

SCHEDULE 1

ALSTONVILLE BYPASS

CONDITIONS OF APPROVAL

The following acronyms and abbreviations are used in this section:

ANZECC	Australian and New Zealand Environment and Conservation Council
ARI	Average Recurrence Interval – refers to the average or expected period between exceedances of a flood of a given size
BSC	Ballina Shire Council
CEMP	Construction Environmental Management Plan
CLG	Community Liaison Group
Department, the	Department of Planning
Director-General, the	Director-General of the Department of Planning or delegate
DLWC	Department of Land and Water Conservation
DoP	Department of Planning
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMR	Environmental Management Representative
EP& A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	Environment Protection Authority
LALC	Local Aboriginal Land Council
L _{Aeq} 9hour	Equivalent continuous (constant) sound level over 9 hour period from 10pm to 7am
L _{Aeq} 15 hour	Equivalent continuous (constant) sound level over 15 hour period from 7am to 10pm
Minister, the	Minister for Planning
NPWS	National Parks and Wildlife Service
OEMP	Operational Environmental Management Plan
Proponent	Roads and Traffic Authority
RTA	Roads and Traffic Authority

General

1. The Project shall be carried out in accordance with:
 - (i) the proposal contained in the Environmental Impact Statement (EIS) '*Proposed Alstonville Bypass - Environmental Impact Statement*' prepared for the Roads and Traffic Authority (RTA) by Sinclair Knight Merz and dated August 1998 and the Representations Report '*Alstonville Bypass - Representations Report*' prepared by RTA Technology for the RTA and dated 9 October 2000;
 - (ii) all identified Sub Plans, safeguards and mitigation measures identified in the EIS and Representations Report;
 - (iii) the conditions of approval granted by the Minister.

Despite the above, in the event of any inconsistency with the proposal as described in the EIS and Representations Report, the conditions of approval granted by the Minister shall prevail.

These conditions do not relieve the Proponent of the obligation to obtain all other approvals and licences from all relevant authorities required under any other Act. Without affecting the generality of the foregoing, the Proponent shall comply with the terms and conditions of such approvals and licences.

It shall be the ultimate responsibility of the RTA to ensure compliance with all conditions of approval granted by the Minister.

Compliance

General

2. The Proponent shall comply with, or ensure compliance with, all requirements of the Director-General in respect of the implementation of any measures arising from the conditions of this approval. The Proponent shall bring to the attention of the Director-General any matter that may require further investigation and the issuing of instructions from the Director-General. The Proponent shall ensure that these instructions are implemented to the satisfaction of the Director-General within such time that the Director-General may specify.

Pre-Construction Compliance Report

3. At least one month prior to commencement of substantial construction (or within any other period agreed by the Director-General) the Proponent shall submit for approval of the Director-General a compliance report detailing compliance with all relevant conditions that apply prior to commencement of substantial construction and shall address:
 - i. the dates of submissions of the various studies and/or requirements of various relevant conditions, and their approval and terms of approval; and
 - ii. action taken or proposed to implement the recommendations made in terms of approvals and/or studies.

Pre-Operation Compliance Report

4. At least one month prior to commissioning of the Project (or discrete sections of the Project as agreed by the Director-General), the Proponent shall submit for approval of the Director-General a compliance report detailing compliance with all relevant conditions that apply prior to commencement of operation and shall address:
 - i. the dates of submissions of the various studies and/or requirements of various relevant conditions, and their approval and terms of approval; and
 - ii. action taken or proposed to implement the recommendations made in terms of approvals and/or studies.

The Period of one month referred to in this condition above may be altered as agreed by the Director-General.

Note: The Director-General shall provide a response to Conditions 3 and 4 within 1 month of receipt of all relevant information from the Proponent. If a request is made by the Director-General for additional information the period of time that elapses between the date on which the Proponent receives the request and the date on which the additional information is provided to the Director-General shall not be taken into account in the 1 month period referred to. Any requests for additional information shall be made by the Director-General within 1 week of receipt of all relevant information from the Proponent.

Dispute Resolution

5. The Proponent shall endeavour to resolve any dispute with relevant public authorities arising out of the implementation of the conditions of this approval. Should this not be possible, the matter shall be referred firstly to the Chief Executives/Directors of the agencies involved and if the matter cannot be resolved then to the Minister for resolution. The Minister's determination of the disagreement shall be final and binding on all parties.

Contact Telephone Number

6. Prior to the commencement of construction, the Proponent shall institute, publicise and list with a telephone company a 24 hour complaints contact telephone number, which would enable any member of the general public to reach a person who can arrange appropriate response action to the complaint.

