongoing	CEMP Chapter 4 & 5 All new staff, visitors and sub contractors to Project attend the Project induction which occurs regularly with the environmental section presented by the environment team

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
A10		The Proponent will be responsible for any breaches of the conditions of approval resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.	Compliant and Ongoing	CEMP Chapters 4, 5 & 8
A11		The Proponent must develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program must be submitted to the Secretary for approval prior to the commencement of construction and operate for a minimum of 18 months following commencement of operation. The Program must include, but not necessarily be limited to:	Compliant and Ongoing	The CTP for Stages 1&2 Project were prepared and submitted to DP&E, and was approved for both stages so Project construction could commence. The CEMP for both stages was approved in August 2016.
	(a) provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged);	A thorough 6-monthly Compliance Report is prepared based on a review of the MCoA and RSMM of the SSI. This compliance report meets this requirement for the last 6 months.		
	(b) provisions for periodic review of the compliance status of the SSI against the requirements of this approval;			
	(c) provisions for periodic reporting of compliance status to the Secretary, including but not limited to:			
	(l) a Pre-Construction Compliance Report prior to the commencement of construction;	A Pre-Construction compliance report was completed and submitted to DPE.		
	(ii) Construction Compliance Reports, at six months intervals following commencement of construction and subsequent submission timeframes to be directed by the Secretary if necessary, following review of the Reports for the duration of construction; and	A compliance report meeting requirements for 6-monthly report is undertaken every 6-months. This current review is for the 6-month period September 2018 to end February 2019.		
	(iii) a Pre-Operation Compliance Report prior to the commencement of operation;	Provision has been made for this report which will be submitted post Construction and Pre-operation as a hold point.		
	(d) a program for independent environmental auditing in accordance with AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems;	CEMP Section 8.4 outlines the auditing regime for the Project. The Project Verifier (WSP) and ER conducts environmental audits on regular basis. During this last six-monthly period the ER undertook a Waste Audit on 13 December 2018. All actions from the previous audit were closed-out.		
	(e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;	CEMP Chapter 7 address Incidents and Emergencies. In this section a process is outlined for incident identification, management, reporting, close out and review.		
	(f) provisions for reporting environmental incidents to the Secretary during construction, in accordance with Conditions A12 and A13;	It addresses the reporting system for notifying RMS by FYJV and RMS to report to the Secretary. Appendix A8 of the CEMP is the RMS Environmental Incident Classification and Reporting Procedure which covers these aspects in more detail.		
	(g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and			
	(h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	CEMP Chapter 4 All new staff (contractors and sub contractors) to Project attend the Project induction which occurs regularly with the environmental section presented by the environment team		
A12		The Proponent must notify the EPA in relation to any pollution incident in carrying out the SSI as required by the Protection of the Environment (Operations) Act 1997 as required by that Act. The Proponent must provide the Secretary with a record of any such notification.	Compliant and Ongoing	Noted, and has been followed and complied with, in response to incidents arising during Stage 1 & 2 construction works (refer Section 5.4).
A13		The Proponent must notify the Secretary (using the contact name and phone number notified by the Department from time to time) of any incident (other than those relating to the Protection of the Environment (Operations) Act 1997) with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident on weekdays, or the following business day on weekends. The Proponent must provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred.	Compliant and Ongoing	Noted, and has been followed and complied with, in response to incidents arising during Stage 2 construction works.

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A14		The Proponent must meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A13, within such period as the Secretary may require.	Compliant and Ongoing	Noted, and has been followed and complied with, in response to incidents arising during Stage 1 & 2 construction works.	
Part B - Environmental Performance					
B1		The Proponent must design and construct the road drainage system generally as described in the documents referred to in condition A1, to achieve a minimum:	Compliant and Ongoing	Compliance with this requirement is being undertaken as part of detailed drainage design as per Scope of Works and Technical Requirements	
	(a)	10 year ARI hydrologic standard for surface roads; and			
	(b)	100 year ARI for unrelieved sag sections of the slot road for pavement surface drainage system, and 10 year ARI for longitudinal drainage system, unless otherwise agreed by the Secretary.			
B2		The proponent must implement all feasible and reasonable measures to limit operational groundwater inflows into the slot road to no greater than one litre per second across any given kilometre.	Compliant and Ongoing	The Water Management plan was approved for construction by DPE on 19/7/2017. No groundwater interception has occurred at this stage, in this reporting period.	
B3		The Proponent must provide all relevant information to 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 SSI.	Compliant and Ongoing	Following completion of construction, information will be supplied to Council and/or NSW State Emergency Service.	
B4		Prior to the commencement of operation, the Proponent must commission a Wakehurst Parkway Flooding Study which reviews the flooding characteristics of the Wakehurst Parkway between the NBH and the Sydney Academy of Sport and Recreation, in the Middle Creek catchment. The Study must be prepared in consultation with relevant Councils and:	Compliant and Ongoing	RMS has commissioned a Wakehurst Parkway Flooding Study to meet this criteria.	
	(a)	consider previous flood studies for the study area;			
	(b)	identify the locations on the Wakehurst Parkway which are likely to experience flooding during storm events and estimate the frequency of flood events at these locations;			
	(c)	investigate options to improve stormwater management to minimise the frequency and duration of road closures due to flooding during relevant storm events;			
	(d)	recommend reasonable and feasible measures to manage flooding impacts; and			
	(e)	include a strategy for implementing the recommendation of the study.			
B5		The Proponent must prepare and implement a Water Management Plan (WMP) for the SSI to ensure that the SSI is designed, constructed and operated to achieve the water quality and flow objectives of this approval. The WMP must include, but not be limited to:	Compliant and Ongoing	The WMP has been prepared by SMEC in March 2017 and has been approved for use by the Project on 19/7/2017 for construction. The WMP covers all conditions and regular surface and groundwater quality is continuing as the Project progresses. Roads and Maritime are currently in the process of applying for a Trade Waste Agreement with Sydney Water. Once the agreement is completed the final design for the management of ground water in construction will be completed.	
	(a)	the identification of works and activities during construction and operation of the SSI, including emergencies and spill events, that have the potential to impact on surface water quality and flows of potentially affected waterways and intercept groundwater;			WMP Section 3.5, 3.6
	(b)	a description of the detailed designs and/or design principles for the SSI taking into consideration the water quality objectives of the WMP, and water sensitive urban design principles consistent with the Guidelines for Riparian Corridors on Waterfront Land (DPI 2012), Warringah Council Water Management Policy (2015) and the Warringah Council Creek Management Study 2004;			WMP Section 2.2, 4.4
	(c)	identification and estimation of the type and quantity of pollutants that may be introduced into the water catchment by source and discharge point;			WMP Section 3.6
	(d)	a detailed description of the watercourses and groundwater systems that could potentially be affected by the SSI, including:			WMP Section 3
	i)	currently available data on existing water quality and flows in receiving waters, groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the project; and/or			
	ii)	a description of the procedures to obtain this information prior to the commencement of the relevant activities identified in condition B5(a);			
	(e)	surface water and groundwater assessment criteria, including water quality objectives and trigger levels for investigating any potentially adverse impacts of the SSI, including consideration of:	WMP Section 5		

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	i)	Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (Australia and New Zealand Environment Conservation Council, 2000);		
	ii)	Warringah Council's PL850- Water Management Policy (2015); and		
	iii)	the interim Water Quality Objectives Design Guidelines in Appendix F of the Warringah Council Creek Management Study 2004;		
	(f)	a program to monitor and report on the potential surface water and groundwater impacts of the SSI, which includes a description of:		
	i)	representative monitoring locations;		
	ii)	the relevant analytes and parameters to monitor;		
	iii)	duration and frequency of monitoring; and		
	iv)	sampling distribution;		
	(g)	identification of measures to ensure natural flows are maintained, where feasible and reasonable, within local watercourses potentially affected by the project;		
	(h)	a plan to respond to any exceedances of the performance criteria, and monitor and/or mitigate any adverse surface water and/or groundwater impacts of the SSI;		
	(i)	a protocol for the periodic review of the plan, including the criteria to determine the need for ongoing monitoring; and		
	(j)	procedures for reporting monitoring results to the Secretary, EPA, DPI Water and Council		
		The WMP must be prepared or reviewed by a suitably qualified expert in consultation with DPI Water and Council, and approved by the Secretary prior to the commencement of construction, unless otherwise agreed by the Secretary.		
		The WMP must be implemented for a minimum of three years following the commencement of operation, unless otherwise agreed by the Secretary. Any request to discontinue the implementation of the WMP must be supported by advice from an independent expert confirming that the criteria established by condition B5(i) are met.	WMP Section 4.4	Monitoring as part of the water management plan is being undertaken.
		The Proponent must provide a copy of the approved WMP, and any approved revisions to the plan, to the EPA, DPI Water and Council once approved. The results of all monitoring are to be made publicly available within 4 weeks of the completion of each monitoring period.	WMP Section 4.5	The WMP was approved in July 2017. RMS have sent copies to the relevant Agencies.
			WMP Section 8	
			WMP Section 7.3	
B6		<p>Prior to the commencement of site preparation and excavation activities, or as otherwise agreed by the Secretary, in areas identified with contamination above investigation levels as described in the Phase 2 Contamination Assessment: Northern Beaches Hospital - Stage 2 Network Enhancement Works, URS, June 2015, the Proponent must prepare and implement a Soil Contamination Report. The report must be prepared by a suitably qualified person(s) in accordance with the requirements of the Contaminated Land Management Act 1997 and associated guidelines. The report must detail, where relevant, whether the soil is suitable (for the intended land use) or can be made suitable through remediation and/or outline the potential contamination risks from the project to human health and receiving waterways.</p> <p>For land to be disturbed by the SSI, where the investigations identify that the site is suitable for the intended operations and that there is no need for a specific remediation strategy, measures to identify, handle and manage potential contaminated soils and materials and groundwater must be identified in the report and incorporated into the Construction Environmental Management Plan required under conditions D27 and D28. Should a remediation strategy be required, the report must include a remediation plan for addressing the disturbed area, and how the environmental and human health risks will be managed during the disturbance, remediation and/or removal of contaminated soil or groundwater.</p> <p>If required, the report must be accompanied by a Site Audit Statement(s), prepared by an accredited Site Auditor under the Contaminated Land Management Act 1997, verifying that the disturbed area has been or can be remediated to a standard consistent with the intended land use. A final Site Audit Statement(s), if required, must be prepared by an accredited Site Auditor, certifying that the contaminated disturbed areas have been remediated to a standard consistent with the intended land use and must be submitted to the Secretary and Council prior to operation of the site.</p>	Compliant and Ongoing	Noted. The Phase 2 Contamination Site Assessment completed during Stage 2 EIS preparation has revised areas which may be subject to a Site Contamination Report targeting AECs which are above investigation levels. Works have been undertaken in accordance with the SWQMP for Stage 2 works including the implementation of Unexpected Discovery of Contaminated Land Procedure (Appendix H). In relation to the former Seven-Eleven service station site, a Remediation Action Plan (RAP) has been prepared, and a specialist subcontractor was engaged to perform the remediation. After the remediation was completed, a Validation Report has been drafted by a specialist consultant to verify that the remediation activity is complete. There has been no change in the land use of the service station site, as it remains a Commercial/industrial land use property.

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B7		The Proponent must implement reasonable and feasible measures to avoid and/or minimise impacts to heritage items within the SSI footprint. Where impacts during construction of the SSI are unavoidable, works must be undertaken in accordance with the strategy outlined in the Construction Heritage Management Plan required by condition D28(e).	Compliant and Ongoing	Stage 1 & 2 works are being undertaken in accordance with approved CEMP Appendix B5 - Construction Heritage Management Sub Plan issued for construction.
B8		The Proponent must not destroy, modify or otherwise physically affect any heritage items outside the SSI footprint, unless otherwise agreed by the Secretary following consultation with the OEH.	Compliant and Ongoing	Stage 1 & 2 works are being undertaken in accordance with approved CEMP Appendix B5 - Heritage Management Sub Plan issued for construction.
B9		Measures to protect heritage sites near or adjacent to the SSI during construction must be detailed in the Construction Heritage Management Plan required under condition D28(e).	Compliant and Ongoing	Stage 1 & 2 works are being undertaken in accordance with approved CEMP - Appendix B5 Construction Heritage Management Sub Plan issued for construction.
B10		Access to all properties must be maintained during construction and operation, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by the SSI must be reinstated to at least an equivalent standard, unless agreed with by the property owner.	Compliant and Ongoing	Noted and actioned in accordance within the CEMP - Appendix B1 - Traffic & Access Management Plan for Stages 1 and 2 (Aug 2016) CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 3.2 B10 2.3 Targets Table 3-3 TA6 The FYJV Community team have regular interactions with directly impacted residents and property owners. To this date, there have not been any access problems with residents - alternative arrangements have been agreed and accepted. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment database
B11		In relation to new or modified local road, parking, kiss and ride, public transport, pedestrian and cycle infrastructure, the SSI must be designed and implemented:	Compliant and Ongoing	Compliance with this requirement is being undertaken as part of detailed design as per Scope of Works and Technical Requirements. Traffic Control Plans (TCPs) are prepared by FYJV Traffic group and audited by independent auditor and submitted to RMS and TMC. Additionally, opportunity for community input exists with the TTLG (Traffic and Transport Liaison Group) attended by FYJV traffic & Community Relations Managers, RMS, TfNSW, Northern Beaches Council, local NSW Police, NSW fire & Rescue, Ambulance NSW, Sydney Buses (STA), Forest Coach Lines, Taxi Council, Sydney Taxis. Design includes a shared path 3m wide along each of the major roads (see Road cross sections eg DS2016/876, RD-0504) and also Traffic Plans which show pedestrian crossings on all major road intersections (Traffic Design eg DS2015/2786, 4712).
	(a) in consultation with the Council, DEC, Health Infrastructure and The Forest High School Working Group;			
	(b) to take into consideration existing and future demand, road safety, local access and traffic network performance, including meeting performance levels identified in the documents listed in condition A1;			
	(c) facilitate a high level of pedestrian accessibility and safety, including safe access to and from the NBH and the provision of pedestrian crossings on all four legs of intersections, or suitable alternative, where feasible and reasonable;			
	(d) to be compatible with local and regional cycle plans and to ensure that on and off road cycle infrastructure is delivered to provide seamless connectivity (including between Stage 1 and Stage 2); and			
	(e) to meet relevant design, engineering and safety standards and guidelines, including Austroads Guide to Traffic Engineering Practice.			
B12		An independent road safety audit(s) is to be undertaken by an appropriately qualified and experienced person during detailed design to assess the safety performance of the subject road network and associated facilities and to ensure that they meet the requirements of condition B11(e). Audit findings and recommendations must be actioned prior to construction of that permanent design element and must be made available to the Secretary on request. The implementation of the audit findings must be reviewed by the person/s responsible for the audit, or suitable alternative person/s, prior to operation of the SSI.	Compliant and Ongoing	Each stage is audited at the design phase. Stage 2 is being audited as part of an ongoing Auditing schedule. A road safety audit was undertaken after the traffic switch for the Hilmer St bridge openings.
B13		The Proponent must develop and implement a Wildlife Connectivity and Road Risk Minimisation Strategy in consultation with OEH. The Strategy must describe the measures to be implemented during the design, construction and operation of the SSI to mitigate fauna connectivity impacts and wildlife road kill from the SSI where reasonable and feasible.	Compliant and Ongoing	The Wildlife Connectivity and Road Risk Minimisation Strategy has been developed and consultation with OEH was undertaken on 16 February 2018. The implementation of the Wildlife Connectivity and Road Risk Minimisation Strategy is currently being undertaken.

