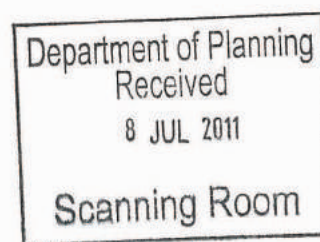




30 June 2011



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



Attention: David Kitto

Dear Sir

**MODIFICATION TO DA 4
PENRITH LAKES SCHEME**

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 following the recent Modification Approvals 4 and 5 and as discussed, to appropriately enable the commencement of construction of the approved infrastructure and to consider other minor works to permit the discharge of water.

The modification proposes:

- amendments to five (5) conditions of consent;
- provision of details and location of proposed rip rap zones to enable the discharge of water into the Nepean River consistent with the Licence Variation Application to PLDC's Environmental Protection Licence No 2956 lodged with OEH on 23 December 2010;
- Erosion and Sediment Control details for the Wildlife Lake Weir and Flood Discharge Pipe; and
- Confirmation of the use of concrete materials and armouring rocks in the construction of the Wildlife Lake weir.

The modifications 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.

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

- Section 75W application form; and
- A copy of the Notice of Determination for MOD 4 and 5 of DA 4 (Attachment A)

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 part of the Penrith Lakes Scheme site. The consent has been modified on five prior occasions in 2004,

Penrith Lakes Development Corporation Ltd

Old Castlereagh Road,
Castlereagh NSW 2749

PO Box 457,
Cranebrook NSW 2749

T: 02 4729 0044
F: 02 4730 1462

E: info@pldc.com.au
W: www.penrithlakes.com.au

ACN 000 133 951
ABN 46 000 133 951

2005 and 2011, with the conditions attached to the most recent Modifications 4 and 5 not being to the satisfaction of PLDC.

2.0 PROPOSED MODIFICATIONS TO CONSENT

The proposed modifications to the conditions of consent are limited to amending the following as detailed below.

2.1 Condition 26A – Tree Screen

Condition 26A requires that a Landscape Plan detailing a vegetative screen be prepared and submitted for approval by the Director General by the end of July 2011.

PLDC requests the DoPI amend Condition 26A by deleting the words "*properties*" and "*end of July 2011*" and replace with "**property**" and "**end of December 2011.**" The amendment will ensure the Wildlife Lake Weir can commence construction whilst also enabling consultation to occur and the preparation of the Plan having regard to the final detailed construction design therefore ensuring the proposed vegetative screen is appropriately designed and located. It is also proposed to implement the plan prior to the issuing of a practical completion certificate being issued for the weir by inserting the following at the end of the condition "***Following approval, the Applicant shall implement the plan prior to the Practical Completion Certificate being issued for the Weir.***" The effect of the amendments is to ensure that the approved vegetative screen will be completed prior to the completion of the weir and its dedication to Government.

Amendment to Consent

Amend Condition 26A as follows:

Tree Screen

26A. *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 neighbouring landowners adjacent the northern boundary, and be submitted to the Director-General for approval by the end of July 2011* ***end of December 2011.***

Following approval, the Applicant shall implement the plan prior to the Practical Completion Certificate being issued for the Weir.

2.2 Condition 27 – Water Supply

Condition 27 proposes to subjugate quarrying to the management of water supply. This is an unacceptable situation as it gives water supply greater priority over the approved DA4 extractive works, being "Continuation of sand and gravel extraction contained within the Penrith Lakes Scheme" and is contrary to the approved 1987 Water Plan where it states under Section 1 – Purpose of the Water Plan:

"These commitments are necessary to ensure that quarry and rehabilitation works are not affected by delays in making decisions related to water management facilities....."

PLDC requests the DoPI amend the condition to delete the wording "*and if necessary, adjust the scale of...*" and rephrase the wording to reflect the intention of the condition, that is, PLDC is to ensure there is

sufficient water for the extractive operations and all stages of the development and obtain any necessary water licences and approvals under the Water Act 1912/or Water management Act 2000.

Amendment to Consent

Amend Condition 27 as follows:

27. *The Applicant shall ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of including quarrying operations, to match its available water supply, to the satisfaction of the Director-General.*

Note: The Applicant is required to obtain after necessary water licences and approvals for the development under the Water Act 1912 and/or Water Management Act 2000.

2.3 Condition 27A – Water Management Plan

The new condition 27A requires that a (new) Water Management Plan for the Scheme be prepared (in consultation with various public entities) and submitted prior to any construction of the flood infrastructure for the Wildlife Lake. This requirement is considered unnecessary as the proposed Wildlife Lake flood infrastructure has little effect/change on ongoing water management.

The weir only operates in flood and the flood outlet pipe is simply a relocation of the pipe from an already approved location in the Wildlife Lake riverbank. As previously advised, the Wildlife Lake Flood Weir operates relatively independently of the flood scheme further upstream and does not affect existing upstream flood conditions. It is also unacceptable because it delays the construction of these urgent items of infrastructure at least a further 5 months and thus well beyond the time when water needs to be transferred to the Wildlife Lake to allow quarrying in the Main Lake area to continue.

Whilst it is recognised that the current Water Management Plan may need to be updated at some future date, PLDC believes that the condition should be amended to enable construction works on the approved infrastructure items to commence prior to any updated Water Management Plan being finalised. In this regard, it is proposed to delete "October 2011" and replace with **December 2011** and deleting "prior to the construction of any flood infrastructure for the Wildlife Lake."

In addition, several items included in the new condition 27A are inappropriate and unacceptable. These items are:

- A Site Water Balance plan should be incorporated into the Surface Water Management Plan (see below). However, this study relates to the operations of the completed lake system and has a significant variable, being the source of top up water. This study cannot and should not cover the period during quarrying.
- The Deed Water Principles and via the 1987 Approved Water Plan does not require the preparation of an Erosion and Sediment Control Plan/s. Erosion and Sediment Controls are detailed in Chapter 4 of the Land Rehabilitation Manual which guides all landform construction. All works and including the preparation of past approved Two Year Plans and any subsequent Two Year Plans are designed to the standards as contained in the manual.

However, Erosion and Sediment Control Plan/s for the construction of the Wildlife Lake flood infrastructure has now been incorporated as part of this application (see Section 3) for separate approval, and for other infrastructure, these plans will be submitted at the time of the relevant

lodgement for development consent. These plans do not need to be incorporated into the Water Management Plan as they are site specific to each element of infrastructure. It is therefore proposed to delete section (b) of the condition.

- A Flood Management Study for the Scheme was submitted as supporting information only for the Wildlife Lake flood infrastructure s75W Applications. This study will be incorporated into the overall Flood Management Plan. Measures for maintenance of the completed flood infrastructure items will be documented at the time of handover of the infrastructure and do not need to be covered in a Water Management Plan at this time. Flood emergency response plans will be for quarrying. Any final on-going (after quarrying) plan will be the responsibility of the end owner (government) and do not need to be included in a Water Management Plan to be dealt with by PLDC.
- The information from the Site Water Balance study will be incorporated into the Surface Water Management Plan which will also cover water quality. PLDC believes that the condition should be amended to enable construction works on the approved infrastructure items to commence prior to any updated Surface Water Management Plan being finalised as part of the overall Water Management Plan.
- A Groundwater Management Plan is considered unnecessary at this stage. PLDC is obliged to monitor groundwater under the existing Water Plan. It is recognised that whilst quarrying proceeds groundwater enters the quarry through the gravel beds being quarried. The existing RES studied the matter of interaction between the completed lakes and the groundwater outside. Recommendations were made on construction of lake banks to minimise interaction and these recommendations are incorporated as specifications in the 1987 Deed. PLDC has been constructing lake banks to this specification and little if any infiltration has been observed at completed lake banks.
- A Surface Water Response Plan (part of the interim Lakes Operation Plan and required for the final Lakes Operation Plan) will be incorporated into the overall Water Management Plan as it is being finalised. As noted above there is little opportunity for lakes water to infiltrate the surrounding groundwater and thus does not need to be addressed at this time. In any case water that enters the lakes is from upstream catchment/s is not in the control of PLDC.

