Appendix A

Letter from Coffs Harbour City Council

COFFS HARBOUR CITY COUNCIL

Your ref: 10/110.1660 CC:SLT
Our ref: 1443045

11 August 2006

Mr R Higgins
General Manager, Pacific Highway
PO Box 546
GRAFTON NSW 2460

Dear Mr Higgins

SH10 – Pacific Highway. Sapphire to Woolgoolga Upgrade

With reference to your recent 4 August 2006 letter and discussions held between the RTA's Mr Chris Clark and Council's Mr Clyde Treadwell; the following response is now provided.

After due consideration to the information provided by the RTA, Council concur with the data provided. Council is satisfied that the proposed development of the interchange in the vicinity of the existing Highway and Arrawarra Beach Road; on land zoned 1(f) (Rural (Forest) Zone) under Ulmarra Local Environmental Plan (LEP) 1992; is generally consistent with Objective (C) of that zone.

Council are currently progressing an amendment to the Ulmarra LEP 1992 to integrate it and align it with Coffs Harbour City LEP 2000. Council is likely to complete the Local Environmental Study (LES) component in late 2006, and then the LEP Amendment would be exhibited and forwarded to State Government for gazettal. Once gazetted Part 5 Schedule 1 of the LEP would also provide the RTA with an appropriate mechanism to consider, assess and determine the upgrade and interchange proposal.

Council is satisfied that in order to facilitate the proposed interchange and highway upgrade, the RTA will need to acquire about one hectare of the Wedding Bells State Forest, zoned 1(f) (Rural (Forests)) under Ulmarra LEP 1992. This action is deemed consistent with Objective (c) of the 1(f) zone.

Yours faithfully

Stephen Sawtell
General Manager

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Appendix B

Draft statement of commitments

Draft Statement of Commitments

The Draft Statement of Commitments has been presented with the Project Application and provides a base for the development of a Statement of Commitments during the environmental assessment process. The Statement of Commitments will be refined during the Environmental Assessment phase. In some cases, commitments stated here provide a management response to environmental issues identified in *Table 5.1*.

These commitments would be carried forward into the Environmental Assessment, which is yet to be completed. The activity, the Upgrade of the Pacific Highway from Sapphire to north of Woolgoolga, will be considered under Part 3A of the *Environmental Planning and Assessment Act 1979.*

Table A.1: Draft Statement of Commitments

	Implementation plan and deliverables	Phase
1	**Desired Environmental Outcome – Compliance and auditing —** To implement a system of audit and inspection that ensures the successful performance of Environmental Management Plans and this Statement of Commitments.	
1.1	The RTA will:	
	a) carry out the Upgrade of the Pacific Highway, Sapphire to Woolgoolga, consistent with:	All
	i. the procedures, safeguards and mitigation measures identified in the Environmental Assessment;	
	ii. additional measures identified in the Submissions Report; and	
	iii. this Statement of Commitments.	
	b) notify in writing the Director-General of the Department of Planning (D-G), relevant Government Departments and relevant Councils, four weeks prior, unless otherwise agreed, of the start of the Activity's Construction.	All
1.2	The RTA will prepare and submit a **Pre-Construction Compliance Report** at least four weeks before Construction commences (or within any other time agreed to by the D-G). The Pre-Construction Compliance Report will include:	Pre-construction
	i. details of how the Commitments required to be addressed before Construction were complied with;	
	ii. the time when each relevant Commitment was complied with, including dates of submission of any required reports and/or approval dates; and	
	iii. details of any approvals or licences required to be issued by relevant Government Departments before Construction commences.	
1.3	The RTA will prepare and implement an audit and inspection plan. The audit and inspection plan may be incorporated in the CEMP.	All