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B14		The proponent must develop and implement an Ecological Monitoring Program to monitor the effectiveness of project design and biodiversity mitigation measures implemented as part of the project. The program must be developed by a suitably qualified and experienced ecologist in consultation with the OEH and Council, and must include but not necessarily be limited to:	Non-Compliant	The Ecological Monitoring Program is part of the Construction Flora and Fauna Management Sub Plan issued for construction. Biosis have issued the Ecological Monitoring Program Implementation 2017/18 report, which outlines the background to monitoring, the current and future monitoring plan and results for the last year. There were two minor incidents in relation to vegetation clearing #134 and #149 (see main body of report).
	(a) an adaptive monitoring program to assess the effectiveness of design and mitigation measures and recommend amendment to the measures if necessary. The monitoring program must nominate performance parameters and criteria against which the effectiveness of these measures will be evaluated, including but not limited to specific species such as the Long Nosed Bandicoot;			
	(b) mechanisms for developing additional monitoring protocols to assess the effectiveness of any additional mitigation measures implemented to address additional impacts in the case of design amendments or unexpected threatened species finds during construction (where these additional impacts are generally consistent with the biodiversity impacts identified for the project in the documents listed under condition A2);			
	(c) monitoring during construction (for construction-related impacts) and from opening of the project to traffic (for operation/ongoing impacts) until such time as the effectiveness of mitigation measures can be demonstrated to have been achieved over a minimum of three successive monitoring periods after opening of the project to traffic, unless otherwise agreed by the Secretary. The monitoring period may be reduced with the agreement of the Secretary in consultation with OEH, depending on the outcomes of the monitoring;			
	(d) provision for the assessment of the data, including data obtained under the Water Management Plan in condition B5, to identify changes to habitat usage and whether this can be directly attributed to the project including, but not limited to, the impacts on the Red-crowned Toadlet as a result of any drainage system redesign and peak flow diversion into or away from ESU 8 and ESU 12 and Curl Curl Creek;			
	(e) details of contingency measures that would be implemented in the event of changes to habitat usage patterns directly attributable to the construction or operation of the project; and			
	(f) provision for annual reporting of monitoring results to the Secretary and OEH, or as otherwise agreed by those agencies.			
		The Program must be submitted to the Secretary for approval no later than six (6) weeks prior to the commencement of construction that would result in the disturbance of native vegetation, unless otherwise agreed by the Secretary.		
B15		The Proponent must develop and implement a Biodiversity Offset Package for the SSI. The Package must detail how the ecological values lost as a result of the SSI will be offset. The Package must be consistent with the NSW Principles for the Use of Biodiversity Offsets in NSW (DECCW, 2008) and align, as far as is feasible and reasonable, with the Biodiversity Offset Strategy requirements of the NSW Biodiversity Offsets Policy for Major Projects, OEH, 2014 and developed in consultation with and to meet the requirements of OEH unless otherwise agreed by the Secretary. The Package must include, but not necessarily be limited to:	Compliant and Ongoing	A combined Stage 1 and Stage 2 Biodiversity Offset Package is being prepared. Roads and Maritime are currently in the process of securing the offsets required for both Stage 1 and Stage 2. A draft Biodiversity Offset Package was submitted to DP&E in mid 2017 with comments received, this submission meets the timeframes required in the conditions of approval However due to legislative changes and additional assessments the draft BOP is to be revised. Once the final credits are secured the BOP will be updated to include comments from the DP&E and submitted for approval.
	(a) the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the SSI;			
	(b) the objectives and biodiversity outcomes to be achieved;			
	(c) the final suite of the biodiversity offset measures selected and secured in accordance with the Biodiversity Offsets Strategy outlined in the EIS for the SSI; and			
	(d) the management and monitoring requirements (where a biobanking agreement is not being entered into) for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including:			
	i. the monitoring of the condition of species and ecological communities at offset (including translocation) locations;			
	ii. the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites;			
	ii. provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the OEH; and			
	iv. timing and responsibilities for the implementation of the provisions of the Package.			
	Where feasible and reasonable, the Biodiversity Offset Package must be designed and implemented to include the offset requirements for the Stage 1 Project and with the objectives of securing areas containing Duffys Forest Ecological Community and improving connectivity in vegetation adjacent to the area impacted by the project. Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures must be provided to collectively deliver an improved or maintained biodiversity outcome for the region. Where monitoring referred to in condition B14 indicates that biodiversity outcomes are not being achieved, remedial actions must be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved. The Package must be submitted to the Secretary for approval within 12 months of the commencement of construction, unless otherwise agreed by the Secretary.			

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B16		Waste generated outside the site must not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence or waste exemption under the Protection of the Environment Operations Act 1997, if such a licence is required in relation to that waste.	Compliant and Ongoing	Stage 2 construction works have been undertaken in accordance with Construction Waste and Energy Management Sub Plan issued for construction.
B17		The reuse and/or recycling of waste materials generated on site must be maximised as far as practicable, to minimise the need for treatment or disposal of those materials off site.	Compliant and Ongoing	Stage 2 construction works have been undertaken in accordance with Construction Waste and Energy Management Sub Plan issued for construction. Examples of reuse of waste materials include VENM/ENM beneficially going to the former Belrose landfill site.
B18		All liquid and/or non-liquid waste generated on the site must be assessed and classified in accordance with Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2009).	Compliant and Ongoing	Stage 2 construction works have been undertaken in accordance with Construction Waste and Energy Management Sub Plan issued for construction.
B19		All waste materials removed from the SSI site must only be directed to a licensed waste management facility or premises lawfully permitted to accept the materials.	Compliant and Ongoing	Stage 2 construction works have been undertaken in accordance with Construction Waste and Energy Management Sub Plan issued for construction.
B20		Utilities, services and other infrastructure potentially affected by construction and operation of the SSI must be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with Council and the relevant owner and/or provider of services that are likely to be affected by the SSI must be undertaken to make suitable arrangements for access to, diversion, relocation, protection, and/or support of the affected infrastructure as required. All works must meet the safety standards, environmental safeguards and other related requirements of the service provider. The cost of any such arrangements is to be borne by the Proponent, unless otherwise agreed by the service provider. The Proponent must ensure that all land impacted as a result of utility adjustments or relocations is restored in consultation with Council and to a standard necessary to facilitate safe pedestrian, cyclist and vehicle usage.	Compliant and Ongoing	Stage 2 works have been undertaken as per FYJV Project Plans in compliance with Scope of Works and Technical Requirements and are meeting these requirements in agreements with the respective utility providers. Utilities relocation is largely complete, except for some Sydney Water works on Forest Way.
B21		Relocation of utilities, services and other infrastructure must not compromise the delivery of transport infrastructure, including cycle ways.	Compliant and Ongoing	
B22		The Proponent, in consultation with the Council, must where feasible and reasonable, implement the urban design objectives and principles, giving consideration to the design strategies and mitigation measures identified in Northern Beaches Hospital Connectivity and Network Enhancements: Stage 2 Urban Design Report and Landscape Character and Visual Impact Assessment, Spackman Mossop and Michaels, July 2015. Where an urban design principle or objective is not considered feasible or reasonable, this will be clearly demonstrated to the Secretary in conjunction with the submission of the Urban Design and Landscape Plan required by condition B24.	Compliant and Ongoing	Stage 2 works have been undertaken as per FYJV Project Plans in compliance with Scope of Works and Technical Requirements and are meeting these requirements in agreements with the respective utility providers. Aecom have developed and issued the Urban Landscape and Design Report (ULDR) which addresses all criteria - all comments from stakeholders and the Secretary are currently being addressed in a revision of the ULDR undertaken by Aecom. still to be updated to cater for Council comments
B23		The use of visible shotcrete for retaining walls and other structures is not permitted, unless approved by the Secretary through the Urban and Design and Landscape Plan required by condition B24.	Compliant and Ongoing	Aecom have developed and issued the Urban Landscape and Design Report (ULDR) and has been approved for use. UDLR Table 1.1 B29 No exposed shotcrete is proposed as part of the project design.
B24		Prior to the commencement of permanent built works and/ or landscaping, or as otherwise agreed by the Secretary, an Urban Design and Landscape Plan must be prepared and implemented (following approval) for the SSI. The Plan must be prepared by suitably qualified and experienced person(s), in consultation with the Council, Health Infrastructure, educational facilities and the community, for the approval of the Secretary. The Plan must present an integrated urban and landscape design for the SSI, and must include, but not necessarily be limited to:	Compliant and Ongoing	Urban Design and Landscape Plan (UDLP) was approved by DP&E on the 20 October 2016. The UDLP has been updated with additional comments from Northern Beaches Council and due to detailed design. The updated UDLP will be submitted to DP&E for approval.
	(a)	identification of design objectives, principles and standards based on:		
	i)	local environmental values		Section 2.1
	ii)	urban design context,		Section 2.1

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	iii)	sustainable design and maintenance,		Section 2.1
	iv)	community safety, amenity and privacy, including 'safer by design' and crime prevention through environment design principles where relevant;		Section 2.2 & 6.4 Urban Design Guidance
	v)	relevant design standards and guidelines (including consideration of Council standards and guidelines where feasible and reasonable); and		Section 2.2 & Appendix 1 included with the safety in Design process for the Project
	vi)	the requirements of condition B22;		Section 1.3 RMS, Urban Design Guidance and Council Standards
	(a)	the location of existing vegetation, a description of disturbed areas (including compounds) and details of the strategies to progressively revegetate these areas;		Section 1.4
	(b)	proposed landscaping (including use of endemic and advanced tree species where practicable). Details of species to be replanted/ revegetated must be provided, including their appropriateness to the area and habitat for threatened species (including rehabilitation of riparian and Duffy's Forest ecological community vegetation);		Section 2.1 Describes existing vegetation and areas to be disturbed Section 2.6 Illustrates areas to be revegetated Appendix E (VMP) Describes the strategies for revegetation
	(c)	the provision of a Seed Collection and Revegetation Strategy, to ensure seed from flora within Duffy's Forest ecological community, where feasible and reasonable, are collected and species identified and used to progressively rehabilitate, regenerate and/ or revegetate these areas with the assistance and involvement of key community and land or bush care groups in the area, where practicable;		Section 6.1, 6.2 + 6.3 + Appendix E Refer Appendix E - Vegetation Management Plan
	(d)	design features, built elements, transport infrastructure, signage, lighting and building materials (including retaining walls) including, but not limited to, colour schemes and finishes of built features;		Section 1.3 + 6.2 + Appendix E Refer Appendix E - Vegetation Management Plan
	(e)	an assessment of the visual screening effects of existing vegetation and the proposed landscaping and built elements. Where receivers have been identified as likely to experience high residual visual impact as a result of the SSI, the Proponent must, in consultation with affected receivers, identify opportunities for providing at-receiver landscaping to further screen views of the SSI. Where agreed to with the landowner, these measures must be implemented during the construction of the SSI;		Section 3- Bridges including Pedestrian Bridges Section 4 - Retaining Walls Section 5 - Earthworks Section 7 - Road Furniture (Lighting) + Pedestrian Pavements Section 8 - Noise Walls
	(f)	graphics such as sections, perspective views and sketches for key elements of the SSI, including, but not limited to built elements of the SSI;		Section 2.5 Areas likely to experience high visual impact is based on the EIS assessment outlined in the Northern Beaches Hospital Connectivity and Network Enhancements: Stage 2 Urban Design Report and Landscape Character and Visual Impact Assessment, Spackman Mossop and Michaels, July 2015.
	(g)	monitoring and maintenance procedures for the built elements, rehabilitated vegetation and landscaping (including weed control) including performance indicators, responsibilities, timing and duration and contingencies where rehabilitation of vegetation and landscaping measures fail; and		Section 3.4 - Artists Impressions and Sections 3, 4, 5, 7 and 8 as covered under item €
	(h)	evidence of consultation with stakeholders on the proposed urban design and landscape measures prior to its finalisation.		Section 6.5 + Appendix E - Vegetation Management Plan The safe management maintenance of built elements will be considered in the Detailed Design process and is part of the Safety In Design Quality Assurance Procedures. All built elements will meet the durability requirements specified in the Project Documents.

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		Note: The Plan may be submitted in Stages to suit a staged construction program of the SSI		Section 1.4 Table 4
B25		Any damage caused to property as a result of the SSI must be rectified or the landowner compensated, within a reasonable timeframe, with the costs borne by the Proponent. This condition is not intended to limit any claims that the landowner may have against the Proponent.	Compliant and Ongoing	Noted and monitored in accordance with the Community Communication Management Strategy
B26		The Proponent must construct and operate the SSI with the objective of minimising light spillage to residential properties and be generally consistent with the requirements of Australian Standard 4282-199 Control of the obtrusive effects of outdoor lighting.	Compliant and Ongoing	The Street Lighting Final Design Report includes the following statement: 'Lighting has been designed with the objective of minimising light spillage to residential properties and be generally consistent with the requirements of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting.' (Environment Checklist by Dave Baldrock).
B27		The Proponent must design and construct the noise barriers for the SSI in consultation with the owners of potentially affected residences, to minimise the shadowing effects of the structures during Winter on the potentially affected residences and to an extent that is no greater than existing shadows from adjacent vegetation, where reasonable and feasible.	Compliant and Ongoing	The Urban Design and Landscape Report includes Section 8 on Noise Barriers Section 8.1 Location and Extent Section 8.2 Materials and Finishes The owners of the neighbouring properties were consulted during the development of the noise wall design and construction, and plexiglass panels were incorporated at the top of the walls to allow solar access.
Part C - Community Information and Reporting				
C1		Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Proponent must prepare, to the satisfaction of the Secretary, and implement a Community Communication Strategy in accordance with requirements of condition C1 of the Concept Proposal. The Strategy must provide mechanisms to facilitate communication between the Proponent (and its contractor(s)), the Environmental Representative, the Council, education and community stakeholders (particularly adjoining landowners) on the environmental management of this approval. The Strategy must include, but not be limited to:	Compliant and Ongoing	Community Communications Strategy (CCS) was updated to include stage 2 and was approved on 5th August 2017
	(a)	identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners, key community and business groups, education (including the Forest High School Working Group), community and social service organisations;		CCS Chapters 4 & 6 Appendix 3
	(b)	procedures and mechanisms for the regular distribution of accessible information to community stakeholders on construction progress and matters associated with environmental management including provision of information in appropriate community languages;		CCS Chapters 6 & 9
	(c)	the formation of community-based forums that focus on key environmental management issues. The Strategy must provide detail on the structure, scope, objectives and frequency of the community-based forums;		CCS Chapter 6 - Section 6.2
	(d)	procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management and delivery of this approval;		CCS Chapter 6
	(e)	procedures and mechanisms through which the Proponent can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of this approval; and		CCS Chapter 6
	(f)	procedures and mechanisms that would be implemented to resolve issues/disputes that may arise between parties on the matters relating to environmental management and the delivery of this approval. This will include a mediation system to assist in considering complaints that are unable to be resolved through initial contact, and which may include the use of a suitably qualified and experienced independent mediator.		CCS Chapter 7
		The Proponent must maintain and implement the Strategy throughout construction of this approval.		Incorporated into the Community Communications Strategy for Stage 3
C2		Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Proponent must ensure that the following are available for community enquiries and complaints for the duration of construction:	Compliant and Ongoing	CCS Chapter 7

