

PENRITH CITY COUNCIL

NOTICE OF DETERMINATION

DESCRIPTION OF DEVELOPMENT

Application number:	DA14/1497
Description of development:	Creation of a Permanent Lake (Stage 1 Works) Including Associated Stormwater Drainage Works, Cycleways and Footpaths
Classification of development:	N/A

DETAILS OF THE LAND TO BE DEVELOPED

Legal description:	Lot 3997 DP 1179646
Property address:	3997 Greenwood Parkway, JORDAN SPRINGS NSW 2747

DETAILS OF THE APPLICANT

Name & Address:	Maryland Development Company Pty Ltd PO Box 4 PARRAMATTA NSW 2124
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DECISION OF CONSENT AUTHORITY

In accordance with Section 81(1) (a) of the Environmental Planning and Assessment Act 1979, consent is granted subject to the conditions listed in attachment 1.

Please note that this consent will lapse on the expiry date unless the development has commenced in that time.

Date from which consent operates	8 April 2015
Date the consent expires	8 April 2017
Date of this decision	7 April 2015

POINT OF CONTACT

If you have any questions regarding this determination you should contact:

Assessing Officer:	Donna Clarke
Contact telephone number:	(02) 4732 7991

NOTES

Reasons

The conditions in the attached schedule have been imposed in accordance with Section 80A of the Environmental Planning and Assessment Act 1979 as amended.

Conditions

Your attention is drawn to the attached conditions of consent in attachment 1.

Certification and advisory notes

You should also check if this type of development requires a construction certificate in addition to this development consent

It is recommended that you read any Advisory Note enclosed with this notice of determination.

Review of determination

The applicant may request Council to review its determination pursuant to Section 82A of the Environmental Planning and Assessment Act 1979 within 6 months of receiving this Notice of Determination.

You cannot make this request if the development is Designated Development, Integrated Development or State Significant development or if the application was decided by a Joint Regional Planning Panel.

Appeals in the Land and Environment Court

The applicant can appeal against this decision in the Land and Environment Court within six (6) months of receiving this Notice of Determination.

You cannot appeal if a Commission of Inquiry was held for the subject development application, or if the development is a State Significant Development.

An appeal to the Land and Environment Court is made by lodging an application to the Court in accordance with the Rules of the Court.

Designated development

If the application was for designated development and a written objection was made in respect to the application, the objector can appeal against this decision to the Land and Environment Court within 28 days after the date of this notice. The objector cannot appeal if a Commission of Inquiry was held.

If the applicant appeals against this decision, objector(s) will be given a notice of the appeal and the objector(s) can apply to the Land and Environment Court within 28 days after the date of this appeal notice to attend the appeal and make submissions at that appeal.

Joint Regional Planning Panels

If the application was decided by a Joint Regional Planning Panel, please refer to Section 23H of the Environmental Planning and Assessment Act, 1979 (as amended) for any further regulations.

OTHER APPROVALS

APPROVAL BODIES

APPROVAL BODY NAME	DATE OF GENERAL TERMS OF APPROVAL	REF. NO.	NO. OF PAGES	RELEVANT LEGISLATION
NSW Government Department of Primary Industries Office of Water	19 December 2014	10 ERM2014/1135	5	Water Managment Act 2000 (WM Act)

The approval bodies listed above have provided General Terms of Approval for this development in accordance with the relevant legislation. A copy of these General Terms of Approval is provided with this development consent notice. Compliance with the relevant State Government departments' General Terms of Approval are required in conjunction with the following conditions listed in Attachment 1: Conditions of Consent issued by Penrith City Council.

ATTACHMENT 1: CONDITIONS OF CONSENT

General

- 1 The development must be implemented substantially in accordance with the plans stamped approved by Council and any supporting information received with the application, except as may be amended in red on the attached plans and by the following conditions.