Amendment to Consent

Amend Condition 27A as follows:

27A. The Applicant shall prepare and implement a **revised** Water Management Plan for the development to the satisfaction of the Director-General. This plan must be prepared in consultation with OEH, DPI and Council, and be submitted to the Director-General for approval by the end of ~~October 2011~~ **December 2011**. ~~and prior to the construction of any flood infrastructure for the Wildlife Lake.~~ The plan must include:

- (a) a Site Water Balance, which must:
 - include details of:
 - sources and security of water supply;
 - water use on site;
 - water management on site;

Penrith Lakes Development Corporation Ltd

Old Castlereagh Road,
Castlereagh NSW 2749

PO Box 457,
Cranebrook NSW 2749

T 02 4729 0044
F 02 4730 1462

E info@pldc.com.au
W www.penrithlakes.com.au

ACN 000 133 951
ABN 46 000 133 951

- any off-site water transfers; and
- investigate and implement all reasonable and feasible measures to minimise water use by the development;

~~(b) an Erosion and Sediment Control Plan, which must:~~

- ~~• identify activities that could cause soil erosion, generate sediment or affect flooding;~~
- ~~• describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;~~
- ~~• describe the location, function, and capacity of erosion and sediment control structures; and~~
- ~~• describe what measures would be implemented to maintain the structures over time;~~

(c) a Flood Management Plan, which must include:

- detailed baseline data and flood modelling for the Penrith Lakes Scheme;
- a description of the measures to minimise flood risk associated with the development and in the surrounding area;
- describe the location, function and capacity of flood management structures;
- describe what measures would be implemented to maintain the structures **over time up to dedication**; and
- flood emergency response plan to effectively respond to flood events **for ongoing quarrying activities**;

(d) a Surface Water Management Plan, which must include:

- baseline data on surface water flows and quality in the lakes and other water bodies that are potentially affected by the development;
- ~~• surface water flows and quality;~~
- ~~• impacts on water users;~~
- ~~• stream health; and~~
- ~~• channel stability;~~
- surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts;
- a program to monitor and assess:
 - surface water flows and quality entering scheme from surrounding catchments;
 - stream health and channel stability immediately adjacent to works associated with the Applicants Quarrying and Rehabilitation Operations

(e) a Groundwater Management Plan, which must include:

- baseline data of groundwater levels, yield and quality in the region;
- measures to minimise interaction with the Hawkesbury Alluvials Groundwater Source;
- groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
- ~~• a program to monitor and assess:~~
 - ~~○ groundwater inflows to the quarrying operations;~~
 - ~~○ impacts on regional aquifers and the Hawkesbury Alluvials Groundwater Source;~~

- ~~o (any) impacts on the groundwater supply of other groundwater users;~~
 - ~~o impacts on groundwater dependent ecosystems and riparian vegetation; and~~
- (f) a Surface and Ground Water Response Plan, which must include:
 - a response protocol for any exceedances of the surface water and groundwater assessment criteria; **and**
 - ~~• measures to prevent, minimise or offset groundwater leakage from alluvial aquifers caused by the development; and~~
 - Measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

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

2.4 Condition 39 – Aboriginal Heritage

Condition 39 has recently been amended to include a change of departmental names and the addition of a date on the development of the conservation management plans. The concerns with the proposed clause in its current form are:

- Conditions 39(a) and (b) both in the original Consent and as in the proposed replacement reflect the legislative and regulatory practices of a former time. The conditions are not consistent with either current legislative or regulatory arrangements and they conflict with the requirements advised by OEH (with area based AHIPs being prepared for the various elements of the Scheme). Any replacement condition should have input from OEH and reflect the requirements being communicated to PLDC by OEH.
- The requirement to complete the conservation management plan for all areas set aside for heritage conservation (within the area covered under DA4 Consent) by the end of October 2011 is unachievable. It is therefore proposed to delete the words "October 2011" and replace with **June 2012**. The two items of flood infrastructure are isolated and the north western corner of the area covered by DA4 Consent and the only conservation areas affected by them are small portions of the riverbank and the Smith Rd property. The effects on these areas have been covered in an area based AHIP submitted to OEH for approval and to DoPI for information. This application is currently being processed with approval expected shortly. PLDC has engaged Muru Mittigar Ltd (an Aboriginal cultural organisation) to prepare conservation management plans for the various conservation areas. The program to complete these, with the requisite consultation, is to recommence after approval has been received for the current AHIP applications.

Amendment to Consent

Amend Condition 39 as follows:

Destruction of Aboriginal Objects

- a) ***The applicant shall make application to OEH for Aboriginal Heritage impact Permits pursuant to Part 6 of the National Parks and Wildlife Act. The applicant must cease work immediately if an Aboriginal object not otherwise authorised by an approval granted by OEH is uncovered and consult with OEH on further action.*** If any new or unknown Aboriginal objects are uncovered during the development, work affecting those objects is to cease immediately and the Applicant must seek the appropriate approvals under the National Parks and Wildlife Act 1974.
- b) ~~The Applicant shall further consult with the OEH regarding appropriate Aboriginal community participation in monitoring, surveying, and any salvaging requirements during the Aboriginal cultural heritage component of the development process. The Applicant shall also consult with the OEH regarding Aboriginal participation in management of the heritage values of the site in the interim period before the proposed regional park is established.~~

Management of Conservation Areas

- c) By the end of ~~October~~ **June 2011 2012**, the Applicant shall develop a conservation management plan/s 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 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.

Geomorphic Unit D1

- d) 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.

2.5 Condition 65(a1) – Noise Compliance Monitoring

The recently modified DA4 Consent included the addition of a new component to condition 65(a1) to require a noise compliance monitoring program for quarrying. PLDC believes that condition 65 and PLDC's EPA licence conditions already adequately cover noise monitoring and control. However PLDC will include a proposed Noise Monitoring program as part of the Construction Environment Management Plan that will be included with the weir's detail construction design.

Amendment to Consent

Amend Condition 65(a1) as follows:

(a1) Prior to quarrying within 300 metres of any residence to the north of the Wildlife Lake, the Applicant shall prepare (and subsequently implement) a noise compliance monitoring program, to the satisfaction of the Director-General to the construction of the Wildlife Lake Weir, the Applicant shall prepare a Noise Monitoring Program as part of the Construction Environment Management Plan. This program is to ensure that the development on site, including the construction works for the weir, complies with the relevant noise limits in this consent and any associated EPL at the residences adjacent to the northern boundary of the site. Following approval, the Applicant shall implement this program to the satisfaction of the Director-General.

Note: The purpose of the monitoring program is to ensure that the noise limits in condition 29 are complied with during the works in proximity to these receivers.