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	(a)	a 24 hour telephone number(s) on which complaints and enquiries about the SSI may be registered;		CCS Chapter 7
	(b)	a postal address to which written complaints and enquires may be sent; and		CCS Chapter 7
	(c)	an email address to which electronic complaints and enquiries may be transmitted.		CCS Chapter 7
		The telephone number, the postal address and the email address must be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information must also be provided on the website (or dedicated pages) required by this approval.		CCS Chapters 7 & 9
C3		<p>Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Proponent must prepare and implement a Construction Complaints Management System consistent with AS 4269: Complaints Handling and maintain the System for the duration of construction and up to 12 months following completion of construction of this SSI stage.</p> <p>Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, must be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System must be made available to the Secretary on request.</p>	Compliant and Ongoing	Construction Complaints Management System in place for Stage 1 & 2 Project and addressed in CCS Chapter 8
C4		<p>Prior to the commencement of construction of this SSI stage, or as otherwise agreed by the Secretary, the Proponent must establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSI, for the duration of construction and for 12 months following completion of construction of the SSI. The Proponent must, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:</p>	Compliant and Ongoing	Project website established and implemented for Stage 1 & 2 Project www.rms.nsw.gov.au/projects/sydney-north/northern-beaches-hospital/
	(a)	information on the current implementation status of the SSI;		
	(b)	a copy of the documents referred to under condition A1 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time;		
	(c)	a copy of this approval and any future modification to this approval;		
	(d)	a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSI;		
	(e)	a copy of each current strategy, plan, program or other document required under this approval;		
	(f)	the outcomes of compliance tracking in accordance with condition A11; and		
	(g)	details of contact point(s) to which community complaints and inquiries may be directed, including a telephone number, a postal address and an email address.		
Part D - Construction Environmental Management				
D1		<p>Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Proponent must appoint a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel, and that has been approved by the Secretary. The Proponent must employ an Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Secretary. The Environment Representative(s) must:</p>	Compliant and Ongoing	Environmental Representative (Maurice Pignatelli of GHD Pty Ltd) appointed and functioning for Stage 1 and Stage 2 Projects.
	(a)	be the principal point of advice in relation to the environmental performance of the SSI;		
	(b)	monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Proponent upon the achievement of these plans/programs;		
	(c)	have responsibility for considering, and advising the Proponent on, matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the SSI;		
	(d)	ensure that environmental auditing is undertaken in accordance with the Proponent's Environmental Management System(s);		
	(e)	be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment must be clearly explained in the Construction Environment Management Plan;		
	(f)	be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and		
	(g)	be available to be consulted in responding to the community concerning the environmental performance of the SSI where the resolution of points of conflict between the Proponent and the community is required.		

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
D2		The Environmental Representative must prepare and submit to the Secretary a monthly report on the Environmental Representative's actions and decision on matters specified in condition D1 for the preceding month. The reports must be submitted within seven (7) days for the end of each month for the duration of construction of the SSI, or as otherwise agreed by the Secretary. Notwithstanding, the Environmental Representative must be given the independence to report to the Secretary at any time and/or at the request of the Secretary.	Compliant and Ongoing	Monthly Reports are prepared by the ER and submitted directly to DPE.
D3		Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vo/s 1 and 2, 4th Edition (Landcom, 2004) must 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.	Compliant and Ongoing	Soil and water measures are implemented on site. A Soil Conservationist is providing weekly site visits and advice, and a site inspection regime is being undertaken.
D4		Where available and practicable, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources must be used in preference to potable water for construction activities, including dust control	Compliant and Ongoing	CEMP Rev 3 (Aug 2016) App B4 Table 7-1 SW23 Where feasible on-site water is used for dust suppression
D5		Except as permitted by an EPL, construction activities associated with the SSI must be undertaken during the following standard construction hours:	Compliant and Ongoing	Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20673 implemented for Stages 1 & 2 (originally issued June 2016 and updated periodically)
	(a) 7:00am to 6:00pm Mondays to Fridays, inclusive;			
	(b) 8:00am to 1:00pm Saturdays; and			
	(c) at no time on Sundays or public holidays.			
D6		Except as permitted by an EPL, high noise impact works and activities (including, but not limited to rock breaking, rock hammering) must only be undertaken:	Compliant and Ongoing	Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20673 implemented for Stages 1 & 2 (Issued June 2016) Chapter 8. Project teams monitor high impact works to ensure compliance to respite periods.
	(a) (a) between the hours of 8:00 am to 6:00 pm Monday to Friday;			
	(b) (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.			
D7		Notwithstanding conditions D5 and D6 construction works outside of the standard construction hours may be undertaken in the following circumstances:	Non-complaint	Stage 1 and 2 works are generally being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan (refer to the Out of Hours Work Procedure) and Environment Protection Licence 20673. There have been some instances of work outside the standard construction hours and these are managed through incidents / non-conformance reports with appropriate follow up action. These have been reported as incidents as required in the CEMP and are discussed in Table 4-2.
	(a) construction works that generate:			
	(i) LAeq(15 minute) noise levels 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) LAeq(15 minute) noise levels 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; and			
	(iii) continuous or impulsive vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.2 of Assessing Vibration: a technical guideline; and			
	(iv) intermittent vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.4 of Assessing Vibration: a technical guideline; or			
	(b) where a negotiated agreement has been reached with affected receivers, where the prescribed noise and vibration levels cannot be achieved; or			
	(c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or			
	(d) where it is required in an emergency to avoid injury or the loss of life, property and/or to prevent environmental harm; or			
	(e) works approved through an EPL, including for works identified in an Out of Hours Work Protocol prepared in accordance with condition D28(b).			
D8		The SSI must be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the Construction Noise and Vibration Management Plan required under condition D28(b). 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.	Compliant and Ongoing	These requirements are incorporated into the approved Construction Noise and Vibration Management Sub Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1&2 construction works. Chapter 8 Section 6.2
D9		The SSI must be constructed with the aim of achieving the following construction vibration goals:	Compliant and	These requirements are incorporated into the approved Construction Noise and Vibration Management

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	(a)	for structural damage to heritage structures, the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration – Part 3 Effects of vibration on structures;	Ongoing	Sub Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1&2 construction works. Chapter 8 Section 6.2
	(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 (as referenced in Australian Standard AS 2187.2-2006 Explosives – Storage and use – Use of Explosives); and		
	(c)	for human exposure, the acceptable vibration values set out in the Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006).		
D10		Where feasible and reasonable, operation noise mitigation measures must be implemented at the start of Construction (or at other times during construction) to minimise construction noise impacts.	Compliant and Ongoing	These requirements are incorporated into the approved Construction Noise and Vibration Management Sub Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1&2 construction works. Chapter 8 Examples of operational stage works being implemented early includes the finalisation of permanent Noise Walls.
D11		During construction, affected educational institutions (including The Forest High School) must be consulted and feasible 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.	Compliant and Ongoing	These requirements are incorporated into the approved Construction Noise and Vibration Management Sub Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1&2 construction works. An example includes attempting to minimise noise during the 2017 HSC study period.
D12		No blasting is permitted on site unless reviewed and approved by the Secretary in consultation with the EPA.	Compliant and complete	No blasting proposed for Stage 1 or 2 works in accordance with Construction Noise and Vibration Management Sub Plan
D13		The SSI must be constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust and tracking of material onto public roads. All activities on the site must be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent must identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.	Compliant and Ongoing	Requirement implemented in accordance with Construction Air Quality Management Sub Plan, forming part of regular inspection monitoring and fixed dust deposition monitors located within the Project area. A range of measures have been implemented to minimise dust including water carts, covered trucks, street sweepers, spraying polymer or covering soil stockpiles.
D14		The SSI must be constructed, where feasible and reasonable, to avoid the use of local roads outside of the SSI footprint (through residential streets) by heavy vehicles to gain access to ancillary facilities.	Compliant and Ongoing	Requirement implemented in accordance with approved CEMP Rev 3 (Aug 2016) App B1 Construction Traffic and Access Management Sub Plan Section 7.2.4 Table 7.2 TAMP19, 25
D15		Access to construction compounds via local roads must be limited to standard construction hours, where practicable, unless otherwise detailed within the Construction Traffic and Access Management Plan required by condition D28(c).	Compliant and Ongoing	Requirement implemented in accordance with approved CEMP Rev 3 (Aug 2016) App B1 Construction Traffic and Access Management Sub Plan Section 6.4 and 7.2.2 Table 7.2 TAMP24
D16		Safe pedestrian and cyclist access through or around worksites must be maintained during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route must be provided and signposted.	Compliant and Ongoing	Requirement implemented in accordance with approved CEMP App B1 Construction Traffic and Access Management Sub Plan Section 7.10 Table 7.2 TAMP35-45 These are divided into discrete work packages. All pedestrian and cyclist access are maintained during construction. Where pedestrian and cyclist access is restricted there are alternate paths created which have appropriate TCPs and Signage plans and are also manned by traffic controllers to assist guiding the public. An example of this is along Frenchs Forest Road where 24 hour traffic control has been implemented to assist the public where there has been the alteration to 1-way traffic flow.
D17		Construction vehicles (including staff vehicles) associated with the SSI must be managed to:	Compliant and Ongoing	Requirement implemented in accordance with approved CEMP Rev 3 (Aug 2016) App B1 Construction Traffic and Access Management Sub Plan Section 6.3, 6.8 and 7.2.4 Table 7.2 TAMP5
	(a)	minimise parking or queuing on public roads;		
	(b)	minimise idling and queuing in local residential streets where practicable; and		
	(c)	adhere to the nominated haulage routes identified in the Construction Traffic Management Plan required under condition D28(c).		

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D18		<p>Upon determining the haulage route(s) for construction vehicles associated with the SSI, and prior to construction, a suitably qualified and experienced independent expert must prepare a Road Dilapidation Report for all local roads utilised. The Report must assess the current condition of the road and describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the construction of the SSI. The Report must be submitted to the Council for review prior to the commencement of haulage.</p> <p>Following completion of construction, a subsequent Report must be prepared to assess any damage to the road that may have resulted from the construction of the SSI.</p> <p>The Reports must be compatible with Council's existing pavement management system and collect data on roughness, rutting, cracking and patching before and after works.</p> <p>Measures undertaken to restore or reinstate roads affected by the SSI must be undertaken in a timely manner, in accordance with the reasonable requirements of the Council, and at the full expense of the Proponent.</p> <p>Note: Nothing in this condition restricts the Proponent commencing adjustments and minor upgrades to the existing road network to cater for construction traffic and installation of temporary project signage prior to the commencement of construction.</p>	Compliant and Ongoing	Requirement implemented and completed in accordance with approved Construction Traffic and Access Management Sub Plan
D19		The clearing of native vegetation must be minimised with the objective of reducing impacts to any threatened species or Endangered Ecological Communities to the greatest extent practicable. Impacted vegetation must be rehabilitated with endemic species to the greatest extent practicable.	Compliant and Ongoing	Implementation of approved Stage 1 & 2 CEMP Rev 3 (Aug 2016) App B2 Construction Flora and Fauna Management Sub Plan Chapter 5
D20		Prior to the commencement of vegetation clearing activities, the Proponent must undertake pre clearing surveys and inspections for endangered and threatened species to confirm the on-site location of those species. The surveys and inspections, and any subsequent relocation of species and associated management/offset measures, must be undertaken under the guidance of a suitably qualified and experienced ecologist. Methodologies are to be incorporated into the Construction Flora and Fauna Management Plan required under condition D28(f) and/or the Biodiversity Offset Package required under condition B15.	Compliant and Ongoing	<p>CEMP Stage 1 & 2 App B2 FFMS-P Referred to in Table 3-3 FF2 & covered by</p> <p>Detailed design</p> <p>Appendix C Pre-clearing checklist</p> <p>Sensitive Area Plans (Appendix A7 to the CEMP)</p> <p>Aecom have developed and issued the Urban Landscape and Design Report (ULDR)</p> <p>RSMM incorporated into Stage 1 FFMP refer to Table 7-1 FF23 to FF31 and is implemented for Stage 1 works.</p> <p>Preclearing surveys completed for Stage 1. Clearing undertaken in accordance with clearing and grubbing method statements incorporating actions for habitat removal, bush rock and hollows recovery, and controls on potential pollution pathways. Pathogen and Weed Management Plan implemented to mitigate impacts.</p> <p>The ULDR addresses management of bushrock in 4.4.1 Removal of bushrock and large woody debris.</p> <p>No core or potential Koala habitat found within the Pre-construction Survey</p> <p>Pre-clearance surveys are occurring for all clearing.</p> <p>There is a 2-stage clearing process with a clearing permit being issued and pre-clearing surveys occurring. Monitoring is being carried out by Biosis.</p> <p>Biodiversity Offset program has been prepared and is under review with DPE. Contracts are being issued and offset program is being enacted concurrently with DPE review..</p>
D21		Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with:	Compliant and Ongoing	Dangerous goods being stored in accordance with the construction Soil and Water Quality Management Sub Plan, Waste and Energy Management Sub Plan and EWMS and Project WHS Management Plan and procedures.
	(a) all relevant Australian Standards;			
	(b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume, within the bund; and			
	(c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997).			
		In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement prevail to the extent of the inconsistency.		
D22		The Proponent must provide boundary screening at all construction compounds that adjoin or are adjacent to residential, educational and/or commercial properties, with the objective of being consistent with the surrounding context.	Compliant and Ongoing	Boundary screening being undertaken to satisfactorily meet this requirement. Requirement incorporated as part of site establishment of the main site compound.

