Attachment 4 Agency Responses to Request for Key Issues - For Information Only

Director-General's Environmental Assessment Requirements

All communications to be addressed to:

Development Control Services NSW Rural Fire Service Locked Mail Bag 17 Granville NSW 2142

Telephone: (02)8741 5555

Development Control Services NSW Rural Fire Service 15 Carter Street Homebush Bay NSW 2127



Facsimile: (02)8741 5433

Urban Assessments Department of Planning GPO Box 39 SYDNEY NSW 2001 Received Your Ref: MP 07_0026 **2 9 MAR 2007**Our Ref: S07/0015 G07/0812 DA07031538759 PS

Attention: Ms Verity Humble-Crofts

Date: 26-Mar-2007

Dear Ms Humble-Crofts,

RE: Request for provision of Key Issues and Assessment Requirements – 234//1104071, HUTLEY DRIVE, LENNOX HEADS NSW

I refer to your letter dated 08-Mar-2007 seeking our key issues and assessment requirements under Section 75F (4) for the above Project Application pursuant to Part 3A of the Environmental Planning and Assessment Act 1979.

The RFS advises that the following key issues and assessment requirements in relation to bushfire matters be included in the Director-Generals Environmental Assessment Requirements:

1. The NSW Rural Fire Service (RFS) notes that the subject site has significant bush fire issues and is identified as bush fire prone. Future residential or Special Fire Protection Purpose developments are likely to be subject to the requirements of Section 100B of the Rural Fires Act 1997 and Section 79BA of the Environmental Planning and Assessment Act 1979.

2. Reducing the rate of heat output (intensity) of a bushfire close to a development through control of fuel levels.

3. The ability to site and provide for adequate future water supplies for bushfire suppression operations.

4. Minimising the vulnerability of buildings to ignition from radiation and ember attack by addressing the construction of assets in accordance with Australian Standard 3959 Building in Bush Fire Prone Areas.

5. The future management regimes for any areas of hazard remaining within the subject area. This should focus on the level of hazard posed to future development by the land or adjacent land and how the hazard may change as a result of development.

6. Substantial revegetation of the property may increase bush fire risk to the proposed development. Any proposed revegetation should be undertaken in such a way that limits the spread and occurrence of fire.

7. Controlling the type of developments permissible in bushfire prone areas.

8. Minimising the impact of radiant heat and direct flame contact by separating the development from the bushfire hazard and identifying the extent to which future development can provide for asset protection zones in accordance with Planning for Bushfire Protection 2006. Setbacks will depend on proximity to vegetation, vegetation type and slope.

9. The ability to provide for adequate egress/access to the proposed development as outlined within Chapter 4 of Planning for Bushfire Protection 2006.

For any enquiries regarding this correspondence please contact Patrick Schell.

Yours faithfully,

Development Control Co-ordinator



NSW DEPARTMENT OF PRIMARY INDUSTRIES

Now incorporating NSW Fisheries ABN 51 734 124 190-002

> Our Ref: Your Ref: 07/0026

Heather Warton Director, Coastal Assessments Department of Planning GPO Box 39 SYDNEY NSW 2001

Attention: Ms Humble-Crofts

23 March 2007

Received **2 8 MAR 2007** Strategic Assessmen

Dear Ms Humble-Crofts

Re: Key Issues and Assessment Requirements – Pacific Pines Estate Lennox Head, Concept Plan Application – proposed residential community development and project application Stage 1, 30 lot residential subdivision

Thank you for requesting details of key issues and assessment requirements from the Department of Primary Industries (Aquatic Habitat Protection Unit) (DPI AHPU) for inclusion in the Director-General's Environmental Assessment Requirements.

There are no agricultural, mining or forestry issues. The Aquatic Habitat Protection Unit within DPI has an interest in contributing to the assessment of the proposal.

The NSW Department of Primary Industries (NSW DPI) has been formed by the merger of NSW Fisheries, Department of Mineral Resources, State Forests and NSW Agriculture.

