

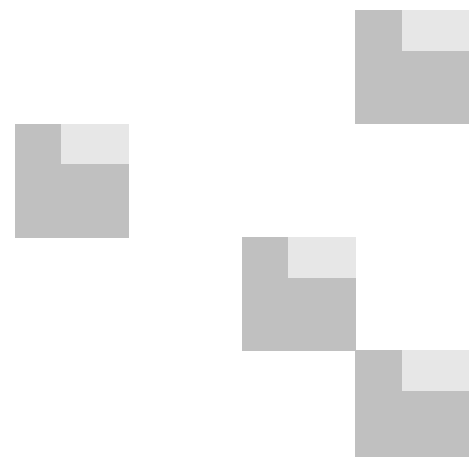


Transport
Roads & Maritime
Services

SAPPHIRE TO WOOLGOOLGA UPGRADE

Proposed modification to the Project Approval,
CoA 6.4 Operational Environmental Management Plan

May 2013 (Revision 2)



Abbreviations

Abbreviation	Full Name
CoA	Conditions of Approval
CEMP	Construction Environmental Management Plan
CHCC	Coffs Harbour City Council
D-G	Director General
DPI	NSW Department of Primary Industries
DP&I	NSW Department of Planning and Infrastructure, formerly the Department of Planning
EA	Environmental Assessment
EMS	Environmental Management System
EPA	Environmental Protection Authority
LFHJV	Leighton Fulton Hogan Joint Venture
OEH	Office of Environment and Heritage
OEMP	Operational Environmental Management plan
RFS	Road and Fleet Services
RMAP	Road Maintenance Annual Plan
RMS	Roads and Maritime Services
SoC	Statement of Commitments
SOP	Standard Operating Procedure

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1 Introduction

1.1 The Approved Project

On behalf of the Australian and NSW governments, Roads and Maritime Services (RMS) is currently upgrading the Pacific Highway on the Mid North Coast of NSW between Sapphire and Woolgoolga. The upgrade will consist of:

- A new southern section, 15 km dual carriageway, between Sapphire and South Woolgoolga largely within the existing highway corridor. The existing highway will be upgraded to provide a local traffic access route without the need to mix with high speed through traffic
- A new 'Greenfield' northern section, 10 km bypass from South Woolgoolga to the west of Woolgoolga which rejoins the existing highway alignment in the vicinity of Arrawarra Beach Road.

The Sapphire to Woolgoolga upgrade was an activity that was assessed and determined under the former Part 3A of the *Environmental Planning and Assessment Act 1979*. It is within the Coffs Harbour City Council local government area.

The Minister for Planning approved the Sapphire to Woolgoolga Pacific Highway Upgrade project under Part 75J of the *Environmental Planning & Assessment Act 1979* (EP&A Act) on 15 January 2009, subsequently issuing a set of approval conditions for the project. These conditions were subsequently modified on 14 November 2009, 22 February 2010, 9 September 2010, 29 October 2010, 25 February 2011 and again on 19 October 2012.

1.2 Proposed modification

The text from Condition of Approval 6.4 is included in Appendix A.

RMS proposes that Condition of Approval 6.4 be modified to the following:

"Prior to the commencement of operation, the Proponent shall incorporate the project into its existing management systems."

This condition relates to the requirement for an Operational Environmental Management Plan (OEMP). The proposed modification does not propose changes to environmental management during the operational stage; it focuses only on administrative and system-related aspects of the Minister's approval.

1.3 Justification for the proposed modification

Roads and Maritime Services, Infrastructure Asset Management is responsible for managing the maintenance of the State road network, while Roads and Fleet Services (RFS) provide the maintenance services. Further details on how infrastructure asset management and RFS manage the road network are included in section 2.1 and 2.2. Once operational, it is proposed that the Sapphire to Woolgoolga Upgrade would be maintained under this system.

Recent RMS project approvals have not required the development of an OEMP or, have successfully modified their approval to remove this condition. Such projects include:

- F3 to Branxton Highway Link (the Hunter Expressway).
- Pacific Highway Upgrade – Devils Pulpit Project.

- Pacific Highway Upgrade - Wells Crossing to Iluka Road – Glenugie Upgrade Project.
- Pacific Highway Upgrade – Tintenbar to Ewingsdale Project.
- Pacific Highway Upgrade – Warrell Creek to Urunga Project.
- Pacific Highway Upgrade – Oxley Highway to Kempsey Project.
- Pacific Highway Upgrade – Banora Point Project.
- Pacific Highway Upgrade – Bulahdelah Project.