Title	Plan ID	Revision No.	Prepared By	Date
Statement of Environmental Effects	14673		JBA	November 2014
Engineering Drawings	-	-	Jacobs	-
Cover Sheet	EN04189-ECC-DG-001	B	Jacobs	17/09/2014
East Lake General Notes	EN04189-ECC-DG-006	B	Jacobs	17/09/2014
East Lake Layout Plan	EN04189-ECC-DG-011	B	Jacobs	17/09/2014
East Lake Detail Spillway Plan	EN04189-ECC-DG-012	B	Jacobs	17/09/2014
East Lake Bulk Earthworks Plan	EN04189-ECC-DG-016	B	Jacobs	17/09/2014
East Lake Sections - Sheet 1	EN04189-ECC-DG-021	B	Jacobs	17/09/2014
East Lake Sections - Sheet 2	EN04189-ECC-DG-022	B	Jacobs	17/09/2014
East Lake Sections - Sheet 3	EN04189-ECC-DG-023	B	Jacobs	17/09/2014
East Lake Detail Sections	EN04189-ECC-DG-026	B	Jacobs	17/09/2014
East Lake Detail Spillway Sections	EN04189-ECC-DG-028	B	Jacobs	17/09/2014
East Lake - Stormwater Management	Final	-	Jacobs	1 Oct 2014
Jordan Springs Village 5 Engineering Plan Sheet 1	9343/03CC08	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Engineering Plan Sheet 2	9343/03CC09	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Engineering Plan Sheet 3	9343/03CC10	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Engineering Plan Sheet 4	9343/03CC11	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Engineering Plan Sheet 5	9343/03CC12	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Drainage Longitudinal Sections Sheet 5	9343/03CC41	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Drainage Longitudinal Sections Sheet 6	9343/03CC42	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Drainage Longitudinal Sections Sheet 7	9343/03CC43	B	J. Wyndahm Prince	23/01/15

Jordan Springs Village 5 Drainage Longitudinal Sections Sheet 10	9343/03CC46	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Drainage Longitudinal Sections Sheet 11	9343/03CC47	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Pit Schedule	9343/03CC52	B	J. Wyndahm Prince	23/01/15
Jordan Springs Village 5 Rock Headwall Sections & Details	9343/03CC70	B	J. Wyndahm Prince	23/01/15
Waste Management Plan	-	-	Lend Lease	19/11/2014

- 2 A copy of the satisfaction of the General Terms of Approval issued by the NSW Office of Water under the Water Management Act 2000, dated 19 December 2014 shall be submitted to the Principal Certifying Authority, before the Construction Certificate can be issued for the same development. A copy of the approval shall be submitted to Penrith City Council with the copy of the Construction Certificate, if Council is not the Principal Certifying Authority.
- 3 A separate development application shall be submitted to Penrith City Council within 12 months of the date of this consent for landscape embellishment works around the lake.
- 4 **The development shall not be used or occupied until an Occupation Certificate has been issued.**
- 5 The soil salinity management measures outlined within the Western Precinct Plan must be implemented during construction.
- 6 The development and salvage works must be conducted in accordance with the Aboriginal Heritage Impact Permit (AHIP Permit No. 10996059) issued on 13 February 2009.
- 7 The development shall be carried out in accordance with the procedures set out in the Western Precinct Contamination Management Plan and the conditions and procedures set out in the Site Audit Statements relating to the Western Precinct.
- 8
At the completion of all works the applicant shall:
 - Arrange for a final inspection of the works by Penrith City Council. Any defects identified at the final inspection are to be rectified by the applicant and be at no cost to Penrith City Council.
 - Lodge a maintenance bond with Penrith City Council. The maintenance bond shall be held for a minimum period of three years (maintenance period). The bond is calculated at 5% of the value of all works.
 - Enter into a Deed of Agreement with Penrith City Council. The deed shall identify liability responsibilities of the applicant for the duration of the maintenance period.
- 9 The development shall be maintained by the applicant for a minimum period of three (3) years. The maintenance period shall commence upon completion of the following:
 - lodgement of the maintenance bond
 - satisfactory completion of the works as determined by Council
 - entering into a Deed of Agreement

Six weeks prior to the end of the three year maintenance period a maintenance defect inspection is to be undertaken by Penrith City Council. Any defects identified during the maintenance inspection are to be rectified by the applicant at no cost to Penrith City Council.