NSW DPI has both statutory and advisory responsibilities in relation to development and land use planning matters. The Department is an advocate of sustainable development and profitable and sustainable primary industries through appropriate access to and wise management of natural resources. NSW DPI through Forests-NSW also has a commercial and operational interest in land use planning matters.

DPI's responsibility also covers managing fish (including aquatic invertebrates), and fish habitat throughout NSW. In addition, the department works to provide quality commercial and recreational fishing, and aquaculture opportunities. Fisheries issues are outlined below:

FISHERIES MANAGEMENT DIVISION AQUATIC HABITAT PROTECTION BRANCH

1243 Bruxner Highway WOLLONGBAR NSW 2477 ABN 51 734 124 190 www.dpl.nsw.gov.au Tel: 02 6626 1269 Fax: 02 6626 1377



Dredging and Reclamation Activities and Fish Passage

The small creek located to the north western side of the property, incorrectly identified on *Preliminary Concept Layout 06115-UD26A 16 Feb07*, page 15 of the *Project Description Report* is a modified natural creek. A previous approval for this site DA 2004-1113 exists and the then NSW Fisheries in an integrated submission on that DA dated 21 September 2004 stated:

The present proposal involves 'embellishment of a new watercourse and associated drainage" (illustration 3.3). Straightening and reshaping, to a trapezoidal channel destroys what is presently a degraded watercourse which provides some fish habitat value for eels and several small freshwater fish species, eg striped gudgeons and firetail gudgeons. DPI Fisheries conditions will require the proponent to restore some ecological function to the watercourse involving establishment of pools and meanders improving the riparian vegetation and fish habitat.

This conditioned outcome will, in a very small way contribute to achieving DPI – Fisheries policy of no net loss of fish habitat and 2:1 replacement of fish habitat and the impacts on fish habitats that have resulted during the 'staging' of the development of Pacific Pines.

The Department therefore required as conditions of approval for the DA four conditions, two of which stated that:

- The 'new' watercourse adopt the principles of Natural Channel Design and incorporate meanders, riparian vegetation and where appropriate pools and riffles.
- That a Design and Management Plan detailing design of, and management proposed for the 'new' watercourse be developed to the satisfaction of DPI Fisheries prior to undertaking the works.

Cognisant of these adopted conditions to what DPI understands is a valid approval DPI strongly recommends that small creek located to the north western side of the property, incorrectly identified on *Preliminary Concept Layout 06115-UD26A 16 Feb07*, page 15 of the *Project Description Report* be rehabilitated and 'natural channel design' principles and meanders, riparian vegetation and where appropriate pools and riffles be adopted. The design and an appropriate management plan for this outcome should be specifically addressed in detail in the assessment.

Furthermore road crossings of this watercourse need to ensure appropriate fish passage be provided when designing, modifying or constructing watercourse crossings (pipelines, floodgates, causeways or weirs) that are constructed or modified. Provision of fish passage needs to satisfy DPI requirements for fish passage available in the document *Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings*, available on the internet at: http://www.fisheries.nsw.gov.au/__data/assets/pdf_file/5054/booklet-fish-passage.pdf

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Buffer Zones

DPI AHPU supports the incorporation of riparian buffers surrounding aquatic habitats. Details of proposed buffer zones surrounding the waterway system should be mapped and included in the environmental assessment. This assessment should identify key environmental assets that are being protected, and outline how these assets are to be protected during the construction and the operational phase of the development. DPI AHPU advocate incorporation of riparian buffer zones lined with native vegetation adjacent to drainage lines and creeks. The assessment process should identify how well these requirements are met and identify any inconsistencies with these requirements where areas of buffer zones can be improved or remediated through revegetation.