3.0 EROSION AND SEDIMENT CONTROL PLANS

It is proposed to include additional Erosion and Sediment Control Plans to cover the following items:

3.1 Rip Rap Details for Discharge of Water as per a proposed Variation to PLDC Environment Protection Licence No 2956

PLDC as part of its Quarry (extractive) operations, has up to this point in time, had adequate capacity to store flow generated on the site and flow from the catchment external to the Penrith Lakes Scheme. As mining operations are nearing completion this may no longer be possible. To enable the finalisation of mining activities and the rehabilitation of the site, a quantity of water currently stored on the site may need to be discharged off site (i.e. into the Nepean River directly and indirectly via Hunts Gully / Smith Creek).

As part of the *Variation to PLDC Environment Protection Licence No 2956* submitted to OEH, it is proposed to discharge water from site in three locations (See Appendix A – Plan PLDC REF – 10877 titled EPA Licence Monitoring Locations). Water is to be discharged into the river using a system of pumps, poly pipes and rip rap rock that generally sit on top of the current land surface. As part of the Soil and Erosion Control requirements to permit the discharge of water, PLDC is required to construct dissipation zones. The proposed dissipation zones acts to slow the velocity of water entering the water ways and minimise soil erosion. Any subsequent consent condition should make reference to the relevant drawings listed for each EPA Monitor location (discussed below) and include a statement that “if deemed necessary by OEH, an AHIP be issued prior to any works commencing.”

The dissipation designs are shown in Appendix B and the details of each location are discussed below:

Discharge Location – EPA Monitor 14

Water is proposed to be discharged into Nepean River via Hunts Gully (Smiths) Creek from the Wildlife Lake. It should be noted that this site would only be used in the short term until Locations 15 and 16 are constructed and operational.

The proposed treatment for water to be discharged from Location 14 will be settlement ponds to allow sediment to drop out of the water. Settlement ponds will be designed with the aim of maximising the hydraulic residence time to ensure adequate time for suspended material to settle prior to discharge.

Water will then be pumped up to a pair of existing concrete pipes. Rip Rap will be placed within the confines of the existing pipes together with a geo-fabric mat being placed over the creek bed at the end of the existing pipe. Water will not be pumped if quality is not suitable for discharge. Scour protection and sediment control details are provided on Figure PLDC-10780 Issue C, in Appendix B. The proposed discharge point has been selected as it avoids any removal and disturbance to any existing vegetation.

Discharge Location – EPA Monitor 15

PLDC recently received an approval to modify DA4 (from the DoPI) to construct a Flood Discharge Outlet from the Wildlife Lake to the Nepean River. This pipeline will allow water flowing into the Lakes Scheme from external catchments to exit the Wildlife Lake and flow to the River, it will also allow the lake levels to return to operational level following a flood event (>10yr ARI).

There will be no temporary rip rap required for this location as water will only be discharged from this area following construction of the approved Wildlife Lake Flood Outlet Discharge Pipe. Impacts on vegetation were considered as part of the recently (modified) consent and all proposed rip rap will be permanent and will be detailed in the final construction plans for the infrastructure when submitted. Water will not be pumped if quality is not suitable for discharge. Final scour protection and sediment control details are provided on Figures W4826-040 & W4826-041, in Appendix C and are located in the exact zone as per the approval recently granted by the DoPI.

Discharge Location – EPA Monitor 16

An application is to be submitted to the DoPI in the near future to construct a series of flood discharge outlet / pipes from the Main Lake to the Nepean River. However, it is likely that PLDC will need to discharge water from this location prior to the construction of these pipes. As such PLDC have applied to OEH to pump water over the river bank utilising 225mm diameter poly pipes that lay on the existing ground surface and discharge to the Nepean River in the same location as the future proposed flood outlet pipes.

The proposed rip rap location is largely open with no significant canopy or understorey layer (see photos below). The locality is characterised by a high dominance of exotic plant species and a low diversity of native understorey and overstorey species. No trees and or vegetation are proposed to be removed as the proposed works will be laid over the existing (predominantly grass) surface.



Photo 1 - Rip Rap Zone viewed west across the Nepean River

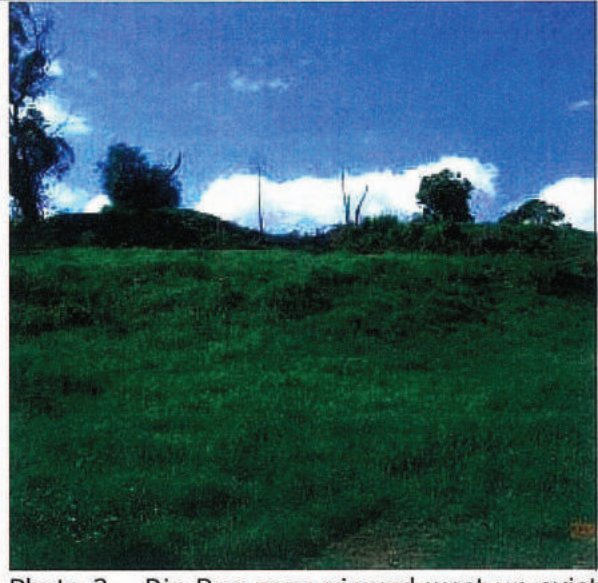


Photo 2 - Rip Rap zone viewed west up existing embankment



Photo 3 - Rip Rap Zone viewed to the north

It is planned that the dissipation materials (rip rap rock) that will be required for the pumped water will be able to be utilised for the flood outlet pipes, although the proposed temporary rip rap solution is significantly less in area than the final design will require (final design has been shown on the Figure W4826-037 in Appendix B for information purpose only). Appropriate energy dissipation will be installed in the area shown as "Temporary Discharge Works" (as clouded) in Figure W4826-037 in Appendix B. The final design of the riprap will be determined based on maximum flow rates to ensure adequate protection to the environment is provided. Water will not be pumped if quality is not suitable for discharge.

New conditions will need to be included within any subsequent consent reflecting the relevant locations and plan/s.

3.2 Wildlife Lake Weir and Flood Outlet Discharge Pipe

As part of the recently approved Wildlife Lake Weir and Flood Outlet Discharge Pipe it was proposed that Erosion and Sediment Control Plans for the construction of the Wildlife Lake flood infrastructure be completed as part of the Construction Environmental Management Plan (CEMP) identified in S75W Application. However, to assist in facilitating an earlier commencement of construction, it is now proposed to include Erosion and Sediment Control Plans as part of this approval (See Appendix C for details). Specific CEMP's for other infrastructure will be developed and implemented when approvals for the relevant infrastructure are granted.

Any subsequent approval / condition should make reference to the plans contained in Appendix C of this report.

4.0 CONFIRMATION OF USE OF CONCRETE MATERIALS USED IN THE CONSTRUCTION AND CREST LEVEL OF THE WILDLIFE LAKE WEIR

Contained within the Environment Assessment approved as part DA4 MOD 5, it was detailed that the Wildlife Lake Weir is likely to be constructed using conventional concrete. As the detailed design has developed, we wish to confirm that the material proposed to be used may be a combination of concrete (conventional or roller compacted concrete) and rock (stone) armouring. Detailed plans identifying materials will be included with Two Year Plans for the infrastructure works.

The exact crest height and length of the wildlife lake weir may vary dependant on modelling undertaken during the detailed design process, any amendments will be detailed in the design submitted through the two year plans for approval.

