Project Approval

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

As delegate of the Minister for Planning under delegation executed on 25 January 2010, I approve the project application referred to in schedule 1, subject to the conditions in schedules 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.

Deputy Director-General
Development Assessment & Systems Performance
Department of Planning

Sydney 12th November 2010 File No. S07/01018

SCHEDULE 1

Application No.:	09_0193
Proponent:	Goulburn Mulwaree Council
Approval Authority:	Minister for Planning
Land:	81km pipeline from Wingecarribee Reservoir to Goulburn
Project:	Highlands Source Project, including: • a new pump station at Wingecarribee Reservoir; • approximately 81km long pipeline extending from Wingecarribee Reservoir near Moss Vale to the Rossi Weir main on Clinton Street in Goulburn; • the capacity to deliver an annual daily average of 5ML of raw water per day and operate on a continuous or intermittent basis; • construction site compounds, lay down areas, spoil stockpiles and environmental controls and; • Ancillary features to ensure safe operation and maintenance, including air and scour valves and stop (divide) valves.

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DEFINITIONS

Act, the	*Environmental Planning and Assessment Act, 1979*
CEMP	Construction Environmental Management Plan
Conditions of Approval	The Minister's conditions of approval for the project
Construction	All pre-operation activities associated with the project other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys or other activities determined by the Environmental Representative to have minimal environmental impact such as minor access roads, minor adjustments to services/utilities, establishing temporary construction sites (in accordance with the requirements of this project approval), or minor clearing (except where threatened species, populations or ecological communities would be affected).
Crown Land	Crown land is land that is owned and managed by State Government. It accounts for over half of all land in New South Wales and includes: Crown lands held under lease, licence or permit; community managed reserves; lands retained in public ownership for environmental purposes; lands within the Crown public roads network; and other unallocated lands. Many non-tidal waterways across the State also comprise Crown land as do most tidal waterways land.
DECCW	Department of Environment, Climate Change and Water
Department, the	Department of Planning
Director-General, the	Director-General of the 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 may ask for additional information if the approval request is considered incomplete.
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.
Dust	any solid material that may become suspended in air or deposited.
EA	Highlands Source Project Part 3A Environmental Assessment prepared by GHD and dated 27 April 2010.
EEC	Endangered Ecological Community
GMC	Goulburn Mulwaree Council or its contractors
HNCMA	Hawkesbury Nepean Catchment Management Authority
I&I	Department of Industry and Investment NSW
LPMA	Land and Property Management Authority
Minister, the	Minister for Planning
NOW	NSW Office of Water
OEMP	Operation Environmental Management Plan
Pipeline	The water pipeline proposed in the Highlands Source Project Part 3A Environmental Assessment and as modified by the Highlands Source Project Preferred Project and Submissions Report dated August 2010.
Preferred Project and Submissions Report	Highlands Source Project Preferred Project and Submissions Report prepared by GHD and dated August 2010.
Proponent	Goulburn Mulwaree Council
Project	Development to which Major Projects Application 09_0049 applies.
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 New South Wales 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 and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.
SCA	Sydney Catchment Authority
Site	The land to which this approval applies.

SCHEDULE 2
PART A - ADMINISTRATIVE CONDITIONS

Terms of Approval

A1. The Proponent shall carry out the project generally in accordance with the:
- (a) Major Project Application 09_0049;
- (b) Highlands Source Project Environmental Assessment (GHD, April 2010);
- (c) Highlands Source Project Preferred Project and Submissions Report (GHD, August 2010); and
- (d) conditions of this approval.

A2. In the event of an inconsistency between:
- (a) the conditions of this approval and any document listed from condition A1(a) to A1(c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
- (b) any document listed from condition A1(a) to A1(c) inclusive, and any other document listed from condition A1(a) to A1(c) inclusive, the most recent document shall prevail to the extent of the inconsistency.

A3. The Proponent shall comply with any reasonable 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

A4. This project approval shall lapse five years after the date on which it is granted, unless the works subject of this approval have been commenced before that time.

Statutory Requirements

The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation of the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the project.

A5. Nothing in these conditions shall be interpreted as preventing compliance with any Condition of Approval for a separate section of the Project where the appropriate documentation/approvals have been obtained for a specific construction work site or section but not necessarily the entire project.

PART B – PRIOR TO CONSTRUCTION

PROPERTY CONSTRUCTION REPORTS

B1. The Proponent shall prepare Property Construction Reports for all directly affected properties along the proposed pipeline route including site compounds. The Property Construction Report shall:

(a) clearly identify all waterway crossings;
(b) include where relevant consideration of condition B5; and
(c) be prepared in consultation with the landholder. Each landholder is to be provided with a copy of the report prepared under this condition.

