



PCU028721

28 November 2011



Director General
Department of Planning
23-33 Bridge Street
SYDNEY NSW 2000

Attention: Matthew Daniel

Department of Planning
Received
5 DEC 2011
Scanning Room

Dear Sir

**MODIFICATION TO DA 4
PENRITH LAKES SCHEME**

As requested by the Department of Planning and Infrastructure and the Penrith Lakes Working Group, we hereby submit an application pursuant to Section 75W of the Environmental Planning and Assessment Act, 1979 (EP&A Act) to modify the development consent for DA 4 for the Penrith Lakes Scheme to enable the use of an existing water body, known as "Lewis Lagoon" as a Water Quality Control Pond.

The modification proposes:

- Formalise the use of an existing water body, known as "Lewis Lagoon" as a Water Quality Control Pond to treat water before entering the Wildlife Lake generally consistent with the recommendations of the Penrith Lakes Water Committee – Review of the Water Principles and Water Plan, June 2005 *Department of Infrastructure, Planning and Natural Resources*.

The modification is considered to have a positive environmental impact as the retention of the water body within the scheme will improve water quality for external catchments prior to entering the Wildlife Lake and does not seek to change the extent of quarrying or the volume of resource material extracted.

This letter identifies the consent and describes the proposed modification and is accompanied by:

- Section 75W application form; and
- A copy of the consolidated Notice of Determination for DA 4 (Attachment A)

Penrith Lakes Development Corporation Ltd

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1.0 CONSENT PROPOSED TO BE MODIFIED

Development consent for DA 4 was granted by the Minister for Planning on 9 September 1998 for the quarrying and extraction of sand and gravel and subsequent rehabilitation of the land in the western and northern part of the Penrith Lakes Scheme site. The consent has been modified on six prior occasions in 2004, 2005 and 2011.

2.0 PROPOSED MODIFICATIONS TO CONSENT

The proposed modification to the consent is detailed below.

2.1 Use of "Lewis Lagoon" as a Water Quality Control Pond

As requested by the NSW Governments Water Committee, located in the north-east of the scheme, is an existing water body (Figure 1) that was constructed during the establishment of the bulk earthworks associated with the construction of (new) Castlereagh Road. Specifically, this application seeks to formalise the use of the existing water body to treat water (as a Water Quality Control Pond) prior to any flows entering the Wildlife Lake as recommended by the Penrith Lakes Water Committee.



Figure 1

To facilitate the proposed modification, it is proposed to include a new condition 27B in DA4 that formalises and retains the water quality control pond known as "Lewis Lagoon".

3.0 Background

Known as "Lewis Lagoon", the water body first appears in the Two Year Plan Approval Drawing No B.5-10320 E Sheet 5d as a perched wetland (Figure 2 and Appendix A). Although this plan was approved by the Minister of Planning at the time (20 September 2002), this area of landform was not sought for approval as the Wildlife Lake was to be subject to further review at the time.

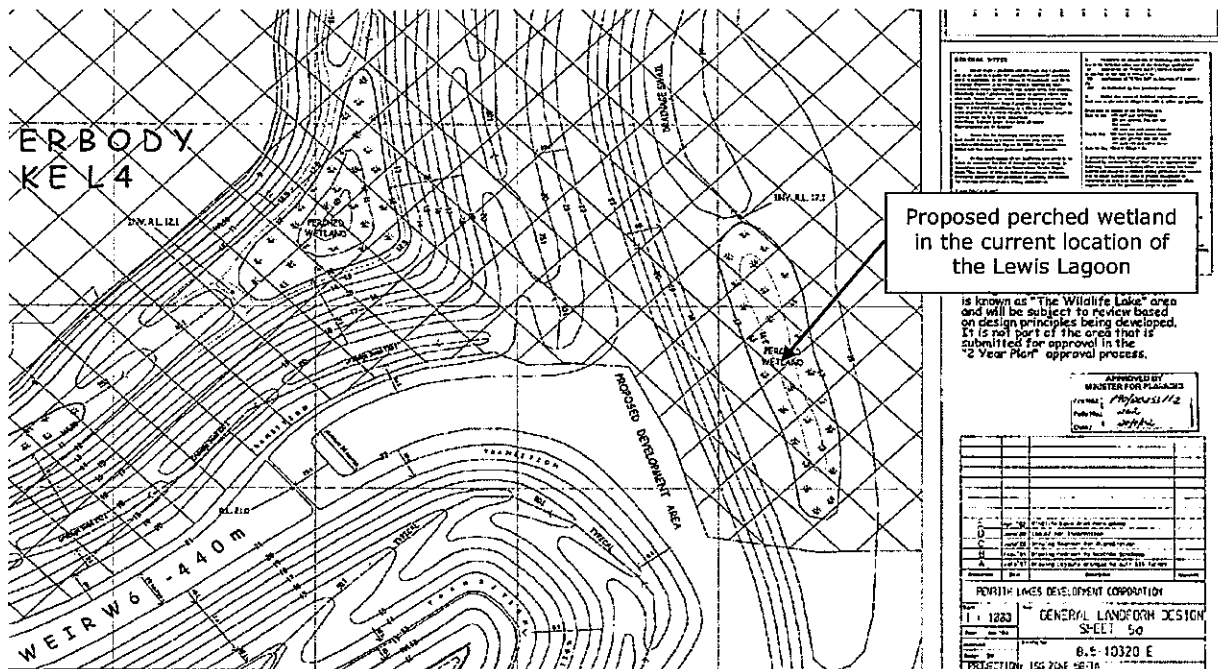


Figure 2

3.1 Penrith Lakes Water Committee – Review of the Water Principles and Water Plan June 2005

In the absence of an on-going parkland management authority, the Penrith Lakes Water Committee (PLWC), consisting of representatives of key stakeholders was established. Commissioned by the Department of Infrastructure Planning and Natural Resources now known as Department of Planning and Infrastructure, the role of the Committee was to represent Government in the development of comprehensive sustainable policies, strategies and processes to guide the final design, implementation and management of the Penrith Lakes waterways. The Committee, on behalf of Government was advised by independent expert consultants – 'Independent Expert Panel on Environmental Flows for the Hawkesbury Nepean, Shoalhaven and Woronora Catchments' (Expert Panel). The Expert Panel had previously advised the Hawkesbury Nepean River Management Forum on environmental flow options for the Hawkesbury-Nepean River system and consists of nationally recognised scientists and engineers with extensive experience in water management issues.

The Committee's terms of reference were as follows:

- Confirm or otherwise if the existing works and/or current proposals achieve the objectives and requirements of the current Water Principles and Water Plan.
- If the initial results of the review of the proposed development indicated that the current Water Plan is not adequate, develop and recommend proposals which would assist Government and PLDC in the further planning, design, development and management of the Penrith Lakes site.

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- Confirm or otherwise if the existing works and/or current proposals meet the objectives and requirements of the original and current planning proposals for the Penrith Lakes site.

The Committee's review was to have particular emphasis on achieving a sustainable, cost effective balance between the existing and proposed uses (land and water) and development within the Penrith Lakes water catchment area, and the infrastructure, water quantity, water quality standards, and management requirements of the lakes system.