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:

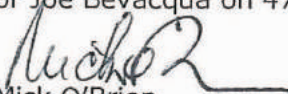
- do not increase the volume of raw material to be extracted;
- do not increase the extent of land area to be quarried;
- do not alter the sand and gravel processing facilities;

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.

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

Penrith Lakes Development Corporation Ltd

Old Castlereagh Road,
Castlereagh NSW 2749

PO Box 457,
Cranebrook NSW 2749

T 02 4729 0044
F 02 4730 1462

E info@pldc.com.au
W www.penrithlakes.com.au

ACN 000 133 951
ABN 46 000 133 951

Attachment A

Penrith Lakes Development Corporation Ltd

Old Castlereagh Road,
Castlereagh NSW 2749

PO Box 457,
Cranebrook NSW 2749

T 02 4729 0044
F 02 4730 1462

E info@pldc.com.au
W www.penrithlakes.com.au

ACN 000 133 951
ABN 46 000 133 951

Notice of Modification

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

As delegate of the Minister for Planning and Infrastructure, I modify the development consent referred to in Schedule 1 as set out in Schedule 2.

SHADDAD

Sam Haddad
Director-General

Sydney,

6th May

2011

SCHEDULE 1

The development consent (DA 4) granted by the Minister for Urban Affairs and Planning on 9 September 1998, for the Penrith Lakes Scheme.

SCHEDULE 2

1. Delete "*proposed development*" and replace with:

proposed development:

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 *Sydney Regional Environmental Plan No. 11 – Penrith Lakes Scheme* on land described in, and identified on the plan, attached at Schedule B, and subsequently modified by:

- 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 *Penrith Lakes Development Corporation, Importation of VENM* dated 22 December 2008, including the response to submissions dated 12 May 2009;
- Modification Application DA4 MOD 4 and accompanying Environmental Assessment titled *Section 75W Application – Flood Discharge Pipe Construction at Penrith Lakes* dated November 2010, including the Supplementary Report titled *Wildlife Lake Section 75W – Weir and Flood Outlet Pipe Supplementary Report* dated 6 December 2010, and the response to submissions dated 21 January 2011; and
- Modification Application DA4 MOD 5 and accompanying Environmental Assessment titled *Section 75W Application – Wildlife Lake Weir at Penrith Lake* dated November 2010, including the response to submissions dated 21 January 2011.

2. Delete the definition for "DECC" in the definitions table, and amend the definitions table to include the following:

- c) the OEH means the Office of Environment and Heritage
- l) the DPI means the Department of Primary Industries

3. Delete all references to "DECC", and replace with "OEH".
4. Delete all references to "Department of Planning" and replace with "Department of Planning and Infrastructure".
5. Delete all references to "Minister for Planning" and replace with "Minister for Planning and Infrastructure".
5. Insert the following after condition 26 of schedule A:

Tree Screen

26A. The Applicant shall prepare (and subsequently implement) a Landscape Plan to provide a vegetative screen between the Wildlife Lake Weir and the properties to the north, to the satisfaction of the Director-General. The Landscape Plan must be prepared in consultation with neighbouring landowners adjacent the northern boundary, and be submitted to the Director-General for approval by the end of July 2011.

6. Delete condition 27 of schedule A, and replace with:

Water Supply

27. The Applicant shall ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of quarrying operations to match its available water supply, to the satisfaction of the Director-General.

Note: The Applicant is required to obtain all necessary water licences and approvals for the development under the Water Act 1912 and/or Water Management Act 2000.

Water Management Plan

27A. The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Director-General. This plan must be prepared in consultation with OEH, DPI and Council, and be submitted to the Director-General for approval by the end of October 2011, and prior to the construction of any flood infrastructure for the Wildlife Lake. The plan must include:

- (a) a Site Water Balance, which must:
 - include details of:
 - sources and security of water supply;
 - water use on site;
 - water management on site;
 - any off-site water transfers; and
 - investigate and implement all reasonable and feasible measures to minimise water use by the development;
- (b) an Erosion and Sediment Control Plan, which must:
 - identify activities that could cause soil erosion, generate sediment or affect flooding;
 - describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
 - describe the location, function, and capacity of erosion and sediment control structures; and
 - describe what measures would be implemented to maintain the structures over time;
- (c) a Flood Management Plan, which must include:
 - detailed baseline data and flood modelling for the Penrith Lakes Scheme;
 - a description of the measures to minimise flood risk associated with the development and in the surrounding area;
 - describe the location, function and capacity of flood management structures;
 - describe what measures would be implemented to maintain the structures over time; and
 - a flood emergency response plan to effectively respond to flood events;
- (d) a Surface Water Management Plan, which must include:
 - baseline data on surface water flows and quality in the lakes and other waterbodies that are potentially affected by the development;

- surface water flows and quality;
 - impacts on water users;
 - stream health; and
 - channel stability;
- (e) a Groundwater Management Plan, which must include:
 - baseline data of groundwater levels, yield and quality in the region;
 - measures to minimise interaction with the Hawkesbury Alluvials Groundwater Source;
 - groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
 - a program to monitor and assess:
 - groundwater inflows to the quarrying operations;
 - impacts on regional aquifers and the Hawkesbury Alluvials Groundwater Source;
 - (any) impacts on the groundwater supply of other groundwater users;
 - impacts on groundwater dependent ecosystems and riparian vegetation; and
- (f) a Surface and Ground Water Response Plan, which must include:
 - a response protocol for any exceedances of the surface water and groundwater assessment criteria;
 - measures to prevent, minimise or offset groundwater leakage from alluvial aquifers caused by the development; and
 - measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

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

7. Delete condition 39 of Schedule A, and replace with:

ABORIGINAL HERITAGE

39. Destruction of Aboriginal Objects

- (a) If any new or unknown Aboriginal objects are uncovered during the development, work affecting those objects is to cease immediately and the Applicant must seek the appropriate approvals under the *National Parks and Wildlife Act 1974*.
- (b) The Applicant shall further consult with the OEH regarding appropriate Aboriginal community participation in monitoring, surveying, and any salvaging requirements during the Aboriginal cultural heritage component of the development process. The Applicant shall also consult with the OEH regarding Aboriginal participation in management of the heritage values of the site in the interim period before the proposed regional park is established.

Management of Conservation Areas

- (c) By the end of October 2011, 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 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.

Geomorphic Unit D1

- (d) Excavation shall not occur within 20 m of Smith's Lane to ensure that portion of geomorphic unit D1 (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.