PROJECT DESIGN

Limits of clearing

B2. The limit of clearing and/or disturbance for the construction of the pipeline shall be limited to six metres, unless otherwise agreed to by the Director-General, through areas containing:

(a) endangered ecological communities and/or threatened species and their habitat; or
(b) waterway crossings unless approved in accordance with B6; or
(c) Indigenous heritage sites, where doing so would result in avoidance of known Indigenous heritage items or PADs; or
(d) where the pipeline traverses through the Veteran Allotments and Kenmore Psychiatric Hospital sites.

FLORA AND FAUNA IMPACTS

Native Vegetation Impacts

B3. The clearing of all native vegetation is to be limited to the minimal extent practicably required. Details regarding the procedures for clearing vegetation and minimising the extent of clearing and the extent and location of these reductions shall be clearly included in the Flora and Fauna Management Plan contained in condition B29(c).

Threatened species

B4. In regard, to the threatened species, Camden Woollybutt (*Eucalyptus macarthurii*) and/or Black Gum (*Eucalyptus aggregata*), the Proponent shall:

(a) undertake a pre-construction survey with the objective of mapping all Camden Woollybutt (*Eucalyptus macarthurii*) and/or Black Gum (*Eucalyptus aggregata*) species within the proposed alignment and seek to avoid individuals to the greatest extent practicable.
(b) map the locations of all Camden Woollybutt and/or Black Gum on the route alignment and/or Work Method Statement clearly showing those individuals to be retained and those to be removed.
(c) include all measures to be implemented, during construction, to protect individuals to be retained within the FFMP required in B29(c).
(d) include consideration of any residual impact on these species as indentified in B4(a) and B4(b) within the Biodiversity Offset as specified in condition D1 and D2.

The results of the survey in B4(a) and B4(b) shall be submitted to the Director General prior to construction commencing.

Livestock

B5. In regards to the potential impact of above ground structures on livestock and horses, the Proponent shall, in consultation with affected landholders, determine if the structures pose an increased risk to livestock and horses. If it is determined that there is an increased risk, the Proponent shall prior to construction, identify and implement all reasonable and feasible options for reducing the risk to an acceptable level.

In the event of a dispute between the parties with respect to the implementation of any reasonable and feasible option that may be required under this condition, any party may refer the matter to the Director-General for resolution. The Director-General's determination of any such dispute shall be final and binding on the parties.

GEOMORPHOLOGICAL MONITORING

Waterway instability and erosion

B6. Prior to the commencement of construction, and following further investigations as required, the Proponent shall adopt a risk based approach to determining the appropriate crossing methodology for each waterway.

(a) For crossings where the waterway:

(i) has permanent flow; or

(ii) contains potential fish passage Class 1 or 2; or

(iii) is in good natural condition; or

(iv) has native riparian vegetation and/or aquatic ecology; or

(v) has a bed that is not rock; or

(vi) is classified as a fragile valley fill system, fragile channelised fill system or an upland swamp; or

(vii) displays evidence of bank or waterway instability or previous erosion within the vicinity of the crossing; or

(viii) any other relevant consideration.

The Proponent shall prepare and submit a report(s) prepared by a geomorphologist in consultation with NOW, I&I, LPMA and SCA and, where relevant to Medway Rivulet, Wingecarribee Shire Council on the proposed crossing method of each of the identified waterways for the approval of the Director-General. In selecting the proposed method to cross the waterway the likely erosion and sedimentation controls and rehabilitation measures and their likelihood of long term success are to be considered.

(b) For all other crossings where the waterway does not meet the criteria in B6(a), the proponent shall notify the Department of the proposed crossing method prior to construction in that waterway.

B7. Prior to the commencement of construction, the Proponent shall prepare a geomorphological monitoring program for waterway crossings that are listed as key fish habitat or exhibiting bank instability or headward erosion in the vicinity of the crossing to ensure adequate rehabilitation to an equal or better status as required by the Rehabilitation Management Plan in condition B29(e). The program is to be developed in consultation with NOW, I&I, SCA and, where relevant to the Medway Rivulet, Wingecarribee Shire Council. The monitoring program shall include but not necessarily be limited to:

(a) procedures for documenting the pre-construction baseline status of the waterway;

(b) monitoring methods to be used to assess the impact of the project on the waterway;

(c) mechanisms for the management and mitigation of any impacts identified by B7(b);

(d) procedures for the implementation of the management and mitigation measures identified in B7(c);

(e) details of how the monitoring results will be reported to NOW; and

(f) a minimum monitoring period of three years following construction or until the waterways are certified as being rehabilitated to an equal or better status.

The monitoring program shall be submitted for the approval of the Director-General no later than one month prior to the commencement of construction, or within such period as otherwise agreed by the Director-General. The program shall be accompanied by written evidence of consultation with the NOW, I&I, SCA and, where relevant, Wingecarribee Shire Council and that issues raised have been addressed. Construction shall not commence until written approval has been received from the Director-General.

B8. The program referred to in condition B7 shall be implemented prior to construction commencing within each waterway.