In Sections 4.13 Reshaping the Lakes and Urban Land and Section 6.3 Recommendations Priority 1 (Appendix B), the Committee recommends the provision of additional water Quality Control Pond in the north and that the foreshore of the Lakes Scheme be revised, as illustrated in Figure 3 below to improve both water circulation and mixing within the main lakes and embayments. As shown below in Figure 3, "Lewis Lagoon" can be seen as "Camenzuli WQCP".

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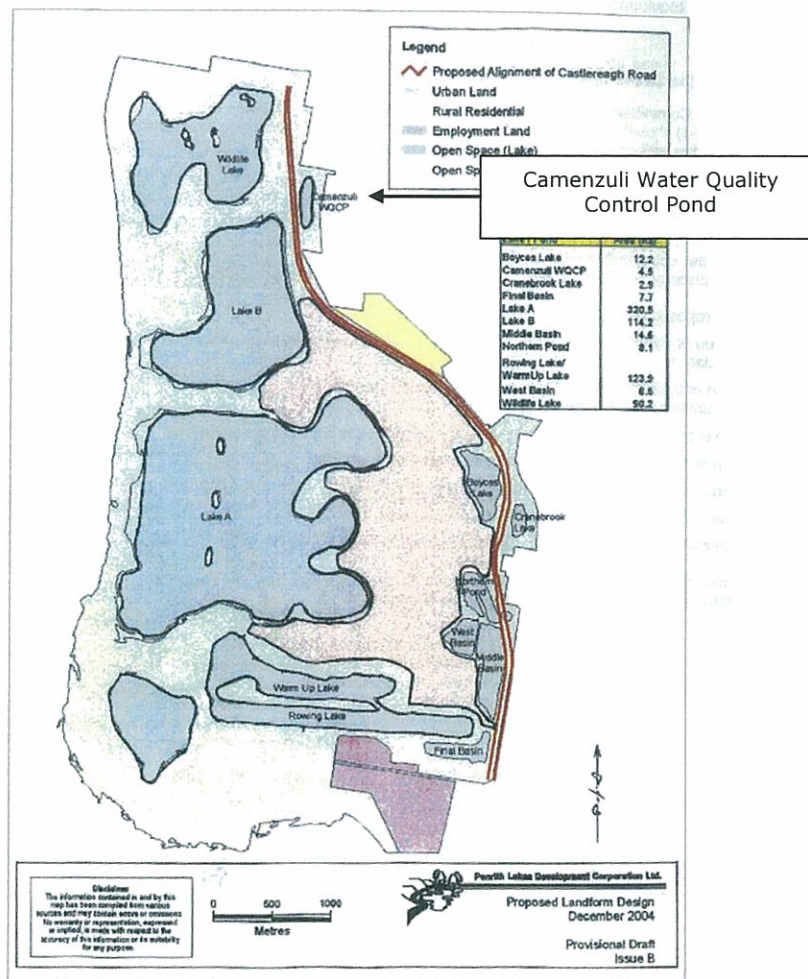


Figure 4-1: Penrith Lakes Scheme - Proposed Change to Shape of Lakes

31

Figure 3

3.2 Browns Consulting – North Scheme Concept Drainage Design July 2005

As part of an independent assessment of the Penrith Lakes Water Management by the Department of Infrastructure, Planning and Natural Resources (DIPNR), additional water quality treatment for the North Scheme Drainage was recommended prior to discharge to Lake B (for recreational use) and the Wildlife Lake. Browns Consulting were engaged and prepared a report (North Scheme Concept Drainage Design July 2005) that describes the qualitative and quantitative assessment of stormwater discharges from the northern catchments of Penrith Lakes Scheme, which lie to the east of the Castlereagh Road Relocation.

The drainage design integrated with the Castlereagh Road Relocation Ultimate design and Stage 1 design, receiving road runoff within swales and conveying this runoff to the proposed water quality

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"Lewis Lagoon Constructed at the bulk earth works phase to be used as temporary sedimentation basin. Basin to be maintained and decommissioned after site establishment as per "soil and construction" Landcom 2004"



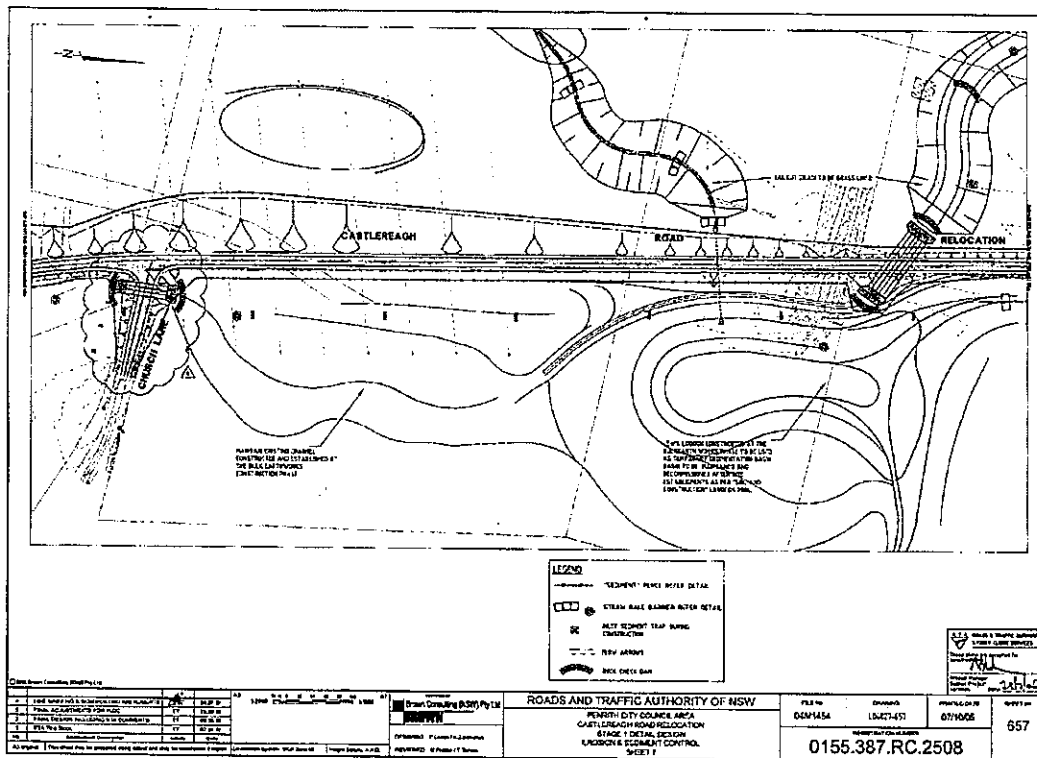


Figure 6

It has always been PLDC understanding, that the "decommissioning" was only in relation for the period of physical construction works for Castlereagh Road, following which the Lagoon would remain as Water Quality Control Pond to treat water from Castlereagh Road and the surrounding catchment. To remove Lewis Lagoon in its entirety would not be consistent with *Browns Consulting – North Scheme Concept Drainage Design July 2005* and the recommendation of the Penrith Water Committee June 2005.