8. Insert the following after condition 65(a) of schedule A:

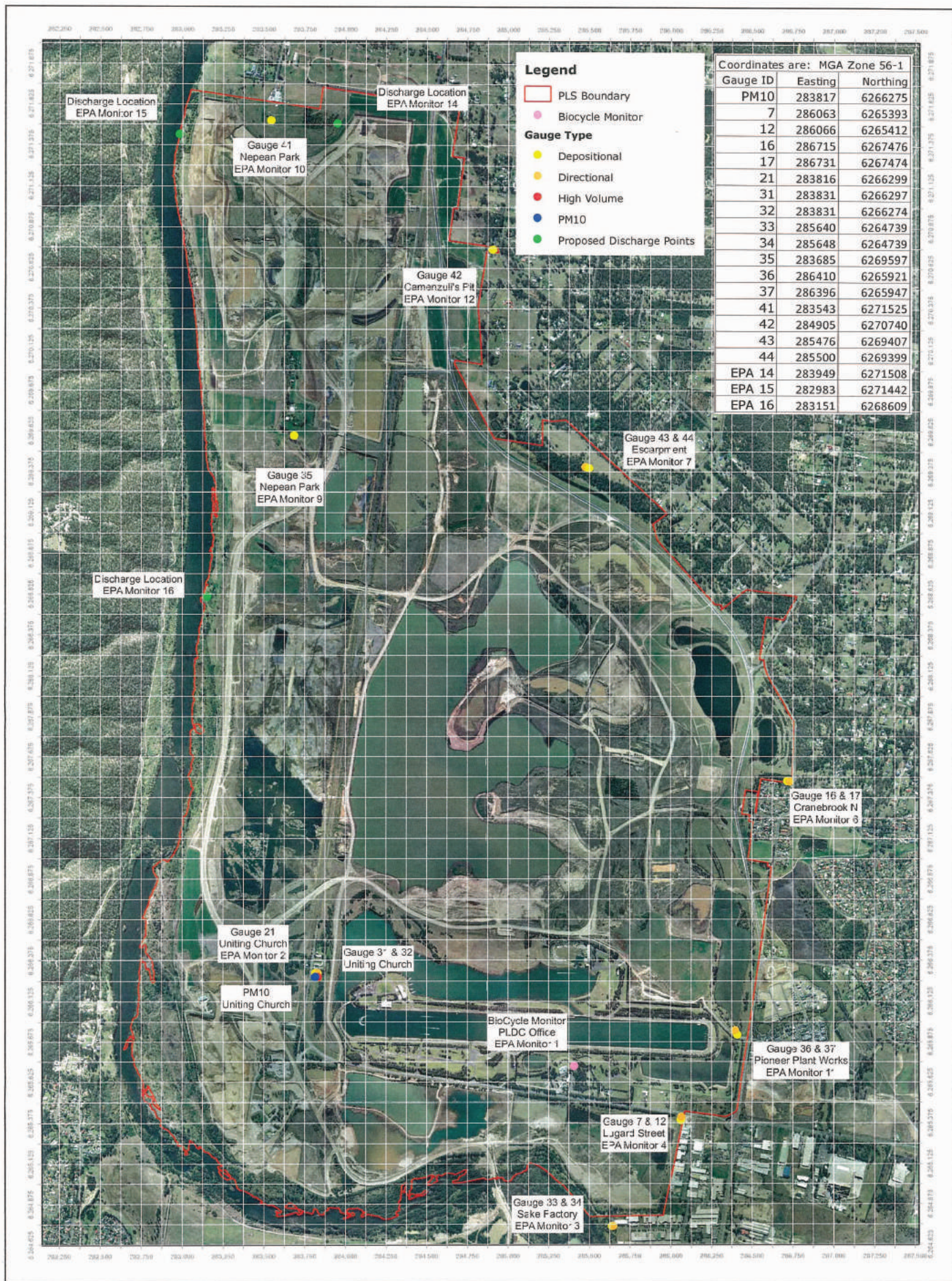
- (a1) Prior to quarrying within 300 metres of any residence to the north of the Wildlife Lake, the Applicant shall prepare (and subsequently implement) a noise compliance monitoring program, to the satisfaction of the Director-General.

Note: The purpose of the monitoring program is to ensure that the noise limits in condition 29 are complied with during the works in proximity to these receivers.

Appendix A

Penrith Lakes Development Corporation Ltd

Old Castlereagh Road, Castlereagh NSW 2749	PO Box 457, Cranebrook NSW 2749	T 02 4729 0044 F 02 4730 1462	E info@pldc.com.au W www.penrithlakes.com.au	ACN 000 133 951 ABN 46 000 133 951
---	------------------------------------	--	--	---------------------------------------



Disclaimer

The information contained in and by this map has been compiled from various sources and may contain errors or omissions. No warranty or representation, expressed or implied, is made with respect to the accuracy of this information or its suitability for any purpose.

0 500 1000
Metres

EPA Licence Monitoring Locations
PLDC Ref - 10877

26 May 2011
For Legal Review



Appendix B

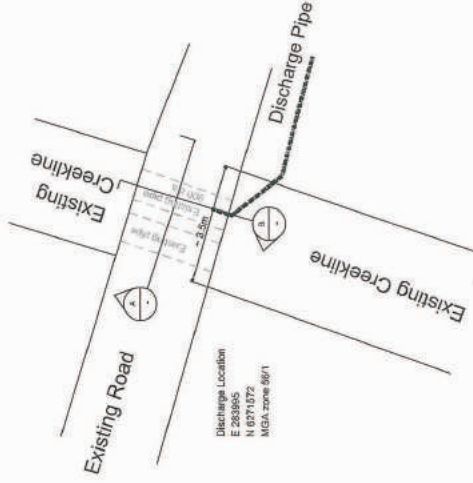
Penrith Lakes Development Corporation Ltd

Old Castlereagh Road, Castlereagh NSW 2749	PO Box 457, Cranebrook NSW 2749	T 02 4729 0044 F 02 4730 1462	E info@pldc.com.au W www.penrithlakes.com.au	ACN 000 133 951 ABN 46 000 133 951
---	------------------------------------	--	--	---------------------------------------

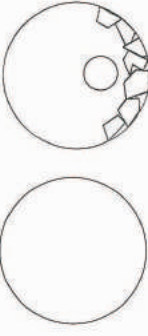


Detail A

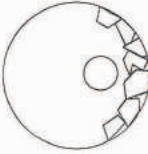
Pump Inlet



Existing pipe
open to flow



Existing pipe
converted for
dissipation

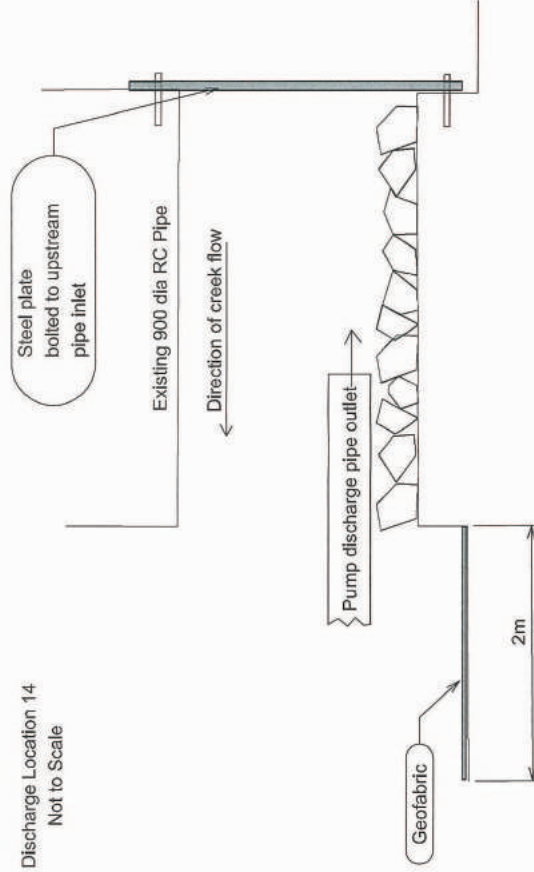


Section A

Cross Section of Existing Pipes
Not to Scale

Detail A

Discharge Location 14
Not to Scale



Section B

Long Section of Existing Pipe
Converted to Dissipator Structure - Not to scale

Rev/Idn	Date	Description	Drawn By	Approved By
C	02/06/2011	FOR APPROVAL	MWZ	MWZ
B	28/05/2011	FOR APPROVAL	BAM	MWZ
A	21/03/2011	FOR APPROVAL	MWZ	MWZ