1.4	The RTA will:		
	a)	prepare the first **Construction Compliance Report** to report on the first six months of Construction and submit it a maximum six weeks after expiry of that period (or at any other time interval agreed to by the D-G). The second, and subsequent, Construction Compliance Reports will be submitted at maximum intervals of six months from the date of submission of the first Construction Compliance Report (or at any other time interval agreed to by the D-G) for the duration of Construction. The Construction Compliance Reports include information on;	Construction
		i. compliance with the CEMP and the Statement of Commitments;	
		ii. compliance with any approvals or licences issued by relevant Government Departments for Construction;	
		iii. the implementation and effectiveness of environmental controls. The assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP;	
		iv. environmental monitoring results, presented as a results summary and analysis;	
		v. the number and details of any complaints, including a summary of main areas of complaint, action taken, response given and intended strategies to reduce recurring complaints;	
		vi. details of any review and amendments to the CEMP resulting from Construction during the reporting period; and	
		vii. any other matter relating to compliance with the Statement of Commitments or as requested by the D-G.	
	b)	provide the D-G, relevant Councils and any other Government department nominated by the D-G with a copy of the Construction Compliance Reports.	Construction
	c)	make the Construction Compliance Reports publicly available.	Construction
1.5	The RTA will notify in writing the D-G, Planning, relevant Government Departments and relevant Councils, four weeks prior, unless other wise agreed, of the start of the Activity's Operation.		Construction
1.6	The RTA will:		
	a)	undertake at least six monthly audits to ensure compliance with the requirements of the CEMP and all sub-plans.	Construction
	b)	ensure the **Environmental Impact Audit Report – Construction** will:	Construction
		i. identify the major environmental controls used during Construction and assess their effectiveness;	
		ii. summarise the main environmental management plans and processes implemented during Construction and assess their effectiveness;	
		iii. identify any innovations in Construction methodology used to improve environmental management; and	
		iv. discuss the lessons learnt during Construction, including recommendations for future Activities.	

1.7	The RTA will:		
	a)	submit a **Pre-Operation Compliance Report** to the D-G at least four weeks before Operation commences (or within any other time agreed to by the D-G).	Operation
	b)	ensure the Pre-Operation Compliance Report includes:	Operation
		i. details of how the Commitments required to be addressed before Operation were complied with;	
		ii. the time when each relevant Commitment was complied with, including dates of submission of any required reports and/or approval dates; and	
		iii. details of any approvals or licences issued by Relevant Government Departments for the Activity's Operation.	
1.8	The RTA will:		Operation
	a)	submit an Environmental Impact Audit Report to the D-G a maximum 24 months after the Activity begins Operation. The **Environmental Impact Audit Report - Operation** will be submitted to other relevant Government Departments upon the request of the D-G.	Operation
	b)	ensure the Environmental Impact Audit Report - Operation will:	Operation
		i. compare the Operation impact predictions made in the Environmental Assessment Submissions Report and any supplementary studies with the actual impacts;	
		ii. assess the effectiveness of implemented mitigation measures and safeguards;	
		iii. assess compliance with the systems for operation maintenance and monitoring;	
		iv. discuss the results of consultation with the local community particularly any feedback or complaints; and	
		v. be made publicly available.	
2	**Desired Environmental Outcome - Environmental Management: —** To manage the potential environmental impacts of the Project in order to meet the requirements identified in the EA.		
2.1	The RTA will:		
	a)	prepare a **Construction Environmental Management Plan (CEMP)** with reference to the DIPNR Guideline for the Preparation of Environmental Management Plans and to address the requirements of Section 4.1.1 of RTA QA Specification G36.	Preconstruction
	b)	ensure that the mitigation measures identified in the Project Application Report, Environmental Assessment and Submissions Report are incorporated into the CEMP.	Preconstruction
	c)	obtain the D-G's Approval for the CEMP before Construction commences or within any other time agreed to by the D-G.	Preconstruction
2.2	The RTA will:		

	a)	implement the CEMP in accordance with this Statement of Commitments and all relevant Acts and Regulations.	Construction
	b)	periodically review the CEMP with the aim of continuous improvement.	Construction
2.3	The RTA will:		
	a)	submit to the D-G an **Operational Environmental Management Plan (OEMP)** or provide details of any existing system to meet the environmental management requirements for the operation of the activity.	Operation
	b)	seek the approval of the D-G for the OEMP or alternative management system before operation commences or within any other time agreed to by the D-G.	Operation
3	**Desired Environmental Outcome – Communication and Consultation —** To maintain clear and open communication with the local community and road users throughout all phases of the Activity.		
3.1	The RTA will:		
	a)	prepare a **Community Involvement Plan**. The Plan will	Preconstruction
		i. include the requirements of the Project Application Report, Environmental Assessment and Submissions Report; and	
		ii. where relevant, be consistent with the principles of the document Community Engagement in the NSW Planning System (PlanningNSW 2003).	
	b)	provide a copy of the Community Involvement Plan to the D-G before Construction commences.	All