DPI policy with regard aquatic habitat buffers: *Policy and Guidelines Aquatic Habitat Management and Fish Conservation 1999* requires:

"Terrestrial areas adjoining freshwater, estuarine and coastal habitats should be carefully managed in order to minimise land-use impacts on these aquatic habitats. As a precautionary approach, foreshore buffer zones at least 50 m wide should be established and maintained, with their natural features and vegetation preserved. Such buffer zones may need to be fenced or marked by signs. The width of these buffer zones may need to be increased to 100 m or more where they are adjacent to ecologically sensitive areas."

These policy and guidelines are available on the department's website at:

http://www.fisheries.nsw.gov.au/hab/tool-kit.htm requires:

It is noted that initial and future management of buffer zones to the waterways is not specifically discussed. It is anticipated that the buffer would need to achieve two competing interests: a habitat protection buffer and asset protection.

In order to achieve this objective provision of an adequate buffer zone to the waterway is necessary. The proposed buffer zones surrounding the waterways should be mapped and included in the environmental assessment. This assessment should also identify these key environmental assets that are being protected, and outline how these assets are to be protected during the construction phase of the development and opportunities for rehabilitation works.

Stormwater Management

One of the key concerns that needs to be addressed is the ability of the nearby waterway system (North Creek Nature Reserve, North Creek and Richmond River) to accommodate the nutrient/pollutant load that will enter the system. DPI AHPU expects that the proponent needs to demonstrate that the development will ensure

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that there is no net increase in nutrient loads entering the waterways. Approval for the poorly located water quality control pond was predicated upon BMP use of a chain of stormwater treatment throughout the catchment. The assessment should specifically include details of the stormwater treatment system such as gross pollutant traps, stormwater detention ponds and swales including their locations and capacities.

Maintenance of stormwater control systems and an associated management plan is an important issue that needs to be addressed, as does stringent monitoring of the water quality of the receiving waters. These matters need to be detailed in the assessment.

Likely and Possible Future Links to Henderson Farm and Ross Lane Locating the 'Likely future link to Henderson Farm' south of the playing fields as depicted in the map titled *Preliminary Concept Layout 06115-UD26A 16 Feb07*, page 15 of the *Project Description Report* affords no buffer to important aquatic habitats within the SEPP 14 area and the North Creek Nature Reserve.

The former NSW Fisheries in correspondence dated 21 September 2004 concerning DA2004-1113 also raised concern with regard the location

"Fisheries understands that this road, if built, will link Hutley Drive to Ross Lane. It is highlighted that during the assessment of the development application for the playing fields the DPI Fisheries expressed serious concern regarding the proximity of the playing fields to marine vegetation communities, the SEPP 14 Wetland and the North Creek Nature Reserve. A buffer was negotiated. Setting aside this area for the road reserve is not supported by DPI Fisheries. Accordingly, DPI Fisheries strongly recommend that Council require the proponent indicate at least one area for a 'Possible Future Road Reserve' north of the playing fields."

Provision within the masterplan for a suitable, environmentally sustainable location for a potential road link to the Henderson Farm and Ross Lane needs considered assessment to minimise future cumulative impacts on fish and fish habitat.

Cumulative Impacts

DPI AHPU is concerned that the cumulative impacts of development in the North Creek precinct has not been adequately considered and planning decision have been ad-hoc. Consideration of the cumulative impacts of development in the North Creek precinct should be an important component of the assessment of this development. This is an important issue for recreational and commercial fishers in the region as it is worth noting that during the extensive fish kill that occurred during February March 2001 in the Richmond River which resulted in the River being closed to recreational and commercial fishing for up to 6 months the North Creek

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area provided a refugia for fish that could access that habitat. These fish contributed to the relatively speedy repopulation of the Richmond River after the catastrophic fish kill. Increased development without appropriate setbacks in this precinct to aquatic habitats compounds the impact of poor planning decisions, specifically the inappropriately located Pacific Pines water quality control pond which forces the Hutley Drive southern link to immediately abut wetland habitats.