Notes:



Scale Bar:



Title:

Detail for Discharge
Location 14

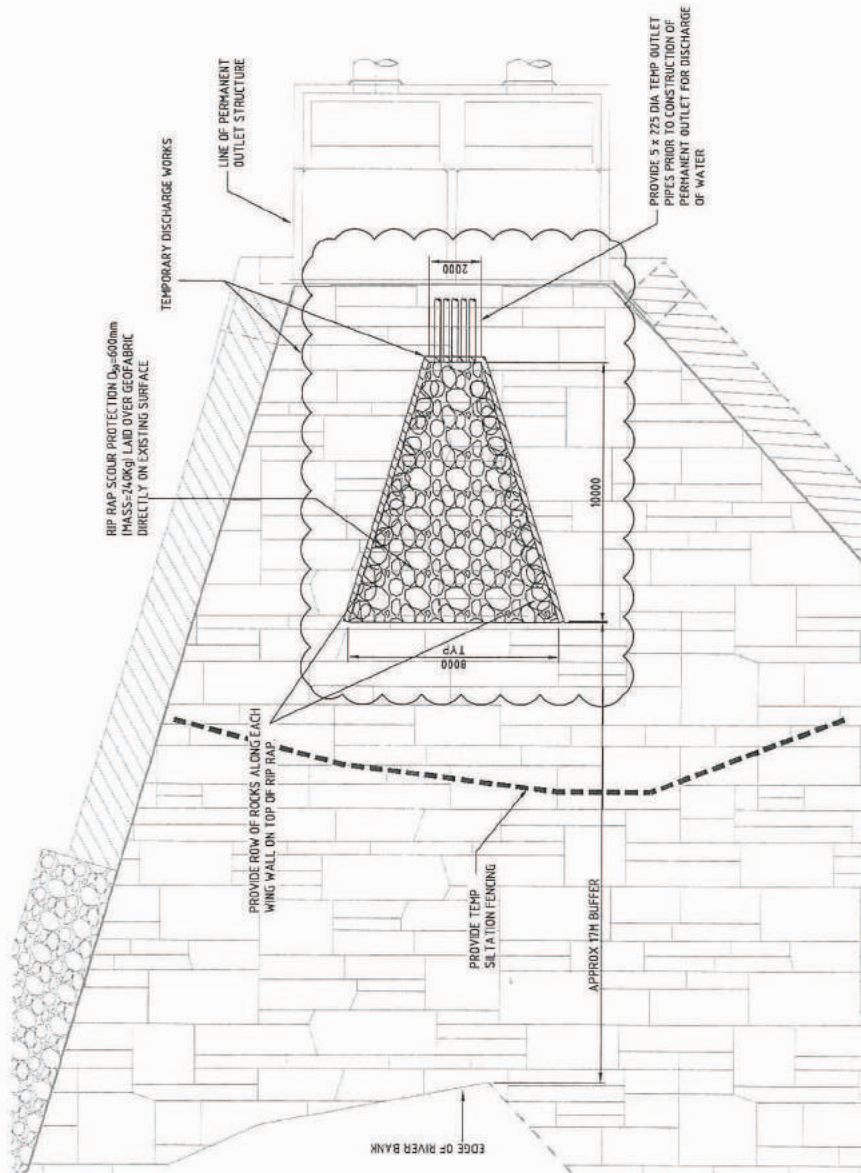
Designed By:
Matthew Zollinger

Drawn By:
Matthew Zollinger

Drawing No.
PLDC - 10780

Projection: MGA Zone 56
1:2000





PLAN - TEMPORARY OUTLET DISCHARGE PROTECTION

SCALE 1:100

NOTES:

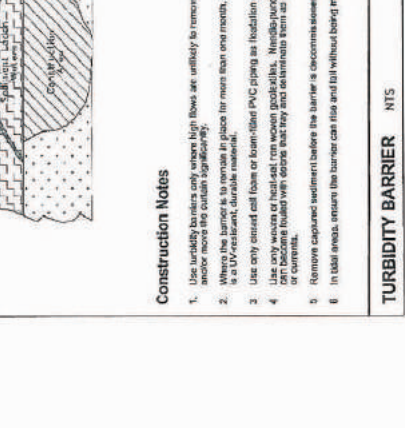
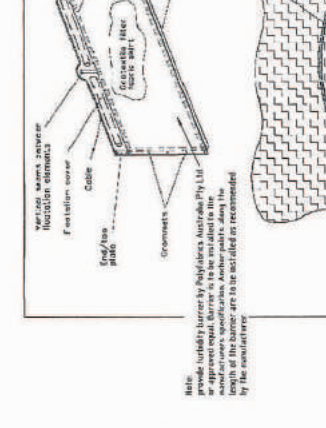
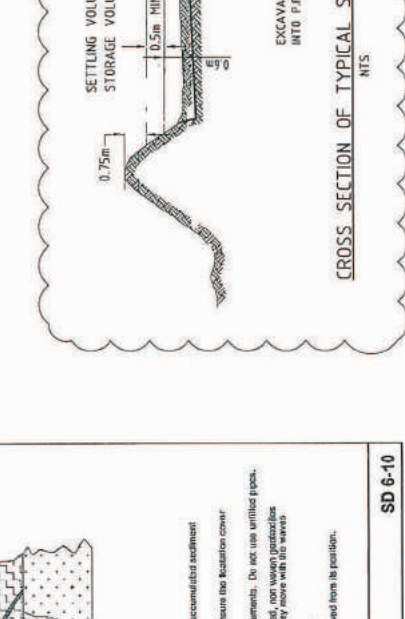
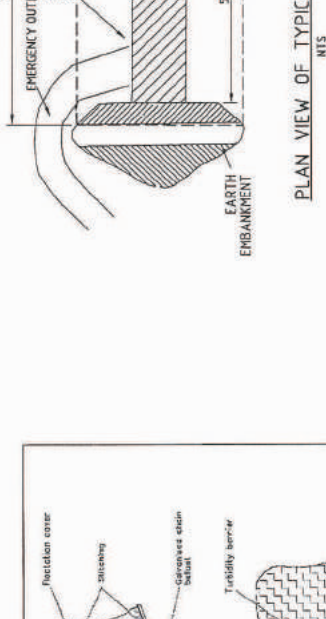
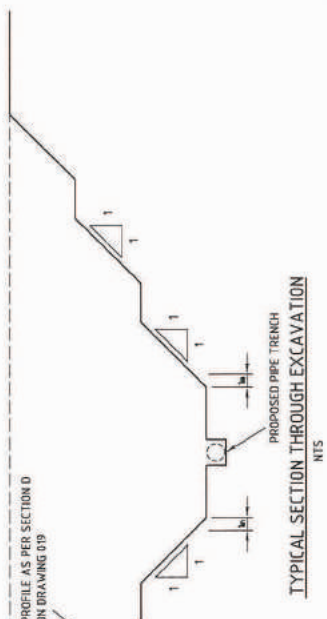
1. NO TREES WILL NEED TO BE REMOVED FOR THESE TEMPORARY WORKS
2. GRASS AND TOPSOIL DISTURBANCE WILL NOT OCCUR IN THE TEMPORARY DISCHARGE RIP RAP ZONE

[illegible]

Appendix C

Penrith Lakes Development Corporation Ltd

Old Castlereagh Road, Castlereagh NSW 2749	PO Box 457, Cranebrook NSW 2749	T 02 4729 0044 F 02 4730 1462	E info@pldc.com.au W www.penrithlakes.com.au	ACN 000 133 951 ABN 46 000 133 951
---	------------------------------------	--	--	---------------------------------------



TURBIDITY BARRIER NTS SD 6-10

DETAIL IN ACCORDANCE WITH:
EROSION AND SILTATION CONTROL GUIDELINE:
LANDCOM - MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION VOLUME 1, 4TH EDITION,
MARCH 2004.