Complaints Register

7. The Proponent shall record details of all complaints received during construction and ensure that an initial response to the complaint is provided within 24 hours and a detailed response within 10 days. Information on all complaints received shall be made available on request to the Director-General and all relevant government agencies. The Proponent shall nominate an appropriate person(s) to receive, log, track and respond to complaints within the specified timeframe. The name and contact details of this person(s) shall be provided to the relevant Council(s) and the Director-General upon appointment or upon any changes to that appointment.

Project Commencement

8. The Proponent shall notify the Director-General and all relevant authorities in writing of the project commencement both in terms of construction and operation (ie commissioning).

Advertisement of Activities

9. Prior to the commencement of construction, and then at three-monthly intervals, the Proponent shall advertise in relevant local newspapers the nature of the works proposed for the forthcoming three months, the areas in which these works are proposed to occur, the hours of operation and a contact telephone number.

The Proponent shall ensure that the local community and businesses are kept informed (by way of means such as: local newsletters, leaflets, newspaper advertisements, community noticeboards, etc.) of the progress of the Project, including any traffic disruptions and controls, construction of temporary detours and work required outside the nominated working hours, prior to such works being undertaken.

The Proponent shall establish a Project internet site prior to the commencement of construction and maintain the internet site until 6 months after commencement of operation of the Project. The internet site shall contain monthly updates of work progress and consultation activities.

Community Liaison Group

10. A Community Liaison Group (CLG) shall be formed prior to the completion of detailed design of the project or commencement of construction (whichever is the sooner) to discuss detailed design issues and methods for minimising the impact on the local community and businesses during the construction stage. The Group shall include the Environmental Management Representative (during construction), representatives from the RTA, the contractor, relevant local community and business groups, and Ballina Shire Council unless otherwise agreed by the Director-General.

Issues for discussion shall include, but not be limited to flora and fauna controls, noise control measures, access arrangements, air and water quality, landscaping requirements and any other issues considered relevant by the CLG.

Appropriate facilities and information shall be provided by the Proponent to assist the Group in carrying out its functions.

The Group may make comments and recommendations about the design and implementation of the Project, which shall be considered by the Proponent. In the event of any dispute between the Group and the Proponent, the Proponent's decision shall be considered final so long as it is not inconsistent with these conditions.

Environmental Management Representative

11. Prior to the commencement of construction, the Director- General shall approve the appointment of the person nominated to serve as the Environmental Management Representative (EMR). In considering the appointment, the Director- General shall take into account:

(a) the qualifications and experience of the EMR including demonstration of general

- compliance with the principles of AS/NZS ISO 14012:1996 Guidelines for Environmental Auditing : Qualification Criteria for Environmental Auditors;
- (b) the role and responsibility of the EMR; and
- (c) the authority and independence of the EMR including details of the Proponent's internal reporting structure.

The EMR shall have responsibility for:

- (a) considering and advising on matters specified in the conditions of approval and compliance with such;
- (b) certifying the environmental/community impacts as minor for all activities defined by the Proponent as not constituting substantial construction;
- (c) requiring the Proponent to take all steps necessary to avoid or minimise an unacceptable impact on the environment such as an immediate halt to work in the vicinity of the impact and/or the implementation of mitigation measures;
- (d) reviewing the Proponent's induction and training program for persons involved in the construction activities and monitor implementation;
- (e) periodically monitoring the Proponent's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with the CEMP and associated plans and procedures, including carrying out site inspections at least fortnightly;
- (f) reporting three monthly to the Department and providing a copy of the report to the Proponent;
- (g) recording and providing a written report to the Proponent of non-conformances with the CEMP, mitigation measures undertaken to avoid or minimise any adverse impacts on the environment and/or required changes to the CEMP;
- (h) reviewing corrective and preventative actions arising from recommendations made in audits and site inspections;
- (i) reviewing and approving minor revisions to the CEMP;
- (j) providing reports to the Department on matters relevant to the carrying out of the EMR role as necessary including notifying the Director-General of any stop work notices; and
- (k) endorse the Construction and Operational EMPs in accordance with Conditions of Approval Nos.13 and 15.

The EMR shall immediately advise the Proponent and the Director-General concurrently of any major issues resulting from the construction of the Project that have not been dealt with expediently or adequately by the Proponent.

The EMR shall be available at 24 hrs notice during construction activities at the site and shall be present on-site during any critical construction activities as defined in the CEMP.

Environmental Management System

12. The Proponent shall ensure the appointment of contractors that have a demonstrated capability and experience in the implementation of an Environmental Management System prepared in accordance with the AS/NZS ISO 14000 series or BS7750-1994 certified by an accredited certifier and/or have a proven environmental management performance record.