Such poorly planning contrives the departments' *Policy and Guidelines Aquatic Habitat Management and Fish Conservation 1999* available at the DPI website, SEPP 71 and the Coastal Policy. Furthermore as in previous locations poorly planned and constructed developments can precipitate and exacerbate fish kill events.

Sea Level Rise/Climate Change

DPI AHPU strongly recommend that potential future sea level rise in low lying coastal floodplains be taken into consideration when assessing and determining such a development. The 2007 IPCC Science Assessment Report states that "Projected globally-average sea level rise at the end of the 21st century will between 0.28-0.43 metres, however...these projections may increase by a further 10 to 25%".

If you have any further enquiries please contact me on (02) 6626 1397.

Yours sincerely

Patrick Dwyer Fisheries Conservation Manager (North)

FISHERIES MANAGEMENT DIVISION AQUATIC HABITAT PROTECTION BRANCH

1243 Bruxner Highway WOLLONGBAR NSW 2477 ABN 51 734 124 190 www.dpl.nsw.gov.au Tel: 02 6626 1269 Fax: 02 6626 1377



NSW Government

DEPARTMENT OF NATURAL RESOURCES

Contact: Tim Rabbidge Phone: (02) 66 270 115 Fax: (02) 66 270 166 Email: <u>tim.rabbidge@dnr.nsw.gov.au</u>

Our ref: Inq 311 - Ballina Your ref: MP 07_0026



ATTENTION: Verity Humble-Crofts

22 March 2007

Dear Sir/Madam

Re: MAJOR PROJECT 07_0026 – PACIFIC PINES ESTATE, LENNOX HEAD Concept Plan Application – Proposed residential community development, & Project Application – Stage 1, 30 lot residential subdivision

URBAN ASSESSMENTS

RECEIVED

2 7 MAR 2007

I refer to your undated correspondence received on 13 March 2007 requesting review of the application and identification of any key issues for inclusion in the Director-General's Environmental Assessment Requirements (DGRs) for the proposed developments at Lennox Head. The Department of Natural Resources (DNR) has reviewed the Concept Plan Project Description Report and the draft DGRs and offers the following initial comments on key issues and assessment requirements that should be addressed by the proponents.

Concept Plan (including Stage 1 proposal)

The Preliminary Concept raises the following concerns.

- 1. The fragmentation of the major north south green corridor (encompassing the natural spring), from that in the approved Master plan is not supported.
- 2. The continued identification of the Hutley Drive southern link as a viable proposition is not supported. This aspect of the development been a controversial element of all the previous planning undertaken for this site and is not supported by any of the state government agencies.

This proposed western arterial road will have both a direct and indirect impact on the SEPP 14 wetland. The direct impact is due to the proposed road cutting through the SEPP 14 area, while the additional indirect impact will be caused by the construction and ongoing presence of a road and its run off being located in an area that should be best allocated as a wetland buffer zone.

Obviously options for redirection or modification of much of this proposed road alignment have been limited by the existing development, however it is considered that there are options for the road (north of the already constructed areas) to be located to the east of the water quality control pond (WCQP). A reconsideration of this aspect in conjunction with the proposed stormwater management scheme may result in a much better environmental outcome.

draft DGRs

The draft DGRs should require the comprehensive assessment and consideration of the following issues in addition to those already listed

- 1. the extent and specifications for filling of land perhaps included under Section 2, relevant to both applications
- 2. the location and size of buffers to be provided as part of the consideration under Section 4.1, relevant to Concept Plan
- 3. the need to protect the natural drainage system rather than adopt the "pipe and bury" approach. The protection of the drainage line (from the existing spring) in the centre of the development so that it is not solely piped into constructed drainage systems but rehabilitated to a natural creek line flowing into the water quality pond is supported. The extension of a creek line through the senior's housing precinct and into the main WQCP would provide a better connection to the natural system and hopefully longer term better water quality. It would also enhance the open space network for future community use relevant to both applications, see Section 7.3.
- the preparation of an ASS management Plan in accordance with is the NSW ASS Manual (1998) should preliminary investigations identify the presence of acid sulfate soils - ASS – add to Section 6.3

For further information regarding this matter please contact Mr Tim Rabbidge on (02) 66270115 in the first instance.

