

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

APPROVED

Frank Sartor MP
Minister for Planning

Sydney

29 August 2007

File No: S07/00247

SCHEDULE 1

Application No:	06_0249
Proponent:	NSW Roads and Traffic Authority
Approval Authority:	Minister for Planning
Land:	Land generally located within or adjacent to the Hume Highway road corridor and extending approximately 131 kilometres south of Gundagai to approximately 141 kilometres south of Gundagai, in the Greater Hume local government area.
Project:	The upgrade of approximately 10 kilometres of the Hume Highway to achieve four lanes of dual carriageway, referred to as 'Woomargama to Mullengandra'.
Part 3A Project:	The project forms part of the Hume Highway Duplication project which was declared under section 75B(1)(b) of the <i>Environmental Planning and Assessment Act 1979</i> (the Act), to be a project to which Part 3A of the Act applies by virtue of an Order made by the Minister for Planning and gazetted on 8 September 2006.
Critical Infrastructure:	The Hume Highway Duplication project was declared as critical infrastructure under section 75C of the <i>Environmental Planning and Assessment Act 1979</i> by virtue of a declaration made by the Minister for Planning and gazetted on 8 December 2006.

KEY TO CONDITIONS

1. ADMINISTRATIVE CONDITIONS	5
Terms of Approval	5
Limits of Approval	5
Statutory Requirements	5
2. SPECIFIC ENVIRONMENTAL CONDITIONS	6
Ecological Impacts	6
Heritage Impacts	7
Noise Impacts	8
Air Quality Impacts	9
Soil and Water Quality Impacts	9
Hydrology	10
Visual	10
3. ENVIRONMENTAL MONITORING AND AUDITING	10
Ecological Monitoring	10
Noise Auditing	11
4. ENVIRONMENTAL MANAGEMENT	11
Environmental Representative	11
Construction Environmental Management Plan	12

SCHEDULE 2

Act, the	<i>Environmental Planning and Assessment Act 1979</i>
Ancillary Facility	Temporary facility for construction. Examples are an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, stockpile areas.
Concept Plan	The Concept Plan (Application No 06_0314) for the Hume Highway Duplication project that involves the upgrade of five separate segments of the Hume Highway totalling 45 kilometres to achieve four lanes of dual carriageway and located in the Wagga Wagga and Greater Hume local government areas.
Conditions of Approval	The Minister's conditions of approval for the project.
Construction	Includes all work in respect of the Project other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, minor clearing (except where threatened species, populations or ecological communities would be affected), establishing ancillary facilities such as site compounds (in locations meeting the criteria of the conditions of the Concept Plan approval), or other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services / utilities, etc.).
Council	Greater Hume Shire Council
DECC	NSW Department of Environment and Climate Change
Department, the	NSW Department of Planning
DEW	Commonwealth Department of Environment and Water Resources
Director-General, the	Director-General of the NSW Department of Planning (or delegate).
Director-General's Approval	A written approval from the Director-General (or delegate). Where the Director-General's Approval is required under a condition the Director-General will endeavour to provide a response within one month of receiving an approval request. The Director-General may ask for additional information if the approval request is considered incomplete. When further information is requested the time taken for the Proponent to respond in writing will be added to the one month period.
Director-General's Report	The report provided to the Minister by the Director-General of the Department under section 75I of the EP&A Act.
DPI	NSW Department of Primary Industries
DWE	NSW Department of Water and Energy

EEC	Endangered Ecological Community
EPA	Environment Protection Authority as part of the NSW Department of Environment and Climate Change
EPL	Environmental Protection Licence
L_{A90}	The noise level exceeded for 90% of a monitoring period, also referred to as the background noise level
L_{A10} (15 mins)	Sound pressure level exceeded for 10 per cent of the time over a 15 minute period
Minister, the	Minister for Planning.
NSW Heritage Office	NSW Department of Planning - Heritage Office
Operation	Means the Operation of the Activity, but does not include commissioning trials of equipment or temporary use of parts of the project during construction
Project	The project that is the subject of Major Projects Application 06_0249.
Proponent	NSW Roads and Traffic Authority
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre).
Reasonable and Feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.
Sensitive Receiver	Residence, education institution (e.g. school, TAFE college), health care facility (e.g. nursing home, hospital) and religious facility (e.g. church)