4.0 Statutory Considerations

4.1 Sydney Regional Environmental Plan 11

The main planning instrument currently applying to the Penrith Lake Scheme site is Sydney Regional Environment Plan 11 (SREP 11). SREP11 contains a Structure Plan, to be used as a key matter for consideration for the consent authority when granting consent. In September 2009, PLDC wrote to the Director General of Planning requesting an amendment to the Structure Plan, which included the provision of "Lewis Lagoon".

The current Structure Plan was approved in 1998. Since 2005 the Structure Plan has not reflected the lakes design that PLDC has been working towards. Changes to the design were the result of accommodating recommendations of the Government's Penrith Lakes Water Committee 2005 and the inclusion of the Roads and Traffic Authority Part 5 Approval for (new) Castlereagh Road.

The provision of an additional Water Quality Control Pond although not specifically shown in the current 1998 Structure Plan, was approved as part of the (new) Castlereagh Road approval and is

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consistent with the recommendation of the Government's Penrith Lakes Water Committee. The Government's request for a Water Quality Control Pond would ordinarily require an amendment to the Structure Plan, however, this modification does not seek to amend the Structure Plan; it only seeks to continue to use the lagoon as a water quality control pond for the purposes of DA4 and the Wildlife Lake.

4.2 Development Application No 4

As discussed above, this modification does not seek approval for the works undertaken to construct Lewis Lagoon, as this was granted under the RTA's Part 5 Approval for (new) Castlereagh Road; it only seeks to continue to use the lagoon as a water quality control pond.

To facilitate the proposed modification, it is proposed to include a new condition 27B in DA4 that formalises and retains the water quality control pond known as "Lewis Lagoon".

5.0 ENVIRONMENTAL ASSESSMENT

Section 75W of the EP&A Act states that a Minister of Planning and Infrastructure may modify a consent previously approved under Part 4. The development, as proposed to be modified, will be of minimal environmental impact as the proposed modifications:

- do not increase the volume of raw material to be extracted;
- do not increase the extent of land area to be quarried;
- do not alter the sand and gravel processing facilities;

The proposed modifications will not result in adverse environmental impacts and do not give rise to additional environmental impacts beyond those considered in the assessment and approval of the original development application. Importantly, Lewis Lagoon improves water quality discharge from the northern catchments to the Wildlife Lake system, ensures conveyance of water without detrimentally affecting adjacent landowners and integrates works with the Castlereagh Road Relocation.

6.0 CONCLUSION

In accordance with Section 75W of the EP&A Act, the Minister may modify the consent. The modifications and additional details are considered to have a minor environmental impact and do not seek to change the extent of quarrying or the volume of resource material extracted.

We trust that this information is sufficient to enable a prompt assessment of the proposed modification. Should you have any queries about this matter, please do not hesitate to contact myself or Joe Bevacqua on 4734 8141, joe.bevacqua@pldc.com.au.



Mick O'Brien
Project Director Penrith Lakes

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Attachment A

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New South Wales Government Department of Urban Affairs and Planning

Sydney Region West - Planning

Mr Ian Stainton
Chief Executive Officer
Penrith Lakes Development Corporation Ltd
Locked Bag 2000
SOUTH PENRITH NSW 2750

Contact:

Our Reference: T Doran

Your Reference: P97/00237 Pt4

Penrith Lakes Scheme - Development Application No.4

Dear Mr Stainton

I refer to the above development application lodged with the Department of Planning in November 1997. Pursuant to Section 92 of the Environmental Planning and Assessment Act, 1979, you are advised that the Minister for Urban Affairs and Planning has granted consent to the development subject to conditions. I enclose a copy of the instrument of consent for your information and attention.

Condition 39(i) specifically requires that in the event any previously unknown Aboriginal sites or relics are uncovered during excavation that work will cease immediately and that the material is to be assessed by the National Parks and Wildlife Service and Aboriginal stakeholders. Condition 40(i) requires that any nonAboriginal relics which are uncovered during excavation should be notified to the Heritage Office and excavation should cease. In both instances the Department believes that it is important that machinery operators are given the necessary training and guidance to enable these conditions to be effectively implemented. The Department also believes that it is important that appropriate protocols are in place so that PLDC staff know precisely what action needs to be taken and who should be contacted in the event that any unknown archaeological remains are uncovered.

During the assessment of the development application a number of matters which were not considered to be directly related to development were raised. These matters have not been covered by conditions of consent, however, the Department believes that in the broader context of the Lake Scheme the Corporation should consider the matters and should take appropriate action.

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Blue font represents 2004 S96 (1) Modification

Red font represents 2005 S96 (2) Modification

Orange font represents 2009 S96(2) Modification

Green font represents May 2011 S75W Modifications (Mods 4 and 5)

Pink font represents August 2011 S75W Modifications (Mod 6)

**NOTICE OF DETERMINATION OF DEVELOPMENT APPLICATION UNDER
SECTION 92 OF THE ENVIRONMENTAL
PLANNING AND ASSESSMENT ACT (1979).**

development application

<i>applicant name:</i>	Penrith Lakes Development Corporation
<i>application date:</i>	26 November 1997
<i>applicant address:</i>	1951 Castlereagh Road, Cranebrook
<i>proposed development:</i>	<p>Development as described in the development application identified as DA 4 and its supporting papers for the purposes of implementing the Penrith Lakes Scheme as defined in Schedule 1 of <i>Sydney Regional Environmental Plan No. 11 – Penrith Lakes Scheme</i> on land described in, and identified on the plan, attached at Schedule B, and subsequently modified by:</p> <ul style="list-style-type: none">• Modification Application and accompanying noise assessment dated June 2004, and prepared by Wilkinson Murray Pty Ltd;• Modification Application and accompanying SEE dated March 2005, and prepared by Arup Pty Ltd (which was subsequently modified by the supplementary noise information prepared by Arup Pty Ltd, and dated 22 August 2005);• Modification Application DA4 MOD 3 and accompanying SEE titled <i>Penrith Lakes Development Corporation, Importation of VENM</i> dated 22 December 2008, including the response to submissions dated 12 May 2009;• Modification Application DA4 MOD 4 and accompanying Environmental Assessment titled <i>Section 75W Application – Flood Discharge Pipe Construction at Penrith Lakes</i> dated November 2010, including the Supplementary Report titled <i>Wildlife Lake Section 75W – Weir and Flood Outlet Pipe Supplementary Report</i> dated 6 December 2010, and the response to submissions dated 21 January 2011;• Modification Application DA4 MOD 5 and accompanying Environmental Assessment titled <i>Section 75W Application – Wildlife Lake Weir at Penrith Lake</i> dated November 2010, including the response to submissions dated 21 January 2011, and• Modification Application DA4 MOD 6 and accompanying Environmental Assessment titled <i>Modification to DA4 Penrith Lakes Scheme</i> dated 30 June 2011.

determination

<i>made on:</i>	9th September 1998
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- i) SEE means Statement of Environmental Effects
- j) EPL means Environment protection Licence
- k) the RTA means the Roads and Traffic Authority
- l) VENM means Virgin Excavated Natural Material, as defined in the *Protection of the Environment Operations Act 1997*

Minister from the applicant as a debt in any court of competent jurisdiction to the extent of the Bank Guarantee referred to in condition 3(b).