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
D23		The location of the ancillary facilities must be identified in the Construction Environment Management Plan required under condition D27.	Compliant and Ongoing	Locations of the ancillary facilities including the main site compound was included in the approved Stage 1 & 2 Construction Compound and Ancillary Facilities Management Sub Plan includes: Warringah Rd/ Wakehurst ParkwayWakehurst Parkway South Compound Aquatic Drive CompoundFrenchs forest Rd East & Warringah Rd Compound 39 Frenchs forest Rd East
D24		Unless approved by the Secretary, the location of Ancillary Facilities not identified in the documents listed in condition A1 must comply with the following locational criteria:	Compliant and Ongoing	Locations of the ancillary facilities including the main site compound were evaluated in accordance with these criteria and included in the approved Combined Stage 1 and Stage 2 Project Construction Compound and Ancillary Facilities Management Sub Plan. Dreadnought Rd and 312 Warringah Rd Ancillary facilities have been approved and applied for, respectively - Dreadnought Rd was assessed to meet these requirements in D24
(a)	be located more than 50 metres from a waterway;			
(b)	be located within or adjacent to land where the SSI is being carried out;			
(c)	have ready access to the road network;			
(d)	be located to minimise the need for heavy vehicles to travel through residential areas;			
(e)	be sited on relatively level land;			
(f)	be separated from nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant);			
(g)	not require vegetation clearing beyond that already required by the SSI;			
(h)	not impact on heritage items (including areas of archaeological sensitivity) beyond those already impacted by the SSI;			
(i)	not unreasonably affect the land use of adjacent properties;			
(j)	be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and			
(k)	provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours.			
D25		All ancillary facilities and access points must be rehabilitated to at least their pre-construction condition or better, unless otherwise agreed by the landowner where relevant.	Compliant and Ongoing	Noted within approved Stage 1 & 2 Construction Compound and Ancillary Facilities Management Sub Plan.
D26		C26 The Secretary's approval is not required for minor Ancillary Facilities (e.g. lunch sheds, office sheds, and portable toilet facilities) that do not comply with the criteria set out in condition D24 and	Compliant and Ongoing	Noted within approved Stage 1 Construction Compound and Ancillary Facilities Management Sub Plan.
(a)	are located within an active construction zone within the approved SSI footprint; and			
(b)	have been assessed by the Environmental Representative to be -			
(i)	of low amenity risk to surrounding residences, with consideration to matters such as noise and vibration impacts, traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and			
(ii)	of low environmental risk in respect to waste management and impacts on flora and fauna, soil and water, and heritage; and			
(c)	have environmental and amenity impacts that can be managed through the implementation of environmental measures detailed in the Construction Environmental Management Plan for the project.			
D27		Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent must prepare and implement (following approval) a Construction Environmental Management Plan (CEMP) for the SSI. The CEMP is to be prepared in consultation with Council, for the approval of the Secretary. The CEMP must outline the environmental management practices and procedures that are to be followed during construction. The CEMP is to be prepared in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004). The CEMP must include, but not necessarily be limited to:	Compliant and Ongoing	CEMP Stages 1 & 2 (August 2016) Letter from DPE 5th August 2016 approving use of CEMP and sub-plans
(a)	a description of activities to be undertaken during construction of the SSI (including staging and scheduling);	Chapter 3		
(b)	statutory and other obligations that the Proponent is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;	Sections 1.2, 1.3 & 1.4 Chapter 3 Appendix A1 Appendix A2 Compliance Tracking Program – Section 8.3 and Appendix A10		

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	(c)	a description of the roles and responsibilities for relevant employees involved in the construction of the SSI, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors, are aware of their environmental and compliance obligations under these conditions of approval;		Sections 4.2, 4.3 Chapter 6
	(d)	an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and		Section 3.4 Appendix A4
	(e)	details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the SSI). These should include consideration of cumulative impacts in relation to staging of other major potential construction activities in the project area (including the NBH project and Stage 1 Project). In particular, the following environmental performance issues must be addressed in the CEMP:		Section 3.4 Chapter 8 Appendix A4
	(i)	measures for reducing, managing and monitoring air quality impacts;		Appendix B6 AQMP
	(ii)	measures for the handling, treatment and management of hazardous and contaminated materials (including asbestos);		Appendix B4 SWMP
	(iii)	measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealing with green waste including timber and mulch from clearing activities;		Appendix B7 WEMP
	(iv)	measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins);		Appendix B4 SWMP
	(v)	measures to monitor and manage hazard and risks; and		Appendix B4 SWMP Appendix B7 WEMP Chapters 7 and 8 Appendix A9
	(vi)	the issues identified in Condition D28.		Section 4.1.2 Appendix B1, B2, B3, B4, B5 and B9
		<p>The CEMP must include procedures for its periodic review and update (including the sub-plans required under Condition D28), as necessary (including where minor changes can be approved by the Environmental Representative).</p> <p>The CEMP must be submitted for the approval of the Secretary no later than one month prior to the commencement of construction, or as otherwise agreed by the Secretary. The CEMP may be prepared in stages; however, construction works must not commence until written approval of the relevant stage has been received from the Secretary.</p> <p>Note: The approval of a CEMP does not relieve the Proponent of any requirement associated with this SSI approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this SSI approval, the requirements of this SSI approval prevails.</p>		Section 1.6 Chapter 9 Section 1.4
D28 (a)		As part of the CEMP for the SSI, the Proponent must prepare and implement (following approval):	Compliant and Ongoing	CEMP Stage 1 & 2 (Aug 2016) App B8 Construction Compound and Ancillary Facilities Management Plan

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	(a)	a Construction Compound and Ancillary Facilities Management Plan to detail the management of site compounds associated with the infrastructure activity. The Plan must be developed in consultation with NOW and Council and include but not be limited to:	Compliant and Ongoing	This Plan Chapter 4 Appendix A Ancillary Facilities Assessment Appendix B Ancillary Facility Register EWMS for Ancillary Facility Establishment (refer to Example in Appendix C)
	(i)	a description of the facility, its components and the surrounding environment;		Sections 5.2, 5.3 and 5.4
	(ii)	details of the activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods;		Sections 5.2, 5.3 and 5.4
	(iii)	an assessment of the facility against the criteria provided in condition D24. Where proposed facilities do not meet those criteria, the assessment must justify and (where relevant) quantify potential impacts of the facility.		Sections 5.2, 5.3 and 5.4
	(iv)	details of the mitigation and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts and an assessment of the adequacy of the mitigation or offsetting measures;		Chapter 7
	(v)	identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation); and		Sections 5.2, 5.3 and 5.5
	(vi)	appropriate monitoring, review and amendment mechanisms.		Chapter 8 Chapter 10
D28 (b)	(b)	a Construction Noise and Vibration Management Plan to detail how construction noise and vibration impacts will be minimised and managed. The Plan must be consistent with the guidelines contained in the Interim Construction Noise Guidelines (DECC, 2009) and be prepared in consultation with The Forest High School Working Group. The Plan must include, but not be limited to:	Compliant and Ongoing	Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP)
	(i)	identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSI stipulated in this approval;		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP)
	(ii)	details the construction activities and an indicative schedule for construction works; including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas;		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP) Section 6.3
	(iii)	identification of construction noise and vibration levels at sensitive receivers; including consideration of cumulative impacts associated with adjoining development sites;		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP) Section 7.4
	(iv)	identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts);		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP) Chapter 8
	(v)	procedures and mitigation measures to ensure relevant vibration criteria are achieved, including applicable buffer distances for vibration sensitive works, use of low-vibration generating equipment/ vibration dampeners or alternative construction methodology, and pre- and post- construction dilapidation surveys of receivers where vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria);		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP) Chapter 8

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	(vi)	a program for construction noise and vibration monitoring (including the monitoring of the effectiveness of noise and vibration mitigation measures) during construction, clearly indicating the monitoring frequency, monitoring locations, how the monitoring results would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified;		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP) Appendix C
	(vii)	an Out-of-Hours Work Protocol for the assessment, management and approval of works outside of the hours specified in condition D5, for the Secretary's approval. The Out-of- Hours Work Protocol must include:		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP) Chapter 9
	(A)	a description of the nature and timing of activities to be carried out during out of hours works;		
	(B)	detailed mitigation measures for any residual impacts (that is, additional to general mitigation measures), including extent of at-receiver treatments; and		
	(C)	proposed notification arrangements;		
	(viii)	procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for managing and responding to noise complaints; and		
	(ix)	mechanisms for the monitoring, review and amendment of this plan.		Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP) Chapter 10
D28 (c)	(c)	a Construction Traffic and Access Management Plan to ensure traffic and access controls are implemented to avoid or minimise impacts on traffic, pedestrian and cyclist access, and the amenity of the surrounding environment. The Plan must be developed in consultation with the Transport Management Centre, Council, emergency services, road user groups, Health Infrastructure, The Forest High School Working Group, and include, but not necessarily be limited to:	Compliant and Ongoing	This Plan Table 7.2 TAMP2
	(i)	identification of construction traffic routes and construction traffic volumes (including heavy vehicle/spoil haulage) on these routes;		Section 7.2, Table 7.2 TAMP4
	(ii)	details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points;		Section 7.2, Table 7.2 TAMP4
	(iii)	discussion of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, access to public land, property access, rat runs, including details of oversize load movements, and the nature and duration of those impacts;		Chapter 6, Table 7.2 TAMP11 NVMP – Appendix A
	(iv)	details of management measures to minimise traffic impacts and maintain road capacity during morning and afternoon peaks, including the proposed schedule of works, temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cycle access;		Chapter 7 Traffic Control Plans Table 7.2 TAMP4
	(v)	details of measures to maintain or provide alternative safe and accessible routes for pedestrians throughout the duration of construction, including provision of replacement kiss and ride, bus stops, pedestrian and cyclist access and paths where necessary;		Chapter 7 Table 7.2 TAMP16, 32
	(vi)	details of measures to maintain connectivity for cyclists, with particular emphasis on providing adequate access between key existing cycle routes;		Section 7.8, Table 7.2 TAMP35, 37
	(vii)	details of measures to manage traffic movements, rat runs, parking, loading and unloading at ancillary facilities during out-of-hours work;		Section 7.2.2, Table 7.2 TAMP5
	(viii)	details of methods to be used to communicate proposed future traffic changes to affected road users, pedestrians and cyclists, consistent with the Community Communication Strategy required under condition C1;		Section 8.3, Table 7.2 TAMP4
	(ix)	an adaptive response plan which sets out a process for response to any traffic, construction or other incident; and		Section 7.13 Appendix G
	(x)	mechanisms for the monitoring, review and amendment of this plan.	Chapter 10	
D28(d)	(d)	A Construction Soil and Water Management Plan to manage surface and groundwater impacts during construction of the SSI. The plan must be developed in consultation with DPI Water and Council and include, but not necessarily be limited to:	Compliant and Ongoing	CEMP Stage 1 & 2 (Aug 2016) App B4 Soil and Water Quality Management Sub Plan Table 7-2 SW51

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	(i)	details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater, including identification of all pollutants that may be introduced into the water cycle;		Appendix Water Quality Monitoring Program undertaken for Stage 1 to be incorporated into the Water Management Plan. Appendix H Unexpected Discovery of Contaminated Land Procedure An Asbestos Management Plan has been prepared. Water Management Plan has been developed and approved.
	(ii)	soil erosion and sediment control measures that comply with the practices and principles as required under Condition D3;		
	(iii)	details of the staging of construction activities to minimise and manage potential sediment loads discharging to receiving drainage lines as a result of soil loss from disturbed areas;		
	(iv)	impacts on watercourse bank stability and the development of appropriate mitigation measures as required by condition B5;		
	(v)	relevant management, monitoring and response measures described in the Water Management Plan prepared in accordance with condition B5;		
	(vi)	a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction;		
	(vii)	an Asbestos Management Plan, to be developed in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999, and to include measures for the safe removal and disposal of known and undiscovered asbestos within the SSI footprint and related construction ancillary facilities, stockpile sites and site access;		
	(viii)	a description of how the effectiveness of these actions and measures would be monitored and maintained during the proposed works, clearly indicating how often this monitoring and maintenance would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; and		
	(ix)	mechanisms for the monitoring, review and amendment of this plan. The Construction Soil and Water Management Plan must be prepared to generally reflect, where feasible and reasonable, the recommendations made in the "Construction Phase Surface Water Management Strategy" as outlined in Section 7 of the EIS Appendix L.		
D28(e)	(e)	a Construction Heritage Management Plan to ensure construction impacts on Aboriginal and non-Aboriginal heritage will be appropriately avoided, minimised and managed. The Plan must be developed in consultation with the Council and Aboriginal stakeholders (for Aboriginal heritage), and include, but not necessarily be limited to:	Compliant and Ongoing	CEMP Stage 1 & 2 (Aug 2016)
	(i)	in relation to Aboriginal Heritage:		Chapter 7, Table 7-1 HMP3
	(A)	procedures for dealing with previously unidentified Aboriginal objects (excluding human remains), including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures, including when works can re-commence, by a suitably qualified and experienced archaeologist in consultation with Department of Planning and Environment, OEH and Aboriginal stakeholders, and assessment of the consistency of any Aboriginal heritage impacts against the approved impacts of the SSI;		HMP2, Appendix A
	(B)	procedures for dealing with human remains, including cessation of works in the vicinity, notification of Department of Planning and Environment, NSW Police Force, OEH and Aboriginal stakeholders, and commitment to cease recommencing any works in the area unless authorised by the OEH and/or the NSW Police Force;		HMP13 Appendix A
	(C)	heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal cultural heritage; and		HMP13 Appendix A
	(D)	procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI, in the event that previously unidentified Aboriginal objects are discovered; and		HMP1 Section 8.3
	(ii)	in relation to non-Aboriginal Heritage:		Section 4.5
	(A)	Listing of heritage Items directly and indirectly affected by the SSI;		Chapter 5
	(B)	details of management measures to be implemented to prevent and minimise impacts on heritage items (including the measures to protect unaffected sites from vibration and other impacts during construction works in the vicinity);		Chapter 7
	(C)	details of monitoring and reporting requirements for impacts on heritage items;		Chapter 7, Table 7-2
	(D)	procedures for dealing with previously unidentified heritage objects, (including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified and experienced archaeologist in consultation with the OEH and the Department, and assessment of the consistency of any heritage impacts against the approved impacts of the SSI; and		Section 8.3, 8.6

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	(E)	heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under this approval including site identification, protection and conservation of non-Aboriginal cultural heritage; and		Table 7-1 HMP15, HMP21
	(iii)	mechanisms for the monitoring, review and amendment of this plan.		Table 7-1 HMP17 Section 8.2 Training (induction)
D28(f)	(f)	a Construction Flora and Fauna Management Plan to detail how construction impacts on ecology will be minimised and managed. The Plan must be endorsed by an appropriately qualified and experienced ecologist and in consultation with NOW and the Council, and must include, but not necessarily be limited to:	Compliant and Ongoing	Chapter 8, Chapter 10
	(i)	plans for impacted and adjoining areas showing vegetation communities, including riparian areas; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including procedures for pre-clearing surveys;		Implementation of approved Stage 1 & 2 CEMP Rev 3 (Aug 2016) App B2 Construction Flora and Fauna Management Sub Plan Chapter 4
	(ii)	the identification of areas to be cleared and details of management measures to avoid residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat such as:		Appendix C – Pre-clearing checklist Sensitive Area Plans (Appendix A7 to the CEMP)
	(A)	clearing minimisation procedures (including fencing),	Non-compliant	Appendix C – Pre-clearing checklist Demarcation fencing is in place for much of the native vegetation around the site, however as works are completed in areas, this fence is removed. There were two minor incidents in relation to vegetation clearing #134 and #149 (see main body of report).
	(B)	pre-clearing and clearing procedures,	Non-compliant	
	(C)	removal and relocation of fauna during clearing,	Compliant and Ongoing	
	(D)	habitat tree and hollow bearing tree management, and		
	(E)	construction worker education;		
	(iii)	rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas;		
	(iv)	a Pathogen and Weed Management Strategy, incorporating weed management measures focusing on early identification of invasive weeds and pathogens (including but not limited to Batrachochytrium dendrobatidis, Phytophthora cinnamomi and myrtle rust) and effective management controls;		
	(v)	a description of how the effectiveness of these management measures would be monitored;		Appendix B – Pathogen and Weed Management Strategy
	(vi)	a procedure for dealing with unexpected EEC/ threatened species identified during construction, including cessation of work and notification of the OEH, determination of appropriate mitigation measures in consultation with the OEH (including relevant re-location measures) and updating of ecological monitoring and/ or biodiversity offset requirements and		Table 7-1 Flora and fauna management measures Appendix A – Ecological Monitoring Program Appendix B – Pathogen and Weed Management Strategy Appendix C – Pre-clearing checklist Appendix D Fauna Handling and Rescue Procedure Appendix E Anticipated Threatened Species/ EEC Management Procedure Appendix F Unexpected Threatened Flora Species/ EEC Finds Procedure Appendix G – Nest Box Plan Soil and Water Quality Management Plan (Appendix B4 to the CEMP)
	(vii)	mechanism for the monitoring, review and amendment of this plan		Table 7-1 Flora and fauna management measures Appendix A Ecological Monitoring Program Appendix D Fauna Handling and Rescue Procedure Appendix F Unexpected Threatened Flora Species/ EEC Finds Procedure