Yours sincerely

alge

Tim Rabbidge Natural Resource Planning



File No. 23.5351 07/649 N00976 Reference. 07-0026

2 3 MAR 2007 BY:

The Acting Director Urban Assessments Department of Planning GPO Box 39 SYDNEY NSW 2001



URBAN ASSESSMENTS RECEIVED

2 7 MAR 2007

Ballina Shire Council. Proposed Pacific Pines Estate, Lennox Head. Details of Key Issues and Assessment Requirements.

Dear Sir

I refer to your letter dated 8 March 2007 concerning the above.

In accordance with SEPPII the proposed Residential Development is classed as a Schedule 1 development and will required consideration in due course by the Regional Development Committee. It would be appreciate if an electronic copy of the document could be provided for dispersal.

In order to maintain the safety and efficiency of the road network it is desirable to identify the necessary road infrastructure requirements as early as possible for the planning of the development.

A traffic study should be undertaken that takes into account the key issues relevant to the scale of this proposal as set out in Table 2.1 of the Roads and Traffic Authority's current 'Guide to Traffic Generating Developments' (copy attached). This should include information relating to:

- Total impact of existing and proposed development on the overall local road network
- Intersection sight distances
- Existing and proposed access conditions
- Detail of servicing and parking arrangements
- Improvements for road junctions
- Connectivity to existing developments
- Impact on Transport (Public and School Bus Routes)
- Provisions for pedestrians, alternative transport modes such as bicycles
- Road Traffic Noise

Current AUSTROADS standards should be adopted for any necessary upgrading of the surrounding road infrastructure.

If Council has any further enquiries please contact Mrs Leisa Sedger on 6640 1362 or email land use northerm@rta.nsw.gov.au.

Yours faithfully

David Bell A/Regional Manager, Northern Region

Roads and Traffic Authority

PO Box 576 Grafton NSW 2460

www.rta.nsw.gov.au

Verity Humble-Crofts - RE: Pacific Pines Estate, Lennox Head

From: To:	"Steve Barnier" <steveb@ballina.nsw.gov.au> "Verity Humble-Crofts" <verity.humble-crofts@planning.nsw.gov.au></verity.humble-crofts@planning.nsw.gov.au></steveb@ballina.nsw.gov.au>
Date:	26/03/2007 16:45
Subject:	RE: Pacific Pines Estate, Lennox Head

Afternoon Verity. Apologies for the lateness of these comments. I hope they are of some assistance. At the risk of "whipping a dead horse", I need to reiterate my concern expressed during our telephone conversation today. That is, that the turnaround times required by the Department in relation to its referrals are, in my view, unreasonable and not conducive to good planning.

As a generalisation, I think that the information prepared by Geolink and submitted with your letter to Council dated 8 March 2007 adequately identifies the issues of most significance to Council in respect of this proposal.

Council reiterates the need for the southward extension of Hutley Drive within the existing road reserve. Provision for a road connection to serve future development to the west of Pacific Pines is required, as outlined in the submitted document. I note on page 14 that Geolink favour the road option north of the dedicated playing fields for this connection. Intersection treatments and separation distances in this locality will require careful assessment.

The Preliminary Concept Layout (PCL) shows a proposed new access road connecting to Stonyhurst Drive. Council's Engineers have not had the opportunity to assess the desirability or consequences of this connection in terms of the adjacent road network.

Whilst I understand the logic of collocating the proposed community facilities (shown yellow on the PCL) with the dedicated sports fields, this may be a bit messy and congested, eg in terms of access. Perhaps an alternative might be to site the community facilities between the neighbourhood blob and the seniors housing blob and adjacent to the green space surrounding the lake.