While this proposed modification seeks to remove the requirement to develop an OEMP, a suite of plans have been approved for the Sapphire to Woolgoolga upgrade that address environmental management measures during the operational phase. It is important to note that no changes are proposed to these plans or applicable commitments included within them in relation to the operational phase of the Project. These plans include:

- *Pacific Highway Upgrade – Sapphire to Woolgoolga: Ecological Monitoring Program (2010)*
- *Pacific Highway Upgrade – Sapphire to Woolgoolga: Biodiversity Offset Strategy (2010)*
- *Pacific Highway Upgrade – Sapphire to Woolgoolga: Operational Noise Management Report (2011)*
- *Pacific Highway Upgrade – Sapphire to Woolgoolga: Community Involvement Plan (June 2010)*
- *Pacific Highway Upgrade – Sapphire to Woolgoolga: Compliance Tracking Program (2010)*
- *Pacific Highway Upgrade – Sapphire to Woolgoolga: Salvage and Storage Strategy of Salvaged Objects (2010)*

Details of the operational management measures and activities to be undertaken during the operational phase are provided in section 2 and Appendix C, respectively. Appendix C of this modification outlines all operational managements for the project and where these issues are addressed within existing plans or management systems. Where operational requirements are not included within existing approved plans for the project, the specific management requirements are outlined within this modification proposal report.

2 Proposed Management of Relevant Operational Issues

2.1 RMS Network Management

The Sapphire to Woolgoolga upgrade would be monitored and managed in accordance with RMS specifications M1 – General Network Management Requirements and M30- Maintenance Intervention and Investigatory Requirements (Corridor).

Under RMS Specification M1 joint planning assessments of the road network are undertaken on an annual basis by RMS Northern Infrastructure Asset Management and Road and Fleet Services (RFS) (the Service Provider). Based on these inspections maintenance requirements would be prioritised and a Road Maintenance Annual Plan (RMAP) would be developed for the Northern region. If a defect at the Sapphire to Woolgoolga upgrade is identified during the operational stage, specification M30 is triggered, which identifies the requirements for intervention and investigation of the defected asset. Under this specification the defects would be assessed and a requirement for intervention would be provided based on the assessment.

2.2 Routine road maintenance activities

RFS is the service provider that delivers road and bridge construction and maintenance services for sections of the NSW road network managed by RMS. RFS manages routine road maintenance activities under the Road Services Management Plan (2012) and the RFS Environmental Management System (2008). These documents describe how RFS manages the environmental impacts for their activities. The RFS EMS has been developed to satisfy the ISO 14001:2004 requirements for environmental management systems. It includes the environmental policy, legal and other requirements, communicating and reporting structures, staff training, as well as environmental management of maintenance and construction activities.

As detailed in Section 7 of the Environmental Assessment the existing Pacific Highway would be used as part of the highway carriageway or revert to a local access road as part of the upgrade. In general RMS is responsible for maintenance of the highway section of the upgrade (as it forms part of the state road network) and Coffs Harbour City Council will be responsible for the sections of the upgrade within the local road network. RMS is currently in discussions with Coffs Harbour City Council about the maintenance and asset handover requirements of the Project. Council will be provided with all relevant information about any particular project commitments that relate to areas proposed to be under Council control.

2.3 Specific approval obligations for operational environmental management measures

2.3.1 Biodiversity offset

All operational management obligations in relation to biodiversity offsets required as part of the project approval are detailed in the Sapphire to Woolgoolga Upgrade – Biodiversity Offset Strategy. Approval of the Biodiversity Offset and Mitigation Strategy was received on the 3 June 2010. The Biodiversity Offset Package required

under CoA 2.13 is to be submitted to the Director-General by the end of April 2013. Refer to Appendix C for details of specific activities required during the operational phase of project.

2.3.2 Ecological monitoring

All ecological monitoring obligations to satisfy CoA 3.1 are addressed in the Ecological Monitoring Program submitted to the agencies and approved by the Director- General on 9 March 2010. Refer to Appendix C for details of specific activities required during the operational phase of project.

2.3.3 Fauna and Flora Protection

Details of the projects flora and fauna protection commitments are included in Table 1 below.

Table 1 Fauna and Flora Protection Measures.

Ref.	Management requirement	Management Method
SoC F17, SoC F18, SoC F19	Limit opportunities for fauna to access the highway and thereby reduce the potential for injury and mortality during operation.	SoC F17 and SoC F18 relate to erection of fauna exclusion fencing and to ensuring that landscaping avoids those species that will attract fauna for feeding or other purposes. During operation the RMS will regularly inspect and maintain vegetation to ensure that branches etc overhanging fences (SoC F19) or other barriers do not provide increased opportunity for fauna to access the highway and thereby reduce the potential for wildlife injury or mortality during operation.
SoC F26	Determine effectiveness of fauna mitigation measures	An adaptive monitoring program (as approved in the Ecological Monitoring Program) will be developed to allow effectiveness of offset and mitigation measures to be assessed and to allow for required modifications. The program will run for a minimum of 12 months after completion of construction.
SoC F22	Manage weeds in areas disturbed by construction activities for a minimum period of two years after construction completion.	The contract between RMS and the Leighton Fulton Hogan Joint Venture (LFHJV) for the design and construction of the Project requires LFHJV to perform landscape maintenance in accordance with the provisions of the environmental documents for a period of 12 months following construction completion. For a minimum period of 12 months after the end of the landscape maintenance period under the contract, RMS will regularly inspect and manage weeds in areas

		disturbed by construction activities.
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2.3.4 Traffic and access

There are no approved plans that address traffic monitoring during the operations phase. Details of the projects traffic monitoring commitments and the proposed to management method is included in Table 2 below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 2 Traffic and access requirements.