3.2	The RTA will:	
	a) advertise in relevant newspapers before Construction commences, and then at maximum three monthly intervals: i. the nature of the works proposed for the next three months; ii. areas in which these works are proposed; iii. construction hours; and iv. a contact telephone number.	Preconstruction
	b) establish an **Activity internet site** before Construction commences and maintain the internet site until Construction ends. This internet site will contain: i. periodic updates of work progress, consultation activities and planned work schedules; ii. a description of relevant approval authorities and their areas of responsibility; iii. a list of reports and plans that are Publicly Available under this Approval and details of how these can be accessed; iv. contact names and phone numbers of relevant communications staff; and v. the 24 hour toll-free complaints contact telephone number.	Preconstruction
	c) prepare a **Construction Complaints Management System** as part of the Communications Plan, before Construction commences and maintain the System for the duration of Construction. The Construction Complaints Management System will be consistent with *AS 4269 Complaints Handling* and include: i. a 24 hour, toll free telephone number listed with a telephone company and advertised; ii. a system to receive, record, track and respond to complaints within a specified timeframe; iii. a process for the provision of a written response to the complainant within 10 days, if the complaint cannot be resolved by the initial or follow-up verbal response; and iv. a mediation system for complaints unable to be resolved.	Preconstruction
	d) include information on all complaints received, including the means by which they were addressed and whether resolution was reached with or without mediation, in the Construction Compliance Reports. This Report will be made available to the D-G on request.	Construction
3.3	The RTA will consult property owners about implementing mitigation measures that affect their property. Mitigation measures will be implemented according to a program derived from that consultation if consistent with these Statement of Commitments	All
3.4	The RTA will implement the Complaints Management System and Community Involvement Plan.	Construction

4	**Desired Environmental Outcome –Traffic and Access —** To maintain access to property and maintain traffic movements on the road network through all phases of the Activity.		
4.1	The RTA will:		
	a)	prepare **pre-construction road dilapidation reports** for all roads likely to be used by Construction traffic. These reports will be prepared before Construction commences.	Pre-construction
	b)	prepare **post –construction road dilapidation reports** for the roads assessed prior to Construction following the completion of construction. Any damage resulting from Construction, except that resulting from normal wear and tear, will be repaired at the RTA's cost. Alternatively the RTA may negotiate an alternative arrangement for road damage with the relevant roads authority.	Operation
	c)	provide copies of the dilapidation reports to the relevant roads authority.	All
4.2	The RTA will prepare a **Construction Traffic Management Sub Plan**, consistent with the RTA Publication *Traffic Control at Work Sites*, as part of the CEMP. The Sub Plan will include:		Pre-construction
	i.	the requirements included in the Environmental Assessment and Submission Report;	
	ii.	identification of all public roads to be used by Construction traffic;	
	iii.	management methods to ensure Construction traffic uses identified roads;	
	iv.	identification of all public roads that may be partially or completely closed during Construction and the expected timing and duration of these closures;	
	v.	impacts on existing traffic (including pedestrians, vehicles, cyclists and disabled persons);	
	vi.	temporary traffic arrangements including property access;	
	vii.	access to Construction sites including entry and exit locations and measures to prevent Construction vehicles queuing on public roads;	
	viii.	a response plan for any Construction traffic incident; and	
	ix.	monitoring, review and amendment mechanisms.	
4.3	The RTA will implement the Construction Traffic Management Sub Plan.		Construction