- (f) That in the event of default by the applicant in respect of the matters referred to in this consent, or in the event of any defects arising, in the landforms, structures, plant, equipment or associated works, the Minister
- (i) may serve on the applicant a notice (which is hereinafter referred to as the "default notice") -
 - (a) indicating the matters, in which, in the opinion of the Minister, the applicant is said to be in default;
 - (b) requiring the applicant, in the matter and within the date and time specified in the default notice to :
 - (1) rectify the default referred to therein, and allowing reasonable time for rectification of any default;
and
 - (2) showing cause why the Minister should not exercise his right under condition 3(e)
PROVIDED THAT the Minister may defer the coming into operation of condition 3(e) above until the expiration of the time specified in the default notice; and
 - (3) showing cause why the Minister should not institute proceedings under section 123 of the Environmental Planning and Assessment Act.
 - (ii) may consider any explanation and representation made by the applicant in pursuance of clause (1)(b)(2) of this condition.

CALCULATION OF BANK GUARANTEE

4. **Bank Guarantee for Defects. arising in Structures. Plant. Equipment or Associated works**

The guarantee for each two year period shall be for an amount of 2.5% of the estimated value of works to be undertaken adjusted each two years, at the time of detailed consent.

5. **Bank Guarantee for Defects Arising in Landforms.**

The guarantee for each two year period shall be for an amount of 2.5% of the estimated value of the total landform cost adjusted each two years, at the time of detailed consent.

6. **Breach of any conditions of Consent**

The guarantee for each two year period shall be the amount calculated by reference to the estimated cost to complete banks, construct foreshores of incomplete lakes, fence and provide a pump station and pipeline in the event of the Applicant terminating all extraction of works pursuant to condition 58.

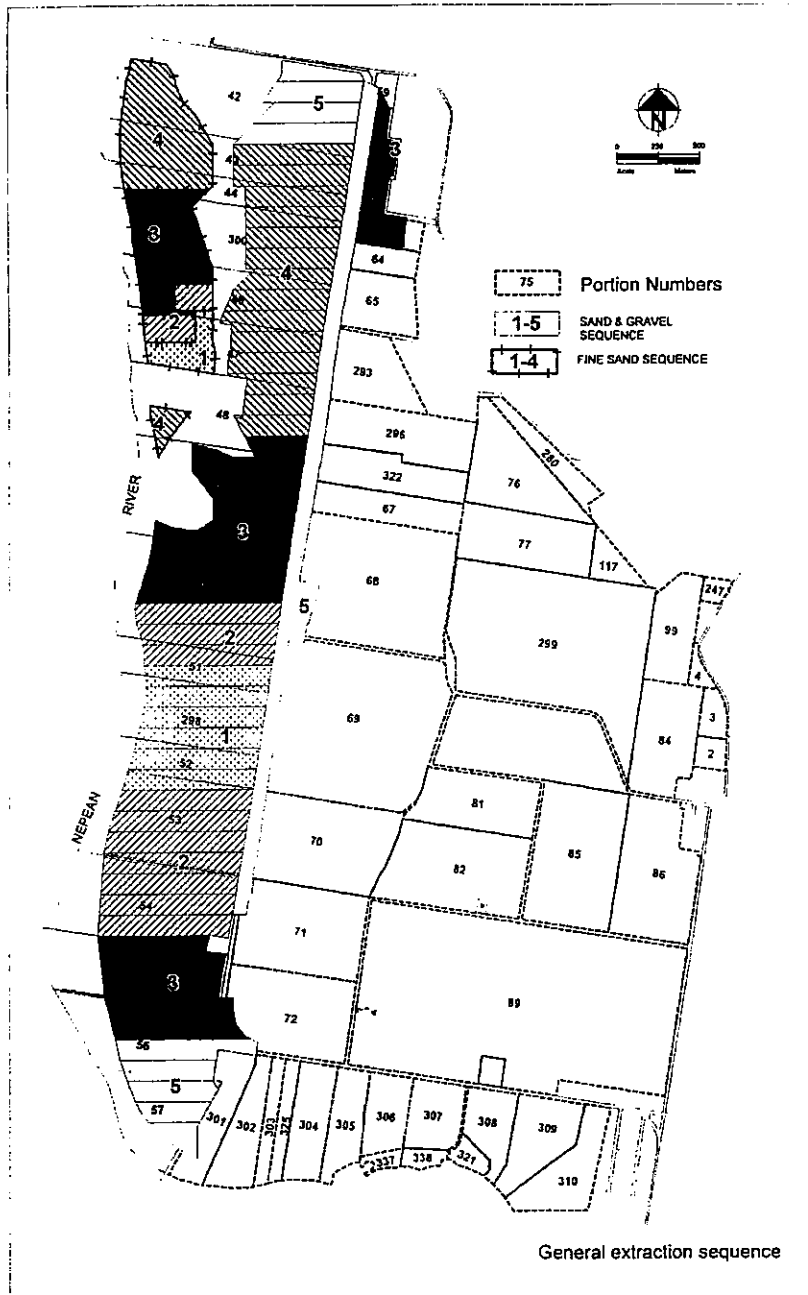
7. **Liability Period**

The defects liability period shall be --

- (a) for plant, equipment and associated works 12 months after the issue of a Certificate of Practical Completion in respect of the previous 2 year period; and

Plan 'SEQ'

237



25. Water Plants

Both submergent and emergent varieties of water plants to be planted concurrently to the first filling of any lake. Landscape plans should make reference to where such planting will occur, density and species.

26. Geo-Technical

All geo-technical works to be carried out in accordance with the detailed plans to be submitted for approval by the Regional Manager of the Department's Sydney Region West Office before rehabilitation works commence (refer to condition 10).

26A. Tree Screen

The Applicant shall prepare (and subsequently implement) a Landscape Plan to provide a vegetative screen between the Wildlife Lake Weir and the property to the north, to the satisfaction of the Director-General. The Landscape Plan must be prepared in consultation with the neighbouring landowner adjacent the northern boundary, and be submitted to the Director-General for approval by the end of December 2011.

Following approval, the Applicant shall implement the plan prior to the completion of construction of the Wildlife Lake Weir.

WATER

27. Controlled Activity Approval

The Applicant shall obtain all necessary controlled activity approvals for the development under the *Water Management Act 2000* and/or *Water Act 1912*.

27A. Water Management Plan

By 31 March 2012, or as otherwise agreed by the Director-General, the Applicant shall review and update the existing Water Management Plan for the scheme to the satisfaction of the Director-General. The review and update of this plan must be prepared in consultation with OEH, DPI and Council; and cover the relevant aspects outlined in the Deed of Agreement for the Penrith Lakes Scheme, the proposed development in this consent, and the proposed development of the other development consents for the Penrith Lakes Scheme.

Following approval, the Applicant shall implement the updated plan to the satisfaction of the Director-General.