1. ADMINISTRATIVE CONDITIONS

Terms of Approval

- 1.1 The Proponent shall carry out the project generally in accordance with the:
- a) Major Projects Application 06_0249;
 - b) *Woomargama to Mullengandra – Hume Highway Duplication – Environmental Assessment* (four volumes), Connell Wagner Pty Ltd and Parsons Brinckerhoff Australia Pty Ltd and dated April 2007;
 - c) *Hume Highway Duplication Yarra Yarra to Holbrook and Woomargama to Mullengandra Environmental Assessments – Submissions Report and Revised Statement of Commitments*, dated June 2007, and prepared by NSW Roads and Traffic Authority and as supplemented by correspondence from the NSW Roads and Traffic Authority dated 27 July 2007;
 - d) *Hume Highway Duplication Project Southern Alliance – Woomargama to Table Top – Modification Report Woomargama to Mullengandra – Project Approval 06_0249*, Hume Highway Southern Alliance, dated 19 February 2008;
 - e) *Hume Highway Duplication Project Southern Alliance – Woomargama to Table Top – Request for Modifications to Conditions of Approval*, dated 11 November 2008;
 - f) Correspondence from the NSW Roads and Traffic Authority, reference number D/00310/SA/01, and dated 17 December 2008;
 - g) the conditions of approval granted by the Minister for Planning for the Hume Highway Duplication Concept Plan (Application Number 06_0314) on 20 July 2007;
 - h) the conditions of this approval.
- 1.2 In the event of an inconsistency between:
- a) the conditions of this approval and any document listed from condition 1.1a) to 1.1f) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
 - b) any of the documents listed from condition 1.1a) to 1.1f) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- 1.3 The Proponent shall comply with any reasonable and feasible requirement(s) of the Director-General arising from the Department's assessment of:
- a) any reports, plans or correspondence that are submitted in accordance with this approval; and
 - b) the implementation of any actions or measures contained in these reports, plans or correspondence.

Limits of Approval

- 1.4 This approval shall lapse ten years after the date on which it is granted, unless the works the subject of this approval are physically commenced on or before that time.

Statutory Requirements

- 1.5 The Proponent shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required with respect to the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals.

Note: This includes any necessary licences required under the *Water Act 1912* for any activity associated with the installation of groundwater bores and the extraction of groundwater for the project, and the necessary licences for ancillary activities (concrete batching plants, crushing plants) that require a licence to operate under the *Protection of the Environment Operations Act 1997*.

2. SPECIFIC ENVIRONMENTAL CONDITIONS

Ecological Impacts

- 2.1 The design of all waterway crossings must be undertaken in consultation with the DPI.
- 2.2 The Blue Metal Travelling Stock Reserve shall not be disturbed by construction activities associated with the project.
- 2.3 Prior to the commencement of construction, the Proponent shall obtain advice from a suitably qualified and experienced ecologist on need, number, location and design of:
- i) fauna underpasses along the project alignment; and
 - ii) aerial crossing measures for the Squirrel Glider along the project alignment;

The above advice shall be provided to the DECC, with the final number, location and design of the required underpasses/crossings to be decided in consultation with the DECC prior to the construction of the underpass/crossing.

The required underpasses and/or aerial crossings shall be designed to extend beneath/across both carriageways. The Proponent shall arrange and bear the full cost of installing and maintaining the aerial crossing points.

- 2.4 Prior to the commencement of construction, the Proponent shall obtain expert advice from a suitably qualified and experienced ecologist on the following:
- a) the identification of key areas along the project alignment where threatened woodland bird species would likely frequently cross the project corridor;
 - b) the need, location and design objectives of aerial crossing measures for threatened woodland bird species within the identified areas; and
 - c) the methodology and timing for the monitoring of woodland bird species within these areas.

The above advice shall be provided to the DECC, with the identified crossing areas to be decided in consultation with the DECC prior to the commencement of any construction work associated with the project.

Construction work shall not commence in the agreed identified areas, unless as otherwise agreed by the Director-General, until the need (and design objectives) of crossing points and the monitoring methodology (including timing) has been decided in consultation with the DECC. The above agreed identified areas where construction work cannot commence shall include an appropriately sized buffer area to ensure any necessary design or pre-construction monitoring requirements are not unduly restricted or impacted by construction work occurring within the adjoining areas.

The agreed monitoring methodology shall be suitably incorporated into the Threatened Species Monitoring Program required by condition 3.1 of this approval.