B9. All proposed new or upgraded access road crossings of waterways shall be designed and constructed in accordance with the *Policy and Guidelines for Fish Friendly Waterway Crossings (NSW Department of Primary Industries, 2003), Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Department of Primary Industries Fisheries, 2003)* and *Environmental Practice Manual for Rural Sealed and Unsealed Roads (ARRB Transport Research Ltd, 2002)* in consultation with I&I, NOW, LPMA and SCA.

TRAFFIC AND TRANSPORT IMPACTS

B10. Where the pipeline is located along and/or within a public road the Proponent shall:

(a) undertake a Road Dilapidation Report of all roads proposed to be used for construction and access activities in consultation with relevant road authorities. The Report shall document the pre-construction condition of the relevant roads.

(b) following completion of construction, a subsequent Road Dilapidation Report shall be prepared to assess any damage that may have resulted from the construction of the project.

(c) rectify any damage attributable to the project indentified in condition B10(b). The cost of any restorative work described in the report required under B10(b) or recommended by the relevant road authority after review of that report which is attributable to the project, shall be funded by the Proponent. Such work shall be undertaken at a time as agreed upon between the Proponent and the relevant road authority. In the event of a dispute between the parties with respect to the extent of restorative work that may be required under this condition, any party may refer the matter to the Director-General for resolution. The Director-General's determination of any such dispute shall be final and binding on the parties.

B11. The Proponent shall ensure that all pipeline crossings of roads are constructed using construction methods and depth cover determined in consultation with the relevant road authority.

B12. The Proponent shall apply to the relevant authority for any proposed temporary road closures at least one month prior to the proposed closure. Any advertisement of the closure shall be funded by the Proponent and include newspapers circulated in that area.

HERITAGE IMPACTS

Heritage Item Management Conditions

Kenmore Psychiatric Hospital

B13. Prior to construction within the State Heritage Listed curtilage of Kenmore Psychiatric Hospital, the Proponent shall complete a Statement of Heritage Impact, in generally accordance with the Heritage Branch's Statement of Heritage Impact Guidelines, for items identified within the State Heritage listed curtilage that are either directly impacted or within 100m of proposed pipeline. This report is to include reference to the Kenmore Hospital Conservation Management Plan, where relevant, and include:

- (a) a statement of significance of the items either directly impacted or within 100m of the proposed pipeline in isolation;
- (b) a statement of significance of each of the items in B13(a) as they relate to the State Heritage listed Kenmore Psychiatric Hospital; and
- (c) details of the significance of the proposed impact to the items in B13(a) and B13(b).

B14. The Proponent shall submit to the Director-General, prior to construction within the State Heritage listed curtilage of Kenmore Psychiatric Hospital, a report documenting consideration of the options to avoid impacts to the items identified under B13. This report shall address the specific impacts arising from the detailed design and to provide mitigation and management measures to reduce those impacts.

B15. Where avoidance is not possible, the Proponent shall undertake, in consultation with the Heritage Branch of the Department:

- (a) historical and detailed site surveys generally in accordance with the guidelines *Assessing Significance for Historical Archaeological Sites and Relics (Department of Planning, 2009)* and *Statements of Heritage Impact (Department of Planning,1996);* and
- (b) an archaeological excavation and/or archival recording. Where archaeological excavation is proposed this must be undertaken consistent with a research design prepared generally in accordance with the Heritage Council guidelines for each site which is to be excavated. Those documents shall be submitted to the Director-General.
  - (i) photographic and archival recording of all affected Heritage items, as identified in the specialist reports prepared as part of the Environmental Assessment and Preferred Project and Submissions Report, is to be undertaken prior to the commencement of construction.
  - (ii) All archival recording and final excavation report(s) are to be completed in accordance with the Guidelines issued by the Heritage Council of NSW and copies made available to the Department, the Local Studies Library, Kenmore Psychiatric Hospital archives and the Local Historical Society in the relevant Local Government areas within six months of the completion of the heritage works. The proponent shall also be required to nominate a repository for the relics salvaged from any historical archaeological excavations.

B16. The Proponent shall engage an suitably qualified heritage specialist approved by the Director-General to complete items B13 to B15. The heritage specialist is to have demonstrated:

- (a) experience in State significant government institution sites; and
- (b) for Excavation Directors, can address the criteria set out in the Heritage Council Publication "excavation Directors Assessment Criteria" (http://www.heritage.nsw.gov.au/docs/excavationdirectors.pdf).

Veterans Allotments

B17. Prior to construction commencing within this area, the Proponent is to complete a Statement of Heritage Impact, in accordance with the Heritage Branch's Statement of Heritage Impact Guidelines, for the Veterans Allotments. The Statement of Heritage Significance is to include:

- (a) a statement of significance of the Allotments;
- (b) details of the significance of the proposed impact to the items as in B17(a); and
- (c) description of the impacts to the heritage item and the mitigation measures to reduce this impact.