4.4	The RTA will:	Construction
	a) ensure that access to properties is maintained during construction and, where necessary and feasible, provide temporary alternative access.	
	b) ensure that where any legal property access is permanently affected by the Activity, that alternative access to an equivalent standard to and from a public road is provided where a property has no other legal means of access and where such alternative access is feasible and practical. Alternatively, where alternative access arrangements are not feasible or practical and a property is left with no access to a public road, ensure that negotiations are undertaken with the relevant property owner for the acquisition of the property in accordance with the provisions of the *Land Acquisition (Just Terms Compensation) Act 1991*.	
5	**Desired Environmental Outcome –Construction Noise and Vibration —** To manage noise and vibration generated during construction and minimise the affects of construction noise and vibration on the community.	
5.1	The RTA will:	
	a) prepare a **Construction Noise and Vibration Management (NVM) Sub-Plan** consistent with the requirements of Practice Note VI of the RTA's *Environmental Noise Management Manual*.	Pre-construction
	b) ensure the NVM Sub Plan is prepared in consultation with the relevant Authorities, Councils and the community and will include Noise and Vibration Management measures identified in the Project Application Report.	Pre-construction
	c) ensure the vibration and construction noise goals contained in the NVM Sub-Plan will be obtained from the following guidelines:	Pre-construction
	i. *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* prepared by the Australian and New Zealand Environment and Conservation Council (ANZECC);	
	ii. German Standard *DIN 4150 Part 3 Structural Vibration in Buildings (Effects on Structures*);	
	iii. the evaluation criteria presented in British Standard BS 6472 - *Guide to Evaluate Human Exposure to Vibration in Buildings* (1Hz to 80 Hz) for low probability of adverse comment; and	
	iv. Chapter 171, Construction Site Noise of the NSW EPA's *Environmental Noise Control Manual*.	
	d) undertake pre–construction noise monitoring as specified in the NVM Sub-Plan.	Pre-construction

5.2	The RTA will:		
	a)	implement measures as identified in the NVM Sub Plan to reduce noise impact of construction activities, including blasting, to nearby residences.	Construction
	b)	ensure that public address systems used at any Construction site are not used outside the normal construction hours unless otherwise approved through the NVM Sub Plan. Public address systems will be designed to minimise noise spillage off-site.	Construction
	c)	schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity that could potentially impact on noise sensitive receivers only between the following hours unless otherwise approved in the NVM Sub Plan: i. 9 am to 12 pm and 2 pm to 5 pm, Monday to Friday; and ii. 9 am to 12 pm, Saturday.	Construction
	d)	ensure that wherever practical, and where sensitive receivers may be affected, driven piles are not used. If driven piles are required they will only be installed where approved in the NVM Sub Plan.	Construction
	e)	undertake blasting trials if blasting is to be used (Results from the trials will be used to determine site-specific blast designs that will enable the performance criteria specified in the Construction Noise and Vibration Sub Plan to be satisfied.).	Construction
	f)	make all reasonable attempts to contact sensitive receivers located within 500 metres of a blast location. The contact will be made at least 48 hours before a blast and advice given to the receiver will include a schedule of blast time(s) and a telephone number and contact name.	Construction
	g)	undertake noise monitoring during construction as specified in the NVM Sub-Plan.	Construction

6	**Desired Environmental Outcome –Operational Noise —** To design and construct operational noise treatments to achieve the goals established in the NSW Government's *Environmental Criteria for Road Traffic Noise* and in accordance with the requirements of the RTA's *Environmental Noise Management Manual*.	
6.1	The RTA will:	
	a) prepare an **Operation Noise Management Report** detailing its investigation of "Reasonable and Feasible" Operation noise mitigation methods. The RTA will seek the approval of the D-G for the Operation Noise Management Report. The Operation Noise Management Report will:	Pre-construction
	i. consider the NSW Government's *Environmental Criteria for Road Traffic Noise* and the RTA's *Environmental Noise Management Manual*;	
	ii. identify the Operation noise criteria;	
	iii. identify Sensitive Receivers;	
	iv. predict noise levels at all Sensitive Receivers;	
	v. detail Reasonable and Feasible noise mitigation measures, physical and managerial. An analysis for the entire Activity will be undertaken in accordance with Practice Note IV of the RTA's *Environmental Noise Management Manual*;	
	vi. consider urban design issues relating to noise control measures;	
	vii. identify which noise mitigation measures will be implemented, including their location, type and when they would be implemented; and	
	viii. detail noise monitoring, reporting and complaint response procedures.	
	b) submit the Operational Noise Management Report to the D-G.	Pre-construction
6.2	The RTA will implement the relevant requirements of the Operational Noise Management Report.	Construction
6.3	The RTA will:	
	a) assess the adequacy of the implemented traffic noise mitigation measures between six months and one year after opening the Activity. Should the assessment indicate traffic noise levels exceeding those predicted in the Operation Noise Management Report, the RTA will:	Operation
	i. advise the D-G; and	
	ii. investigate and implement further reasonable and feasible mitigation measures in accordance with the NSW Government's *Environmental Criteria for Road Traffic Noise* and RTA's *Environmental Noise Management Manual* .The selection of these measures will be undertaken in consultation with affected property owners and be consistent with the Operation Noise Management Report.	
	b) Undertake monitoring of Operation noise in accordance with Practice Note VIII of the RTA's *Environmental Noise Management Manual*.	Operation