Environmental Management Plan (Construction Stage)

13. Prior to the commencement of construction, a Construction Environmental Management Plan (CEMP) shall be prepared in consultation with the EPA, DLWC, NSW Fisheries and BSC. Where construction activities may be undertaken in discrete stages, the Proponent may prepare individual EMPs relating to specific stages of construction. An outline of any proposed staging of EMPs, their linkages to one another and the CEMP itself, potential environmental risks and indicative timing shall be detailed.

The CEMP shall be prepared in accordance with the conditions of this approval, all relevant Acts and Regulations and accepted best practice management Sub Plans. The CEMP shall require approval by the Director-General prior to substantial construction works or within such time as otherwise agreed by the Director-General. The EMP shall be certified as being in accordance with the conditions of approval by the EMR prior to seeking approval of the Director-General.

The Director-General shall provide a response to the CEMP within 1 month of receipt of all relevant information from the Proponent assuming receipt of adequate and sufficient information. If a request is made by the Director-General for additional information the period of time that elapses between the date on which the Proponent receives the request and the date on which the additional information is provided to the Director-General shall not be taken into account in the 1 month period referred to.

The CEMP shall:

- (a) address construction activities associated with all key construction sites, including staging and timing of the proposed works;
- (b) cover specific environmental management objectives and strategies for the main environmental system elements and include, but not be limited to: noise and vibration; air quality; water quality; erosion and sedimentation; access and traffic; heritage and archaeology; groundwater; spoil stockpiling and disposal; waste/resource management; flora and fauna; weed management; flooding and stormwater control; geotechnical issues; visual screening, landscaping and rehabilitation; hazards and risks; energy use, resource use and recycling; and utilities; and
- (c) address, but not be limited to:
 - i) identification of the statutory and other obligations which the Proponent is required to fulfil during project construction, including all approvals and consultations/agreements required from other authorities and stakeholders, and key legislation and policies which control the Proponent's construction of the project;
 - ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to compliance with the CEMP;
 - iii) measures to avoid and/or control the occurrence of environmental impacts;
 - iv) measures (where practicable and cost effective) to provide positive environmental offsets to unavoidable environmental impacts;
 - v) the role of the EMR;
 - vi) environmental management procedures for all construction processes which are important for the quality of the environment in respect of permanent and/or temporary works;

- vii) monitoring, inspection and test plans for all activities and environmental qualities which are important to the environmental management of the project, including performance criteria, specific tests, protocols (eg. frequency and location) and procedures to follow;
- viii) environmental management instructions for all complex environmental control processes which do not follow common practice or where the absence of such instructions could be potentially detrimental to the environment;
- ix) steps the Proponent intends to take to ensure that all plans and procedures are being complied with;
- x) consultation requirements with relevant government agencies; and
- xi) community consultation and notification strategy (including local community, relevant government agencies, and BSC), and complaint handling procedures.

Specific requirements for some of the main environmental system elements referred to in (b) shall be as required under the conditions of this approval and/or as required under any licence or approval.

The CEMP shall be made publicly available.

Environmental Monitoring - Construction

14. The Proponent shall submit to the Director-General a report(s) in respect of the environmental performance of the construction works and compliance with the CEMP and any other relevant conditions of this approval. The reports shall be prepared six months after the start of substantial construction and thereafter at six monthly intervals or at other such periods as requested by the Director-General to ensure adequate environmental performance over the duration of the construction works. The report(s) shall include, but not be limited to, information on:
 - (a) applications for consents, licences and approvals, and responses from relevant authorities;
 - (b) implementation and effectiveness of environmental controls and conditions relating to the work undertaken;
 - (c) identification of construction impact predictions made in the EIS and any supplementary studies and details of the extent to which actual impacts reflected the predictions;
 - (d) details and analysis of results of environmental monitoring;
 - (e) number and details of any complaints, including summary of main areas of complaint, action taken, response given and intended strategies to reduce complaints of a similar nature; and
 - (f) any other matter relating to the compliance by the Proponent with the conditions of this approval or as requested by the Director-General.

The report(s) shall be provided to the EPA, DLWC, NSW Fisheries and BSC, and any other government agency nominated by the Director-General. The report(s) shall also be made publicly available.

Environmental Management Plan (Operation Stage)

15. An Operational Environmental Management Plan (OEMP) shall be prepared prior to the commencement of operation. The Plan shall be prepared in consultation with the EPA, DLWC, NSW Fisheries, BSC and any other government agency nominated by the Director-General. The OEMP shall be prepared in accordance with the conditions of this approval, all relevant Acts and Regulations and accepted best practice management Sub Plans. The OEMP shall require approval by the Director-General prior to commissioning or within such time as otherwise agreed to by the Director-General. The OEMP shall be certified as being in accordance with the conditions of approval by the EMR prior to seeking approval of the Director-General.