ANCILLARY CONSTRUCTION FACILITIES

B18. The Proponent shall only establish construction compounds, stockpiles or any other ancillary facilities under this Approval in locations that satisfy the following criteria, unless otherwise agreed to by the Director-General:

- (a) are within the construction corridor;
- (b) do not require the removal of native vegetation;
- (c) do not impact on Indigenous and non-Indigenous Heritage;
- (d) are at least 40m from the edge of riparian vegetation and waterways;
- (e) do not require the construction of additional access roads; and
- (f) minimise any impacts to sensitive receivers from traffic, noise and light spillage.

Any request for the Director-General to approve locations that do not satisfy any of the criteria B18(a) to B18(f) must include demonstration of mitigation and management measures to minimise impacts.

B19. All construction compound sites shall be rehabilitated to at least their pre-construction condition, as detailed in the Property Construction Report required under condition B1 and as agreed with the landowner.

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

B20. Subject to reasonable confidentiality requirements, the Proponent shall make all documents required under this approval available for public inspection on request.

Provision of Electronic Information

B21. Prior to the commencement of construction, the Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:

(a) the status of the project;
(b) a copy of this approval and any future modification to this approval;
(c) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;
(d) a copy of each plan, report, or monitoring program required by this approval; and
(e) details of the outcomes of compliance reviews and audits of the project.

Community Information Plan

B22. Prior to the commencement of construction, the Proponent shall prepare and implement a Community Information Plan which sets out the community communication and consultation processes to be implemented during construction and operation of the project. The Plan shall include but not be limited to:

(a) procedures to inform the local community of planned investigations and construction activities, including blasting works (if any);
(b) procedures to inform the relevant community of construction traffic routes and any potential disruptions to traffic flows and amenity impacts;
(c) procedures to consult with local landowners with regard to construction traffic to ensure the safety of livestock and to limit disruption to livestock movements;
(d) procedures to inform the community where work outside the construction hours specified in condition C2, in particular noisy activities, has been approved; and
(e) procedures to inform and consult with affected landowners to rehabilitate impacted land.

Complaints Procedure

B23. Prior to the commencement of construction, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation) or as otherwise agreed by the Director-General:

(a) a 24 hour telephone number on which complaints about construction and operational activities at the site may be registered;
(b) a postal address to which written complaints may be sent; and
(c) an email address to which electronic complaints may be transmitted.

The telephone number, postal address and e-mail address shall be advertised in a newspaper circulating in the area along the pipeline route on at least one occasion prior to the commencement of construction; and at six-monthly intervals during construction and for a period of two years following commencement of operation of the project. These details shall also be provided on the Proponent's internet site required by condition B21. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the construction site(s), in a position that is clearly visible to the public.

B24. The Proponent shall record details of all complaints received through the means listed in condition B23 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:

(a) the date and time, of the complaint;
(b) the means by which the complaint was made (telephone, mail or email);
(c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
(d) the nature of the complaint;
(e) any action(s) taken by the Proponent in relation to the complaint, including timeframes for implementing the action; and
(f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director-General upon request.

B25. The Proponent shall provide an initial response to any complaints made in relation to the project during construction or operation within 48 hours of the complaint being made. The response and any subsequent action taken shall be recorded in accordance with condition B24. Any subsequent detailed response or action is to be provided within two weeks.

COMPLIANCE TRACKING PROGRAM

B26. Prior to the commencement of construction, the Proponent shall develop and implement a Compliance Tracking Program, to track compliance with the requirements of this approval during the construction and operation of the project and shall include, but not necessarily limited to:

(a) provisions for periodic reporting of compliance status to the Director-General including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operation commencement;

(b) a program for independent environmental auditing in accordance with AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing;

(c) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;

(d) mechanisms for recording environmental incidents and actions taken in response to those incidents;

(e) provisions for reporting environmental incidents to the Director-General during construction and operation; and

(f) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

ENVIRONMENTAL MANAGEMENT

Environmental Representative

B27. Prior to the commencement of any construction or operational activities, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s) independent of the design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) prior to construction until at least 6 months after commencement of operation, or as otherwise agreed by the Director-General. The Environmental Representative(s) shall:

(a) monitor the implementation of all environmental management plans and monitoring programs required under this approval;

(b) monitor the outcome of all environmental management plans and advise the Proponent upon the achievement of all project environmental outcomes;

(c) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval, and all other licences and approvals related to the environmental performance and impacts of the project;

(d) ensure that environmental auditing is undertaken in accordance with the requirements of Condition B26 and the project Environmental Management System(s);

(e) be consulted in responding to the community concerning the environmental performance of the project; and

(f) have the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and, failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will be likely to occur, until reasonable steps are implemented to avoid such impact.