7	**Desired Environmental Outcome – Flora and Fauna — T**o minimise adverse impacts on native vegetation, fauna and their habitats, and threatened flora and fauna in accordance with the strategies contained in the EA.	
7.1	The RTA will:	
	a) prepare a **Flora and Fauna Management Sub Plan**. The Sub Plan will be prepared in consultation with relevant Government Departments and relevant Councils and include:	Pre-construction
	i. appropriate mitigation measures identified in the Environmental Assessment and Submissions Report;	Pre-construction
	ii. plans showing terrestrial and aquatic vegetation communities;	
	iii. methods to manage impacts on flora and fauna species (terrestrial and aquatic) and their habitat which may be directly or indirectly affected by the Activity;	
	iv. rehabilitation details;	
	v. a Weed Management Plan; and	
	vi. a program for reporting on the effectiveness of terrestrial and aquatic flora and fauna management measures against the identified performance criteria.	
	b) undertake the design and construction of bridges and culverts in consultation with the DEC and DPI Fisheries. The RTA will ensure the design and construction of bridges and culverts are consistent with DPI Fisheries Guidelines.	Pre-construction
	c) submit the Flora and Fauna Management Sub Plan to the D-G.	Pre-construction
7.2	The RTA will:	
	a) implement all requirements of the Flora and Fauna Management Sub Plan.	Construction
	b) establish contractual systems for the Construction Contractor to conduct inspections and monitor compliance with plan requirements.	Construction
7.3	The RTA will implement all post construction requirements of the Flora and Fauna sub plan.	Operation

8	**Desired Environmental Outcome – Aboriginal Heritage —** To manage adverse impacts on Aboriginal heritage in accordance with the strategies contained in the EA.	
8.1	The RTA will prepare an **Aboriginal Heritage Management Sub Plan** as part of the CEMP. The RTA will consult with all relevant Aboriginal groups and the DEC when preparing the Sub Plan. The Sub Plan will include: i. Aboriginal heritage measures identified in the Project Application Report; ii. details of the archaeological investigations to be undertaken and any associated licences or approvals required; iii. procedures to be implemented if previously unidentified Aboriginal objects are discovered during Construction; and iv. an education program for Construction personnel on their obligations for Aboriginal cultural materials.	Pre-construction
8.2	The RTA will:	
	a) implement the Aboriginal Heritage Management Sub Plan.	Construction
	b) ensure that if during the course of Construction the RTA becomes aware of any unexpected Aboriginal Heritage object(s), all work likely to affect the object(s) will cease immediately and the DEC informed in accordance with the *National Parks and Wildlife Act 1974*.	Construction
9	**Desired Environmental Outcome – Non-Aboriginal Heritage —** To manage adverse impacts on heritage items and structures in accordance with the strategies contained in the EA.	
9.1	The RTA will prepare a **Non-Aboriginal Heritage Management Sub Plan** as part of the CEMP. The Sub Plan will be prepared in consultation with the Heritage Office and relevant Councils and include: i. details of any investigations to be undertaken and any approvals required; ii. procedures to be implemented if previously unidentified historical relics are discovered during Construction. If such relics are discovered all work likely to affect the relic(s) will cease immediately and the Heritage Council notified in accordance with the Heritage Act 1977; and iii. an education program for Construction personnel on their obligations for historic relics.	Pre-construction
9.2	The RTA will implement the Non-Aboriginal Heritage Management Sub Plan.	Construction