Ref.	Management requirement	Management Method
CoA 2.15	In consultation with Coffs Harbour City Council, assess need for upgrades of local roads if receiving increased traffic volumes.	Works to be completed before transfer to Coffs Harbour City Council's control.
CoA 2.16 SoC T4	Maintenance of Property Access	Ongoing alteration to property access where impacts have occurred to ensure ongoing access.
SoC T2	Road dilapidation reports	The road dilapidation surveys have been completed for the preconstruction stage. Operation reports will occur within 6 months after opening to traffic.
SoC T5 SoC AG8	Maintenance of access to State Forests	Negotiations and consultation with Forestry Corporation of NSW.

2.3.5 Heritage management

Details of the projects heritage management commitments are included in Table 3, below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 3 Heritage management requirements.

Ref.	Management requirement	Management Method
CoA 2.32, SoC AH2, SoC AH5, SoC AH9	Aboriginal observance of topsoil stripping in certain locations, sub-surface investigation, salvage and storage of Aboriginal objects, identification on the "as built" drawings and on the ground of all heritage sites.	The Salvage and Curation Strategy identifies the salvage of objects and how these will be managed during construction and includes a process for redeposition during operation

SoC AH3, SoC AH4, SoC NAH2, SoC NAH3	Induction to include heritage obligations, further investigation of sites outside project boundary if required	All site personnel are inducted into the Project which includes training on heritage issues.
CoA 2.33A, SoC NAH1	Archival recording of various Non-Aboriginal heritage items. Interpretation Plan for Golden Arrow Gold Mine.	Archival recording has been undertaken and reports forwarded to Department of Planning and Infrastructure. Interpretation Plan for Golden Arrow Mine still to occur once construction work in the area have been completed.

2.3.6 Operational noise management

An Operational Noise Management Report (2011) was developed for the Sapphire to Woolgoolga upgrade and approved by the Director-General on 21 October 2011 in accordance with CoA 2.24. Additional operational noise requirements are outlined in Table 4 below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 4: Operational noise management requirements and methods.

Ref.	Management requirement	Management Method
SoC ON2, SoC ON3, SoC ON4	Provide a range of noise mitigation measures including low noise pavement, road design, noise barriers and architectural treatments.	The Operational Noise Management Report models road design, low noise pavement and noise barriers to predict noise impacts and determine architectural treatments required.
CoA 3.2, SoC ON5	Monitor operational noise between 6 months and 1 year after opening to traffic.	Determine impacts in accordance with noise goals and, if required, implementation of further reasonable and feasible mitigation measures in consultation with affected property owners. Measures to be confirmed against predictions 10 years after opening. The Operational Noise Management Report shall be provided to the D-G and EPA within 60 days of completing the operational noise monitoring.

2.3.7 Water Quality Management

Details of water quality management requirements and how this issue is proposed to be managed is outlined in Table 5. Until such time as effective ground cover has been achieved to limit erosion potential, the site will remain licensed by EPA. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 5: Water quality management requirements and methods.

Ref	Management requirement	Management Method
SoC SW4	Implement operational water quality treatment measures	Measures have been incorporated into design to meet these objectives. A number of operational basins will be installed in sensitive areas including areas associated with the Marine Park.
CoA 2.26	Ensure all appropriate measures are undertaken to prevent soil erosion and discharge of sediment and pollutants.	All exposed areas would be landscaped prior to the completion of works which will assist to minimise any risk of soil erosion and discharge of sediment to surrounding lands and/ or waters. In addition the project Environmental Protection Licence will be enforced by EPA until the project can demonstrate that it has rehabilitated all exposed areas to a suitable level to reduce the risk of erosion or sedimentation and any related impacts to surrounding lands and/or waters. RTA QA Specification R178 requires that stabilisation of exposed areas will be undertaken. Monitoring and maintenance of landscaping will be undertaken in accordance with RMS specifications
CoA 2.26	Control measures to mitigate impacts and protect Solitary Islands Marine Park waters	Marine Parks Authority, Fisheries and EPA regularly attend the site for inspection of sensitive areas, particularly waterways and areas draining to Solitary Islands Marine Park. These agencies are regularly consulted on design impacts, work method statements and the like.