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Part E - Operational Environmental Management and Reporting				
E1		The SSI must be designed and operated with the objective of meeting the requirements of the NSW Road Noise Policy (DECCW, 2011).	Compliant and Ongoing	Detailed design is proceeding in accordance with this requirement.
E2		Unless otherwise agreed by the Secretary, at least six months prior to completing construction, the Proponent must, in consultation with the EPA, submit for the approval of the Secretary, an Operational Noise Review to review the operational noise mitigation measures proposed to be implemented for the SSI. The Review must be undertaken by a suitably qualified and experienced acoustic specialist and must:	Compliant and Ongoing	The Operational Noise Report has been submitted and approved by DPE on 3 July 2018.
	(a)	confirm the operational noise predictions of the SSI based on detailed design, utilising an appropriately calibrated noise model which has incorporated additional noise monitoring where necessary for calibration purposes;		The Operational Noise Report has been submitted and approved by DPE on 3 July 2018.
	(b)	review the suitability of the operational noise mitigation measures identified in the documents listed under condition A1 to achieve the criteria outlined in the NSW Road Noise Policy (DECCW, 2011), based on the operational noise performance of the SSI predicted under condition E1; and		The Operational Noise Report has been submitted and approved by DPE on 3 July 2018.
	(c)	where necessary, investigate and identify additional feasible and reasonable noise mitigation measures to achieve the criteria outlined in the NSW Road Noise Policy (DECCW, 2011);		The Operational Noise Report has been submitted and approved by DPE on 3 July 2018.
	(d)	identify the management of tactile noise from traffic signals; and		The Operational Noise Report has been submitted and approved by DPE on 3 July 2018.
	(e)	identify all sensitive receiver locations eligible for architectural treatments.		The Operational Noise Report has been submitted and approved by DPE on 3 July 2018. Landowners were contacted in writing at end of July 2017, to advise they were eligible for architectural treatment as relevant.
E3		Notwithstanding the above, the Proponent is responsible for the cumulative operational noise impacts of the SSI and the NBH development. That is, the Review must incorporate a baseline time period that does not include traffic generated by the NBH development (SSI 5982).		
E3		Within four weeks of the Secretary's approval of the report required by condition E2, the Proponent must write to each landowner whose property is identified as eligible for architectural treatment. If eligible, the proponent will offer to provide and fund feasible and reasonable architectural noise mitigation treatments to reduce the impact of operational traffic noise at the affected premises. The Proponent's offer must remain open for acceptance by the affected landowner for at least six months from the date of the notification required under this condition. of the Secretary's approval of the report required by condition D3, the Proponent must write to each landowner whose property is identified as eligible for architectural treatment. If eligible, the proponent will offer to provide and fund feasible and reasonable architectural noise mitigation treatments to reduce the impact of operational traffic noise at the affected premises. The Proponent's offer must remain open for acceptance by the affected landowner for at least six months from the date of the notification required under this condition.	Compliant and Ongoing	Properties during this reporting period were being assessed for treatment. Reports are being prepared and will be provided to the residents for agreement.
E4		Architectural treatments agreed between the parties must be implemented, where practicable, within six months of reaching such an agreement.	Compliant and Ongoing	
E5		Within 12 months of the commencement of operation of the SSI, or as otherwise agreed by the Secretary, the Proponent must undertake operational noise monitoring to compare actual noise performance of the SSI against noise performance predicted in the review of noise mitigation measures required by condition E3, and prepare an Operational Noise Assessment Report to document this monitoring. The Report must include, but not necessarily be limited to:	Compliant and Ongoing	
	(a)	noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under condition E2 and documents specified under condition A1 of this approval;		
	(b)	a review of the operational noise levels in terms of criteria established in the NSW Road Policy (DECCW, 2011);		
	(c)	methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which SSI noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers;		
	(d)	details on average daily traffic volumes across the SSI area during the daytime and night-time periods based on recorded observations, including but not limited to traffic volumes along Warringah Road and the intersections with Wakehurst Parkway, Hilmer Street and Forest Way;		
	(e)	details of any complaints and enquiries received in relation to operational noise generated by the SSI between the date of commencement of operation and the date the report was prepared;		
	(f)	any required recalibrations of the noise model taking into consideration factors such as actual traffic numbers and proportions;		
	(g)	an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of feasible and reasonable mitigation measures; and		
	(h)	identification of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition E3, if required, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Policy (DECCW, 2011), when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.		
		The Proponent must provide the Secretary and the EPA with a copy of the Operational Noise Compliance Report within 60 days of completing the operational noise monitoring referred to in (a) above or as otherwise agreed by the Secretary.	Compliant and Ongoing	To be actioned following completion of the Project.

Ref	Sub Ref.	STAGE 2 CONDITIONS OF APPROVAL Commitment/Obligation	Compliance Status	March 2019 Status (e.g. Date submitted to DP&E, Approval obtained etc.)
E6		The Proponent must prepare an Operational Traffic Performance Review to address the traffic performance of the SSI. The Review must be undertaken within six months following operation of the SSI (and is to be inclusive of both Stage 1 and Stage 2) and six months following operation of the NBH development, or as otherwise agreed by the Secretary. The Review must be undertaken in consultation with the Transport Management Centre, Transport for NSW, Council, and Health Infrastructure and include, but not necessarily be limited to:		To be actioned following completion
	(a)	traffic and road network performance of the SSI against expected performance, including consideration of NBH traffic generation;		
	(b)	local street and property access (such as ingress and egress from local roads onto Warringah Road and property during morning and afternoon peak periods);		
	(c)	broader downstream impacts;		
	(d)	any parking impacts, including on-street parking to the south of Warringah Road in the vicinity of the proposed new shared pedestrian/bicycle overbridge;		
	(e)	'rat running' in streets that are likely to exhibit increases in traffic as a result of the SSI, including pre construction baseline data;		
	(f)	bus priority measures implemented to mitigate detrimental impacts on bus performance;		
	(g)	the performance (for road users and pedestrians) of any alternative parking arrangements;		
	(h)	pedestrian and cycle facilities and use, including connectivity at the project area fringes with other proposed non-project facilities; and		
	(i)	details of any complaints received relating to traffic, transport and access impacts, and how they have been addressed in the Review.		
		The Review must be submitted to the Secretary and to the Council within 60 days of its completion and made publicly available. If the Review indicates traffic, transport and access impacts attributable to the SSI and the NBH development if operational at the time of review, via traffic volumes, level of service, queue lengths, road safety, and other relevant parameters of performance, the Proponent must implement further feasible and reasonable measures to mitigate these impacts. The timing for the implementation of these measures must be clearly articulated in the Review. Note: Identified mitigation measures that are not consistent with the environmental impacts described in the documents listed in condition A1, will need to be further assessed under the Environmental Planning and Assessment Act, 1979. Works will need to meet relevant design standards and be subject to independent road safety audits.	Complaint and Ongoing	To be actioned following completion
E7		The ongoing maintenance of urban design and landscaping items and works implemented as part of this SSI approval remains the Proponent's responsibility unless satisfactory arrangements have been put in place for the transfer of ownership of the item or work to another authority. The Proponent will maintain items and works to the standards established in the Urban Design and Landscape Plan required under condition B24, unless and until landscaping items have been transferred.	Compliant and Ongoing	Noted for action
E8		Prior to the commencement of operation, the Proponent must incorporate the infrastructure activity into existing environmental management systems administered by the Proponent and prepared in accordance with the AS/NZS ISO 14000 Environmental Management System series.	Compliant and Ongoing	Noted for action

Appendix B - summary of the Stage 2 compliance against each of the RSMMs.

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Revised Safeguards and Management Measures - Traffic and Transport			
Construction Traffic Impacts	<p>A construction traffic management plan would be developed and implemented as part of the Stage 2 Project. The construction traffic management plan would focus on maintaining general traffic flow and specifying appropriate site accesses and construction traffic routes. It would include:</p> <ul style="list-style-type: none"> • Traffic Control Plans showing the access arrangements and the detail of required signs and devices • Pedestrian and cyclist management plans • Consultation strategy for access requirements to adjacent properties including The Forest High School and Frenchs Forest • Hours of operation, including prohibitions on queuing outside sites prior to commencement of work • Road safety audit requirements • Any localised improvements/adjustments to existing traffic management arrangements. 	Compliant and On-going	CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 TAMP1
	Subject to safety reasons and other environmental impacts (e.g. noise), construction traffic movements would be limited to off-peak periods, with peak period construction staggered to minimise construction traffic during these periods.	Compliant and On-going	CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 TAMP2
	Priority would be given to the use of the arterial road network for construction vehicle access routes.	Compliant and On-going	CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 TAMP19
Cumulative Construction Traffic Impacts	<p>Consultation would be undertaken with Health Infrastructure to coordinate scheduling of construction activities and deliveries.</p> <p>Consultation would be undertaken with Health Infrastructure regarding the need for construction access to the hospital site to focus on the Warringah Road/Bantry Bay Road intersection.</p>	Compliant and On-going	<p>RSMM incorporated into CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 7-1 (TAMP56 and TAMP57). Consultation undertaken as part of interface meetings with Healthscope contractor.</p> <p>FYJV construction team has regular meetings/ correspondence with CPB - with regards to upcoming works/ deliveries which will affect the other Project.</p> <p>The FYJV Community Relations Manager has a fortnightly catchup with Healthscope Community representative.</p>
Property Access	Access to properties along affected roads would be maintained during construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners.	Compliant and On-going	<p>CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 3.2 B10</p> <p>2.3 Targets</p> <p>Table 3-3 TA6</p> <p>Table 3-3 TA7</p> <p>The FYJV Community team have regular interactions with directly impacted residents and property owners. Within this reporting period, there have not been any access problems with residents - alternative arrangements have been agreed and accepted.</p> <p>On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works (weekly work updates) informing residents of high noise night dates sent automatically to all residents on catchment database.</p>
Operational Traffic	<p>An operational traffic review would be carried out within 12 months of opening of the Stage 2 Project to confirm the operational traffic impacts of the project on Warringah Road, Forest Way and Wakehurst Parkway in close proximity to the hospital. The assessment would be based on actual traffic counts and will assess the level of service at major intersections within the assessed road network. Where necessary, the outcomes of the operational traffic review would be used to identify any additional feasible and reasonable measures to be implemented where it is determined that the level of service has significantly deteriorated as a result of the Stage 2 Project, compared to the levels described in Section 8.3 of the Stage 2 Project EIS.</p> <p>A Road Safety Audit will be undertaken for the intersection of Madison Way and Aquatic Drive to assess potential road safety issues at the intersection. The audit will be carried out with consideration of existing traffic conditions together with future traffic conditions and increases in traffic resulting from the new access at Aquatic Drive/Wakehurst Parkway.</p>	Compliant and On-going	<p>Noted for action as required after opening.</p> <p>After Stage 2 is completed.</p> <p>This tracking register prompts action when completed.</p>
Revised Safeguards and Management Measures - Noise and Vibration			

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
General construction noise and vibration impacts	A Construction Noise and Vibration Management Plan would be prepared for the Stage 2 Project. The plan would provide details of noise and vibration management measures and procedures to be carried out during construction to minimise and manage noise impacts on sensitive receivers, including: - Noise and vibration monitoring and reporting requirements - A map showing the locations of all sensitive receivers - Specific mitigation treatments, management methods and procedures to be implemented to control noise and vibration during construction - Construction timetabling to minimise noise impacts including time and duration restrictions, respite periods and frequency - Procedures for notifying residents, business owners, schools and other sensitive receivers of construction activities likely to affect their amenity through noise and vibration - Contingency procedures to be implemented in the event of non-compliances and/or noise complaints	Compliant and On-going	Stage 1 & 2 CNVMP approved by DP&E and issued for construction (Aug 16) and implemented for construction.
Construction Hours	Where reasonable and feasible, work would be carried out within ICNG recommended working hours	Compliant and On-going	All works being undertaken under EPL 20673 which conforms with the ICNG. CNVMP implemented for construction including Out Of Hours Work protocol which is being implemented for construction.
	Where work is required to be carried out outside of recommended working hours, all appropriate approvals would be obtained prior to work commencing, and all affected receivers would be notified of all relevant details relating to the work	Non-compliant	Generally nightworks have been compliant, however, during this reporting period there were some incidents involving trucks idling or parking in residential streets that resulted in community complaints; see main report. Trucking companies have been warned not to use residential streets without notification.
	Noisy activities that cannot be scheduled during standard construction hours would be scheduled as early as possible during the evening and/or night-time periods	Compliant and On-going	Induction highlights that noisiest activities are to be completed early if night works occur. This is also stressed in OOHW Permit.
Construction Vibration	Where reasonable and feasible, use lower vibration generating items of excavation plant and equipment e.g. smaller capacity rock breaker hammers.	Compliant and On-going	RSMM incorporated into Stage 1 & Stage 2 NVMP refer to Table 8-2 NVMM23, NVMM24, NVMM25, NVMM26 and Table 8.3 NVMM54, NVMM55, NVMM56, NVMM57. Pre-Construction building surveys completed. Vibration assessments and monitoring undertaken as required.
	Use dampened rock breakers and/or 'city' rock breakers to minimise the impacts associated with rock breaking work.	Compliant and On-going	
	If vibration-intensive works are required within the safe working distances, vibration monitoring or attended vibration trials would be carried out to ensure that levels remain below the cosmetic damage criterion.	Compliant and On-going	
	Building condition surveys would be completed both before and after the works to identify the existing condition and any damage due to the Stage 2 Project works.	Compliant and On-going	
Impacts on sensitive receivers	Local residents would be advised of hours of operation (including out of hours works) and duration of works, and supplied with a contact name and number for queries and complaints regarding noise and vibration matters.	Non-compliant	Generally nightworks have been compliant, however, during this reporting period there were some incidents involving trucks idling or parking in residential streets that resulted in community complaints; see main report. Trucking companies have been warned not to use residential streets without notification.
	Operational noise mitigation measures, such as architectural treatment or noise barriers will be provided as early as practicable in the construction program to reduce potential noise impacts associated with construction activities.	Compliant and On-going	Noise walls have been installed along Warringah Road and assessment reports for at property noise treatments are currently being prepared.
	Complaints received are to be recorded and attended to promptly in accordance with the Roads and Maritime Draft Community Consultation Framework.	Compliant and On-going	Community Consultation Strategy has been prepared and approved by DP&E. A 24 hours hotline is available for compliants.
	A protocol would be developed to identify the need for and provision of respite measures for residential receivers in accordance with ICNG. Respite measures may include the restriction to the hours of construction activities resulting in impulsive or tonal noise (such as rock breaking, rock hammering, pile driving), or other appropriate measures agreed between the contractor and residential receiver such as alternative accommodation.	Compliant and On-going	Table 8-3 NVMM36 in the CNVIS. Affected sensitive receivers are offered alternative accommodation for the nights that night works will be affecting them, according to the OOHW Protocol.
	Heavy vehicle drivers would be advised of designated vehicle routes, parking locations, acceptable delivery hours and other relevant practices (i.e., minimising the use of engine brakes, and no extended periods of engine idling)	Compliant and On-going	Table 8-3 NVMM45, NVMM47, NVMM48 This is included in the TAMP and the Project on-site induction
Operational road traffic noise	Noise mitigation in the form of noise barriers, low noise road surfaces and/or acoustic treatment of existing individual dwellings will be considered, where feasible and reasonable at receivers identified for noise mitigation.	Compliant and On-going	Construction Program Detailed Design Reports Table 8-3 NVMM63 Operational noise review has been approved by the DPE
	Consideration of the feasible and reasonable noise management strategies presented in Section 8.6 would be carried out during detailed design, and appropriate noise management measures implemented for the operation phase.	Compliant and On-going	