The Director-General shall provide a response to the OEMP within 1 month of receipt of all relevant information from the Proponent assuming receipt of adequate and sufficient information. If a request is made by the Director-General for additional information the period of time that elapses between the date on which the Proponent receives the request and the date on which the additional information is provided to the Director-General shall not be taken into account in the 1 month period referred to.

The OEMP shall include but not be limited to:

- (a) identification of the statutory and other obligations which the Proponent is required to fulfil, including all licences/approvals and consultations/agreements required from authorities and other stakeholders, and key legislation and policies which control the Proponent's operation of the project;
- (b) sampling strategies and protocols to ensure the quality of the monitoring program, including the specific requirements of the EPA and DLWC;
- (c) monitoring, inspection and test plans for all activities and environmental qualities which are important to the environmental performance of the project during its operation, including description of potential site impacts, performance criteria, specific tests and monitoring requirements, protocols (eg. frequency and location) and procedures to follow;
- (d) steps the Proponent intends to take to ensure compliance with all plans and procedures;
- (e) consultation requirements, including relevant government agencies, the local community and BSC, and complaints handling procedures; and
- (f) strategies for the main environmental system elements and including, but not limited to: noise; water quality; erosion and sedimentation; access and traffic; groundwater; settlement; waste/resource management/removal/disposal; aquatic and terrestrial flora and fauna; hydrology and flooding; visual screening, landscaping and rehabilitation and hazards and risks.

Specific requirements for some of the main environmental system elements referred to in (f) shall be as detailed under the conditions of this approval and/or as required under any licence or approval.

The OEMP shall be made publicly available.

All sampling strategies and protocols undertaken as part of the OEMP shall include a quality plan and shall be approved by the relevant regulatory agencies to ensure the effectiveness and quality of the monitoring program. Only accredited laboratories can be used for laboratory analysis.

Compliance with this condition may be waived with the approval of the Director-General on the proviso that the RTA has an operational maintenance and monitoring program which addresses the key issues relating to this activity and provided that the results of this program are made publicly available.

Environmental Impact Audit Report

16. An Environmental Impact Audit Report shall be submitted to the Director-General, and the EPA and upon request by the Director-General to any other government authority 12 months and 5 years after commissioning of the project. An independent person at the Proponent's expense shall prepare the Report. The Report shall assess the key impact predictions made in the EIS and any supplementary studies and detail the extent to which actual impacts reflect the predictions. In particular, the Report shall provide details on actual versus predicted impacts for all key issues identified in the EIS. The suitability of implemented mitigation measures and safeguards shall also be assessed. The Report shall also assess compliance with the OEMP.

The Report shall discuss results of consultation with the local community in terms of feedback/complaints on the construction and operation phases of the project and any issues of concern raised. The Proponent shall comply with all requirements of the Director-General, EPA and other relevant authorities with respect to any reasonable measure arising from, or recommendations in, the Report.

The Report shall be made publicly available.

Economic Impacts

17. Prior to the commencement of construction, the Proponent shall undertake consultation with BSC and the CLG to develop appropriate signage and 'gateway' treatment for Bruxner Highway traffic on the approaches to Alstonville and Wollongbar. The signage shall indicate the range of services available in the towns and that the route through the towns may be used as an alternative route to the bypass, taking into account RTA's standard signposting policy. The "Gateway Treatments" shall consist of a roadside layby on both the eastern and western exits from the bypass providing the opportunity for the provision of directional and tourist information and appropriate landscaping to provide a "sense of arrival".

Property and Land Use

18. The Proponent shall ensure that any legal access way affected by the Project is reinstated to an equivalent standard or that adequate compensation is negotiated with the relevant landowner(s)

19. The Proponent shall consult with all directly affected landowners regarding any practical and cost-effective measures to minimise impacts which may be implemented prior to the commencement of construction or within such time as agreed with the relevant landowner(s).
20. If requested by any affected landowner during the property acquisition process, the Proponent shall consider the consolidation of severed parcels of land as part of any compensation package if practical and cost-effective.
21. When requested to do so by rural producers directly affected by the project the RTA, in consultation with NSW Agriculture and as part of the acquisition process, is to engage agricultural specialist(s) to provide advice to landowners on measures to minimise the effects of the proposal on agricultural activities. The RTA shall notify all affected landowners of the availability of the agricultural specialist(s) as soon as practicable and prior to commencement of substantial construction activities likely to affect agricultural activities.