2.3.8 Landscaping Management

Details of landscape management requirements and how these requirements are proposed to be managed is outlined in Table 6. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 6: Landscaping requirements and methods.

Ref	Management requirement	Management Method
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SoC UD4	Monitoring and remediation of landscaping and rehabilitation works for a minimum period of 2 years.	The contract between RMS and LFHJV for the design and construction of the Project requires LFHJV to perform landscape maintenance in accordance with the provisions of the environmental documents for a period of 12 months from the date of construction completion. For a minimum period of 12 months after the landscape maintenance period under the contract, RMS will regularly inspect and, where required, remediate landscaping and rehabilitation works.
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2.3.9 Air Quality

Details of air quality requirements including the suppression of dust and how these requirements are proposed to be managed is outlined in Table 7. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 7

Ref	Management requirement	Management Method
CoA2.25	Construct, operate and maintain the project in a manner that minimises or prevents emission of dust	All exposed areas would be landscaped prior to the completion of works which will assist to minimise any risk of dust emissions.

2.4 Other operational approval obligations of the Sapphire to Woolgoolga upgrade

2.4.1 Compliance Tracking Program

Details of the projects commitments and how it is proposed to manage these commitments is included in Table 8, below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 8: Compliance Tracking Program requirements and methods

Ref.	Management requirement	Management Method
CoA 4.1	Compliance tracking program includes requirement to develop a compliance tracking program to relate to both construction and operational phases of the project.	A Compliance Tracking Program has been developed for the construction phase of the Project. The Compliance Tracking Program includes a statement that "RTA will periodically develop and report compliance to the Director-General during the operational phase of the project. Details of the review and reporting program will be submitted to the

		Director-General prior to the commencement of operation of the Project”.
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2.4.2 Community consultation

A Community Involvement Plan was developed to satisfy the requirements of CoA 5.6 was developed in June 2010. Additional community consultation requirements are outlined in Table 9 below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 9: Additional community consultation requirements.

Ref.	Management requirement	Management Method
SoC C6	RMS to consult with stakeholders.	Formal community information sessions will cease at the completion of construction. Contact details (email, toll free Project hotline 1800 number and mailbox) for project will be transferred to RMS once project has been completed. RMS remains committed to ongoing liaison with regulatory agencies and Coffs Harbour City Council.

2.4.3 Rectification of Property Damage

Details of the projects commitments and how it is proposed to manage these commitments is included in Table 10, below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 10: Property Damage rectification requirements and methods

Ref.	Management requirement	Management Method
SoC P5	Damage caused to property during construction or operation will be rectified or compensation offered.	Property inspections of those properties potentially affected by construction activities was undertaken prior to construction. Follow-up inspections will be undertaken on completion of construction or on complaint to determine any damage to property and, if so, make arrangements for repair or compensation.

2.4.4 Maintenance of Water Supply

Details of the projects commitments and how it is proposed to manage these commitments is included in Table 11, below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 11: Water supply maintenance requirements and methods

Ref.	Management requirement	Management Method
SoC P6	Adverse impacts on property water supplies will require equivalent alternate supply or compensation to be provided	A number of farm dams have been impacted by construction. RMS remains committed to ensuring consultation with landholders on implementation of suitable alternatives or compensation.

3 Consultation with agencies

An Environmental Review Group has been organised for the Sapphire to Woolgoolga upgrade and meeting invites are regularly sent to the following agencies representatives:

- Coffs Harbour City Council
- Environment Protection Authority
- DPI Fisheries
- Marine Parks Authority
- Project Environmental Representative
- RMS Pacific Highway Office
- Department of Planning and Infrastructure
- Leighton Fulton Hogan Joint Venture

The proposed modification was outlined to members of the Environmental Review Group at the ERG on 20 March 2013 and a copy of this report provided on that date.

Both EPA and DPI have advised that they have no objection to the application.

Formal feedback received is attached in Appendix D.

References

NSW Department of Planning and Infrastructure 2009, *Project Approval – Sapphire to Woolgoolga Upgrade project*, project approval by K. Kineally MP, Minister for Planning, NSW Department of Planning, Sydney.

NSW Roads and Maritime Services 2010, *Pacific Highway Upgrade – Sapphire to Woolgoolga: Community Involvement Plan*, Roads and Maritime Services.

NSW Roads and Maritime Services 2010, *Pacific Highway Upgrade – Sapphire to Woolgoolga: Ecological Monitoring Program*, Roads and Maritime Services.

NSW Roads and Maritime Services 2010, *Pacific Highway Upgrade – Sapphire to Woolgoolga Biodiversity Offset Strategy*, Roads and Maritime Services.

NSW Roads and Maritime Services 2011, *Pacific Highway Upgrade - Sapphire to Woolgoolga. Operational Noise Management Report*, Roads and Maritime Services.