Note: Prior to approval of the revised Water Management Plan, the pre-existing Water Management Plan for the Penrith Lakes Scheme shall continue to apply to the development.

27B. Erosion & Sediment Control – Wildlife Lake Weir and Flood Outlet & Water Discharge Locations 14-16

The Applicant shall implement the Erosion and Sediment Control Plans (ESCPs) for the Wildlife Lake Weir, Wildlife Lake Flood Outlet Pipe, and Water Discharge Locations 14-16 included in DA 4 MOD 6.

28. Reticulation Pipes

Alternative methods for water transfer are to be made available by the applicant should water levels be reduced to a level that causes the reticulation pipes to be unserviceable.

NOISE LIMITS

Camenzuli Residence	41	50	47
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Notes:

- (i) If the Applicant has a written noise agreement with any landowner, and a copy of this agreement has been forwarded to the Department and the **OEH**, then the applicant may exceed the noise limits in the table for the landowner's land in accordance with the terms of the noise agreement.
 - (ii) Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary.
 - (iii) To determine compliance with the $L_{Aeq(15\text{ minute})}$ noise limits in the above table, where it can be demonstrated that direct measurement of noise from the development is impractical, the **OEH** may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in section 4 of the NSW Industrial Noise Policy shall be applied to the measured noise levels where applicable.
 - (iv) The noise emission limits in the above table do not apply under meteorological
 - i wind speeds in excess of 3m/s at 10 metres above ground level; and/or
 - ii temperature inversion conditions in excess of 3°C/100m, and wind speeds in excess of 2m/s at 10 metres above ground level.
- (d) The Applicant shall ensure that all extraction and transport operations carried out between 5.00am and 7.00am comply with the **OEH**'s intrusive and sleep disturbance criteria set out in the Industrial Noise Policy.

HOURS OF OPERATION

30. The standard hours of operation for non-noise sensitive areas are:

Sand and gravel extraction, including haulage to processing plants	5.00am to 9.00pm, Monday to Friday; 5.00am to 7.00pm, Saturday.
Overburden stripping and rehabilitation	7.00am to 7.00pm, Monday to Saturday;
Importation of VENM	7.00am to 6.00pm, Monday to Friday; 7.00am to 1.00pm, Saturday

None of the above works must be undertaken on Sundays or public holidays.

31. The standard hours of operation for extraction and rehabilitation on Lot 2 DP61792 and in the Exclusion Zone shown by side hatching in "Figure 1 – Exclusion Zone for Additional Hours" are:

Sand and gravel extraction, including haulage to processing plants	7.00am to 6.00pm, Monday to Friday; 7.00am to 1.00pm, Saturday.
Overburden stripping and rehabilitation	7.00am to 5.00pm, Monday to Friday; 7.00am to 1.00pm, Saturday.
Importation of VENM	7.00am to 6.00pm, Monday to Friday; 7.00am to 1.00pm, Saturday

None of the above works must be undertaken on Sundays or public holidays.

35. When wind speeds average 5 m/s and nearby residences are likely to be significantly affected by dust, authorised Council or Environment Protection Authority officers may direct the Applicant to cease operations and the Applicant shall comply with these directions.
36. An additional dust monitor shall be erected on the eastern side of Castlereagh Road in the vicinity of the Sydney International Regatta Centre.
- 36A. Prior to carrying out any works on Lot 2 DP 617921 the Applicant shall erect a dust monitor in the vicinity of 138-147 West Wilchard Road to demonstrate compliance with the dust deposition criteria set out in Condition 34.

37. Use of Watering

That the Applicant shall keep all unsealed roads used for extractive or other material or overburden haulage sufficiently damp, at all times to prevent windblown or traffic generated dust. Plant shall be provided and operated to enable watering at least at a rate of 1.0 litres per square metre per hour.

38. Grasses

Rehabilitated areas shall be grassed as soon as possible, in accordance with condition 20 and the Land Rehabilitation Manual, 1987.

ABORIGINAL HERITAGE

39. Management of Conservation Areas

- (a) By the end of December 2012 (unless otherwise agreed by the Director-General), the Applicant shall develop a conservation management plan that addresses the interim day-to-day management of all areas set aside for heritage conservation for the intervening period before the proposed regional park is established, to the satisfaction of the Director-General. The plan is to ensure that the cultural and natural values of the land are not diminished and shall be prepared in consultation with relevant stakeholders, including the OEH, the Aboriginal community and the park advisory committee. The plan shall also provide for ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

Geomorphic Unit D1

- (b) Excavation shall not occur within 20 m of Smith's Lane to ensure that portion of geomorphic unit D I (as identified in the *Supplementary Notes to Archaeological Investigations in the DA 4 area, Penrith Lakes Scheme, prepared by Dr J Kohen, May 1998*) is retained.

Wildlife Lake Weir, Flood Outlet Pipe and Water Discharge Locations 14-16

- (c) The Applicant shall not commence any construction works on the Wildlife Lake Weir, Flood Outlet Pipe and Water Discharge Locations 14-16, until it has obtained an Aboriginal Heritage Impact Permit(s) under the *National Parks and Wildlife Act 1974*, unless otherwise agreed by the OEH.

Note: The Wildlife Lake Weir, Flood Outlet Pipe and Water Discharge Locations 14-16 are detailed in MODs 4 to 6.

EUROPEAN HERITAGE

- (h) Where items are to be retained and are owned by the Applicant, a conservation management plan is to be prepared for all items identified as holding local significance in tables 5. 1.1 and 5.1.4, as well as, the Mass Concrete House located at 95 Castlereagh Road, Castlereagh and Landers Inn.
- (i) A Conservation Management Plan shall be prepared for Hadley Park and include matters associated with Nepean Park and surrounding lands and be submitted to the Heritage Council for approval.

Collections Policy

- (j) The Applicant is to prepare a Collections Policy to guide the collection and order of European artefacts, their storage and recording.

Cultural Landscape Study

- (k) A Cultural Landscape Study detailing the history of land grants and development within the DA 4 area and providing a comparative assessment of the significance of the area, is to be prepared. A copy of the documentation shall be lodged with the **Department of Planning and Infrastructure** and a second copy shall be made available to the management authority for the Penrith Lakes Scheme.

NATURAL ENVIRONMENT

- 41. (a) Prior to works being undertaken in the vicinity of the former settling pond (identified as site 12 within the DA 4 flora and fauna investigation report prepared by Kevin Mills, December 1996), the Applicant is to undertake a field survey to determine whether the Green and Golden Bell Frog is present in this location. Should this species of frog be found, the Applicant is to relocate the population to the most optimum location for this species elsewhere on the site.
- (b) The applicant is to develop a strategy for the management of the Nepean River Corridor in association with the Hawkesbury Nepean Catchment Trust.
- (c) The treed creek north of Hadley Park is to be retained as part of the curtilage around Hadley Park to permit the retention of a stand of *Angophora subvelutina*.