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	<p>Within 12 months of the commencement of operation of the project an operational noise review will be carried out. This will include:</p> <ul style="list-style-type: none"> – Monitoring to compare actual noise performance of the project against predicted noise performance – An assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of all feasible and reasonable mitigation measures – Identification of any additional feasible and reasonable measures that will be implemented with the objective of meeting the criteria in the NSW Road Noise Policy (EPA 2011), when these measures will be implemented and how their effectiveness will be measured and reported. 	Compliant and On-going	To be completed 12 months after the Project is in operation.
Revised Safeguards and Management Measures - Biodiversity			
General biodiversity impacts	<p>A Construction Flora and Fauna Management Plan would be prepared for the Stage 2 Project. The plan would provide details of biodiversity management measures and procedures to be undertaken during construction to minimise and manage impacts on flora and fauna, including:</p> <ul style="list-style-type: none"> – Management strategies for pre-construction, construction and post- construction activities including control measures for pre-clearing process – A map showing the DFEC and other native vegetation to be retained – Fauna rescue and release procedure – Protocol for working around trees that includes methods for trimming/lopping and managing excavations near retained trees to maintain tree health – Procedure for controlling the introduction and spreading of weeds and pathogens – Proposed strategies for re-use of coarse woody debris and bushrock – Unexpected threatened species finds procedure consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011) to manage any unexpected finds during construction. 	Compliant and Ongoing	A combined Stage 1 and Stage 2 CEMP Appendix B2 is the Flora and Fauna Management Sub-Plan has been approved for construction in August 2016.
Loss of DFEC and other native vegetation	Establish exclusion zones around areas of DFEC and other native vegetation to be retained outside of the construction impact area.	Non-compliant	This mitigation measure is incorporated into Stage 1 & 2 Flora and Fauna Management Plan, referred to in Table 3-3 FF2.
	Locate construction access tracks and additional ancillary facilities in previously cleared/disturbed areas.	Non-compliant	A range of exclusion boundary fencing is used such as Orange plastic netting and signage to demarcate protection areas from work zones. During this reporting period there were two minor vegetation clearing incidents, where correct internal procedures were not followed, however there was no clearing outside the project boundary.
	Excavations required in proximity to retained trees which may impact the critical root zone, are to be carried out in consultation with a suitably qualified and experienced arborist to ensure roots are not damaged in a way that could detrimentally affect tree health.	Non-compliant	This is assessed on a needs basis. Vegetation clearing on the project is generally undertaken by Plateau Tree Services who are experienced tree cutters and who also include arborists. See minor vegetation incident above.
	Detailed design would aim to minimise impacts on DFEC, Red-crowned Toadlet and other moderate to good condition native vegetation.	Compliant and Complete	Detailed design aims to minimise vegetation impacts on DFEC, RCT and other native vegetation. This is documented in CEMP Stage 1 & 2 Appendix B2 FFMS-P Referred to in Table 7-1 FF11 & covered by Appendix A Ecological Monitoring Program. Also documented in the Urban Design and Landscape Report - Section 2.1.3 Natural environment potentials and constraints addresses DFEC.
	Residual impacts on DFEC and Red-crowned Toadlet habitat would be offset in accordance with the NSW offset principles for major projects (state significant development and state significant infrastructure) (OEH 2013)	Compliant and Ongoing	Biodiversity Offset program has been prepared and is under review with DPE. Roads and Maritime have been currently negotiating to secure the credits. Once secured the BOP will be updated with new legislative requirements, review from DP&E and new offset assessments.
	Offsets that conserve DFEC and Red-crowned Toadlet habitat should be the first priority	Compliant and Ongoing	
Threats to threatened species habitat	Implement sediment and erosion controls in accordance with the Blue Book (Landcom 2004) during construction.	Compliant and Ongoing	<p>CEMP Stage 1 & 2 App B2 FFMS-P Referred to in Table 7-1 FF8 & covered by Soil and Water Quality Management Sub Plan (Appendix B4 to the CEMP).</p> <p>Progressive Erosion Sediment Control Plans (PESCPs) are developed for each package of works prior to work commencing, and these are amended to meet work scope requirements as work progresses. These are developed in line with the Blue Book. An independent Soil Conservationist attends site on a weekly basis, and also has provided numerous ERSSED training to workers.</p>

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	Nest boxes would be installed in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011). The number and type of nest boxes required would be based on the number, quality and size of hollows that would be removed.	Compliant and Complete	CEMP Stage 1 & 2 App B2 Flora and Fauna Management Plan, Referred to in Table 7-1 FF9 & covered by Appendix G Nest Box Plan. Nest Boxes have been installed on the project, and these are monitored and maintained regularly.
Spread of invasive weeds	Carry out weed management and control in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011) during and post- construction.	Compliant and Ongoing	CEMP Stage 1 & 2 App B2 FFMS-P Referred to in Table 3-3 FF4 Appendix A Ecological Monitoring Plan and Appendix B Weed and Pathogen Management Strategy. Biosis have undertaken weed monitoring, and found no new areas of weed infestations. In areas of vegetation clearance new weed recruits were suppressed by the project's landscape subcontractors.
Introduction of diseases	Should Phytophthora cinnamomi be identified, follow protocol to prevent introduction or spread of Phytophthora cinnamomi and Myrtle Rust consistent with Roads and Maritime Biodiversity Guidelines – Guide 7 (Pathogen Management) (RTA, 2011) during construction. The protocols used should be either the Sydney Region Pest Management Strategy or Best Practice Guidelines for Phytophthora cinnamomi (DECC 2008) and the DPI hand-out prepared for Myrtle Rust response 2010-11: Preventing spread of Myrtle Rust in bushland or the OEH Interim Management Plan for Myrtle Rust in Bushland (2011).	Compliant and On-going	This is addressed in CEMP Stage 1 & 2 App B2 FFMS-P Referred to in Table 3-3 FF5 Appendix A Ecological Monitoring Plan Appendix B Weed and Pathogen Management Strategy
	Implement measures to prevent the spread of chytrid fungus in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011) including the hygiene protocol standards for the control of disease in frogs.	Compliant and On-going	CEMP Stage 1 & 2 App B2 FFMS-P Referred to in Table 3-3 FF5 Appendix A Ecological Monitoring Plan Appendix B Weed and Pathogen Management Strategy The (Frog) Chytrid Batrachytridium dendrobatidis has been identified to occur in 80% of frogs identified by Biosis. It is believed that due to the high presence, the presence of the Project would not have any influence over spread amongst the population. FYJV have developed a monitoring program which meets the RMS criteria and is applicable to the Project's environment.
Habitat corridor and wildlife connectivity	Prioritise investigation of offset sites in accordance with the wildlife connectivity strategy (refer to Appendix E of the Stage 2 Project EIS)	Compliant and On-going	The Wildlife Connectivity and Road Risk Mitigation Strategy has been completed in consultation with OEH. The implementation of the strategy is currently being completed.
	Detailed design would aim to minimise vegetation clearing and indirect impacts on vegetation within the area mapped by Warringah Council as Priority 1 Wildlife Corridor during construction.	Compliant and Complete	Potential mitigation of impacts being considered as part of detailed design. Revegetation to be consistent with Biodiversity Guidelines in the Urban Landscape and Design Report No revegetation has occurred to date. ULDR outlines revegetation strategy. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed Biosis preparing Biodiversity Offset Program
	Fauna fencing, culverts and rope bridges will be implemented as early as possible, informed by the options in the Wildlife Connectivity Strategy (Appendix E) and in consultation with a suitably qualified and experienced ecologist. The final locations of measures will be determined during detailed design.	Compliant and On-going	Addressed in detailed design and in accordance with the Wildlife Connectivity and Road Risk Minimisation Strategy. The strategy is currently being implemented.
	A monitoring program will be designed and implemented to assess the effectiveness of connectivity and roadkill mitigation measures.	Compliant and On-going	A Roadkill Monitoring program has been established within the Ecological Monitoring Program Table 9 Monitoring Actions of the NBHCNE EMP
	Carry out revegetation in accordance with Roads and Maritime Biodiversity Guidelines (RTA 2011) and detailed landscape plan prepared for the project.	Compliant and On-going	Revegetation consistent with Biodiversity Guidelines in the Urban Landscape and Design Report ULDR outlines revegetation strategy. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed Biosis have completed the Biodiversity Offset Program
	Ensure revegetation works use local native trees, shrubs and groundcovers that occur in DFEC.	Compliant and On-going	Revegetation consistent with Biodiversity Guidelines in the Urban Landscape and Design Report ULDR outlines revegetation strategy. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed Biosis have completed the Biodiversity Offset Program
Impact on native fauna and their habitat	Identify areas of suitable habitat nearby for release of any fauna species encountered during construction in accordance with Roads and Maritime Biodiversity Guidelines (RTA 2011).	Compliant and On-going	RSMM incorporated into Stage 1 FFMP refer to Table 7-1 FF23 to FF31 and is implemented for Stage 1 works. Appendix D of the FFMP Fauna Handling Procedure addresses identifying suitable release areas Injured Fauna has been delivered to local Allambie Heights Vet.

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	<p>Restrict use of pesticides to control weeds during and post-construction, particularly near watercourses and immediately before/during wet weather.</p> <p>Implement reasonable and feasible measures to prevent pollution of waterways and drainage lines in the area downstream of the proposed works during and post-construction.</p> <p>Should bushrock removal be required, it should be replaced in suitable areas as part of post-construction restoration in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011).</p> <p>Should removal of dead wood and trees be required it should be replaced in suitable areas as part of post-construction restoration in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011).</p> <p>Carry out staged habitat removal of hollow-bearing trees and bushrock in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011).</p> <p>Restoration and landscaping work post-construction is to include replanting areas of former DFEC with local native species including Allocasuarina trees and nectar producing trees and shrubs that occur in DFEC</p>	<p>Compliant and On-going</p>	<p>This mitigation measure is incorporated into Stage 1 & 2 Flora and Fauna Management Plan, referred to in Table 3-3.</p> <p>Appendix B of the FFMP A Pathogen and Weed Management Plan was implemented to mitigate impacts. Preclearing surveys completed for Stage 2. Clearing undertaken in accordance with clearing and grubbing method statements incorporating actions for habitat removal, bush rock and hollows recovery, and controls on potential pollution pathways.</p> <p>These mitigation measure is incorporated into Stage 1 & 2 Flora and Fauna Management Plan, referred to in Table 3-3.</p> <p>During this reporting period, very little vegetation clearing was undertaken. Many areas are being completed as construction progresses, and runoff is directed to permanent stormwater systems.</p> <p>Revegetation to be undertaken in accordance with approved Urban Landscape and Design Report. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed</p>
Impact on threatened flora and their habitat	Carry out pre-clearing surveys for threatened plants that could potentially occur in the construction impact area. Any threatened plants identified would be managed in accordance with the unexpected threatened species finds procedure consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011).	Compliant and On-going	<p>These mitigation measure is incorporated into Stage 1 & 2 Flora and Fauna Management Plan, referred to in Table 3-3.</p> <p>Preclearing surveys completed for all clearing for Stage 1 and 2. Clearing undertaken in accordance with clearing and grubbing method statements incorporating actions for habitat removal, bush rock and hollows recovery, and controls on potential pollution pathways. Pathogen and Weed Management Plan implemented to mitigate impacts.</p>
Impact on threatened fauna and their habitat	<p>Carry out pre-clearing surveys for threatened fauna (including the Powerful Owl and Red-crowned Toadlet) that could potentially occur in the construction impact area. Any threatened fauna identified would be managed in accordance with the unexpected threatened species finds procedure consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011)</p> <p>Explore and implement options for sustaining moisture in Red-crowned Toadlet breeding habitat during detailed road design</p> <p>A Red-crowned Toadlet Management Plan would be developed and included as part of the Construction Flora and Fauna Management Plan. This would include measures to protect and minimise impacts to Red-crowned Toadlet habitat during construction (such as temporary frog fencing) and protocols for pre-clearing survey and the identification of relocation areas prior to construction.</p> <p>Consideration of water quality issues that may adversely affect Red-crowned Toadlet habitat will be incorporated as part of a broader water quality monitoring program developed and implemented for construction and operation of Stage 2 project in consultation with EPA and NOW. The monitoring program will include objectives and parameters to determine the effectiveness of mitigation measures and will also include contingency measures.</p>	<p>Compliant and On-going</p> <p>Compliant and Complete</p> <p>Compliant and On-going</p> <p>Compliant and On-going</p>	<p>The ULDR addresses management of bushrock in 4.4.1 Removal of bushrock and large woody debris. No core or potential Koala habitat found within the Pre-construction Survey</p> <p>Pre-clearance surveys are occurring for all clearing.</p> <p>There is a 2-stage clearing process with a clearing permit being issued and pre-clearing surveys occurring. Monitoring is being carried out by Biosis.</p> <p>Sighted Pre-clearing checklist for clearing of DFEC in front of the hospital (Wakehurst Parkway) in June and for Aquatic Drive clearing in August. All clearing permits have Sensitive Area Maps attached showing any important ecological, environmental and heritage areas which need to be excluded. DFEC is not specifically referred to in the checklist, but all sensitive areas are acknowledged and exclusion zones are erected (orange para-web) if applicable.</p> <p>The Stage 2 Project Biodiversity Assessment 2015 (Biodiversity Assessment) conducted by SMEC suggests that Red-crowned Toadlet GDE in Curl Curl Creek is dominated by surface water flows, and a reduction in groundwater discharge to surface water will not adversely impact the Red-crowned Toadlet habitat.</p> <p>Design is substantially complete, however ecological monitoring is continuing in accordance with the project Ecological Monitoring Program.</p>
Revised Safeguards and Management Measures - Socio economic, land use and property			
Business, Economic and Property Impacts	<p>Carry out ongoing communication through a Communication Strategy with local land owners and business impacted by Stage 2 with specific attention given to the duration, location and timing of construction and the potential impact on business operations</p> <p>Ensure continued communication with businesses that will be affected by acquisition to minimise uncertainty and impacts on business operations, as well as establishing a direct contact at Roads and Maritime for businesses to consult with as required</p>	<p>Compliant and On-going</p> <p>Compliant and On-going</p>	<p>RSMM incorporated into Community Communications Strategy with consultation being undertaken with land owners and businesses.</p> <p>RSMM incorporated into TAMP Table 7-1 TAMP25, with consultation ongoing with businesses on temporary access arrangements. Community consultation has been ongoing with local businesses.</p>