NSW Roads and Maritime Services 2010, *Pacific Highway Upgrade – Sapphire to Woolgoolga Salvage and Curation Strategy*

Roads and Fleet Services 2008, *Environmental Management System*, Roads and Fleet Services.

Roads and Fleet Services 2012, *Road Services Management Plan*, Roads and Fleet Services.

Road Services 2004, *Standard Operating Procedure (Environmental Management) – Waste Management*. Road and Fleet Services.

Appendix A – Text of Condition of Approval 6.4

Operational Environment Management Plan

The Proponent shall prepare and implement an Operational Environment Management Plan for the project that details the environmental management framework, practices and procedures to be followed during its operation. The Plan shall be consistent with the Department's Guideline for the Preparation of Environmental Management Plans (DIPNR 2004) to provide a clear environmental management framework. The Plan shall be prepared in consultation with the relevant government agencies and shall include, but not necessarily be limited to:

- a) a description of all relevant activities to be undertaken during operation of the project including an indication, where relevant, of stages of operation;
- b) statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
- c) details of how the project's environmental performance will be monitored and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:
 - i) measures to monitor and manage ecological factors, including effectiveness and maintenance of fauna crossings and rehabilitation measures, with reference to Condition 2.12;
 - ii) measures to monitor and manage heritage sites within the road reserve with reference to Condition 2.32;
 - iii) measures to monitor and manage noise impacts with reference to Condition 2.24;
 - iv) measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to surrounding lands and/or waters;
 - v) measures to monitor and maintain landscaping undertaken along the project corridor until the vegetation has sufficiently been established.
- d) a description and contact details of the roles and responsibilities for all relevant employees involved in the operation of the project; and
- e) complaints handling procedures during operation.

The Plan shall be submitted for the Director-General's approval no later than one month prior to the commencement of operation, or within such period as otherwise agreed by the Director-General. Operation of the project shall not commence until written approval has been received from the Director-General.

Appendix B – Summary of outcomes to CoA from the proposed modification

Requirement of Condition of Approval 6.4	Outcome from proposed modification
a). <i>a description of all relevant activities to be undertaken during operation of the project including an indication , where relevant, of stages of operation</i>	A description of all activities to be undertaken during the operational phase is included in appendix C of this proposed modification.
b). <i>statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;</i> c). <i>details of how the project's environmental performance will be monitored and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:</i> i) <i>measures to monitor and manage ecological factors, including effectiveness and maintenance of fauna crossings and rehabilitation measures, with reference to Condition 2.12;</i> ii) <i>measures to monitor and manage heritage sites within the road reserve with reference to Condition 2.32;</i> iii) <i>measures to monitor and manage noise impacts with reference to Condition 2.24;</i> iv) <i>measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to surrounding lands and/or</i>	A description of statutory obligations is included within the RFS Environmental Management System (2008). In additional all management plans developed under the Project Approval (06_0293) will be fulfilled. Measures to monitor and manage ecological factors would be undertaken in accordance with the Biodiversity Offset and Mitigation Strategy approved in accordance with CoA 2.12. The Salvage and Curation Strategy which forms an Appendix to the CEMP deals with management of identified sites including salvage and curation of objects and methodologies including consultation etc. The process for redeposition and registration of sites is also provided. Condition 2.24 requires that an investigation be undertaken of operational noise mitigation measures within six months of commencing construction. A report addressing this condition was approved by DP&I on 21 October 2011. The report addresses noise barrier locations, architectural treatments and other noise mitigation measures. RMS is committed to ensuring that these mitigation measures are implemented. Noise impacts would be monitored and managed through the noise auditing process, which is required under conditions of approval 3.2 and 3.3. All exposed areas would be landscaped prior to the completion of works which will assist to minimise and risk of soil erosion and discharge of sediment to surrounding lands and/ or waters. In addition the project

<i>waters;</i>	Environmental Protection Licence will be enforced by EPA until the project can demonstrate that it has rehabilitated all exposed areas to a suitable level to reduce the risk of erosion or sedimentation and any related impacts to surrounding lands and/or waters. RTA QA Specification R178 requires that stabilisation of exposed areas will be undertaken progressively. Monitoring and maintenance of landscaping will be undertaken in accordance with RMS specifications
<i>v) measures to monitor and maintain landscaping undertaken along the project corridor until the vegetation has sufficiently been established.</i>	Monitoring and maintenance of landscaping along the upgrade will be undertaken in accordance with the Landscape Management Plan. The Leighton Fulton Hogan Joint Venture are required to undertake specific maintenance of the landscaping areas for twelve months after date of completion. Ongoing long-term monitoring of these measures would be undertaken in accordance with RMS Specifications M 321 - Landscape Maintenance and M30 – Maintenance Intervention & Investigatory Requirements (Corridor).
<i>d) a description and contact details of the roles and responsibilities for all relevant employees involved in the operation of the project; and</i>	A description of the roles and responsibilities for all relevant employees involved in the operation of the project is included in Appendix A of the RFS Environmental Management System. In addition, (as detailed below) the project contact details will be transferred back to RMS from the Leighton Fulton Hogan Joint Venture once the project is operational. This includes the project hotline 1800 (toll free) number, postal address, and project email contact. Staff from the RMS Pacific Highway Office in Grafton are also involved in any ongoing management or environmental issues that arise during the operational phase of the project.
<i>e). Complaints handling procedures during operation.</i>	The Project Hotline will be operational for up to 12 months after the commencement of operation and RMS Environmental Hotline for the entire operation period. Once the contractor has ceased to have a presence on site the relevant contact details (email, toll free Project hotline 1800 number and mailbox) for the project will be transferred to RMS.