TRANSPORT

- 42. That the transport route for the carriage of all materials shall be via internal trunk haul roads as described in Figure 4.6 of the Statement of Environmental Effects.
- 42A. All VENM transport to and from the site and the M4 Motorway shall be via the approved route as shown in Figure 2 below and described in the VENM Importation Statement of Environmental Effects: Response to Submissions. No trucks shall use Castlereagh Road south of Old Castlereagh Road or Mulgoa Road to access or egress the site.

48A. Prior to the commencement of importation of VENM using the northern most and second northern most access point, the Applicant shall upgrade the site entrances on Castlereagh Road to the north of Cranebrook Road to provide:

- AUL (auxiliary lane left turn treatment) for northbound traffic turning left into the site;
- 'no right turn' signage for all southbound vehicles travelling on Castlereagh Road into the second most northern access, and for all southbound non-resident vehicles travelling on Castlereagh Road into the northern most access; and
- advance warning signs, to the satisfaction of the RTA.

Road Haulage

48B. The Applicant shall ensure that:

- (a) all loaded vehicles entering or leaving the site are covered; and
- (b) all loaded vehicles leaving the site are cleaned of materials that may fall on the road, before they leave the site.

48C. The importation of VENM shall be limited to 3 million tonnes over a 3 year period from the date of approval of the Traffic Noise Management Plan (referred to in Condition 65(d) of schedule A).

EXCAVATION IN THE VICINITY OF CASTLEREAGH ROAD

49. Where excavation takes place within 100 metres of Castlereagh Road a 1.2 metre high earth embankment should be built as a safety measure. The embankment may be built no closer than 20 metres to Castlereagh Road. Details of the embankment to be submitted as part of the appropriate two year detailed consent application. (refer to condition 10).

OTHER LANDOWNERS

50. Drainage

The applicant is to permit natural drainage of adjacent existing development areas into the scheme. Detailed plans shall be submitted outlining the mitigation measures to be undertaken to protect adjacent sites. These plans shall be drawn in accordance with sound engineering practice.

51. The Applicant is not to carry out any works that would cause inundation of surrounding developed areas by discharges produced by a 100 year recurrence interval rainfall event.

52. Where the Applicant alters discharge patterns from existing development the proposed measures to facilitate drainage including details of scour protection works should be submitted to Penrith City Council for Council's consent with a supporting report by a qualified civil engineer.

53. Damage to Other Property

That the Applicant shall take all reasonable steps in carrying out works on the land the subject of the application in such a manner as to prevent any injury, loss or damage to persons and stock on any other property.

54. Alterations to services or municipal facilities on the subject land necessitated by the development shall be carried out at the Applicant's expense to the reasonable satisfaction of the authority administering the service/facility. The service authority's written concurrence to such works shall be obtained prior to the commencement of such works.

TERMINATION OR TEMPORARY CESSATION OF EXTRACTION

58. Details

The Applicant shall, in accordance with clause 6, prepare and submit to the Director General for consent details of proposals for completion and construction of landforms, banks, fencing and works including the construction of a pump and pipeline in the event of termination of the extraction works or temporary cessation of such works.

59. Temporary Cessation of Works

Where the Minister after consultation with the Applicant notifies the Applicant that he has formed the view that effective sand and gravel extraction has temporarily ceased and considerable time will elapse before effective extraction will resume then the Applicant shall undertake and substantially complete the works consented to in those circumstances pursuant to condition 58 within one year of the date of the notification and shall totally complete such works within 2 years of that date.

60. Total Cessation of Works

Where the applicant issues a termination notice to the Minister setting out the reasons for ceasing all sand and gravel extraction and the Minister agrees to such termination then the Applicant shall substantially complete the works consented to in those circumstances pursuant to condition 58 within one year of the date of the termination notice and shall totally complete such works within 2 years of that date.

MONITORING

61. Monitoring Programme

The applicant shall carry out the tests, recording and reporting referred to in conditions 62 and 63 to enable the impact of on-site activities to be assessed.

62. Land Rehabilitation

Compaction Tests

- (a) The Applicant will at its cost, be responsible for compaction tests at the following frequencies:

Engineered Zones - 1 test every 2500 cubic metre

- (b) Tests are not required in other construction zones.

- (c) The above frequency has been determined on the basis that the Applicant has a suitably qualified Engineer on site to supervise earthworks. Frequency of testing is to increase to 1 test every 500 cubic metres in Engineered Zones if such professional supervision is not provided.

- (d) Compaction tests shall be done in accordance with AS 1289E4.1-1982 unless specific approval is given by the consent authority to change the test method.

- (e) Testing to be undertaken by a National Australian Testing Authority registered laboratory.

- (f) Should the Applicant wish to undertake its own tests then: -

- (i) it is to be National Australian Testing Authority registered; and

- d) Prior to the commencement of importation of VENM the Applicant shall submit a Traffic Noise Management Plan prepared in consultation with OEH, and to the satisfaction of the Director-General. The plan must include:
- an investigation and description of all reasonable and feasible measures to reduce traffic noise; and
 - a program to monitor traffic noise and respond to complaints.

66. Air Quality

- (a) The Applicant shall, on a monthly basis, obtain and analyse dust samples collected in accordance with OEH licence conditions. Vertical dust deposit gauges shall be located at each site and, in addition directional dust gauges shall be located where agreed. This monitoring shall continue for one year from the date of this consent. Such monitoring shall cease after this period provided results obtained during the period indicate that dust emanating from quarry and reconstitution operations has not exceeded 4g/sq.m./month (annual average) at neighbouring residences.
- (b) PLDC shall install and operate a high volume dust sampler to ensure compliance with the 24 hour maximum concentration level. This monitoring shall continue for one year from the date of consent to the development application. Such monitoring shall cease after this period provided results obtained during the period indicate that dust emanating from quarry and reconstitution operations has not exceeded 260 ug/cubic.m./24 hour maximum concentration.
- (c) PLDC shall monitor wind speed and direction.
- (d) A report containing the results of all air quality monitoring undertaken in the preceding 3 month period shall be submitted to the OEH and Penrith City Council within 2 months of the end of the period.