- 2.5 The Proponent shall install nest boxes and relocated hollows to offset the loss of tree hollows/habitat. Structures to replace hollows shall be installed prior to or during the early stages of clearing, other than minor clearing (except where threatened species, populations or communities would be impacted).

The location and/or guiding criteria for the selection of locations for the above nest boxes and relocated hollows shall be specified within the Construction Flora and Fauna Environmental Management Plan, as required by condition 4.2a) of this approval.

- 2.6 The relocation of any cleared timber within terrestrial habitats will be undertaken in consultation with the DECC and shall be undertaken in a manner that:

- a) provides priority to supporting areas of retained native vegetation that is of moderate condition; and
- b) avoids any additional negative impacts upon the retained native vegetation.

Heritage Impacts

Aboriginal Heritage

- 2.7 The Proponent shall not destroy, modify or otherwise physically affect the scarred trees M2, M3, M7, M8, M9, M10, M13, M14 and M15.
- 2.8 The Proponent shall salvage, through surface collection, identified artefacts from site M11 in consultation with the DECC and the relevant Aboriginal stakeholders prior to the commencement of construction works that may impact on this site.
- 2.9 Prior to the commencement of construction, the Proponent shall undertake subsurface testing for sites M-PAD-1 and M-PAD-3, and shall investigate the options to design and construct the project as to avoid these sites in consultation with the DECC.

Where these sites cannot be avoided, the Proponent shall implement the mitigation and management measures detailed within the Construction Heritage Management Plan required under this approval.

Any salvage (by either surface collection or archaeological excavation) of artefacts detected at these sites shall be conducted in the same manner as required under condition 2.7 of this approval.

- 2.10 The Proponent shall forward the results of the above subsurface testing and excavation as well as the details of the relocation of any Aboriginal item to the DECC to allow the entry of this information onto the Aboriginal Heritage Information Management System.

Non-Aboriginal Heritage

- 2.11 Prior to the commencement of construction, the Proponent shall complete a site specific heritage investigation for Site M100 and shall investigate the options to avoid or minimise the impacts on this site in the final design of the alignment.

Should excavation and/or archival recordings be required for these sites as a result of the investigation, the Proponent shall undertake these works in the same manner as required by condition 2.12 of this approval.

- 2.12 Prior to the commencement of construction work in proximity to the following items, the Proponent shall complete all excavations and/or archival recordings, including photographic records, for M001, M004, M005, M006, M008/M208, M101, M203 and M211. This shall be undertaken and completed in accordance with the guidelines issued by the Heritage Council of NSW. The areas containing these items shall be clearly identified and fenced until the completion of the archaeological excavations and/or archival recordings.

Any excavation work required for these items shall be overseen by a suitably qualified archaeologist and in accordance with the research design and archaeological excavation methodology that has been developed in consultation with the Department's Heritage Branch prior to commencing any archaeological excavation. The Construction Heritage Management Plan required by this approval shall be suitably updated to incorporate the mitigation and management measures associated with the excavation works.

Within six months of completing the above work, the Proponent shall submit a report containing the findings of the excavations and archival recordings to the Heritage Council of NSW, the local Council and the local Historic Society. This report shall nominate an agreed repository for the relics salvaged from any excavations along the proposed corridor.

2.12A Unless otherwise agreed to by the Director-General, the Proponent shall in consultation with the Hamilton and Head Family Trust, remove relics from Site M212 for secure storage prior to the commencement of construction works in the vicinity of the Site and relocate the items to a suitable alternate location within the road reserve following the completion of construction.

Noise Impacts

Construction and Blasting Restrictions

2.13 The Proponent shall only undertake construction activities associated with the project, other than blasting, during the following hours:

- a) 6:00 am to 7:00 pm, Mondays to Fridays, inclusive;
- b) 7:00 am to 4:00 pm on Saturdays; and
- c) at no time on Sundays or public holidays.

The Proponent may vary of the hours of construction in the following circumstances:

- a) any works that do not cause construction noise to be audible at any sensitive receivers; or
- b) for the delivery of materials required outside these hours by the Police or other authorities for safety reasons; or
- c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
- d) as approved through the process outlined in condition 2.14 of this approval.