Appendix C – Description of activities required to be undertaken in the operational phase

Activity	Responsibility	Timing	Required Under	Where Addressed
Ecological monitoring				
Fauna Underpasses	RMS (and Project Ecologist)	Monitoring Autumn and Spring each year for period of minimum three years after commencement of operation.	CoA 3.1	Ecological Monitoring Program (2009)
Vegetated Median	RMS (and Project Ecologist)	Monitoring Winter and Spring each year for period of minimum three years after commencement of operation.	CoA 3.1	Ecological Monitoring Program (2009)
Nest box installation	RMS (and Project Ecologist)	Monitoring during Spring each year for the first two years and then again in Year five	CoA 3.1	Ecological Monitoring Program (2009))
In-situ threatened flora	RMS (and Project Ecologist)	Monitoring during Spring each year for a period of six years after commencement of operation.	CoA 3.1	Ecological Monitoring Program (2009)
Translocation Areas	RMS (and Project Ecologist)	Monitoring during Spring each year for a period of six years after commencement of operation.	CoA 3.1	Ecological Monitoring Program (2009)
Provide annual reports to stakeholders	RMS	Monitoring results will be reported in Annual Ecological Monitoring Report provided to Department of Planning and Infrastructure and EPA.	CoA 3.1	Ecological Monitoring Program (2009)
Biodiversity Offset and Mitigation				
Yearly monitoring of rehabilitation works against objectives of offset strategy.	RMS (and Project ecologist)	Details of the rehabilitation activities and measurement of progress against the offset package objectives will be incorporated into the annual monitoring reports prepared as part of the Ecological Monitoring Strategy prepared for the	CoA 2.12 CoA 2.13	Biodiversity Offset and Mitigation Strategy (2010) Biodiversity Offset Package

Activity	Responsibility	Timing	Required Under	Where Addressed
		project. Monitoring will be undertaken for a period of three years. Annual progress report following establishment of rehabilitated areas provided to Department of Planning and Infrastructure and Environmental Protection Authority. It is intended that the offset properties will be provided to National Parks and Wildlife Service to incorporate into the National Parks System along with funding to offset the costs of management.		(to be submitted) (Ecological Monitoring Strategy (2010))
Traffic and Access				
Road dilapidation reports	RMS / LFHJV	Operation reports will occur within 6 months after upgrade opening to traffic.	SoC T2	Addressed in Section 2.3.4 of this modification.
Transfer of roads to Coffs Harbour City Council	RMS	Completion of all required upgrade works prior to opening to traffic and transfer of ownership. Negotiations underway with Coffs Harbour City Council	CoA 2.15	Addressed in Section 2.3.4 of this modification.
Maintenance of Property Access	RMS / LFHJV	Alternate access for all properties impacted by construction or the upgrade to be provided to minimise disruption	CoA 2.16 SoC T4	Addressed in Section 2.3.4 of this modification.
Maintenance of access to state forests	RMS / LFHJV	Alternate access for Forestry Corporation of NSW impacted by construction or the upgrade to be provided to minimise disruption. Consultation has been undertaken to ascertain Forestry's requirements for ongoing access and these will be provided before Project completion.	SoC T5 SoC AG8	Addressed in Section 2.3.4 of this modification.

Activity	Responsibility	Timing	Required Under	Where Addressed
Heritage management				
Aboriginal observance of topsoil stripping, sub-surface investigation and salvage, identification of sites, storage of objects.	LFHJV	Aboriginal stakeholders participated in all relevant activities identified	CoA 2.32 Soc AH2 SoC AH5 SoC AH9	Addressed in Section 2.3.5 of this modification.
Provide an interpretation report relating to Golden Arrow Gold Mine.	RMS / LFHJV	Interpretation Plan for Golden Arrow Mine has not yet been prepared as works in the vicinity of the mine are continuing.	CoA 2.33A SoC NAH1	Addressed in section 2.3.5 of this modification.
Archival recording of non-Aboriginal heritage items	RMS / LFHJV	Archival recording of Woolgoolga forest nursery and nursery cottage, the British Australian timber company and Great Northern timber company tramlines and the Postmatster General's department cable has taken place. Archival recording of the Golden Arrow mine has been occurring with each new shaft find and a final addendum may be prepared if there are any further finds	SoC NAH1	Addressed in section 2.3.5 of this modification.
Install temporary protective fencing for heritage sites and remove on completion of construction.	RMS	Temporary fencing currently in place will be removed on completion of construction activities.	SoC AH6	Addressed in section 2.3.5 of this modification.
Operational noise				
Undertake operational noise monitoring	RMS	A noise auditing program will be undertaken between six and twelve months of commencement of operation of the project.	CoA 3.2 SoC ON5	Addressed in section 2.3.6 of this modification.
Submit an operational noise	RMS	An operational noise management report would	CoA 3.3	