At the satisfactory completion of the maintenance period, as determined by Council, the development shall be delivered to Penrith City Council.

- 10 The development is required to comply with the General Terms of Approval (GTA) dated 19 December 2014, issued by the NSW Office of Water as outlined below:

Plans, standards and guidelines

a) These General Terms of Approval (GTA) only apply to the controlled activities described in the plans and associated documentation relating to DA2014/1497 and provided by Council:

- Site plan, map and/or surveys

Any amendments or modifications to the proposed controlled activities may render these GTA invalid. If the proposed control activities are amended or modified the NSW Office of Water must be notified to determine if any variations to these GTA will be required.

b) Prior to the commencement of any controlled activity (works) on waterfront land, the consent holder must obtain a Controlled Activity Approval (CAA) under the Water Management Act from the NSW Office of Water. Waterfront land for the purposes of this DA is land and material in or within 40m of the top of the bank or shore of the river identified.

c) The consent holder must prepare or commission the preparation of:

- Vegetation Management Plan
- Erosion and Sediment Control Plan
- Soil and Water Management Plan

d) All plans must be prepared by a suitably qualified person and submitted to the NSW Office of Water for approval prior to any controlled activity commencing. The following plans must be prepared in accordance with the NSW Office of Water's guidelines located at www.water.nsw.gov.au/Waterlicensing/Approvals/Default.aspx

- Vegetation Management Plans
- Riparian Corridors
- In-stream works
- Outlet structures

e) The consent holder must (i) carry out any controlled activity in accordance with approved plans and (ii) construct and/or implement any controlled activity by or under the direct supervision of a suitably qualified professional and (iii) when required, provide a certificate of completion to the NSW Office of Water.

Rehabilitation and maintenance

a) The consent holder must carry out a maintenance period of two (2) years after practical completion of all controlled activities, rehabilitation and vegetation management in accordance with a plan approved by the NSW Office of Water.

b) The consent holder must reinstate waterfront land affected by carrying out any controlled activity in accordance with a plan or design approved by the NSW Office of Water.

Reporting requirements

a) The consent holder must use a suitably qualified person to monitor the progress, completion, performance of works, rehabilitation and maintenance and report to the NSW Office of Water as required.

Security deposits

a) The consent holder must provide a security deposit (bank guarantee or cash bond) – equal to the sum of the cost of complying with the obligations under any approval – to the NSW Office of Water as and when required.

Access-ways

a) The consent holder must not locate ramps, stairs, access ways, cycle paths, pedestrian paths or any other non- vehicular form of access way in a riparian corridor other than in accordance with a plan approved by the NSW Office of Water.

Bridge, causeway, culverts, and crossing

a) The consent holder must ensure that the construction of any bridge, causeway, culver or crossing does not result in erosion, obstruction of flow, destabilisation or damage to the bed or banks of the river or waterfront land, other than in accordance with a plan approved by the NSW Office of Water

b) The consent holder must ensure that any bridge, causeway, culvert or crossing does not obstruct water flow and direction, is the same width as the river or sufficiently wide to maintain water circulation, with no significant water level difference between either side of the structure other than in accordance with a plan approved by the NSW Office of Water.

Disposal

a) The consent holder must ensure that no materials or cleared vegetation that may (i) obstruct flow, (ii) wash into the water body, or (iii) cause damage to river banks; are left on waterfront land other than in accordance with a plan approved by the NSW Office of Water.

Drainage and Stormwater

a) The consent holder is to ensure that all drainage works capture and convey runoffs, discharges and flood flows to low flow water level in accordance with a plan approved by the NSW Office of Water, and (ii) do not obstruct the flow of water other than in accordance with a plan approved by the NSW Office of Water.

b) The consent holder must stabilize drain discharge points to prevent erosion in accordance with a plan approved by the NSW Office of Water.