67. Monitoring Records

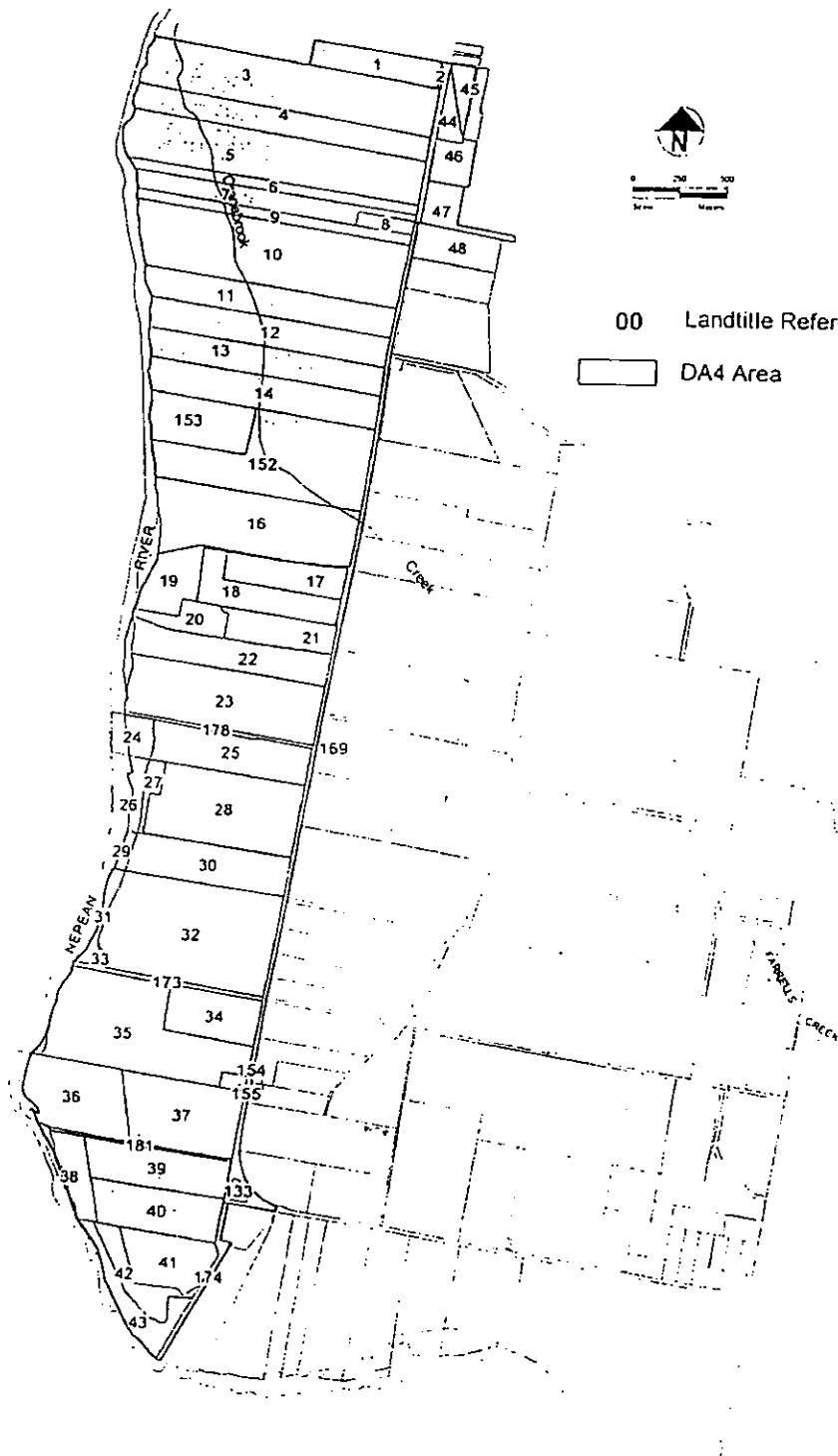
The Applicant shall maintain a record of the following which shall be available upon request of the consent authority:

- (a) Works as executed drawings, 1: 1000 scale with 1 m contours;
- (b) Details of where topsoil was stripped from, placed and method of placement;
- (c) A report showing landforms completed and areas revegetated;
- (d) A summary of all works undertaken in regard to repairs and maintenance of landforms;
- (e) The results of all noise monitoring undertaken in the previous 12 month period;
- (f) The results of all air quality monitoring undertaken in the previous 12 month period;
- (g) Photogrammetric surveys at an appropriate scale showing the extent of rehabilitation which has been carried out in the lands;
- (h) The results of compaction and settlement tests;
- (i) The species composition and location of plantings completed together with loss rates;

SCHEDULE B

PLDC Land							
Ref	Description	Torrens Register	Vol.	Fol.	Conv	Bk	Area (ha)
1	Lot 471 DP 558416	471/558416	12116	85			9.146
2	Lot 470 DP 558416	470/558416	12116	84			0.101
3	Part Por 42				988	3192	32.375
4	Lot 1 DP 63308	1/63308	11693	241			19.35
5	Por43				852		36.13
6	Lot 1 DP 73955	1/73955	3460	31			7.845
7	Lot 1 DP 120891	1/120891	7777	57			13
8	Lot 1 DP 120872	1/120872	7777	56			2.023
9	Part Por 44				130	3136	6.475
10	Lot 300 DP 752021	300/752021	7074	206			45.19
11	Part Por 46				422	3462	18.129
12	Lot 1 DP 60859	1/60859	15175	87			18.72
13	Lot 1 DP 87060	1/87060	6733	116			17.82
14	Lot 2 DP 87060	2/87060	6733	115			20.23
16	Lot 1 DP 219895	1/219895	9849	93			32.39
17	Lot 21 DP 530256	2/1530256	10914	62			8.966
18	Lot 45 DP 545813	45/545813	11695	145			11.53
19	Lot 44 DP 545813	44/545813	11695	144			11.22
20	Lot 42 DP 546220	42/546220	11695	157			5.373
21	Lot 23 DP 530256	23/530256	10974	6			8.65
22	Lot 3 DP 219895	3/219895	9849	95			15.95
23	Lot 1 DP 436198	1/436198	12771	89			29.69
24	Part Por 51				687	2228	4.705
25	Lot 4 DP 2223	4/2223	13771	232			15.71
26	Part Por 298				709	1948	9.308
27	Lot 2 DP 348979	2/348979	5446	194			2.668
28	Lot 2981 DP 128099	2981/128099	8258	233			27.98
29	Part Por 52				386	2236	3.237
30	Lot 1 DP 2223	1/2223	916	35			16.13
31	Part Por 53				917	2240	3.49
32	Lot 2 DP 236125	2/236125	10784	45			43.563
33	Lot 1 DP 236125	1/236125	10784	44			0.355
34	Part Por 54				491	2973	11.47
35	Part Por 54				483	2050	39.651
36	Lot A DP 374807	A/374807	13771	231			20.39
37	Lot B DP 374807	B/374807	6614	133			20.89
38	Lot 1 DP 128036	1/128036	7209	143			5.911
39	Lot 2 DP 128036	2/128036	7209	142			14.12
40	Lot 56 DP 7868-6----	56/78686	7209	144			14.77
41	Lot X DP 421674	X/421674	8380	19			11.09
42	Lot Y DP 421674	Y/421674	8380	20			6.37
43	Order No F151934 Part Por 57		6178	202			7.285
44	Lot 104 DP 599725	104/599725	13906	14			2.587
45	Lot 103 DP 599725 (Part Only)	103/599725	13906	13			2.716
46	Lot 2 DP 630803	2/630803	15010	63			5.287
47	Lot 34 DP 241197	34/241197	11624	62			5.136
152	Lot 481 DP 849952	481/849952	4558	110			35.284
174	Sheens Lane Lot 1 DP 47720	1/47720	15721	175			1.92
48	Lot 2 DP617921						7.6
		Subtotal					709.926