Activity	Responsibility	Timing	Required Under	Where Addressed
management report to the Director –General and the EPA.		be submitted to the D-G and EPA within 60 days of completing the operational noise monitoring program.		
Landscaping				
Monitor and maintenance of landscape or rehabilitation works by a landscape specialist	RMS (and LFHJV for year 1)	Short term – maintenance inspections by qualified contractors for one year after commencement of operation in accordance with RMS specifications. Ongoing - Inspected yearly, based on these inspections maintenance requirements will be prioritised and a RMAP established.	SoC UD4	Addressed in section 2.3.8 of this modification
Reduce weeds invasion as a result of vegetation clearing	RMS / LFHJV	Weeds in areas disturbed by construction activities will be managed for a minimum period of two years after construction completion	SoC F22	Addressed in section 2.3.3 of this modification
Water quality monitoring				
Surface water monitoring	RMS / LFHJV	Routine construction phase water quality monitoring for surface water will be undertaken until operation commences.	SoC SW1 SoC SW7	Addressed in section 2.3.7 of this modification
Implement operational water quality treatment measures	RMS / LFHJV	Measures have been incorporated into design to meet these objectives. Nominated temporary basins are being converted into operational basins.	SoC SW4	Addressed in section 2.3.7 of this modification
Air quality				
Minimisation of dust	RMS / LFHJV	All exposed areas would be landscaped prior to the completion of works which will assist to minimise any risk of dust emissions.	CoA 2.25	Addressed in section 2.3.9 of this modification

Activity	Responsibility	Timing	Required Under	Where Addressed
Water Management				
Prevention of soil erosion and sedimentation	RMS / LFHJV	All exposed areas would be landscaped prior to the completion of works which will assist to minimise any risk of soil erosion and discharge of sediment to surrounding lands and/ or waters. In addition the project Environmental Protection Licence will be enforced by EPA until the project can demonstrate that it has rehabilitated all exposed areas to a suitable level to reduce the risk of erosion or sedimentation and any related impacts to surrounding lands and/or waters. RTA QA Specification R178 requires that stabilisation of exposed areas will be undertaken. Monitoring and maintenance of landscaping will be undertaken in accordance with RMS specifications.	CoA 2.26 a)	Addressed in section 2.3.7 of this modification
Control measures to mitigate impacts and protect Solitary Islands Marine Park waters	RMS / LFHJV	Marine Parks Authority, Fisheries and EPA regularly attend the site for inspection of sensitive areas, particularly waterways and areas draining to Solitary Islands Marine Park. These agencies are regularly consulted on design impacts, work method statements and the like. Water quality is also regularly measured during construction phase to determine impacts.	CoA 2.26 b)	Addressed in section 2.3.7 of this modification
Waste Management				
Waste collection and management	RMS	RFS has a Standard Operating Procedure (SOP) for waste management. This procedure includes procedures to avoid, minimise, reuse, recycle, treat and dispose of waste streams during operation. All waste materials will be handled in accordance with relevant guidelines.	Section 20.4.2	-

Activity	Responsibility	Timing	Required Under	Where Addressed
Groundwater				
Groundwater level and quality	RMS / LFHJV	The EA identified that there is a potential for impacts to the groundwater table in response to significant construction activities. Groundwater level, quality and abstraction monitoring and reporting throughout project duration is required as part of the Construction Groundwater Management Plan. It appears that the prolonged wet period encountered at the start of the Project has elevated groundwater levels and impacts have not been encountered. It is considered that there will be no impacts on groundwater during operation. However, if monitoring and investigation identifies a change, the significance of the change and resultant impacts will be investigated and, if required, measures to manage changes will be designed and implemented in consultation with relevant government agencies.	Section 18.3.4 of the EA	-
Community consultation				
Consult with stakeholders throughout operational phase.	RMS	Formal community information sessions will cease at the completion of construction. Contact details (email, 1800 number and mailbox) for project will be transferred to RMS once project has been completed. RMS remains committed to ongoing liaison with regulatory agencies and Tweed Shire Council.	SoC C2 SoC C3	Addressed in section 2.4.2 of this modification