Construction Environmental Management Plan

B28. The Proponent shall prepare and implement a Construction Environmental Management Plan (CEMP) to outline environmental management practices and procedures to be followed during construction of the project. The Plan shall be consistent with the Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004 or its latest revision) and shall include, but not necessarily be limited to:

(a) a description of all relevant activities to be undertaken on the site during construction including an indication of stages of construction, where relevant;

(b) details of the areas designated for the erection of public information signage;

(c) statutory and other obligations that the Proponent is required to fulfil during construction including all relevant approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;

(d) details of how the environmental performance of construction will be monitored, and what actions will be taken to address identified potential adverse environmental impacts;

(e) a description of the roles and responsibilities for all relevant employees involved in construction;

(f) details of any construction sites and mitigation, monitoring, management and rehabilitation measures specific to the site compound(s) that would be implemented;

(g) specific consideration of relevant measures to address any requirements identified in the documents referred to under conditions A1(b) and A1(c) of this approval;

(h) the additional requirements of this approval;

(i) a complaints handling procedure during construction;

(j) route alignment sheet(s) to identify the final pipeline alignment including identification of areas where the easement area has been reduced to minimise impacts to threatened species, EEC, waterways and heritage areas as contained in condition B2;

(k) a matrix of construction work method statements (or similar) to be prepared and the anticipated level of risk associated with each determined; and

(l) reference to the approved waterway crossing methodology as determined in condition B6.

The Construction Environmental Management Plan shall be submitted for the approval of the Director General no later than one month prior to the commencement of any relevant construction works associated with the project, or within such period otherwise agreed by the Director General. Construction works shall not commence until written approval has been received from the Director General.

B29. As part of the Construction Environmental Management Plan required under condition B28 of this approval, the Proponent shall prepare and implement the following:

(a) a **Surface and Groundwater Water Management Plan** to manage water quality impacts during construction. The Plan shall be prepared in consultation with the I&I, DECCW, SCA, LPMA, NOW and Wingecarribee Shire Council and shall include, but not necessarily be limited to:
   - (i) detailed engineering designs for each watercourse crossing;
   - (ii) reference to the Rehabilitation Management Plan in condition B29(e) outlining the rehabilitation requirements for each type of watercourse crossing;
   - (iii) a description of any dewatering or water disposal activities associated with groundwater interception or surface water;
   - (iv) monitoring measures listed in condition B7;
   - (v) a description of the quantity and source of all water supplies relating to construction, hydro-testing and operation; and
   - (vi) a description of any dewatering activities associated with groundwater interception along the pipeline easement that includes the quantity of groundwater to be used and a description of any expected impacts associated with the works.

(b) a **Heritage Management Plan** to managed Indigenous and non-Indigenous heritage impacts during construction. The Heritage Management Plan shall include:
   - (i) identification of all Indigenous and Non-Indigenous heritage sites (including archaeological sites) directly impacted or within close proximity of the pipeline construction;
   - (ii) procedures to be implemented to minimise impacts to known heritage items and adequately protect heritage items/areas not directly impacted by the works;
   - (iii) a procedure for consultation with DECCW and the registered Aboriginal stakeholders regarding Aboriginal heritage assessment management and methodology for archaeological subsurface excavation and resultant salvage work; and
   - (iv) a procedure developed in consultation with the registered Aboriginal stakeholders for the management of artefacts found during salvage.

(c) a **Flora and Fauna Management Plan,** developed in consultation with DECCW, to outline measures to protect and minimise loss of terrestrial, riparian and aquatic native vegetation and native fauna habitat as a result of construction of the project. Consultation is to be extended to LPMA, where it involves Crown reserve 1012688 lot 160 DP 821713. The Plan shall include, but not necessarily be limited to:
   - (i) plans showing terrestrial vegetation communities; important flora and fauna habitat areas; locations where EECs, threatened species (Camden Woollybutt *Eucalyptus macarthurii* and Black Gum *Eucalyptus aggregata*); and areas to be cleared. The plans shall also identify vegetation adjoining the site where this contains important habitat areas and/or threatened species, populations or ecological communities;
   - (ii) methods to manage impacts on flora and fauna species and their habitat which may be directly or indirectly affected by the project, such as location of fencing, procedures for vegetation clearing or soil removal/stockpiling and procedures for re-locating hollows or installing nesting boxes and managing weeds;
   - (iii) procedures to accurately determine the total area, type and condition of vegetation community to be cleared;
   - (iv) reference to the Rehabilitation Management Plan required in condition B29(e); and
   - (v) a procedure to review management methods where they are found to be ineffective.

(d) a **Construction Noise and Vibration Management Plan** to manage noise and vibration impacts during construction and to identify all feasible and reasonable noise and vibration mitigation measures. The Plan 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 areas;
   - (iii) detail the requirements for Noise and Vibration Impact Statement(s) for discrete work areas, including construction site compounds;
   - (iv) detail what reasonable and feasible actions and measures would be implemented to minimise noise impacts;
   - (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;
   - (vi) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined in condition C5 of this approval, including a risk assessment process under which an Environmental Representative may approve out-of-hour construction activities deemed to be of low environmental risk and refer

high risk works for the Director-General's approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the Director-General; and

(vii) 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 reported; and, if any exceedance is detected how any non-compliance would be rectified.