Erosion control

a) The consent holder must establish all erosion and sediment control works and water diversion

structures in accordance with a plan approved by the NSW Office of Water. These works and structures must be inspected and maintained throughout the working period and must not be removed until the site has been fully stabilized.

Excavation

a) The consent holder must ensure that no excavation is undertaken on waterfront land other than in accordance with a plan approved by the NSW Office of Water.

Maintaining river

a) The consent holder must ensure that (i) river diversion, realignment or alteration does not result from any controlled activity work and (ii) bank control or protection works maintain the existing river hydraulic and geomorphic functions, and (iii) bed control structures do not result in river degradation other than in accordance with a plan approved by the NSW Office of Water.

b) The consent holder must ensure that the surfaces of river banks are graded to enable the unobstructed flow of water and bank retaining structures result in a stable river bank in accordance with a plan approved by the NSW Office of Water.

11 Prior to the handover of GPTs, a Draft Operation and Maintenance manual for the proposed stormwater treatment measures shall be submitted to Council for approval. The manual should include details on the cleaning / maintenance requirements as well as provide details on the estimated annual and lifecycle costs associated with the proposed treatment measures. The plan should include details on the following:

- i. Site description (area, imperviousness, land use, annual rainfall, topography etc)
- ii. Site access description
- iii. Likely pollutant types, sources and estimated loads
- iv. Locations, types and descriptions of measures proposed
- v. Operation and maintenance responsibility
- vi. Inspection methods (including inspection checklists)
- vii. Maintenance methods (frequency, equipment and personnel requirements);
- viii. Landscape and weed control requirements
- ix. Operation and maintenance costs;
- x. Waste management and disposal options; and
- xi. Reporting.

12 **Prior to the handover** of the water body and related stormwater treatment infrastructure, Council requires that all requirements outlined in section 2.6 of Council's WSUD Technical Guidelines (Version 2) are met. These include the following:

- The WSUD assets / measures are constructed and operate in accordance with the approved design specifications / parameters and any other specific design agreements previously entered into with Council
- The performance of the WSUD measure(s) has been validated, which must include the provision of a Performance Validation Report supporting the performance of the WSUD measure
- Where applicable, the build-up of sediment has resulted in no more than a 10% reduction of operational volume

- Asset inspections for defects has been completed and, if any defects are found, rectified to the satisfaction of Council
- The WSUD infrastructure is to the satisfaction of Council, structurally and geotechnically sound (this will require the submission of documents demonstrating that such infrastructure has been certified by suitably qualified persons)
- Design drawings have been supplied in a format acceptable to Council
- Works as Executed (WAE) drawings have been supplied for all infrastructure in a format and level of accuracy acceptable to Council
- Other relevant digital files have been provided (e.g. design drawings, surveys, bathymetry, models etc)
- Landscape designs have been supplied, particularly those detailing the distribution of functional vegetation, i.e. vegetation that plays a role in water quality improvement (clearance certificates from the landscape architect will need to be supplied)
- The condition of the infrastructure and associated with the land complies with the approved design specification.
- Comprehensive operation and maintenance manuals (including indicative costs) have been provided.
- Inspection and maintenance forms provided
- Vegetation establishment period successfully complete (3 years unless otherwise approved by Council)
- Copies of all required permits (both construction and operational) have been submitted.

- 13 The water quality / detention system shall be maintained by the person/company with the benefit of the development consent for a 3 year period. During the maintenance period the basin is to be monitored by the developer for water quality and vegetation management as per the adopted maintenance regime / operational manual.
- 14 The stormwater management system shall be provided generally in accordance with the concept plan/s lodged for development approval, prepared by (Jacobs Pty Ltd), reference numbers (EN04189-ECC-DG- (0001, 0006, 0011, 0012, 0016, 0021, 0022, 0023, 0026, 0028), revision (B), dated (17/09/2014).