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
	The Construction Traffic Management Plan would include a signage strategy (consistent with Roads and Maritime policy) to allow the public, including local and passing patrons, to access shops, services and businesses during construction	Compliant and On-going	TAMP Table 3.4 Section 7.12 Table 7.2 TAMP 75, 94
Property Impacts	Provide compensation to those property owners directly impacted by project in accordance with Land Acquisition (Just Terms Compensation) Act 1991.	Compliant and Complete	This is undertaken by RMS as required.
Local Amenity Impacts	Carry out consultation with the local community about the duration, location and timing of construction and the potential impacts throughout the construction phase.	Compliant and On-going	RSMM incorporated into Community Communications Strategy. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment database
Community Services	Carry out consultation with schools, child care centres, medical facilities and recreational facilities throughout construction about the duration, location and timing of construction and the potential impacts on their activities.	Compliant and On-going	RSMM incorporated into Community Communications Strategy Regular monthly meetings have occurred with the Forest High School Working Group as well as monthly with the Traffic & Transport liaison Group, Healthscope and PCG.
	Ensure access is maintained to community facilities and open space throughout construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners and a signage strategy would be implemented to explain new access arrangements where required.	Compliant and On-going	RSMM incorporated into Traffic and Access Management Plan (TAMP) approved by DP&E (refer to Table 7-1). The FYJV Community team have regular interactions with directly impacted residents and property owners. To this date, there have not been any access problems with residents - alternative arrangements have been agreed and accepted. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment database
Traffic and Access	Develop, implement and communicate traffic management plan with the aim of minimising traffic impacts and disruptions (refer to Section 7.5 of the Stage 2 Project EIS).	Compliant and On-going	RSMM incorporated into TAMP section 8.3. Communications on traffic management undertaken in accordance with Community Communications Strategy.
Community Severance and Cohesion	Ensure existing pedestrian and cyclist networks are maintained or provide alternate arrangements where needed.	Compliant and On-going	RSMM incorporated into the Traffic and Access Management Plan (TAMP) approved by DP&E with Traffic Control Plans issued for construction work sites. CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 TAMP1 Section 6.5 Pedestrian and Cyclist access TAMP 35-45 Details for each work scope in TCPs
Community and stakeholder consultation	Develop and implement a consultation program consistent with the Roads and Maritime Draft Community Consultation Framework that will ensure businesses, residents and others stay informed about the type, timing and duration of construction impacts and any mitigation measures being put in place.	Compliant and On-going	RSMM incorporated into Community Communications Strategy with communications with local community being undertaken, and updates on RMS Project website
	The consultation program will include consultation requirements for final design treatments that alter current access arrangements into Maxwell Parade	Compliant and On-going	A community communications strategy details measures to notify stakeholders regarding project design and construction.
Revised Safeguards and Management Measures - Landscape character and visual impact			
Landscape Character Impacts	Consistency with other road upgrades in the region is to be achieved by using elements that are identifiably part of the road-user experience in the surrounding area	Compliant and Complete	These requirements have been considered and implemented in accordance with the project UDLP & ULDR
	All walls are to be finished in materials and colours that are complementary to the urban bushland setting	Compliant and On-going	ULDR addresses FRAMEWORK OBJECTIVE AND PRINCIPLE 7C as "Colour palettes have been developed that complement the surrounding bushland and generally are receding colours and are consistent with the urban design framework. These will assist in featuring the revegetation and new landscape planting works."
	The revegetation technique is to be determined by a combination of surrounding landscape character, as well proximity to existing ecological habitats and wildlife corridors	Compliant and On-going	ULDR Section 6.3 and Appendix E - Vegetation Management Plan address revegetation
	Use of bush reconstruction and regeneration as a revegetation technique is to be employed for areas next to endemic bushland	Compliant and On-going	ULDR Section 6.3 and Appendix E - Vegetation Management Plan address revegetation
	Limited use of 'feature' planting would be implemented at key intersections and important cultural areas to provide visual landmarks and enhance local identity	Compliant and On-going	ULDR Section 6.3 and Appendix E - Vegetation Management Plan address revegetation

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Visual Impacts	A detailed landscape plan will be prepared for the project. The landscape plan will build on the finding of the Urban Design, Landscape Character and Visual Working Paper and will include detailed set out, species and planting guides.	Compliant and On-going	ULDR issued November 2016 and will be implemented in accordance with Scope of Works and Technical Criteria and detailed design.
	A combination of sandstone cladding, stone block or other material sensitive to the context is to be provided where either facing the road or where associated with residential properties.	Compliant and On-going	Addressed in ULDR Report 4.3 Fascia panel details
	Due to the urban nature of the project, retaining wall finishes are to be of a high quality and visible shotcrete is not to be employed as a finished material	Compliant and On-going	The Urban and Landscape Design Report (ULDR) (NBHRDC-0000-UD-170A) notes in Table 1 that "No exposed shotcrete is proposed as part of the project design"
	Suitable fencing materials would be utilised including timber, brick and pressed steel fencing in colours suited to the local area	Compliant and On-going	The ULD Report (NBHRDC-0000-UD-170A) addresses fencing in 7.2 Furnishing and fixings and states that "The furnishings and fixings components of the public domain will be consistent with the requirements of Northern Beaches Council and RMS.
	Where possible vegetative screening would be provided to mitigate the visual impact of fencing	Compliant and On-going	The ULDR addresses the use of vegetative screening wherever possible, not just associated with fencing.
	Revegetation is to be carried out to all areas affected by construction work	Compliant and On-going	Appendix E ULDR describe the strategies for revegetation
	Revegetation of fill embankments and shallow cut batters is to be carried out in order to stabilise the earthwork, minimise visual impact and integrate them with the character of the surrounding landscape	Compliant and On-going	Appendix E ULDR describe the strategies for revegetation
	Detailed design of structural elements, including noise barriers, shared pedestrian and cyclist bridges, and retaining walls and retaining wall finishes, are to be in accordance with Beyond the Pavement, Urban design policy, procedure and design principles (Roads and Maritime, 2013) and the associated design guidelines	Compliant and On-going	Section 3 ULDR - Bridges including Shared User path bridges
Loss of Privacy views into residential properties	Provide landscape buffer screening or glazed or steel mesh panels on bridge, stair and ramp structures to screen views to/from residential properties	Compliant and On-going	Section 3 ULDR - Bridges including Shared User path bridges. The ULDR addresses the use of vegetative screening wherever possible, not just associated with fencing. In this period additional privacy screening was erected onto the Hilmer Street Pedestrian Bridge, as well as additional landscape plantings as arranged through the Community Relations team.
Construction visual impacts	Landscaping would be progressively introduced to provide screening between adjacent residences and the road corridor.	Compliant and On-going	
Revised Safeguards and Management Measures - Aboriginal Heritage			
General Aboriginal impacts	A Construction Heritage Management Plan would be prepared for the Stage 2 Project. The plan would provide details of management measures and procedures to be carried out during construction to minimise and manage impacts on Aboriginal heritage	Compliant and On-going	Stage 1 & 2 works are being undertaken in accordance with approved CEMP Appendix B5 - Construction Heritage Management Sub Plan issued for construction (Aug 2016)
Unexpected Finds	Should any Aboriginal finds be uncovered during construction, their management should be in accordance with the Roads and Maritime Unexpected Finds Protocol. All staff should be made aware of their obligations under various Federal and State heritage legislation during their site induction and copies of this Protocol should be on site and available at all times to all staff.	Compliant and On-going	RSMM incorporated into Stage 2 Heritage Management Sub Plan approved by DP&E (Aug 2016) (refer to Appendix A Table 7.2, HMP29) Also covered in Site Induction Areas are permanently avoided and are not part of the Project footprint. avoided -
Unexpected finds	Aboriginal cultural awareness training for all relevant staff and contractors would be undertaken prior to commencing work onsite.	Compliant and On-going	RSMM incorporated into Stage 1 & 2 Heritage Management Sub Plan approved by DP&E (refer to Table 7-1 HMP14). Aboriginal Cultural Awareness training conducted for Stage 1 & 2 construction teams, with further heritage awareness as part of induction training.
Unexpected finds	Should any Aboriginal finds be uncovered during construction, their management should be in accordance with the Roads and Maritime Unexpected Finds Protocol. All staff should be made aware of their obligations under various Federal and State heritage legislation during their site induction and copies of this Protocol should be on site and available at all times to all staff.	Compliant and On-going	
Revised Safeguards and Management Measures - Non Aboriginal Heritage			

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
General Non-Aboriginal Impacts	A Construction Heritage Management Plan would be prepared for the Stage 2 Project. The plan would provide details of management measures and procedures to be carried out during construction to minimise and manage impacts on non-Aboriginal heritage, including: – Management measures to be implemented to prevent and minimise impacts on heritage items – Procedures for dealing with previously unidentified heritage objects; – Heritage training and induction processes to ensure all relevant staff, contractors and subcontractors will be made aware of their statutory obligations for heritage under the Heritage Act 1977	Compliant and On-going	Stage 1 & 2 works are being undertaken in accordance with approved CEMP Appendix B5 - Construction Heritage Management Sub Plan issued for construction (Aug 2016) Requirement incorporated into Stage 2 Heritage Management Sub Plan (Section 8.2 Training, and management measure HMP30) submitted to DP&E for approval
Management of pear tree	If impacted by the Stage 2 Project, the pear tree would be propagated further and photographically recorded in advance of any construction activities that would impact the tree. Options for a commemorative garden/plantings would be further discussed with Council, Department of Education and Communities and Health Infrastructure during detailed design.	Compliant and On-going	Archival recording and tree cuttings have been undertaken for propagation. Two cuttings have successfully been propagated and were grown within a local nursery. Following discussion with key local stakeholders, the cuttings were planted at the Frenchs Forest Primary School, and another potted and given to the Forest High School.
Unexpected finds	Should any non-Aboriginal finds be uncovered during construction, their management should be in accordance with the Roads and Maritime Standard Management Procedure: Unexpected Heritage Items. All staff should be made aware of their obligations under various Federal and State heritage legislation during their site induction and copies of this Procedure should be on site and available at all times to all staff	Compliant and On-going	RSMM incorporated into Stage 1 & 2 Heritage Management Sub Plan approved by DP&E - refer to Table 7-1 HMP20 (Aug 2016) Heritage Cultural Awareness training conducted for Stage 1 construction teams, with further heritage awareness as part of induction training. No non-Aboriginal finds have been uncovered during the Project.
Revised Safeguards and Management Measures - Air Quality			
General air quality impacts	An Air Quality Management Plan will be prepared to detail air quality control measures and procedures to be carried out during construction, including: – air quality and dust management objectives consistent with DECCW guidelines – emissions from diesel construction plant – potential sources and impacts of dust, identifying all dust-sensitive receptors – mitigation measures to minimise dust impacts to sensitive receivers and to the environment – a monitoring program to assess compliance with the identified objectives – contingency plans to be implemented in the event of non-compliances and/or complaints about dust.	Compliant and On-going	Construction Air Quality Management Sub Plan prepared prior to Stage 1 construction as part of the CEMP (Appendix B6) and revised in August 2016 to incorporate Stage 2. Safeguards and management measures incorporated into Table 7-1 of the AQMP
Impacts on local air quality during construction	Areas of exposed surfaces are to be minimised through construction site planning and programming, to reduce the area of potential construction dust emission sources.	Compliant and On-going	RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Dust monitoring and inspections, and dust suppression measures have been conducted and are progressing as part of Stage 2 construction works. Induction addresses dust management. Stonewall has been used on stockpiles and areas of site being left uncovered for long durations. Different attachment have been utilised for rock breaking to minimise dust
	Control measures, such as compaction stabilisation or covering would be implemented in order to minimise dust from stockpile sites.	Compliant and On-going	
	Dust suppression measures, such as the use of water carts or soil binders, would be used in any unsealed surfaces and other exposed areas.	Compliant and On-going	
	All trucks would be covered when transporting materials to and from the site.	Compliant and On-going	
	Construction activities that would generate dust would be avoided or modified during high wind periods.	Compliant and On-going	
	Work activities would be reviewed if the dust suppression measures are not adequately restricting dust generation.	Compliant and On-going	
	Rehabilitation of completed sections would be progressively undertaken.	Compliant and On-going	
Exhaust emissions	Construction plant and equipment would be maintained in good working condition in order to limit impacts on air quality.	Compliant and On-going	RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Equipment maintenance monitored as part of WHS management plan requirements. These are covered under AQMP 16 & 17 which are addressed in Section 8.3 and Incoming Plant Verification Checklists
	Where practicable, vehicles will be fitted with pollution reduction devices and switched off when not in use.	Compliant and On-going	
Revised Safeguards and Management Measures - Geology, Soils and Contamination			