Traffic and Roadworks

22. The Proponent shall prepare a Traffic Management Sub Plan as part of the CEMP for traffic arrangements during the construction period. The Traffic Management Sub Plan shall be prepared in consultation with BSC and shall include:
 - (a) measures to manage traffic flows through and surrounding the Project, including regulatory and direction signposting, line marking and variable message signs;
 - (b) techniques for the management of construction traffic including minimisation of the use of local roads by heavy construction vehicles and access arrangements to construction sites;
 - (c) impacts on all existing traffic (including pedestrians, school bus services, cyclists and disabled persons) including arrangements to minimise the need for road closures or major delays; and
 - (d) monitoring of local roads for any damage by construction vehicles.
23. A road dilapidation report shall be prepared prior to the commencement of construction and after construction is complete for all non-arterial roads likely to be used by construction traffic. Copies of the report shall be provided to BSC. Any damage resulting from the construction of the Project, aside from that resulting from normal wear and tear, shall be repaired at the cost of the Proponent.

Note: Nothing in Conditions 22 nor 23 shall be taken as restricting the Proponent from negotiating an alternative payment for damage arrangements with BSC subject to the agreement of BSC.
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24. Within 12 months of opening the Project, the Proponent shall conduct a detailed Road Safety Audit to determine the need for the installation of concrete medians or other required safety measures at the Sneaths Road, Kays Lane and Teven Road intersections with the Project. The details of this audit shall be incorporated into the Environmental Impact Audit Report.

Flora and Fauna

Construction

25. As part of the CEMP the Proponent shall prepare, in consultation with the NPWS, a detailed Flora and Fauna Management Sub Plan. The Sub Plan shall be prepared prior to construction and include but not be limited to:
 - (a) strategies for seed collection and revegetation;
 - (b) strategies for minimising vegetation clearance;
 - (c) mitigation measures to be implemented;
 - (d) weed management strategy; and
 - (e) identification of measures proposed to be taken to protect vegetated areas outside the direct impact zone, controlling impacts due to spills, spread of debris and refuse and movement and storage of materials and equipment.
26. Prior to construction, the area of Veiny Laceflower (*Archidendron muellerianum*) near Kays Lane shall be fenced to prevent impacts from the Project unless otherwise agreed by NPWS.
27. Prior to construction all areas of Rough-leaved Queensland Nut (*Macadamia tetraphylla*) that may be affected both directly and indirectly during construction shall be identified and included in the Flora and Fauna Management Sub Plan. All areas that will not need to be removed shall be fenced and protected from construction activities. Small plants and seedlings of the Rough-leaved Queensland Nut that would be affected by the Project are to be collected prior to construction and transplanted to an appropriate area to be reused as part of the landscaping works.
28. Where possible seed of locally native species, including all rainforest trees to be removed, shall be collected prior to the commencement of and/or during construction to provide seed stock for revegetation purposes to the satisfaction of a qualified bushland regeneration officer. Topsoil and leaf mulch shall be stripped and stored for placement back in the vegetation zone from where it was removed.
29. The Flora and Fauna Management Sub Plan shall provide for a qualified ecologist to: be consulted on the location of individual rare or threatened plants or communities; ensure minimal disturbance to native vegetation; provide direction on methods for relocation and/or replacement plantings; and initiate and undertake rehabilitation works as soon as practicable. The qualified ecologist shall also be consulted to identify potentially affected tree hollows including the detection and removal of any roosting fauna in these hollows prior to construction.
30. Rainforest remnants and their habitat adjacent to, but not directly affected by the Project shall be fenced off from construction areas to avoid disturbance. All construction personnel shall receive training prior to construction to become familiar with rainforest remnant vegetation types.

31. Topsoil infested with proclaimed noxious weeds as identified by a qualified ecologist shall not be used in the rehabilitation works unless it is to be sterilised or treated in an appropriate manner.
32. If, during the course of construction, the Proponent becomes aware of the presence of any threatened species which are likely to be significantly affected and are not recognised in the flora and fauna studies as part of the EIS, Representations Report or CEMP, then the Proponent shall immediately advise the NPWS. No activity which places any of these species at risk shall be undertaken until advice has been received from the NPWS. All recommendations by the NPWS shall be complied with prior to the recommencement of any works likely to affect these threatened species.
33. Where practicable the Proponent shall salvage trees with hollows and relocate these trees to adjacent areas of vegetation. These trees shall be identified in accordance with Condition No. 29 and following identification by a qualified ecologist.
34. Cleared vegetation must be reused or recycled to the greatest extent practicable. Reuse options include removing millable logs, recovering fence posts and mulching or chipping unusable vegetation waste for on-site use. All reasonable measures to use any surplus vegetation shall be undertaken including donation to community groups, distribution to the local community, etc.