10	**Desired Environmental Outcome – Soil and Water Management —** To manage soil and water impacts to achieve the objective of Landcom's guideline *Managing Urban Stormwater - Soils and Construction* (2004), the *Acid Sulfate Soils Manual* (1998) and the RTA's *Code of Practice for Water Management*.	
10.1	The RTA will prepare a **Soil and Water Management Sub Plan** in consultation with relevant Government Departments and relevant Councils as part of the CEMP. The Sub Plan will: i. include the hydrology, water quality and soil management measures identified in the Project Application Report; ii. where relevant, be consistent with: ➢ the Landcom guideline *Managing Urban Stormwater – Soils and Construction*; ➢ the RTA's *Guidelines for the Control of Erosion and Sedimentation in Roadworks*; and ➢ the DIPNR *Constructed Wetlands Manual*. iii. identify the Construction activities that could cause soil erosion or discharge sediment or water pollutants from the site; iv. describe management methods to minimise soil erosion or discharge of sediment or water pollutants from the site including a strategy to minimise the area of bare surfaces during construction; and v. include contingency plans to be implemented for events such as fuel spills.	Pre-construction
10.2	The RTA will prepare an **Acid Sulfate Soil Management Sub Plan** in consultation with relevant Government Departments as part of the CEMP. The Sub Plan will: i. be consistent with the *Acid Sulfate Soils Manual* (Acid Sulfate Soil Management Advisory Committee, 1998) or update; ii. include a contingency plan to deal with the unexpected discovery of actual or potential acid sulphate soils; and iii. include a water quality monitoring program.	Pre-construction
10.3	The RTA will prepare a **Spoil and Fill Management Sub Plan** as part of the CEMP. The Sub Plan will include: i. the locations of major (defined as a volume greater than 500 cubic metres) spoil stockpiles; ii. the estimated volume and source of imported fill material and where imported fill material will be stockpiled and used; and iii. methods to re-use or dispose excess or unsuitable spoil material including estimated volumes and disposal sites.	Pre-Construction

10.4	The RTA will investigate the potential for changes in the groundwater table before any major earthworks (defined as a cut or fill area with depth or height exceeding five metres). Where a potential for change is identified the RTA will: i. assess the significance of the change and any resultant effects within and outside the road reserve; and ii. where necessary, design and implement measures to manage the changes. Management measures will be determined in consultation with the regional office of DNR.	Pre-construction
10.5	The RTA will ensure that all Operation stage controls for stormwater drainage and water pollution will be located, designed, constructed, operated and maintained to meet the requirements of the RTA's *Code of Practice for Water Management – Road Development and Management*. These controls will be designed in consultation with relevant Government Departments and relevant Councils.	Pre-construction
10.6	The RTA will implement a pre construction water monitoring program in accordance with the Soil and Water Management Sub Plan, the Acid Sulfate Soil Management Sub Plan and the Spoil and Fill Management Sub Plan.	Pre-construction
10.7	The RTA will: a) implement the Soil and Water Management Sub Plan, the Acid Sulfate Soil Management Sub Plan and the Spoil and Fill Management Sub Plan.	Construction
	b) consult an appropriately qualified soil conservationist according to a schedule identified in the Soil and Water Management Sub Plan to: i. undertake inspections of temporary and permanent erosion and sedimentation control devices; ii. ensure that the most appropriate controls are being implemented; iii. check that controls are being maintained in an efficient condition; and iv. check that controls meet the requirements of any relevant approval and/or licence condition.	Construction
10.8	The RTA will: a) implement operational water management controls as identified in the Soil and Water Management Sub Plan, the Acid Sulfate Soil Management Sub Plan and the Spoil and Fill Management Sub Plan.	Operation
	b) implement a maintenance and inspection program for operational controls as identified in the Soil and Water Management Sub Plan, the Acid Sulfate Soil Management Sub Plan and the Spoil and Fill Management Sub Plan.	Operation