241



Appendix A

Penrith Lakes Development Corporation Ltd

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BEARING NO. 5106
1:1000 LAND PLAN
CONSTRUCTION BEARING

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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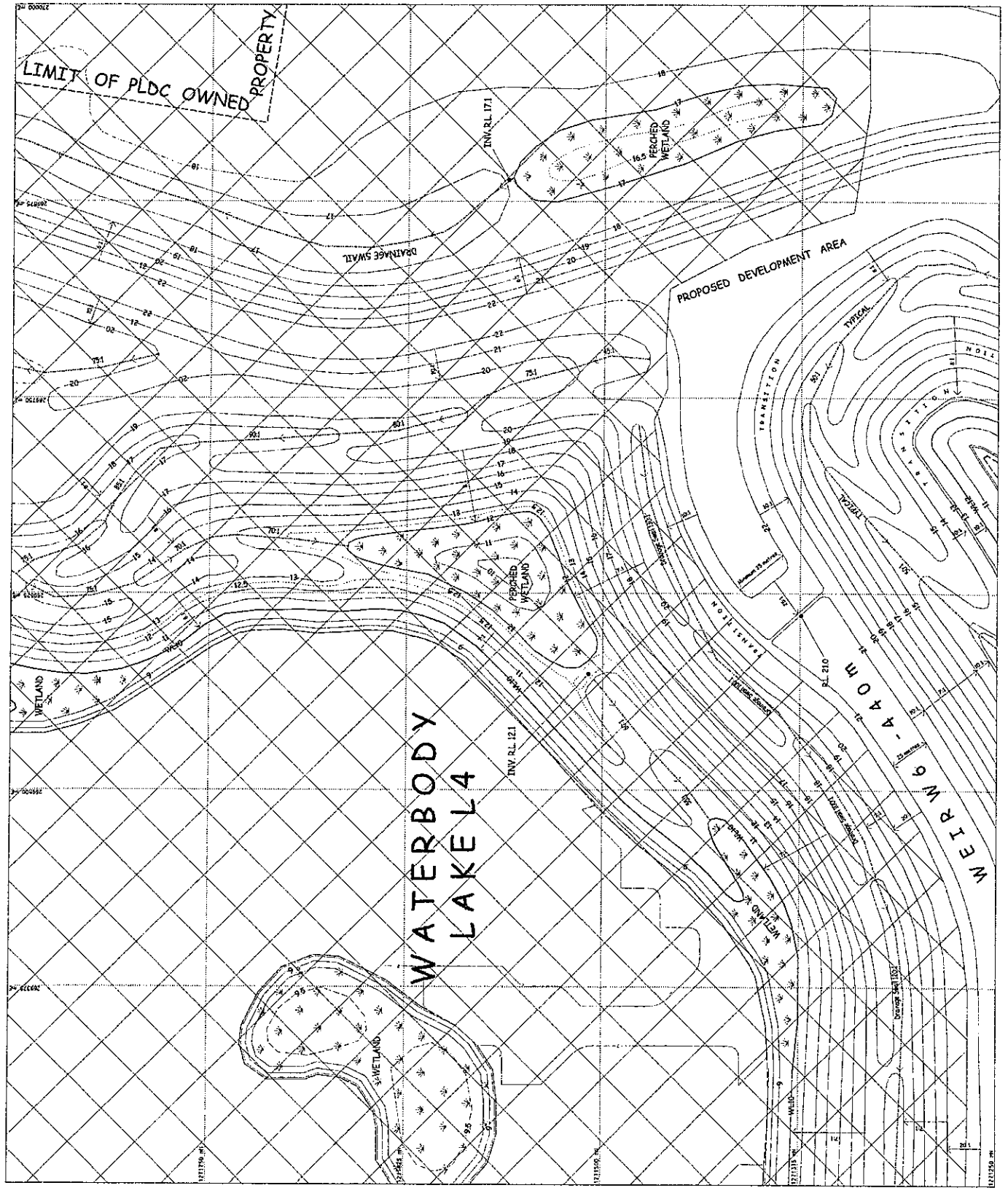
GENERAL NOTES

1. The area shown in this plan is known as "The Wildlife Lake" area and will be subject to review based on design principles being developed. It is not part of the area that is submitted for approval in the "2 Year Plan" approval process.
2. The area shown in this plan is known as "The Wildlife Lake" area and will be subject to review based on design principles being developed. It is not part of the area that is submitted for approval in the "2 Year Plan" approval process.
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NOTE: Area shown in "crosshatch" is known as "The Wildlife Lake" area and will be subject to review based on design principles being developed. It is not part of the area that is submitted for approval in the "2 Year Plan" approval process.

APPROVED BY
MINISTER FOR PLANNING
Date: 1/19/88
File No: 100-10320-112
Date: 1/19/88

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Appendix B

Penrith Lakes Development Corporation Ltd

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ACN 000 133 951
ABN 46 000 133 951



Department of
Infrastructure, Planning and Natural Resources

**Penrith Lakes Water Committee
REVIEW OF THE WATER PRINCIPLES
AND WATER PLAN**

June 2005

6.3 Recommendations

The Penrith Lakes Water Committee recommends:

Priority 1:

- The adoption of Scenario 2A as a practical, cost-effective and sustainable plan for the Lakes scheme.
- A Quarantine Lake be established in the western extension of the Warm-up Lake for the control of exotic species and to assist in maintaining the recreation water quality values of the Lakes.
- A revised foreshore alignment as illustrated in Figure 4-1 be implemented to improve both water circulation and mixing within the main lakes and embayments.
- Studies be carried out to determine the effect on infrastructure requirements of proposed changes to the configuration of the Lakes, as illustrated in Figure 4-1.
- Retention of management flexibility for the lakes system for utilising top up and flushing as complimentary management tools.
- The initial top-up water supply to the Lakes be from the Nepean River.
- In order to determine correct thresholds for fish passage, downstream requirements and environmental flows, Penrith Weir be re-rated as a matter of urgency.
- Investigations be carried out as a matter of urgency into the critical fish-passage flow threshold for the river reach downstream of Penrith Weir to enable sustainable cease-to-pump and pumping rates for lakes 'top up' water to be established.
- The cost effectiveness and recreational/ecological implications of using treated effluent from Penrith Sewage Treatment Plant as the long term water source (2015 and beyond) be investigated.
- A strategy be developed as soon as possible in accordance with the guiding principles to deliver the recommended scenario.

Priority 2:

- The cost effectiveness of extracting 'top up' water from the Nepean River at a location adjacent to the recommended Quarantine Lake be investigated as an alternative to the location specified in the Water Plan (ie. upstream of Penrith Weir). This alternative would also involve transferring the existing discharge point for effluent from Penrith STP to a location downstream of the Lakes extraction point.
- Further investigation be carried out into the cost effectiveness of raising the flood control weirs between Main Lakes A and B and the Nepean River to cater for less frequent floods than the current design value of 1 in 20 years. This investigation should consider the post flooding clean up and environmental benefits and engineering implications.

Priority 3:

- The cost effectiveness of enhanced riparian zones and islands in Main Lakes A and B be further investigated.
- Studies and ongoing research as recommended by the Expert Panel (and described in Appendix 2) be further assessed to determine priorities, scope and responsibilities, and a plan for moving forward be developed to accommodate the studies and ongoing research and to deliver on the recommended scenario outcomes.