Urban Design, Landscaping and Revegetation

35. As part of the CEMP, the Proponent shall prepare a detailed Urban Design and Landscape Sub-Plan in consultation with BSC, all affected landowners and the CLG. The Sub Plan shall include, but not be limited to the following:
 - (a) sections and perspective sketches;
 - (b) methodology of landscaping works;
 - (c) location and identification of existing and proposed vegetation including use of locally native species;
 - (d) location of mounds, bunds, structures or other proposed treatments, finishes of exposed surfaces (including paved areas), ramps, interchanges, colours and specifications, staging of works, methodology of landscaping;
 - (e) progressive landscape strategies incorporating other environmental controls such as erosion and sedimentation controls, drainage and noise mitigation;
 - (f) lighting, particularly around interchanges; and
 - (g) monitoring and maintenance procedures.
36. All revegetation and landscaping works (including the control of weeds) shall be monitored and maintained by a suitably qualified person at the Proponent's expense for a period of not less than three years.
37. The proposed lighting at junctions and elsewhere nominated by the RTA shall be in accordance the RTA design guidelines and AUSTROADS 'Roadway Lighting Guide'.

Noise and Vibration

Management Sub Plans

38. A detailed Noise and Vibration Management Sub Plan (NVMP Construction) shall be prepared as part of the CEMP in consultation with the EPA. The Sub Plan shall include, but not be limited to:
- (a) compliance standards;
 - (b) community consultation;
 - (c) complaints handling monitoring/system;
 - (d) site contact person to follow up complaints;
 - (e) mitigation measures;
 - (f) the design/orientation of the proposed mitigation methods demonstrating best practice;
 - (g) construction times;
 - (h) contingency measures where noise complaints are received; and
 - (i) monitoring methods and program.
39. A detailed Operational Noise Management Sub Plan (ONMP) shall be prepared as part of the OEMP in consultation with the EPA. The ONMP shall include, but not be limited to:
- (a) details of the EPA noise criteria and any project specified noise goals;
 - (b) details of noise mitigation measures (including structural and/or non structural measures) implemented for the operation stage sufficient to address the technical requirements of the EPA's guideline – 'Environmental Criteria for Road Traffic Noise' and the RTA's 'Environmental Noise Management Manual';
 - (c) location and type of any permanent noise barriers;
 - (d) noise monitoring, reporting and response procedures; and
 - (e) the urban design issues relating to noise control measures.
40. The Proponent shall install, where practicable, operational stage noise mitigation measures prior to construction to reduce construction noise impacts.

Construction Hours

41. All construction activities, including entry and departure of heavy vehicles, but apart from blasting are restricted to the hours of 7.00am to 6.00pm (Monday to Friday), 8.00am to 1.00pm (Saturday) and at no time on Sundays and public holidays.

Works outside these hours that may be permitted include:

- (a) any works which do not cause noise emissions to be audible at any nearby residential property;
- (b) the delivery of materials which is required outside these hours as requested by police or other authorities for safety reasons;
- (c) emergency work to avoid the loss of lives, property and/or to prevent environmental harm (including the suppression of dust); and

- (d) any other work as agreed through negotiation between the RTA and potentially affected noise receivers or as otherwise agreed by the EPA through the NVMP process or any EPA licence process.

Blasting and Vibration

- 42. Blasting shall only be undertaken between the hours of 9.00am and 3.00pm, Monday to Friday, and 9.00am to 12.00pm on Saturday.
- 43. Any blasting as part of the construction works shall be carried out in accordance the Guideline *“Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration”* prepared by ANZECC.
- 44. As far as practicable, piling activities, vibratory compactors and rock breakers shall not be used closer than 50m from residential buildings and any blasting activities no closer than 300m from residential buildings. Should major vibration causing equipment or blasting occur within these limits, building condition surveys shall be undertaken before and after use of this type of equipment or blasting and in reference to the vibration limits specified in Condition No. 45. The Proponent shall be responsible for rectifying any damages occurring as a result of the construction with the cost to be borne by the Proponent.
- 45. Vibration resulting from construction of the Project shall be limited to:
 - (a) For structural damage vibration - German Standard DIN 4150 and BS 7385: Part 2 – 1993; and,
 - (b) For human exposure to vibration - the evaluation criteria presented in British Standard BS6472 for low probability of adverse comment,

unless otherwise agreed by the EPA through the NVMP Construction.

- 46. The Proponent shall make all reasonable attempts to notify the occupants at least 48 hours in advance, including a schedule of times, should blasting take place within 500 metres of residences.

Operation Noise

- 47. *Monitoring of the noise when operational shall be undertaken as stated in the ONMP and in accordance with the NSW Government guideline Environmental Criteria for Road Traffic Noise. The Proponent shall review the monitoring results, and assess the adequacy of the traffic noise mitigation measures in accordance with the “Post Construction Noise Monitoring Practice Note viii” contained in the RTA’s Environmental Noise Management Manual.*

Flooding and Hydrology

Inundation levels

48. The Project shall be designed with a goal of causing no increase in the peak discharge in BSC's stormwater drainage system in the vicinity of the Mellis Circuit area.