2.14 The hours of construction activities specified under condition 2.13 of this approval may be varied with the prior written approval of the Director-General. Any request to alter the hours of construction specified under condition 2.13 shall be:

- a) considered on a case-by-case or activity-specific basis;
- b) accompanied by details of the nature and need for activities to be conducted during the varied construction hours;
- c) accompanied by written evidence to DECC and the Director-General that activities undertaken during the varied construction hours are justified, appropriate consultation with potentially affected receivers and notification of Council has been undertaken and all practicable and reasonable mitigation measures have been put in place; and
- d) evidence of consultation with the DECC on the proposed variation in construction times.

2.15 The Proponent shall only undertake blasting activities associated with the project during the following hours, unless otherwise approved by the Director-General:

- a) 9:00 am to 5:00 pm, Mondays to Fridays, inclusive;
- b) 9:00 am to 1:00 pm on Saturdays; and
- c) at no time on Sundays or public holidays.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons.

Construction and Blasting Limits

2.16 The construction noise *objective for the Project is to manage noise from construction activities (as measured by a L_{A10} (15minute) descriptor) so it does not exceed the background L_{A90} noise level by more than 5 dB(A) when measured at the most affected sensitive receiver.*

Background noise levels are those identified in the documents referred to in condition 1.1b) and condition 1.1c) of this approval.

Any activities that have the potential for noise emissions that exceed the objective must be identified and managed in accordance with the Construction Noise and Vibration

Management Plan.

If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the *NSW Industrial Noise Policy*), 5dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise objective. The Proponent shall implement all reasonable and feasible noise mitigation measures with the aim of achieving the construction noise objective.

Negotiated agreements between the Proponent and affected sensitive receivers must be in place if noise emissions from any stationary activities, including concrete batching plants, exceed 40dB(A) $L_{Aeq}(15\text{minute})$.

- 2.17 The Proponent shall ensure that airblast overpressure generated by blasting associated with the project does not exceed the criteria specified in Table 1 when measured at the most affected sensitive receiver.

Table 1 - Airblast Overpressure Criteria

Airblast Overpressure (dB(Lin Peak))	Allowable Exceedance
115	5% of total number of blasts over a 12 month period
120	Never

- 2.18 The Proponent shall ensure that ground vibration generated by blasting associated with the project does not exceed the criteria specified in Table 2 when measured at the most affected sensitive receiver.

Table 2 – Peak Particle Velocity Criteria

Peak Particle Velocity (mms^{-1})	Allowable Exceedance
5	5% of total number of blasts over a 12 month period
10	Never

Operation Noise

- 2.19 Unless otherwise agreed to by the Director-General, the Proponent shall submit for the approval of the Director-General a Review of the operational noise mitigation measures for the project within six months of commencing the construction of the project. The Review shall take into account the detailed design of the project and shall be prepared in consultation with the DECC. Consideration of the operational noise mitigation measures shall include, but not necessarily be limited to, noise-reducing road surfaces, noise barriers and acoustic treatments of residences.

For the purpose of this condition, the Proponent is only required to consider Reasonable and Feasible noise mitigation measures to meet the noise criteria stipulated in *Environmental Criteria for Road Traffic Noise* (EPA 1999).

Air Quality Impacts

- 2.20 The Proponent shall construct the project in a manner that minimises dust impacts generated by construction works, including wind-blown and traffic-generated dust, on the receiving environment, including sensitive receivers and road users.

Soil and Water Quality Impacts

- 2.21 The Proponent shall take all Reasonable and Feasible measures to prevent soil erosion and the discharge of sediments and pollutants from the project during the construction and operation of the project.

Hydrology

- 2.22 Prior to the commencement of construction of drainage structures, road embankments and other works associated with the project that may result in changes to afflux and flooding behaviour, the Proponent shall demonstrate to the Director-General that the new or duplicated drainage structures associated with the project have been designed, in consultation with DWE, to minimise any changes to afflux and flooding behaviour along Billabong Creek, Mullengandra Creek, Ryans Creek and Four Mile Creek and other minor waterways/tributaries that traverse the road alignment.
- 2.23 Should the final alignment (and associated works) necessitate the decommissioning of bore GW060551 (Mullengandra), the Proponent shall ensure that a replacement bore is commissioned prior to the commencement of any construction works within the vicinity of GW060551 that may impact on the operation of that bore. The location and depth of the replacement bore shall be determined in consultation with DWE and the relevant landowner/licence holder. The construction and commissioning of the replacement bore shall be at the full cost of the Proponent.