(e) Prior to the commencement of construction, the Proponent shall provide details to the Director-General of the **rehabilitation strategy** including details of:

(i) Property Construction Reports prepared prior to construction for all directly affected properties along the proposed pipeline route and clearly identify all waterway crossings;
(ii) identification of measures to manage the top soil and sub-soil stockpile areas, particularly for areas where the construction corridor has been reduced;
(iii) Short term stabilisation measures to be progressively implemented for all areas and waterway types immediately following construction;
(iv) Roles and responsibilities for ensuring that the measures in B29(e)(iii) are implemented and are sufficient;
(v) How the short term stabilisation would interact with the longer term measures specified in the Rehabilitation management Plan required in B29(f).

(f) a **Rehabilitation Management Plan** to manage the waterway and flora and fauna rehabilitation process required as part of the post construction activities of the project and referred to in D3. The Plan shall be prepared in consultation with DECCW, I&I, NOW, LPMA, Wingecarribee Shire Council and SCA with input from the landholders and where relevant geomorphologist, ecologist and agronomist. The Rehabilitation Management Plan is to include but not limited to:

(i) reference to Property Construction Reports prepared prior to construction for all directly affected properties along the proposed pipeline route and clearly identify all waterway crossings;
(ii) details of the rehabilitation methodology of each type of watercourse crossing;
(iii) measures to ensure the rehabilitation of all watercourses disturbed during construction are rehabilitated to a standard equal to or better than the existing condition; and
(iv) identify areas requiring specialist contractors with appropriate expertise and experience for the restoration of waterways and areas adjacent to native flora.

Prior to the completion of construction, the Proponent shall provide details to the Director-General of responsibilities for ongoing maintenance and monitoring of the rehabilitation measures including monitoring duration and frequency, performance criteria and what contingency measures will be undertaken should monitoring against performance criteria indicate that the rehabilitation measures have not achieved performance outcomes. The Proponent shall report on the performance of rehabilitation measures in accordance with the reporting requirements of condition B26.

(g) a **Traffic Management Plan** to manage traffic conflicts that may be generated during construction. The Plan shall address the requirements of the relevant road authority and shall include, but not necessarily be limited to:

(i) details of how construction of the project will be managed in proximity to local and regional roads;
(ii) details of traffic routes for heavy vehicles, including any necessary route or timing restriction for oversized loads;
(iii) demonstration that all statutory responsibilities with regard to road traffic impacts have been complied with;
(iv) details of measures to minimise interactions between the project and other users of the roads such as the use of fencing, lights, barriers, traffic diversions etc;
(v) procedures for informing the public where any road access will be restricted as a result of the project;
(vi) procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to livestock;
(vii) speed limits to be observed along routes to and from the site and within the site; and
(viii) details of the expected behavioural requirements for vehicle drivers travelling to and from the site and within the site.

(h) an **Air Quality Management Plan** to manage air quality impacts during construction. The Plan shall include but not be limited to:

(i) the identification of potential dust sources;
(ii) mitigation measures to control dust impacts including measures to be implemented during weather conditions where high level dust episodes are probable (such as strong winds on hot, dry days); and
(iii) a progressive revegetation strategy for exposed surfaces with the aim of minimising exposed surfaces in accordance with condition B29(e).

PART C – DURING CONSTRUCTION

SOIL AND WATER QUALITY IMPACTS

C1. Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities, in accordance with:

(a) Managing Urban Stormwater: Soils and Conservation (Landcom, 2004);

(b) Managing Stormwater: Urban Soils and Construction 2A Installation of Services (DECC 2008); and

(c) Managing Stormwater: Urban Soils and Construction Vol 2C Unsealed Roads (DECC 2008).

HERITAGE

C2. Construction activities within the Kenmore Psychiatric Hospital curtilage and the Veterans Allotments shall be monitored by a suitably qualified heritage specialist and/or Excavation Director whose appointment has been agreed to by the Director-General in B16. The heritage specialist is to:

(a) advise on the detail design resolution of the works, undertake on-site heritage inductions, and shall inspect new works, design and installation of services (to minimise impacts on significant fabric and views); and

(b) stop work if any unidentified items are found and notify the Heritage Council of New South Wales immediately in accordance with section 146 of the *NSW Heritage Act 1977*. Relevant works shall not recommence until written authorisation from the Department advising otherwise is received by the Proponent.

(c) describe the heritage items, proposed impacts and the mitigation measures to reduce this impact

C3. If during the course of construction the Proponent becomes aware of any previously unidentified heritage object(s), all work likely to affect the object(s) shall cease immediately and the Heritage Council of New South Wales shall be notified immediately in accordance with section 146 of the NSW Heritage Act 1977. Relevant works shall not recommence until written authorisation from the Director General advising otherwise is received by the Proponent.