Flood Design Criteria

49. Minimum design criteria for the Project shall be –
- (a) cross drainage - 1 in 100 year ARI; and
 - (b) road drainage - 1 in 5 year ARI.

Soil and Water Management

Soil and Water Quality Management Sub Plan

50. As part of the CEMP and OEMP, a detailed Soil and Water Quality Management Sub Plan shall be prepared in consultation with the EPA, DLWC, NSW Fisheries and BSC. The Sub Plan shall be prepared in accordance with the Department of Housing's guideline *Managing Urban Stormwater - Soils and Construction*. The Sub Plan(s) shall be prepared prior to construction or operation as appropriate.

The Soil and Water Quality Management Sub Plan shall contain, but not be limited to:

- (a) management of the cumulative impacts of the development on the quality and quantity of surface and groundwater, including stormwater in storage, sedimentation dams and flooding impacts;
- (b) details of short and long term measures to be employed to minimise soil erosion and the discharge of sediment to land and/or waters including the locations of suitably sized sedimentation basins;
- (c) management of the impacts of the development on watercourse crossings including Maguires Creek and any other nearby creeks and water bodies;
- (d) identification of all potential sources of water pollution and a detailed description of the remedial action to be taken or management systems to be implemented to minimise discharges of these pollutants from all sources within the subject site;
- (e) detailed description of water quality monitoring to be undertaken during the pre-construction, construction and operation stages of the Project including identification of locations where monitoring would be carried out;
- (f) contingency plans to be implemented in the event of fuel and other spills;
- (g) a program for reporting on the effectiveness of the sediment and erosion control system against performance goals; and

- (h) a program for the DLWC, or other appropriately qualified soil conservationist, to undertake inspections of temporary and permanent erosion and sedimentation control devices to ensure that the most appropriate controls are being implemented and that they are being maintained in an efficient condition at all times.

Erosion and Sediment Control Works

- 51. The Soil and Water Management Sub Plan shall incorporate detailed erosion and sedimentation controls including a strategy to manage the extent of exposed ground surface during construction and progressive site rehabilitation requirements (in accordance with the Urban Design and Landscape Sub Plan and Air Quality Sub Plan).
- 52. All stormwater runoff collected on-site during construction which is likely to be contaminated, shall be tested, handled and disposed of in accordance with the provisions of the *Protection of the Environment Operations Act 1997*.
- 53. Sediment basin(s) must be designed (stability, location, type and size), constructed, operated and maintained in accordance with the guideline "*Managing Urban Stormwater – Soils and Construction, 3rd edition, 1998*" produced by the NSW Department of Housing. The Proponent shall consult with landowners in the immediate vicinity of the basins, regarding their location.

Operation Stage Control Measures

- 54. All stormwater drainage, erosion, sedimentation and water pollution control systems and facilities of the Project shall be located, designed, constructed operated and maintained to meet the requirements of DLWC and any Environment Protection Licence issued by the EPA for the Project. All facilities including wetland filters, grass filter strips, gross pollutant traps and operational sedimentation basins shall be inspected as stated in the OEMP and maintained in a functional condition for the life of the project. Construction stage water quality structures shall be maintained until revegetation has provided groundcover to at least 70% of the exposed surfaces.
- 55. The Proponent shall provide appropriate detention systems for containment of spills and materials arising from accidents that are consistent with the RTA's "*Code of Practice for Water Management – Road Development and Management*".

Heritage and Archaeology

- 56. As part of the CEMP, the Proponent shall prepare an Indigenous Heritage Management Sub Plan in consultation with NPWS and Jali LALC. The Sub Plan shall include, but not be limited to, the following:
 - (a) details of licences/approvals to be obtained in relation to indigenous heritage issues including those required under the *National Parks and Wildlife Act 1974*; and
 - (b) procedures for monitoring of areas of potential archaeological sensitivity identified in the EIS during initial clearing and construction activities with the involvement of the Jali LALC.

57. During the detailed design stage of the Project, the Proponent shall, in consultation with NPWS and Jali LALC, identify the extent of indigenous axe grinding grooves in the vicinity of the bridge over the Maguires Creek. Where possible, the bridge shall be designed to avoid affecting any identified indigenous axe grinding grooves. If a potential to affect the axe grinding grooves is identified then the Proponent shall undertake further studies in consultation with NPWS and/or obtain appropriate licences/approvals from NPWS.

Unexpected items

58. If during the course of construction the Proponent becomes aware of any heritage items or archaeological material, all work likely to affect the site(s) shall cease immediately and the relevant authorities, including NPWS and the relevant Local Aboriginal Land Council or the NSW Heritage Office, shall be consulted to determine an appropriate course of action prior to the recommencement of work at that site. Appropriate supporting documentation would need to accompany any application for required permit/consent(s).