Visual

- 2.24 The Proponent shall ensure that the specific visual strategy for Mullengandra (defined as Character Zone 5 and 6) is designed to provide a visual connection between with the project and the Albury-Wodonga National Freeway project.
- 2.25 In consultation with the owners of the residences, the Proponent shall provide reasonable and feasible landscaping measures to provide visual screening to residences which have been identified as likely to experience significant visual impact as a result of the project.
- 2.26 In consultation with Anglican Diocese of Canberra and Goulburn and the Department of Education, the Proponent shall provide reasonable and feasible landscaping measures to provide visual screening to St Luke's, Mullengandra and Mullengandra Primary School to mitigate the visual impacts as a result of the project and associated structures (including any relevant noise mitigation measures).

3. ENVIRONMENTAL MONITORING AND AUDITING

Ecological Monitoring

- 3.1 Prior to the commencement of construction of the project, the Proponent shall develop and implement a **Threatened Species Monitoring Program** for the project, to monitor the impacts of the project on threatened species and populations and to monitor the effectiveness of the mitigation measures (including offsets located within the project corridor) implemented for these species as part of the project. The program shall include (but not necessarily be limited to) the monitoring of populations of the Squirrel Glider (*Petaurus norfolcensis*) and the Southern Pygmy Perch (*Nannoperca australis*). The Program shall be developed in consultation with the DECC and DPI (where relevant) and shall include, but not necessarily be limited to:
- a) the monitoring of a representative sample of the threatened species populations in and adjacent to the footprint of the project prior to the commencement of construction. The methodology, such as monitoring technique, number and location of study populations, shall be decided in consultation with the DECC and DPI;
 - b) a program for monitoring the health (mortality) and habitat utilisation of populations before the construction of the project, during construction of the project and for a period of not less than three years after the commencement of operation of the project, unless otherwise agreed by the Director-General. The monitoring intervals for the sample populations shall be decided in consultation with the DECC and DPI;

- c) provision for the assessment of the data for each sample population to identify the changes in population health (mortality) or habitat over time and possible causes for these changes in the event of an identified decline;
- d) details of the contingency measures that would be implemented in the event of an identified decline in the population health (mortality) as a direct result of the construction or operation of the project; and
- e) provision for annual reporting of monitoring results to the Director-General, the DECC and DPI, or as otherwise agreed by those agencies.

The Program shall be submitted to the Director-General prior to the commencement of construction and shall be updated to incorporate the monitoring methodology for threatened woodland bird species once agreed to in accordance with condition 2.4 of this approval.

Noise Auditing

- 3.2 Within one year of commencement of operation of the project, or as otherwise agreed by the Director-General, and during a period in which the project is operating under normal operational traffic conditions, the Proponent shall undertake an operational noise monitoring program to confirm the noise performance of the project and prepare an Operational Noise Report. The Report shall include, but not necessarily be limited to:
- a) noise monitoring to assess compliance with the operational noise outcomes predicted in the operational noise Review required under condition 2.19 of this approval;
 - b) methodologies, locations and frequencies for noise monitoring, to be undertaken in accordance with the *Environmental Noise Management Manual* (RTA, 2001);
 - c) identification of monitoring sites at which background noise and project noise levels can be ascertained, with specific reference to locations indicative of impacts on residential receptors and sensitive land uses;
 - d) details of any complaints and enquiries received in relation to noise generated by the project within the year of operation;
 - e) an assessment of the performance and effectiveness of applied noise mitigation measures; and
 - f) any additional noise mitigation measures and timetables for implementation.
- 3.3 Within 60 days of completing the operational noise monitoring program referred to under condition 3.2 of this approval, the Proponent shall provide the Director-General and the DECC with a copy of the Operational Noise Report. If the Report identifies any non-compliance with the noise objectives specified in the *Environmental Criteria for Road Traffic Noise* (EPA 1999), the Proponent shall detail what additional measures would be implemented to ensure compliance, clearly indicating who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be measured and reported to the Director-General.

4. ENVIRONMENTAL MANAGEMENT

Environmental Representative

- 4.1 Prior to the commencement of construction of the project, or otherwise agreed by the Director-General, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s) independent of the design and construction personnel. The Proponent shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Director-General. The Environmental Representative(s) shall:
- a) be the principal point of advice in relation to all questions and complaints concerning the environmental performance of the project;
 - b) monitor the implementation of all environmental management plans and monitoring programs required under this approval and any relevant plans required by the Concept Plan approval;

- c) monitor the outcome of all environmental management plans and advise the Proponent upon the achievement of all Project environmental outcomes;
- d) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval and the conditions of the Concept Plan approval, and all other licences and approvals related to the environmental performance and impacts of the project;
- e) ensure that environmental auditing is undertaken in accordance with the requirements of the Concept Plan approval and all relevant project Environmental Management System(s);
- f) given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur.