C4. If during the course of construction the Proponent becomes aware of any previously unidentified significant Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the DECCW informed in accordance with section 89A of the National Parks and Wildlife Act 1974. Relevant works shall not recommence until written authorisation from the Director General advising otherwise is received by the Proponent.

NOISE IMPACTS

Construction Noise

C5. Construction that would generate audible noise at any residential premises shall only be permitted during the following hours:

(a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;

(b) 8:00 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, to prevent environmental harm or risk to life.

C6. Construction outside of these hours specified in condition C5 may be varied with the prior written approval of the Director-General. Any request to alter the hours of construction shall be:

(a) be considered on a case-by-case basis;

(b) be accompanied by details of the nature and need for activities to be conducted during the varied construction hours and any other information necessary to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site; and

(c) require that affected residential receivers are informed of the timing and duration of any construction activities approved under this condition at least 48 hours before that work commences.

Work generating high noise impact

C7. Any work generating high noise that has impulsive, intermittent, low frequency or tonal characteristics, including jack hammering, line drilling, pile driving, rock hammering, rock breaking, saw cutting, sheet piling, vibratory rolling but excluding blasting, must only be undertaken:

(a) between the hours of 8:00am and 6:00pm Monday to Friday;

(b) between the hours of 8:00am and 1:00pm Saturday; and

(c) in continuous blocks of no more than three hours, with at least a one hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers;

except as otherwise approved by the Director-General. For the purposes of this Condition 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this Condition.

Construction Blasting

C8. Blasting shall only be undertaken between:

(a) 9:00 am to 3:00 pm, Mondays to Fridays, inclusive;

(b) No blasting is permitted on Saturdays or Sundays.

Where compelling safety reasons exist, the Director-General may permit blasting outside of these hours on a case by case basis where any request is accompanied by details of the nature and need for blasting outside the approved hours and the measures to be implemented to minimise impacts.

C9. The Proponent shall ensure that air blast overpressure generated by blasting associated with the project does not exceed the criteria specified in Table 1 when measured at the most-affected residential or 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

C10. The Proponent shall ensure that the ground vibration generated by blasting associated with the project does not exceed the criteria specified in Table 2 when measured at the most-affected residential or sensitive receiver.

Table 2 – Peak Particle Velocity Criteria

Peak Particle Velocity Criteria	*Allowable Exceedance*
5	5% of total number of blasts over a 12 month period
10	Never

C11. At least two weeks prior to each blasting event, the Proponent shall notify the relevant local council and potentially-affected landowners, including details of time and location of the blasting event and providing a contact point for inquiries and complaints.

Waste Generation and Management

C12. All waste materials removed from the site shall only be directed to a waste management facility lawfully permitted to accept the materials.

C13. The Proponent shall maximise the treatment, reuse and/or recycling on the site of any excavated soils, slurries, dusts and sludges associated with the project, to minimise the need for treatment or disposal of those materials outside the site.

C14. The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence issued under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.

C15. The Proponent shall ensure that all liquid and/or non-liquid waste generated and/or stored on the site is assessed and classified in accordance with Waste Classification Guidelines (DECCW 2008), or any future guideline that may supersede that document.

AIR QUALITY IMPACTS

Dust Generation

C16. The Proponent shall construct and operate the project in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust from the site cease.

PART D – PRIOR TO OPERATIONS

BIODIVERSITY OFFSET

Biodiversity Offset Strategy

D1. The Proponent shall prepare a strategy, to the satisfaction of the Director-General, to offset native vegetation losses or impacts including impacts to Southern Highlands Shale Woodland; Box-gum Woodland; *Eucalyptus macarthurii* (Camden Woollybutt) and *Eucalyptus aggregata* (Black Gum).
The Offset Strategy is to be developed in consultation with DECCW, HNCMA, Wingecarribee Shire Council and, not to involve Crown land. Where it is adjacent to Crown land, be developed in consultation with LPMA. The Proponent shall submit the Offset Strategy for approval prior to the commencement of construction.

D2. Details of the offset package shall be submitted for the approval of the Director-General prior to the commencement of operation or as agreed by the Director-General. The package shall:
- (a) describe how the offset shall be guaranteed and monitored in perpetuity;
- (b) ensure all cleared vegetation communities and threatened species are represented. Where this cannot be achieved how an equivalent offset has been developed;
- (c) demonstrate how the offset ratio determined improves or maintains biodiversity values; and
- (d) include requirements for a post construction review to confirm the extent of clearing was commensurate with and not greater than that predicted. If clearing is greater, then the package shall demonstrate how the offset was modified and increased to the value of the actual biodiversity loss.