Construction Notes

1. Use silt fences only when high flows are unlikely to remove accumulated sediment and/or where the barrier is to be placed for more than one month, ensure the location cover is a UV-resistant, durable material.
2. Where the barrier is to be placed for more than one month, ensure the location cover is a UV-resistant, durable material.
3. Use only silt fences and foam or foam-filled PVC piping as siltation elements. Do not use unutilised pipes.
4. Use any silt fences and foam or foam-filled PVC piping as siltation elements. Do not use unutilised pipes.
5. Remove captured sediment with devices that try and disintegrate them as they move with the waves or currents.
6. In total areas, ensure the barrier can rise and fall without being pressed down by its position.

Rev	Date	Description	Drawn	Appr
C	17/06/17	REVISED AS PER DETAIL	VC	VC
A	24/05/17	SCALE FOR TENDER	VC	VC

Cardno
Cardno (NSW/ACT) Pty Ltd
Suite 11, 271 Midland Street North, Sydney NSW 1585
Email: info@cardno.com.au Website: www.cardno.com.au

© Cardno (NSW/ACT) Pty Ltd 2018
All Rights Reserved.
This document is the property of Cardno (NSW/ACT) Pty Ltd. It is to be used only for the project for which it was prepared. It is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without prior written permission from Cardno (NSW/ACT) Pty Ltd.

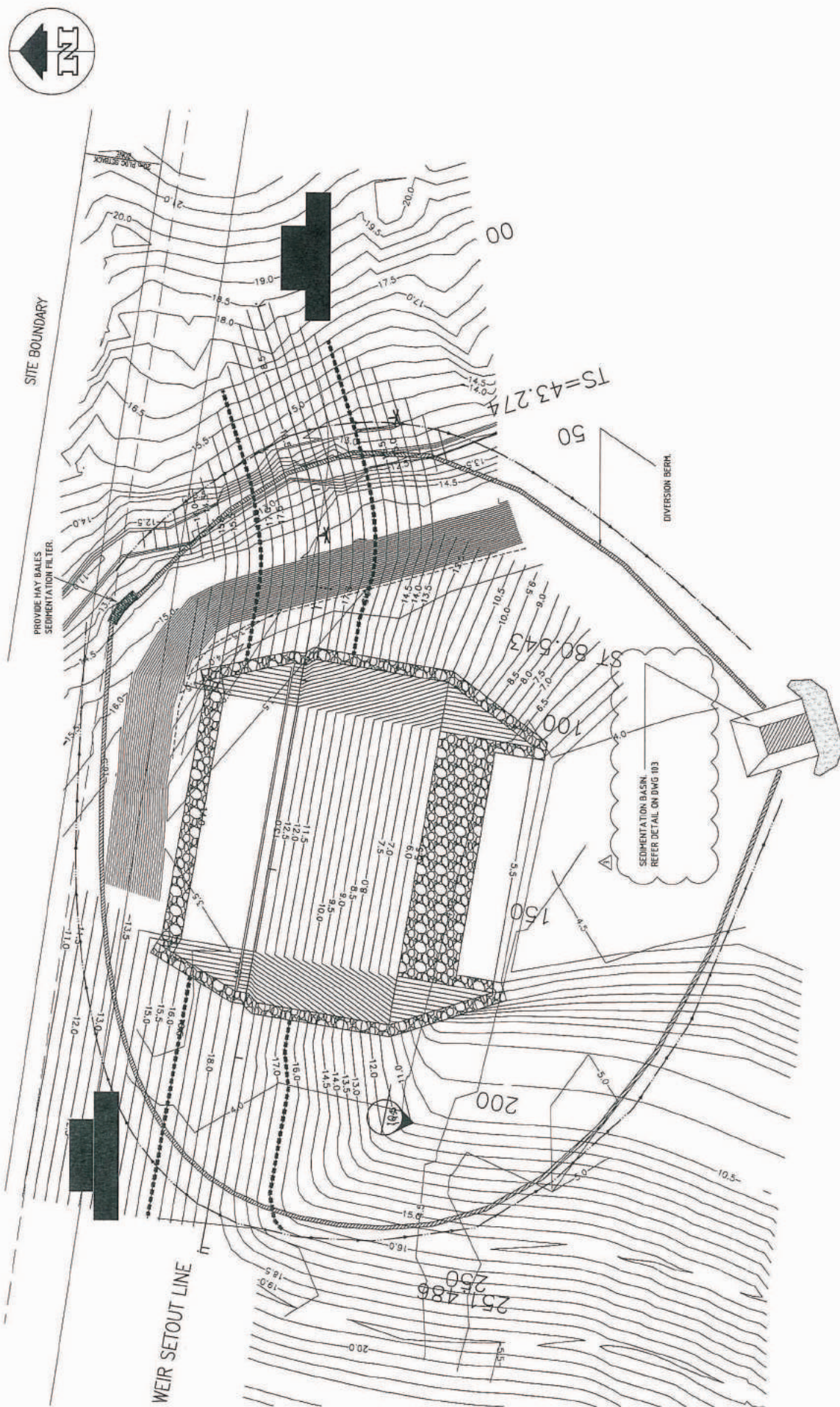
Drawn: NDK
Checked: CD
Designed: CD
Verified: NDK
Approved: NDK

Date: 25/05/17
Date: 26/05/17
Date: 26/05/17
Date: 26/05/17
Date: 26/05/17

FOR CONSTRUCTION
WILDLIFE LAKE FLOOD OUTLET PIPELINE
WILDLIFE LAKE FLOOD OUTLET - SEDIMENT
AND EROSION CONTROL DETAILS - STAGE 2

Scale: A1
Sheet: AS SHOWN
Revision: C

Project Number: W4826-04.1




PLAN

Doc	Date	Description	WK	VC
3	7/16/71	CROSS BREEDING HYBRID	WK	VC
2	7/16/71	TITLE BLACK REVEAL	WK	VC
1	7/16/71	ISSUED FOR APPROVAL	WK	VC
			Dated	Appr

⑤ **Cardinal (55W) Pay Unit 2010**
All Rights Reserved.