Engineering plans and supporting calculations for the stormwater management systems are to be prepared by a suitably qualified person and shall accompany the application for a Construction Certificate.

- 15 **Prior to the issue of a Construction Certificate** the Certifying Authority shall ensure that the stormwater management system has been designed in accordance with Council's Water Sensitive Urban Design Policy as well as the commitments made in the Riparian Corridors – Soil and Water Management Plan Report prepared by SKM February 2014 and the Jordan Springs Village 5 Subdivision Stormwater Management Study Prepared by J Wyndham Prince October 2014 (Reference number 9343-03).
- 16 All works associated with the project including the location of stormwater management systems must be completed in accordance with the requirements of the NSW Office of Water.
- 17 **Prior to commencement of works**, sediment and erosion control measures shall be installed in accordance with the approved Construction Certificate and to ensure compliance with the Protection of the Environment Operations Act 1997.

The erosion and sediment control measures shall remain in place and be maintained until all disturbed areas have been rehabilitated and stabilised.

18 **Prior to the issue of an Occupation Certificate**, works-as-executed drawings, final operation and maintenance management plans and any other compliance documentation shall be submitted to the Principal Certifying Authority in accordance with Penrith City Council's Engineering Construction Specification for Civil Works, WSUD Technical Guidelines and Stormwater Drainage for Building Developments.

An original set of works-as-executed drawings and copies of the final operation and maintenance management plans and compliance documentation shall also be submitted to Penrith City Council with notification of the issue of the Occupation Certificate where Council is not the Principal Certifying Authority.

19 **Prior to the issue of an Occupation Certificate** the Principal Certifying Authority shall ensure that the:

- a) Stormwater management systems (including on-site detention and water sensitive urban design)
- b) Overland flowpath works
- c) Flood control works
 - Have been satisfactorily completed in accordance with the approved Construction Certificate and the requirements of this consent.
 - Have met the design intent with regard to any construction variations to the approved design.
 - Any remedial works required to been undertaken have been satisfactorily completed.

Details of the approved and constructed system/s shall be provided as part of the works-as-executed drawings.

Demolition

20 All demolition works are to be conducted in accordance with the provisions of AS 2601-1991 "The Demolition of Structures". **Prior to demolition**, all services shall be suitably disconnected and capped off or sealed to the satisfaction of the relevant service authority requirements.

All demolition and excavated material shall be disposed of at a Council approved site or waste facility. Details of the proposed disposal location(s) of all excavated material from the development site shall be provided to the Principal Certifying Authority **prior to commencement of demolition**.

21 Demolition works will be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:

- Mondays to Fridays, 7am to 6pm
- Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm
- No demolition work is permitted on Sundays and Public Holidays.

In the event that the demolition relates to works inside the building and do not involve external walls or the roof, and do not involve the use of equipment that emits noise then the demolition works are not restricted to the hours stated above.

The provisions of the Protection of the Environment Operations Act, 1997 in regulating offensive noise also apply to all construction works.

Environmental Matters

- 22 Erosion and sediment control measures shall be installed **prior to the commencement of works on site** including approved clearing of site vegetation. The erosion and sediment control measures are to be maintained in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

Certification that the erosion and sediment control measures have been installed in accordance with the approved erosion and sediment control plan (s) for the development and "Managing Urban Stormwater: Soils and Construction 2004" shall be obtained and issued a minimum 2 days before any other site works are to commence, including earthworks and clearing of the site.

The approved sediment and erosion control measures are to be installed **prior to and maintained throughout the construction phase of the development until the land, that was subject to the works, have been stabilised and grass cover established.** These measures shall ensure that mud and soil from vehicular movements to and from the site does not occur during the construction of the development.

- 23 No fill material is to be imported to the site without the prior approval of Penrith City Council in accordance with Sydney Regional Environmental Plan No.20 (Hawkesbury- Nepean River) (No.2-1997). No recycling of material for use as fill material shall be carried out on the site without the prior approval of Council.