Air Quality

Construction Air Quality Sub Plan

59. As part of the CEMP a specific Construction Stage Air Quality Sub Plan shall be prepared in consultation with the EPA. The Sub Plan shall provide details of all dust control measures to be implemented during the construction stage. The Sub Plan shall include, but not be limited to:
- (a) pro-active measures to reduce dust from stockpiles and cleared areas and other exposed surfaces; and
 - (b) progressive revegetation strategies for exposed surfaces in accordance with the Soil and Water management Sub Plan and the Urban Design and Landscape Sub Plan.
60. Where there is a risk of losing material, construction vehicles using public roads shall be maintained and covered to prevent any loss of load, whether in the form of dust, liquid or solids. Construction vehicles shall be maintained to minimise any mud, dirt or other material tracked onto any street which is opened and accessible to the public. The Proponent shall install measures such as wheel wash facilities and/or wheel shakers at exits from construction sites to public roads. In the event of any spill, the Proponent is required to remove the spilt material within 24 hours.
61. In accordance with the *Protection of Environment Operations (Control of Burning) Regulation 2000*, no open burning or incineration shall be permitted on the Project site unless otherwise approved by the EPA.

Spoil Disposal and Waste Management

Spoil Management Sub Plan

62. As part of the CEMP, the Proponent shall prepare a Spoil Management Sub Plan. This Sub Plan shall identify how spoil would be handled, stockpiled, reused and disposed. The Sub Plan shall be prepared in consultation with the EPA and BSC before the commencement of construction at relevant sites.
63. All clean and/or treated spoil shall be reused or recycled where possible and cost effective to do so. Wherever possible, the Proponent shall ensure that spoil generated from construction activities is maximised in preference to any import of fill.

Waste Management and Recycling Sub Plan

64. As part of the CEMP, a detailed Waste Management and Reuse Sub Plan shall be prepared. The Sub Plan shall address the management of wastes during the construction stage in accordance with the Government's *Waste Reduction and Purchasing Policy* and shall identify requirements for:

- (a) waste avoidance;
- (b) reduction;
- (c) reuse; and
- (d) recycling,

and details of requirements for:

- (e) handling;
- (f) stockpiling;
- (g) disposal of wastes: specifically contaminated soil or water, concrete, demolition material, cleared vegetation, oils, grease, lubricants, sanitary wastes, timber, glass, metal, etc.;
- (h) implementation of best practice energy conservation;
- (i) identifying any site for final disposal of any material and any remedial works required at the disposal site before accepting the material.

65. Any waste material that is unable to be reused, reprocessed or recycled shall be disposed at a landfill licensed by the EPA to receive that type of waste.

Utilities and Services

66. As part of the CEMP a Utilities Services Sub Plan shall be prepared. In the Sub Plan the Proponent shall identify the services potentially affected by construction activities to determine requirements for diversion, protection and/or support. This shall be undertaken in consultation with the relevant service provider(s). Any alterations to utilities and services shall be carried out to the satisfaction of the relevant service provider(s), and unless otherwise agreed to, at no cost to the service/utility provider(s).

Note: Nothing in Condition 66 shall be taken as requiring the Proponent to meet the cost of any alterations should any prior agreements or protocols be in place between the Proponent and service provider(s) for such alterations.

67. The Proponent shall ensure that disruptions to services resulting from the Project are minimised and shall be responsible for ensuring that local residents and businesses affected are advised prior to any disruption of service.

Batching Plants and Construction Compounds

68. The Proponent shall only construct batching plants and construction compounds under this approval in those locations that satisfy the following criteria:
- (a) sites to be located within the road reserve wherever feasible;
 - (b) if the sites are located outside the road reserve, the area is to be restored to its original condition following removal of the plant or compound;
 - (c) sites to be located with ready access to the local road network;
 - (d) sites on relatively level land;
 - (e) sites to be separated from nearest residences by at least 200m unless it can be demonstrated to the satisfaction of the Director-General that there would be no adverse impacts on noise, visual and air quality impacts;
 - (f) sites are not to be located within 100m of waterways unless adequate erosion and sediment controls are implemented to protect water quality;
 - (g) sites above the 100 ARI flood level;
 - (h) sites are to have low conservation significance for flora, fauna or heritage and they are not to require any clearing of native vegetation beyond that which must be cleared for the Project in any case; and
 - (i) sites are to be selected so that the operation of the plants does not impact on the land use of adjacent properties.

The location of any construction compounds, concrete and/or asphalt batching plants shall be detailed in the CEMP which shall include demonstration that the above criteria have been met.