11	**Desired Environmental Outcome – Air Quality —** To manage adverse air quality impacts on the community to meet air quality targets identified in the EA.	
11.1	The RTA will prepare an **Air Quality Management Sub Plan** as part of the CEMP. The Sub Plan will identify:	Pre-construction
	i. potential sources of dust;	
	ii. dust management objectives consistent with DEC guidelines;	
	iii. a monitoring program to assess compliance with the identified objectives. Monitoring for dust deposition and particulate concentration will be undertaken according to the DEC Guideline *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales*;	
	iv. mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds in dry weather); and	
	v. a progressive rehabilitation strategy for exposed surfaces with the aim of minimising exposed surfaces.	
11.2	The RTA will:	
	a) implement the Air Quality Management Sub Plan.	Construction
	b) ensure that construction vehicles using public roads are maintained to prevent any loss of load, whether dust, liquid or soils. Facilities will be provided at exit points of all Construction sites/compounds to minimise tracking mud, dirt or other material onto a public road or footpath. In the event of any spillage, the RTA will remove the spilled material as soon as practicable within the working day of the spillage.	Construction
	c) ensure that all plant and equipment used in connection with the Activity are:	Construction
	i. maintained in a proper and efficient condition; and	
	ii. operated in a proper and efficient manner.	
	d) implement a dust monitoring program.	Construction

12	**Desired Environmental Outcome — Greenhouse gases and energy. -** To manage energy consumption and greenhouse gas generation during construction in accordance with the strategies contained in the EA	
12.1	The RTA will:	
	a) promote the reduction of greenhouse gasses by adopting energy efficient work practices including:	Construction
	i. Developing and implementing procedures to minimise energy use; and	
	ii. Conducting awareness programs for all site personnel regarding energy conservation methods.	
	b) conduct energy audits during the activity to identify and address energy waste.	Construction
13	**Desired Environmental Outcome — Urban Design and Landscaping -** To minimise the visual impact of the Activity.	
13.1	The RTA will:	
	a) prepare an **Urban Design and Landscape Plan** before Construction commences. The Plan will present an integrated urban design for the Activity, applying design principles established in the Environmental Assessment. The Plan will include design treatments for:	Pre-construction
	I. location and identification of existing vegetation and proposed landscaped areas;	
	II. built elements including retaining walls, bridges and noise walls;	
	III. pedestrian and cyclist elements including footpath location, paving types and pedestrian crossings; and	
	IV. fixtures such as seating, lighting, fencing and signs.	
	b) also include the following information in the Plan :	Pre-construction
	i. graphics for key elements such as sections, sketches, perspective views etc;	
	ii. a schedule of species to be used in landscaping. The derivation of the schedule will be explained including its relationship with the Activity's ecological studies;	
	iii. details of the timing and progressive implementation of landscape works considering related environmental controls such as erosion and sedimentation controls and drainage; and	
	iv. procedures and methods to monitor and maintain landscaped or rehabilitated areas both inside and outside the Activity.	
	c) obtain the approval of the D-G for the Urban Design and Landscape Report before Construction commences or within any other time agreed to by the D-G.	Pre-construction
13.2	The RTA will implement the Urban Design and Landscape Plan.	Construction

13.3	The RTA will implement any required remedial measures to maintain landscaping works to the design standard established in the Urban Design and Landscape Report.	Operation
13.4	The RTA will monitor and maintain landscape or rehabilitation works which, following Construction, are not the responsibility of the RTA for a period of three years following completion of any landscaping stage or as otherwise identified in the Urban Design and Landscape Report.	Operation
14	**Desired Environmental Outcome — Hazard and Risk -** To manage potential for hazards and reduce the risks associated with the Activity.	
14.1	The RTA will prepare **Hazards and Risk Management Sub Plan** as part of the Construction and Operation EMPs. These Sub Plans will include: i. details of the hazards and risks associated with the Activity; and ii. mitigation measures including contingency plans.	Pre-construction
14.2	The RTA will implement the Hazard and Risk Management Sub Plan –Construction.	Construction
14.3	The RTA will implement the Hazard and Risk Management Sub Plan –Operation.	Operation
15	**Desired Environmental Outcome – Waste —** Manage Waste in accordance with the principles of the Waste Management hierarchy referred to in the *Waste Avoidance and Resource Recovery Act 2001* and the NSW Government's Waste Reduction and Purchasing Policy.	
15.1	The RTA will prepare a **Waste Management and Re-use Sub Plan(s)**. The Sub Plan(s) will address the management of wastes during the Construction and Operation stages respectively in accordance with the NSW Government's Waste Reduction and Purchasing Policy. The Sub Plan(s) will identify requirements for: i. the application of the waste minimisation hierarchy principles of avoid / reduce / re-use / recycle / dispose; ii. waste handling and storage; iii. disposal of wastes. Specific details will be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes; and iv. any waste material that is unable to be re-used, re-processed or recycled will be disposed at a facility approved to receive that type of waste.	Pre-construction
15.2	The RTA will: a) implement the Waste Management and Re-use Sub Plan –construction. b) ensure that the re-use of material generated from Construction is maximised in preference to importing fill. .All material excavated from Construction will be re-used or recycled unless otherwise approved in the Spoil and Fill Management Sub Plan.	Construction Construction
15.3	The RTA will implement the Waste Management and Re-use Sub Plan –operation.	Operation