Activity	Responsibility	Timing	Required Under	Where Addressed
Property Impacts				
Rectification of property damage	RMS / LFHJV	The Project has completed a number of property inspections of those properties potentially impacted by vibration. Follow-up inspections will be undertaken at completion of construction and any damage of property will be rectified or compensation provided.	SoC P5	Addressed in section 2.4.3 of this modification
Maintenance of water supply to properties	RMS / LFHJV	A number of dams have been impacted during construction and negotiations have taken place with the landholders to ensure that they have alternative supply or are compensated.	SoC P6	Addressed in section 2.4.4 of this modification

Appendix D – Details of consultation with agencies

BANCROFT Janelle

From: Craig Dunk [Craig.Dunk@epa.nsw.gov.au]
Sent: Thursday, 4 April 2013 3:58 PM
To: BANCROFT Janelle
Cc: Robert Donohoe; Craig Harre
Subject: RE: Proposed modification of Project Approval, Sapphire to Woolgoolga (no objection EPA)

Hi Janelle,

The EPA does not have an objection to the proposal to modify the project approval, CoA 6.4 Operational Environmental Management Plan at this time.

Regards

Craig Dunk

Regional operations Officer | **NSW Environment Protection Authority** |

☎: (02) 6640 2514 | Mobile ☎: 0427 237 154 | 📠: (02) 6640 2539 | ✉: Craig.Dunk@epa.nsw.gov.au

From: BANCROFT Janelle [mailto:Janelle.BANCROFT@rms.nsw.gov.au]
Sent: Thursday, 21 March 2013 10:19 AM
To: Dunk Craig; Harre Craig; James Sakker (james.sakker@industry.nsw.gov.au);
 clive.treadwell@chcc.nsw.gov.au
Cc: WOODS Mark; HARDIMAN Sean
Subject: Proposed modification of Project Approval, Sapphire to Woolgoolga

Hi All

As discussed at yesterday's ERG, RMS is proposing a modification to the Project Approval for Sapphire to Woolgoolga to **allow** for project-specific operational environmental management practices and procedures to be incorporated into existing environmental management systems.

Please find attached modification document that outlines all operational management measures for the project and where these issues are addressed within existing plans or management systems. Where operational requirements are not included within existing approved plans for the project, the specific management requirements is outlined within this modification proposal report.

Overall, it is considered that this modification would result in consistent management measures being able to be applied to the Sapphire to Woolgoolga upgrade project and allow for streamlining of the regulatory approval process associated with the preparation of an Operation Environmental Management Plan. This modification is considered consistent with current best practice management and would not result in a decrease in the environmental performance of the project.

It would be appreciated if you forward any responses to this proposal to me before Thursday 4 March.

Please feel free to contact me if you have any queries or would like any further information.

Janelle Bancroft

Environmental Advisor

Pacific Highway Environmental | Environment Branch

T 02 6604 9331 F 02 6640 1001 M 0408 975 647

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Roads and Maritime Services

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BANCROFT Janelle

From: james.sakker@dpi.nsw.gov.au
Sent: Saturday, 23 March 2013 11:51 AM
To: BANCROFT Janelle
Subject: Re: Proposed modification of Project Approval, Sapphire to Woolgoolga

Hi Janelle
 NSW DPI have no comments to make on the proposed modification
 regards James
 PS 4th of March is a bit tough for a due date.....

James Sakker Conservation Manager (Pacific Highway Upgrade) Department of Primary Industries NSW (NSW DPI) 1243 Bruxner Highway
 Wollongbar NSW 2477
 M 0419 185378 F 02 66283264
 james.sakker@industry.nsw.gov.au

-----BANCROFT Janelle <Janelle.BANCROFT@rms.nsw.gov.au> wrote: -----

To: "craig.dunk@epa.nsw.gov.au" <craig.dunk@epa.nsw.gov.au>, "craig.harre@epa.nsw.gov.au" <craig.harre@epa.nsw.gov.au>, "James Sakker (james.sakker@industry.nsw.gov.au)" <james.sakker@industry.nsw.gov.au>, "clive.treadwell@chcc.nsw.gov.au" <clive.treadwell@chcc.nsw.gov.au>
 From: BANCROFT Janelle <Janelle.BANCROFT@rms.nsw.gov.au>
 Date: 03/21/2013 10:19AM
 Cc: WOODS Mark <Mark.WOODS@rms.nsw.gov.au>, HARDIMAN Sean <Sean.HARDIMAN@rms.nsw.gov.au>
 Subject: Proposed modification of Project Approval, Sapphire to Woolgoolga

Hi All

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It would be appreciated if you forward any responses to this proposal to me before Thursday 4 March.

Please feel free to contact me if you have any queries or would like any further information.

Janelle Bancroft
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[attachment "DRAFT modification request V. 2.pdf" removed by James Sakker/DII/NSW]

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