There is the potential for the Council to inherit problems in terms of the interface between the neighbourhood centre and residential areas. I feel that some form of separation (rather than just a road) is desirable to mitigate noise, traffic including service vehicles and other potential conflict issues. Consideration might also be given to the means of vehicular access to the rear of the blue blob closest to the lake for servicing, and also for those wishing to access this area for passive recreation.

Please accept that as there is no information furnished in relation to residential lot sizes, road dimensions, landscaping and dedication of public areas, access arrangements to the neighbourhood centre etc, Council may well make further representations to the Department when more adequate details become available. Regards, Steve.

From: Verity Humble-Crofts [mailto:Verity.Humble-Crofts@planning.nsw.gov.au] Sent: Tuesday, 20 March 2007 5:15 PM To: Steve Barnier Subject: Pacific Pines Estate, Lennox Head

Steve,

the Department referred correspondence regarding key issues for the Director-General's Requirements for the above proposal on 8 March to Council.

Your reference Our reference Contact : MP 07_0026 S07/00304 : FIL06/2015 DOC07/7244 : Krister Waern, 66402503 URBAN ASSESSMENTS RECEIVED

1 9 MAR 2007

Heather Warton Director Urban Assessments Department of Planning GPO Box 39 SYDNEY NSW 2001

1 6 MAR 2007

Dear Ms Warton

RE: REQUEST FOR KEY ISSUES AND ASSESSMENT REQUIREMENTS – MAJOR PROJECT 07_0026 – PACIFIC PINES ESTATE, LENNOX HEAD

I refer to your request for the Department of Environment and Conservation's (DEC) requirements for the environmental assessment (EA) in regard to the above proposal received by DEC on 13 March 2007.

DEC has considered the details of the project as provided by the applicant and has identified the information it requires to assess the project in Attachment A. The proponent should ensure that the EA is sufficiently comprehensive and detailed to determine the extent of the impact of the proposal.

In summary, DEC's recommended key information requirements for the project are:

- 1. the impacts on local surface water quality;
- 2. the impacts of the project on threatened species/communities and their habitat;
- 3. the impacts of the project on Aboriginal cultural heritage values;
- 4. an assessment of any land contamination and;
- 5. the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts identified in 1-4 above.

Should you require any further information please contact Krister Waern on (02) 66402503.

Yours sincerely

JON KEATS Head Industry and Waste Unit North Coast Environment Protection and Regulation

Att:

Attachment A DEC EA Requirements Attachment B Guidance Material

PO Box 498, Grafton NSW 2460 NSW Government Offices, 49 Victoria Street, Grafton NSW Tel: (02) 6640 2500 Fax: (02) 6642 7743 ABN 30 841 387 271 www.environment.nsw.gov.au

Department of Environment and Conservation NSW

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Attachment A – Department of Environment and Conservation's Environmental Assessment Requirements

Environmental impacts of the project

- 1. The following environmental impacts of the project need to be assessed, quantified and reported on:
 - Water quality
 - Contaminated Land
 - Noise
 - Threatened Species and Ecological Communities
 - Aboriginal cultural heritage
- 2. These should be assessed in accordance with the relevant guidelines listed in Attachment B.
- 3. Describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

Water quality

The environmental outcomes for the project in relation to water should be:

- There is no pollution of waters during the construction and operational phases of the development;
- There is no inconsistency with any relevant Statement of Joint Intent established by the Healthy Rivers Commission; and
- It is acceptable in terms of the achievement or protection of the River Flow Objectives and Water Quality Objectives.

The Environmental Assessment (EA) should document the measures that will achieve the above outcomes.

Contaminated Land

The EA must document the assessment and management of any land contamination to ensure that the land is not allowed to be put to a use that is inappropriate because of the presence of contamination. Under the *Contaminated Land Management Act 1997* there is a responsibility to notify the DEC of sites that pose a significant risk of harm to human health or the environment.