16	**Miscellaneous Issues**	
16.1	**Utilities and Services**	All
	The RTA will identify the utilities and services (hereafter "services") potentially affected by Construction to determine requirements for diversion, protection and / or support. Alterations to services will be determined by negotiation between the RTA and the service providers. The RTA in consultation with service providers will ensure that disruption to services resulting from the Activity are minimised and advised to customers.	
16.2	**Ancillary Facilities**	All
	The RTA will ensure the sites for Ancillary Facilities satisfy the criteria provided in the Environmental Assessment unless otherwise approved through the CEMP.	
16.3	**Property Impacts**	
	The RTA will:	
	a) undertake a risk assessment before Construction commences to determine which structures or properties may be affected by construction activities and therefore need to be inspected. The risk assessment will be undertaken by geotechnical and construction engineering experts with appropriate registration on the National Professional Engineers Register.	Preconstruction
	b) conduct property inspections, subject to landowner agreement, on all structures within:	Preconstruction
	i. 200 metres of blasting;	
	ii. 50 metres of Construction activities that generate vibration impacts; and	
	iii. any other locations identified by the Proponent in the risk assessment.	
	c) undertake the property inspections consistent with AS 4349.1 Inspection of Buildings.	Preconstruction
	d) advise the owners of all properties on which property inspections are conducted at least two weeks before the inspection of its scope and methodology and of the process for making a property damage claim.	Preconstruction
	e) give a copy of the property inspection report to the owner of each property inspected at least three weeks before Construction that could affect the property commences.	Preconstruction
	f) maintain a register of all properties inspected, indicating whether the owner accepted or refused the property inspection offer. A copy of the register will be provided to the D-G upon request.	All
	g) where liable, rectify any property damage caused directly or indirectly (for example from vibration or from groundwater change) by the Activity's Construction or Operation. At no cost to the property owner(s). Alternatively the RTA may negotiate compensation for the property damage with the property owner.	Construction / Operation

h)	reinstate a water supply of equivalent quality and quantity where a licensed bore, dam or other property water supply is adversely affected by the Activity. Alternatively the RTA may negotiate compensation for the loss with the landowner.	Construction / Operation

Appendix C

Study team

Study Team

Roads and Traffic Authority of NSW

Chris Clark, Adam Cameron, Neil Heinze, Scott Lawrence, David Corry

Project Management, Community Consultation, Environmental Planning & Assessment, Traffic & Transportation, Engineering Design, Cost Estimation and Hydrology & Hydraulics

Connell Wagner

Ground Survey

Connell Wagner

Geotechnical Investigations

Connell Wagner
Robert Carr and Associates

Community Consultation

JMS Consulting (formerly Pramax Communications)
ID Planning

Sikh Cultural Assessment

Manidis Roberts

Agricultural Assessment

Wilkie Fleming
Hartley Associates International

Ecology

Connell Wagner
Lewis Ecological Services
Ecos Environmental

Indigenous Heritage

Jacqueline Collins

Noise and Vibration

Wilkinson Murray

Urban Design

Hassell

Air Quality

Holmes Air Sciences
Connell Wagner (Advanced Technology Centre)