Cardino (NSW/ACT) Pty Ltd
 A204 95 801 145 625
 Suite 20, 191 Albany Street North, Glenview, NSW Australia 2150
 Phone: 641 10 4223 2018 Fax: 641 10 4214 2024
 e-mail: info@cardino.com.au Website: www.cardino.com.au

 STATE OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION	Issue	NOK	Date	25/05/11
	Order	EO	Date	25/05/11
	Revised	EO	Date	24/05/11
	Verified		Date	
	Approved		Date	
PENRITH LAKES DEVELOPMENT WILDLIFE LAKE - WEIR WILDLIFE LAKE WEIR - SEDIMENT AND EROSION CONTROL PLAN - STAGE 2				
DRAWN BY: [Signature] CHECKED BY: [Signature] DATE: 25/05/11				

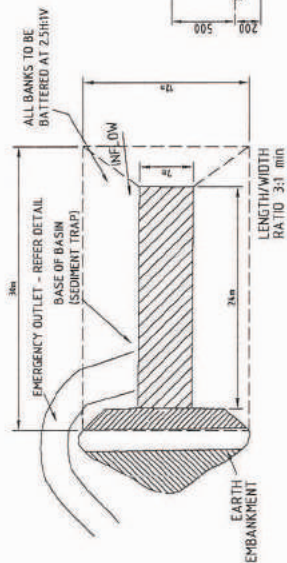
Genl PENRITH LAKES DEVELOPMENT CORPORATION

PENRIN LAKES	WILDLIFE LAKE - WEIR
--------------	----------------------

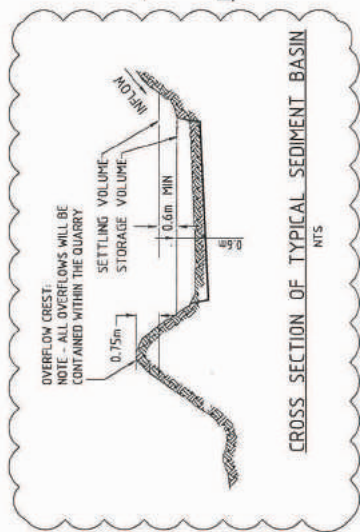
WILDLIFE LAKE WEIR - SEDIMENT
AND EROSION CONTROL PLAN - STAGE 2

Draining Harder
W4826-WLW-102

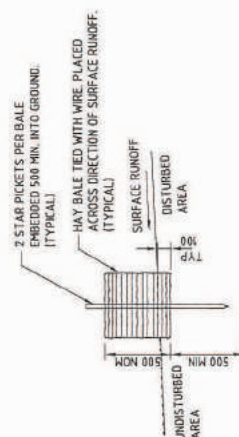




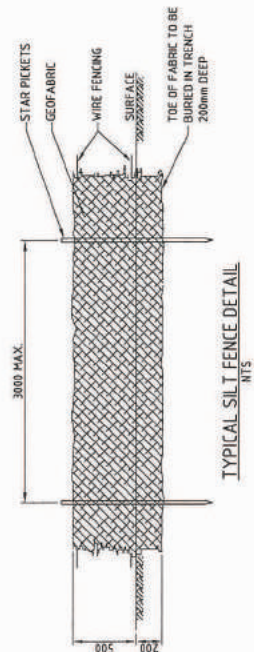
PLAN VIEW OF TYPICAL SEDIMENT BASIN
NTS



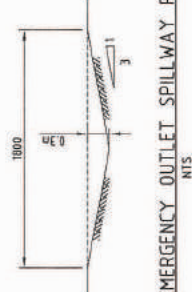
CROSS SECTION OF TYPICAL SEDIMENT BASIN
NTS



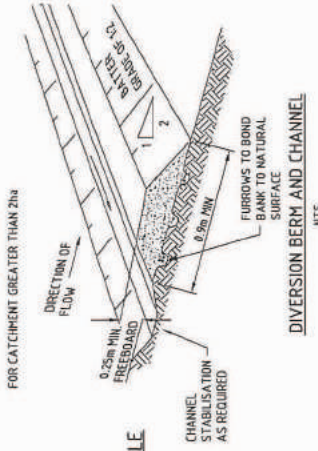
TEMPORARY HAY BALE SEDIMENT FILTER



TYPICAL SILT FENCE DETAIL
NTS



EMERGENCY OUTLET SPILLWAY PROFILE
NTS



DIVERSION BERM AND CHANNEL
NTS

CARDIO (NSW) Pty Ltd 2010 All Rights Reserved This document is the property of Cardio (NSW) Pty Ltd and is to be used only for the purposes for which it was prepared. It is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Cardio (NSW) Pty Ltd.		Cardio (NSW) Pty Ltd Cardio (NSW) Pty Ltd Suite 14, 277 Alfred Street North, Sydney NSW 1585 (Cardio (NSW) Pty Ltd is a company registered in Australia)		Penrith Lakes Development Corporation Wildlife Lake - Weir Wildlife Lake Weir - Sediment AND EROSION CONTROL DETAILS - STAGE 2		ISSUED FOR APPROVAL 30/03/11 W4826-WLW-103	
Drawn	Check	Rev	Rev	Rev	Rev	Rev	Rev
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31
32	32	32	32	32	32	32	32
33	33	33	33	33	33	33	33
34	34	34	34	34	34	34	34
35	35	35	35	35	35	35	35
36	36	36	36	36	36	36	36
37	37	37	37	37	37	37	37
38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40
41	41	41	41	41	41	41	41
42	42	42	42	42	42	42	42
43	43	43	43	43	43	43	43
44	44	44	44	44	44	44	44
45	45	45	45	45	45	45	45
46	46	46	46	46	46	46	46
47	47	47	47	47	47	47	47
48	48	48	48	48	48	48	48
49	49	49	49	49	49	49	49
50	50	50	50	50	50	50	50
51	51	51	51	51	51	51	51
52	52	52	52	52	52	52	52
53	53	53	53	53	53	53	53
54	54	54	54	54	54	54	54
55	55	55	55	55	55	55	55
56	56	56	56	56	56	56	56
57	57	57	57	57	57	57	57
58	58	58	58	58	58	58	58
59	59	59	59	59	59	59	59
60	60	60	60	60	60	60	60
61	61	61	61	61	61	61	61
62	62	62	62	62	62	62	62
63	63	63	63	63	63	63	63
64	64	64	64	64	64	64	64
65	65	65	65	65	65	65	65
66	66	66	66	66	66	66	66
67	67	67	67	67	67	67	67
68	68	68	68	68	68	68	68
69	69	69	69	69	69	69	69
70	70	70	70	70	70	70	70
71	71	71	71	71	71	71	71
72	72	72	72	72	72	72	72
73	73	73	73	73	73	73	73
74	74	74	74	74	74	74	74
75	75	75	75	75	75	75	75
76	76	76	76	76	76	76	76
77	77	77	77	77	77	77	77
78	78	78	78	78	78	78	78
79	79	79	79	79	79	79	79
80	80	80	80	80	80	80	80
81	81	81	81	81	81	81	81
82	82	82	82	82	82	82	82
83	83	83	83	83	83	83	83
84	84	84	84	84	84	84	84
85	85	85	85	85	85	85	85
86	86	86	86	86	86	86	86
87	87	87	87	87	87	87	87
88	88	88	88	88	88	88	88
89	89	89	89	89	89	89	89
90	90	90	90	90	90	90	90
91	91	91	91	91	91	91	91
92	92	92	92	92	92	92	92
93	93	93	93	93	93	93	93
94	94	94	94	94	94	94	94
95	95	95	95	95	95	95	95
96	96	96	96	96	96	96	96
97	97	97	97	97	97	97	97
98	98	98	98	98	98	98	98
99	99	99	99	99	99	99	99
100	100	100	100	100	100	100	100

DA4 PROPERTY DESCRIPTION

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	Por 43				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			8.66
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				396	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	4556	110			35.284
174	Sheens Lane Lot 1 DP 47720	1/47720	15721	175			1.92
48	Lot 2 DP 617921						7.6
		Subtotal					709.926