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Warringah Road 'slot' cut face may be susceptible to erosion and slope stability during construction	As part of Stage 2 Project design development, subsoil drainage would be incorporated into the 'slot' to ensure the ongoing stabilisation of face. The extent of the drainage network would be finalised during detailed design	Compliant and On-going	Subsoil drainage is incorporated into Slot Drainage Design.
Managing Impacts on soil in general	A Soil and Water Management Plan will be prepared for each construction stage of the Concept Proposal in accordance with the principles and guidelines set out Soils and Construction – Managing Urban Stormwater series, comprising Volume 1 (Landcom, 2004) and Volume 2D – Main Roads (DECC, 2008), including: – Consideration of soil erodibility – Management strategies to be used to minimise surface and groundwater impacts, including identification of water treatment measures, discharge points and erosion and sediment control measures – Sedimentation basin construction and management – Measures to monitor and manage spoil, fill and materials stockpile sites – Dewatering procedure – Water quality monitoring and checklists	Compliant and On-going	Stage 1 construction Soil and Water Quality Sub Plan approved by DP&E and issued for construction (Nov 15). Stage 2 requirements incorporated into revised SWMP approved in August 2016.
Disturbance of contaminated or potentially contaminated land	A Contaminated Land Management Plan will be prepared in accordance with the Contaminated Land Management Act 1997, relevant EPA Guidelines and Roads and Maritime Guideline for Management of Contamination (RMS 2013) and will include at a minimum: – Contaminated land legislation and guidelines including any relevant licences and approvals to be obtained – Identification of locations of known or potential contamination and preparation of a map showing these locations – Identification of rehabilitation requirements, classification, and transport and disposal requirements of any contaminated land within the construction footprint – Measures to manage stockpiled potentially contaminated soil in accordance with the requirements of NSW EPA Waste Guidelines – Contamination management measures including waste classification and reuse procedures and unexpected finds procedures for unanticipated discovery of contaminated material during construction.	Compliant and On-going	RSMM incorporated into Stage 1 SWMP approved by DP&E (refer to Table 7-1 SW31, SW32 of SWMP), and the construction Waste and Energy Management Sub Plan (Appendix B7 of the CEMP). Contaminated areas of concern (AECs) were further investigated and defined as part of the Stage 2 EIS Phase 2 Contamination Site Assessment, defining AECs within Stage 2 project area. These areas will be managed as part of Stage 2 construction.
	Potentially contaminated groundwater encountered during the work would be managed in accordance with a Groundwater and Dewatering Management Plan. This would include the proposed method for capture, treatment and/or in accordance with the requirements of NSW EPA (2014) Waste Guidelines	Compliant and On-going	This is captured in the Water Management Plan for the project. During the construction phase during the reporting period there was limited groundwater ingress into the slot. Negotiations have been successful in obtaining a Trade Waste Agreement with Sydney Water to accept groundwater.
	A remediation validation report will be developed to ensure that all identified contamination has been remediated, removed from site and/or managed sufficiently once construction work has ceased and the site is in operation	Compliant and On-going	Appendix L of the SWQMP - Appendix L Remedial Action Plan addresses identified contamination remediation
	An Asbestos Management Plan will be developed prior to work commencing and include: – The locations of asbestos impacted areas within each AEC; and – The requirements including mitigation measures for asbestos management, asbestos handling and asbestos disposal in accordance with NSW EPA and NSW WorkCover guidelines	Compliant and On-going	An Asbestos Management Plan has been developed.
Inappropriate disposal of material that cannot be reused on the Project	Excavated material that is not suitable for on-site reuse or recycling will be transported to a site that may legally accept that material for reuse or disposal.	Compliant and On-going	RSMM incorporated into Stage 1 & 2 SWMP approved by DP&E, and the CEMP Rev 2 - Appendix B7 - Construction Waste and Energy Management Sub Plan (Aug 2016).
	Excavated material leaving the site will be classified in accordance with the Waste Classification Guidelines so that correct resource recovery and or off-site disposal occur.	Compliant and On-going	Waste disposal is being tracked and tracking register sits with environment team. Waste & Energy Register trackswaste classification and use/ disposal of excavated material
Construction accidental spills	An emergency spill response procedure will be prepared to minimise the impact of spills including details on the requirements for managing, cleaning up and reporting.	Compliant and On-going	RSMM incorporated into Stage 1 & 2 SWQMP approved by DP&E (refer to Table 7-1 SWMM7). These measures are in place for Stage 1 works. Environmental Incident & Spill Response Protocol Doc #
	Spill kits and adequate quantities of suitable material to counteract spillage would be kept readily available.	Compliant and On-going	NBHRDC-EN-SWMP-APPA_PLN forms Appendix A of the SWQMP..
	The refuelling of plant and maintenance of machinery would be undertaken in impervious bunded areas. Refuelling would be attended at all times.	Compliant and On-going	Environmental inspection checklist addresses spill response Site induction addresses spill response Toolboxes have been given on spill response
	Vehicle wash-downs and/or concrete truck washouts would be undertaken within a designated bunded area of an impervious surface or undertaken off-site.	Compliant and On-going	Spill kits located around site. Refuelling included as a checklist item in Weekly environmental Inspections
Operation Accidental Spills	Detailed design would consider reasonable and feasible measures to optimise pollution mitigation.	Compliant and On-going	GPTs included in detailed design for slot drainage

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Revised Safeguards and Management Measures - Hydrology, Water Quality and Flooding			
Erosion and sediment control (construction)	A Soil and Water Management Plan will be prepared for each construction stage of the Concept Proposal in accordance with the principles and guidelines set out Soils and Construction – Managing Urban Stormwater series, comprising Volume 1 (Landcom, 2004) and Volume 2D – Main Roads (DECC, 2008), including: – Consideration of soil erodibility – Management strategies to be used to minimise surface and groundwater impacts, including identification of water treatment measures, discharge points and erosion and sediment control measures – Sedimentation basin construction and management – Measures to monitor and manage spoil, fill and materials stockpile sites – Dewatering procedure – Water quality monitoring and checklists.	Compliant and On-going	Stage 1 & 2 construction Soil and Water Quality Sub Plan approved by DP&E and issued for construction (Aug 2016).
Erosion, sediment and water quality impacts	Where space allows, construction work should consider the potential for locating sediment retention basins or sumps along the southern side of Warringah Road, where widening of the existing westbound carriageway will require land clearing and excavation work, if possible. These basins or sumps would reduce the volume of sediment and turbidity levels in runoff potentially discharging to Catchments 4, 5 and 6.	Compliant and On-going	Sediment basins are installed where practical considering space constraints.
Water Quality impacts during construction	An emergency spill response procedure will be prepared to minimise the impact of spills including details on the requirements for managing, cleaning up and reporting. Spill kits and adequate quantities of suitable material to counteract spillage would be kept readily available. Any potential hazardous or contaminant materials (for example, fuels, curing compounds, and oils) would not be stored within 50 metres of any waterways or drainage lines, flood prone areas, or on slopes steeper than 1:10. Storage areas would be impervious and adequately bunded. The refuelling of plant and maintenance of machinery would be carried out in impervious bunded areas. Refuelling would be attended at all times. Vehicle wash-downs and/or concrete truck washouts would be located within a designated bunded area with an impervious surface or located off-site. Machinery would be checked daily to ensure that there are no oil, fuel, or other liquid leaks.	Compliant and On-going Compliant and On-going Compliant and On-going Compliant and On-going Compliant and On-going	RSMM incorporated into Stage 1 & 2 SWQMP approved by DP&E (refer to Table 7-1 SWMM7). Environmental Incident & Spill Response Protocol Doc # NBHRDC-EN-SWMP-APPA_PLN forms Appendix A of the SWQMP. Environmental inspection checklist addresses spill response. Site induction addresses spill response Toolboxes have been given on spill response Spill kits located around site. Refuelling included as a checklist item in Weekly environmental Inspections Checklist - Daily Machine maintenance and Inspection Record sighted and in Evidence folder - 26-27/8/16 5T excavator on Lachlan 7 allen Streets. Detailed design has incorporated spill containment in the stormwater system with Humeceptor systems.
Operational accidental spills	Detailed design would consider reasonable and feasible measures to optimise pollution mitigation and would include as a minimum: - Spill containment requirements focusing on drainage lines discharging to identified Red-crowned Toadlet habitat - Opportunities to include spill containment provisions in conjunction with the proposed separate ground detention storages in the vicinity of the Aquatic Drive and Wakehurst Parkway intersection - Consideration of wall wash down and other maintenance requirement.	Compliant and On-going	
Revised Safeguards and Management Measures - Groundwater			
	Pre-construction monitoring of surface water and groundwater quality, groundwater flows and groundwater levels will continue to be carried out to establish existing baseline conditions for Stage 2.	Compliant and Complete	Matter addressed in Stage 2 EIS and has been incorporated as part of the Stage 2 requirements for the approved Water Management Plan. In March 2017 SMEC issued the Water Management Plan and have continued water monitoring for the Project for surface water and groundwater. These conditions are addressed in the WMP (SMEC 2017) in Appendix A, Section 6.

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Management of groundwater quality and quantity	<p>Groundwater monitoring as part of a broader water quality monitoring program will be developed and implemented for construction and operation in consultation with EPA and NOW. As a minimum the water quality monitoring will include the following analytes:</p> <ul style="list-style-type: none"> - Total dissolved solids and other inorganic constituents including chloride, sodium and sulphate - pH - Metals including cadmium, iron, lead, nickel, manganese and zinc - Nitrate and phosphorus - Petroleum hydrocarbon related compounds (such as benzene, toluene, ethylbenzene and xylene and poly-aromatic hydrocarbons). <p>The monitoring program will include objectives and parameters to determine the effectiveness of mitigation measures and will also include contingency measures.</p>	Compliant and On-going	
Management of groundwater drawdown due to the seepage into the slot during construction	<p>A Groundwater and Dewatering Management Plan would be prepared to manage the impacts of groundwater drawdown due to seepage into the slot during construction. The Plan would ensure that the proposed method for managing groundwater impacts during construction, including dewatering operations, does not impact on the quality of the receiving surface waters. The Plan would also provide groundwater quality objectives and discharge requirements, the scope of dewatering (including volumes, levels, method and draw down effects) and would be prepared in consultation with the EPA and NOW.</p>	Compliant and On-going	<p>Consultation with council and DPI Water as required under conditions Water Management Plan has been approved and includes managing the impacts of groundwater drawdown in WMP (SMEC 2017) Section 4.3.1. WMP with final operational groundwater management to be submitted to DP&E for approval.</p>
Treatment of captured groundwater during construction	<p>Groundwater seepage quality would be treated to background surface water quality to be protective of overall instream environmental values, and then in consideration of ANZECC (2000) freshwater criteria prior to discharge to surface water.</p>	Compliant and On-going	<p>This has been addressed in the Water Management Plan. This condition is addressed in Section 6.4 Table 7-2 SW60 as well as Appendix B Water Management Plan (including the Groundwater and Dewatering Management Plan) These conditions are addressed in the WMP (SMEC 2017) in Section 4.3.2. WMP with final operational groundwater management to be submitted to DP&E for approval.</p>
Groundwater drawdown due to seepage into the slot potentially resulting in settlement of ground and further impacts to existing infrastructure	<p>Groundwater drawdown plots will be further developed during detailed design to confirm EIS findings. Additional mitigation measures will be developed should settlement risks be identified.</p>	Compliant and On-going	<p>Groundwater drawdown was considered within the Water Management Plan and subsequently within the Slot Drainage Drawing set.</p>
Slot seepage discharge into surface water during operation	<p>Detailed design of the slot drainage system will confirm the capture, treatment and discharge methods for groundwater and would include:</p> <ul style="list-style-type: none"> - Designing the slot infrastructure to prevent interaction of groundwater seepage with surface water run-off from the Stage 2 Project and slot including the need to facilitate flushing/cleaning activities to remove build-up of sludge associated with groundwater precipitates - Confirmation of discharge quality requirements for groundwater based on background surface water quality and ANZECC (2000) freshwater criteria - Opportunities to connect into the surface water drainage system/detention storage below Aquatic Drive at the intersection of Wakehurst Parkway (post treatment) to minimise impacts associated with increasing downstream surface water flows - Consideration of the amount of treatment required on a long term (operational) basis - Alternative disposal methods if considered feasible and reasonable, including discharge to sewer (subject to Sydney Water trade waste permit). - Consultation with the EPA and NOW. 	Compliant and On-going	<p>Consultation occurred with council and DPI Water as required under conditions. Two detention tanks have been installed in the southern corner of Fitzpatrick Avenue East and Warringah Rd, and under Aquatic Drive. These conditions are addressed in the WMP (SMEC 2017) in Section 4.3.2, 4.4 and 5.3. During operation a groundwater collection system has been incorporated into the design of the slot, with proposed connection to the Trade Waste system.</p>
Revised Safeguards and Management Measures - Resource use and waste management			

Impact	STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES Commitment/Obligation	Compliance Status	Compliance Report 5 (March 2019) Status (e.g. Date submitted to DP&E, Approval obtained etc.)
Inappropriate handling or disposal of waste	A Resource and Waste Management Plan will be prepared to identify the hierarchy for sourcing and use of resources. The plan will adopt the Resource Management Hierarchy principles of the WARR Act and include: – Identification the waste streams that will be generated during construction – A waste register detailing types of waste collected, amounts, date, time, and details of disposal – A resource management strategy detailing beneficial reuse options for surplus and/or unsuitable material.	Compliant and On-going	Construction Waste and Energy Management Sub Plan prepared and issued for construction (Aug 2016).
	All wastes, including contaminated wastes, will be identified and classified in accordance with Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes.	Compliant and On-going	RSMM requirements incorporated into management measures within Table 6-1 (WEMM4, WEMM5 and WEMM6) of the WEMP Rev 2 (Aug 2016). Waste disposal tracking implemented as part of Stage 2 works.
	Disposal of any non-recyclable waste will be in accordance with the POEO Act and Waste Classification Guidelines: Part 1 Classifying Waste.	Compliant and On-going	
	An asbestos survey would be carried out of buildings to be demolished as part of the project. The survey would be conducted by a suitably qualified occupational hygienist.	Compliant and Complete	Asbestos survey completed. An Asbestos Management Plan has been developed.
	Asbestos handling and management would be documented in an Asbestos Management Plan and carried out in accordance with: - Work Health and Safety Act 2011 - Code of Practice for the Safe Removal of Asbestos 2nd edition (NOHSC, 2005) - Code of Practice for the Management and Control of Asbestos in Workplaces (NOHSC, 2005) - Protection of the Environment Operations (Waste) Regulation 2005 – section 42 special requirements relating to asbestos waste - AS2601:1991 Demolition of Structures.	Compliant and On-going	An Asbestos Management Plan has been developed and implemented as part of the Project.
Inappropriate disposal of excavated material that cannot be reused in the Stage 2 Project	Where possible and fit for purpose, spoil would be beneficially re-used within the project before off-site re-use or disposal options are pursued.	Compliant and On-going	RSMM requirements incorporated into management measures within Table 6-1 (WEMM7 and WEMM8) of the WEMP (Rev 2). Waste disposal tracking implemented as part of Stage 1 works.
	Excavated material that is not suitable for on-site reuse or recycling will be transported to a site that may legally accept that material for reuse or disposal.	Compliant and On-going	Fill material has been used elsewhere on the Project where available.
	Before being transported from construction sites, excavated spoil would be classified in accordance with the Waste Classification Guidelines: Part 1 Classifying Waste (DECCW, 2009) to ensure appropriate reuse or disposal.	Compliant and On-going	
Management of Excess Spoil	A Spoil Management Strategy would be developed prior to the commencement of construction and implemented during construction. The strategy would identify spoil disposal site(s) and describe the management of spoil on-site and during off-site transport.	Compliant and On-going	Appendix C - Spoil and Fill Management Procedure of SWQMP (Appendix B4 of the CEMP)
Revised Safeguards and Management Measures - Greenhouse gas and climate change			
Energy consumption during construction	Energy (fuel/electricity) efficiency would be assessed in selecting plant and equipment. Where reasonable and feasible, plant and equipment with higher energy efficiency ratings would be selected.	Compliant and On-going	RSMM requirements incorporated into management measures within Table 6-1 (WEMM10, WEMM11, WEMM12 and WEMM13) of the WEMP. Being considered in detailed design and construction methods during Stage 2 works.
	Use of locally sourced materials to reduce transport emissions where reasonable and feasible.	Compliant and On-going	
	Flyash content within concrete would be specified where feasible.	Compliant and On-going	
	The feasibility of using biofuels (biodiesel, ethanol, or blends such as E10 or B80) would be investigated by the contractor, taking into consideration the capacity of plant and equipment to use these fuels, ongoing maintenance issues and local sources. Works would be planned to minimise fuel use.	Compliant and On-going	
Re-use of excavated road materials	Reuse of excavated road materials would be maximised as far as possible where they are cost, quality and performance competitive to reduce use of materials (with embedded energy).	Compliant and On-going	Requirements incorporated into management measures within Table 6-1 (WEMM14 and WEMM15) of the WEMP

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Energy consumption during construction	Investigate opportunities to use renewable energy sources to operational requirements such as power control systems, lighting and signage where reasonable and feasible.	Compliant and Complete	Requirements have been considered during detailed design and construction, influenced by overall project costs and ongoing maintenance regimes.
Revised Safeguards and Management Measures - Cumulative Impacts and Interactions			
Cumulative Impacts	Broad consultation would be undertaken with potentially affected local community and key stakeholders in coordination with proponents of other nearby projects.	Compliant and On-going	RSMM incorporated as part of Community Communications Strategy. Interface meetings held with NBH Hospital project contractor.
	Consultation would be undertaken with proponents of other nearby projects to increase the overall awareness of project timeframes/staging and impacts and to provide a more coordinated approach to managing construction in the area.	Compliant and On-going	