REHABILITATION

D3. The Proponent shall ensure that all rehabilitation measures are implemented progressively where possible and in all cases within one month of the cessation of construction activities at the relevant area. Unless otherwise agreed to by the Director-General, the Proponent shall monitor and maintain the health of all revegetated areas until such time that the plantings have been verified by an independent and suitably qualified expert (such as an ecologist or agronomist whose appointment has been agreed to by the Director-General) as meeting the benchmarks set in the Rehabilitation Management Plan as required in condition B29(e).

D4. Unless otherwise agreed to by the Director-General, the Proponent shall, and in accordance with the Rehabilitation Plan in condition B29(e):
- (a) rehabilitate the pipeline easement, subject to restrictions for planting deep-rooted vegetation within the easement immediately above the buried pipeline or bushfire asset protection requirements;
- (b) rehabilitate riparian areas affected by construction, including measures for controlling gully erosion and replanting of native species endemic to the area with the aim of improving connectivity with surrounding vegetation; and
- (c) rehabilitate water courses (including associated riparian and aquatic habitat) disturbed during the construction of the project to a standard equal or better than the existing condition.

The Rehabilitation Plan shall consider measures for encouraging natural regeneration including replacement of rocks and vegetated litter, replanting of native species endemic to the area propagated from locally collected seed and plant material, re-establishing vegetation communities with all strata represented as appropriate, control of erosion and sedimentation, weed and pest control and stock exclusion in consultation with DECCW, I&I, SCA, NOW, HNCMA, LPMA and Wingecarribee Shire Council as relevant.

NOISE

D5. The Proponent shall take all reasonable measures to minimise noise emissions and vibration from all plant and equipment operated on the site such that they do not exceed noise and vibration criteria derived by application of the NSW Industrial Noise Policy (DECC, 2000) and Assessing Vibration: A Technical Guideline (DECC, 2006).

D6. Operational noise of the pipeline and associated infrastructure must not exceed the sound pressure level (noise) limits presented in the Table 4. Note that the limits apply to the operation of the project and represent the sound pressure level (noise) contribution, at the nominated residential receiver locations in the table.

Table 4 Operational noise limits for residential receivers

	Noise Limits (dB(A))			
Location	***Day***	***Evening***	***Night***	
	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{A1(1minute)}$
Any residential premises	35	35	35	45

(a) For the purpose of this condition:
   (i) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;
   (ii) Evening is defined as the period from 6pm to 10pm on any day; and
   (iii) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays
(b) Noise from the pipeline and associated infrastructure is to be measured at one metre from the dwelling façade of the most affected point or within 30 metres of the dwelling (rural situations) if the dwelling is more than 30 metres from the boundary to determine compliance with the noise limits in this condition;
(c) Noise from the pipeline and associated infrastructure is to be measured on or at the most affected point.
(d) Where it can be demonstrated that direct measurement of noise from the pipeline and associated infrastructure is impractical, the Director-General may accept alternative means of determining compliance in accordance with Chapter 11 of the NSW Industrial Noise Policy.
The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.
(e) The noise emission limits identified in this condition apply under meteorological conditions of:
   (i) wind speeds up to 3 m/s at 10 metres above ground level; or
   (ii) temperature inversion conditions of up to 3 °C/100 metres and wind speeds up to 2 m/s at 10 metres above ground level.

OPERATION ENVIRONMENTAL MANAGEMENT PLAN

D7. The Proponent shall prepare and implement an Operation Environmental Management Plan in accordance with the Guideline for the Preparation of Environmental Management Plans (DUAP, 2004) or its latest revision. The Plan is to be prepared in consultation with the SCA, NOW, I&I, LPMA and Wingecarribee Shire Council as relevant. The Plan shall include but not necessarily be limited to:
(a) identification of all statutory and other obligations that the Proponent is required to fulfil in relation to the operation of the development, including all consents, licences, approvals and consultations;
(b) a management organisational chart identifying the roles and responsibilities for all relevant employees involved in the operation of the project;
(c) overall environmental policies to be applied to the operation of the project;
(d) standards and performance measures to be applied to the project, and means by which environmental performance can be periodically monitored, reviewed and improved, (where appropriate) and what actions would be taken in the case that non-compliance with the requirements of this approval are identified. In particular the following environmental performance issues shall be addressed:
   (i) bushfire hazard and risk management;
   (ii) management and maintenance of offsets;
   (iii) inspection, monitoring and maintenance of all watercourse crossings, both pipeline and access tracks;
   (iv) management measures for handling of scour water released from the pipeline; and
   (v) management measures for easement areas, including management of vegetation, soil erosion, weed control and landholder liaison.
(e) the environmental monitoring requirements outlined under this approval;
(f) complaints handling procedures as identified in conditions B23 to B25;
(g) specific consideration of relevant measures to address any requirements identified in the documents referred to under conditions A1(b) and A1(c) of this approval; and
(h) management policies to ensure that environmental performance goals are met and to comply with the conditions of this approval.

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