The Proponent may choose to nominate an Environmental Representative to be responsible for a number of projects associated with the Concept Plan. In doing so, the Proponent shall demonstrate to the Director-General that the nominated Environmental Representative is capable to carrying out the required duties across multiple projects.

Construction Environmental Management Plan

4.2 As part of the Construction Environmental Management Plan for the project as required by the Minister for Planning's approval of Concept Plan 06_0314, the Proponent shall prepare and implement the following:

- a) a **Construction Flora and Fauna Management Plan** to detail how construction impacts on terrestrial and aquatic ecology will be minimised and managed. The Plan shall be developed in consultation with the DECC and DPI and shall include, but not necessarily be limited to:
 - i) details of work practices (such as fencing and construction worker education) to minimise the potential for damage to vegetation (particularly EECs) and native fauna during construction. Measures shall also be included to ensure the extent of soil disturbance during construction work is minimised;
 - ii) weed management measures focusing on early identification of invasive weeds and determining effectiveness of management controls;
 - iii) details of the mitigation measures that would be implemented and the associated procedures for the installation and monitoring of these measures, for example the location, maintenance and monitoring of nest boxes, relocated hollows and fauna fencing;
 - iv) a procedure detailing the timing for the implementation and monitoring of the mitigation and management measures; and
 - v) a description of how the effectiveness of the mitigation and management measures would be monitored during the proposed works and, if any non-compliance is detected how any non-compliance would be rectified.
- b) a **Construction Heritage Management Plan** to detail how construction impacts on Aboriginal and non-Aboriginal heritage will be minimised and managed. The Plan shall be developed in consultation with the NSW Heritage Office and the DECC and shall include, but not necessarily be limited to:
 - i) the recommendations arising from the cultural heritage assessment report prepared in consultation with the relevant Aboriginal stakeholders following the investigations into the Potential Archaeological Deposits and other sites as required by condition 2.9 of this approval;
 - ii) a strategy for the salvage and curation of salvaged objects, giving consideration to measures for managing and housing objects;
 - iii) specific measures to be applied to works undertaken in close proximity to identified Aboriginal and non-Aboriginal heritage items to minimise and avoid impacts on these items. This shall include a component within the site induction program for construction workers on Aboriginal and non-Aboriginal heritage along the project corridor;

- iv) a program for construction work practices and an auditing program to ensure that there is no impact on heritage items additional to that already permitted; and
 - v) procedures that would be followed should the auditing required in 4.2b)iv) detect an impact on any known and/or any previously unidentified heritage item be discovered during construction.
- c) a **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts would be minimised and managed. The Plan shall be developed in consultation with the DECC and shall include, but not necessarily be limited to:
- i) details of construction activities and an indicative schedule for construction works;
 - ii) identification of construction activities that have the potential to generate noise and/ or vibration impacts on surrounding land uses, particularly residential receptors, St Luke's, Mullengandra and Mullengandra Primary School;
 - iii) procedures to be undertaken during the execution of blasting activities to ensure overpressure and vibration criteria are met, including the formulation of a suitable blast program that is supported by test blast results;
 - iv) a detailed description of what reasonable and feasible actions and measures would be implemented to ensure that these works would comply with the relevant noise and vibration criteria/objectives;
 - v) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints; and
 - vi) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded; and, if any non-compliance is detected how any non-compliance would be rectified.
- d) a **Construction Riparian Management Plan** to detail how the construction activities and structures within or in proximity to riparian areas would be appropriately designed and managed to ensure the integrity, function and condition of these areas are maintained and/or suitably rehabilitated. Where relevant, the rehabilitation of riparian areas shall use flora that is consistent with the EEC in the Natural Drainage System of the Lower Murray River Catchment. This plan shall be developed in consultation with DWE and DPI, and shall include a monitoring program to ensure the effectiveness of any mitigation measures implemented during and following the conclusion of construction.
- e) a **Dust Management Plan** to detail how the construction activities would be managed and monitored to mitigate dust emissions and to achieve the requirements of condition 2.20 of this approval. This plan shall be prepared in consultation with the DECC.
-