Noise

The environmental outcomes should include the following:

 The proposal must be designed, constructed, operated and maintained so that there are no adverse impacts from noise (including traffic noise).

Impacts of the project on threatened species and their habitat

It is noted that the majority of the site is cleared of vegetation, however, a number of threatened fauna species and communities could potentially use the site. In addition, the Hairy Joint Grass (*Arthraxon hispidus*) is known to exist in the area and should be thoroughly searched for, especially in the wetter areas and around the existing spring.

The vegetation on site has the potential to support a wide range of threatened flora and fauna species and ecological communities. Any identified threatened species and/or community should be discussed in detail.

The EA will need to include a comprehensive assessment of the above issues and also address the following:

- 1. A field survey of the site should be conducted and documented in accordance with the draft "Guideline for threatened species assessment'.
- 2. Likely impacts on threatened species and/or community and their habitat need to be assessed, evaluated and reported on. The assessment should specifically report on the considerations listed in Step 3 of the draft guideline.
- 3. Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on threatened species and their habitat. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- 4. The EA needs to clearly state whether it meets each of the key thresholds set out in Step 5 of the draft guideline.

Impacts of the project on Aboriginal cultural heritage values

- 1. The EA should address and document the information requirements set out in the draft "Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation" involving surveys and consultation with the Aboriginal community.
- 2. Identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area.
- 3. The extent and significance of this site will need to be assessed and preferably any development in this area would avoid disturbance of the site.
- 4. Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- 5. The EA needs to clearly demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

Note: If the EA is relying on past surveys that they should check that the work is consistent with the requirements within the above 3A guidelines.

Department of Environment and Conservation NSW

Attachment B - Guidance Material

1. Assessing Environmental Impacts

Water quality

- National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000)
- NWQMS Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC 2000)
- Healthy Rivers Commission Report into Coastal Lakes and Statement of Joint Intent
- The relevant targets within the State Water Management Outcomes Plan

Wastewater

- National Water Quality Management Strategy: Guidelines for Sewerage Systems -Effluent Management (ARMCANZ/ANZECC 1997)
- National Water Quality Management Strategy: Guidelines for Sewerage Systems Use of Reclaimed Water (ARMCANZ/ANZECC 2000)
- Environmental Guidelines for the Utilisation of Treated Effluent by Irrigation (NSW DEC 2004)
- Environment and Health Protection Guidelines: 'Onsite Sewage Management for Single Households', February 1998 (Silver Book).

Stormwater

(Note: some of these documents will be revised in 2006)

- Managing Urban Stormwater: Soils and Construction (NSW Landcom, 2004)
- Managing Urban Stormwater: Source Control (EPA 1998)
- Managing Urban Stormwater: Treatment Techniques (EPA 1998).

Contaminated Land

- Managing Land Contamination: Planning Guidelines SEPP55 Remediation of Land, Department of Urban Affairs and Planning and NSW EPA, 1998:
- Contaminated Sites Guidelines for Consultants Reporting on Contaminated Sites (Environment Protection Authority (EPA) 1997);
- Contaminated Sites Guidelines on Significant Risk of Harm and Duty to Report (EPA, 1999).

Noise and vibration

- NSW Industrial Noise Policy (EPA, 1999)
- NSW Environmental Criteria for Road Traffic Noise (EPA, 1999)
- Chapter 171 Noise Control Guideline, Construction Site Noise, Environmental Noise Control Manual, 1994.

2. Assessing Threatened Species Impacts

Draft Guidelines for Threatened Species Assessment - Available from Department of Planning.

3. Assessing Aboriginal Cultural Heritage Impacts

Draft Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation - Available from Dept of Planning

Interim Community Consultation Requirements for Applicants <u>http://www3.environment.nsw.gov.au/npws.nsf/Content/Protecting+Aboriginal+objects+and+place</u> <u>s</u>

Aboriginal Cultural Heritage Standards and Guidelines Kit - Available shortly on-line through DEC's webpage.

Department of Environment and Conservation NSW