- 24 No fill material shall be imported to the site until such time as a Validation Certificate(with a copy of any report forming the basis for the validation) for the fill material has been submitted to, considered and approved by Council. The Validation Certificate shall:
- state the legal property description of the fill material source site,
 - be prepared by an appropriately qualified person (as defined in Penrith Contaminated Land Development Control Plan) with consideration of all relevant guidelines (e.g. EPA, ANZECC, NH&MRC), standards, planning instruments and legislation,
 - clearly indicate the legal property description of the fill material source site,
 - provide details of the volume of fill material to be used in the filling operations,
 - provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
 - (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment.

{Note: Penrith Contaminated Land Development Control Plan defines an appropriately qualified person as "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance."}.

If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances the works shall be carried out prior to any further approved works.

- 25 All waste materials stored on-site are to be contained within a designated area such as a waste bay or bin to ensure that no waste materials are allowed to enter the stormwater system or neighbouring properties. The designated waste storage areas shall provide at least two waste bays / bins so as to allow for the

separation of wastes, and are to be fully enclosed when the site is unattended.

- 26 All excavated material and other wastes generated as a result of the development are to be re-used, recycled or disposed of in accordance with the approved waste management plan.

Waste materials not specified in the approved waste management plan are to be disposed of at a lawful waste management facility. Where the disposal location or waste materials have not been identified in the waste management plan, details shall be provided to the Certifying Authority as part of the waste management documentation accompanying the Construction Certificate application.

All receipts and supporting documentation must be retained in order to verify lawful disposal of materials and are to be made available to Penrith City Council on request.

- 27 The operating noise level of plant and equipment shall not exceed 5dB(A) above the background noise level when measured at the boundaries of the premises. The provisions of the Protection of the Environment Operations Act 1997 apply to the development, in terms of regulating offensive noise.
- 28 Only clean and unpolluted water is to be discharged into Penrith City Council's stormwater drainage system. Liquid wastes suitable for discharge to the mains sewer are to be discharged in accordance with Sydney Water requirements.

If mains sewer is not available or if Sydney Water will not allow disposal to the sewer then a licensed waste contractor is to remove the liquid waste from the premises to an appropriate waste facility.

The waste contractor and waste facility are to hold the relevant licenses issued by the NSW Environment Protection Authority.

Construction

- 29 The approved waste management plan must be implemented on-site and adhered to throughout all stages of the development including demolition, with supporting documentation / receipts retained in order to verify the recycling and disposal of materials in accordance with the approved plan.
- 30 Construction works or subdivision works that are carried out in accordance with an approved consent that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:
- Mondays to Fridays, 7am to 6pm
 - Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm
 - No work is permitted on Sundays and Public Holidays.

Other construction works carried out inside a building/tenancy and do not involve the use of equipment that emits noise are not restricted to the construction hours stated above.

The provisions of the Protection of the Environment Operations Act, 1997 in regulating offensive noise also apply to all construction works.

Engineering

- 31 All roadworks, stormwater works and dedications, required to effect the consented development shall be undertaken at no cost to Penrith City Council.

- 32 All earthworks shall be undertaken in accordance with AS 3798 and Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments, Engineering Construction Specification for Civil Works.

The level of testing shall be determined by the Geotechnical Testing Authority/ Superintendent in consultation with the Principal Certifying Authority.

- 33 **Prior to the handover of the lake to Penrith City Council**, works-as-executed drawings, final operation and maintenance management plans and any other compliance documentation shall be submitted to the Principal Certifying Authority in accordance with Penrith City Council's Engineering Construction Specification for Civil Works, WSUD Technical Guidelines and Stormwater Drainage for Building Developments.

An original set of works-as-executed drawings and copies of the final operation and maintenance management plans and compliance documentation shall also be submitted to Penrith City Council with notification of the issue of the Occupation Certificate where Council is not the Principal Certifying Authority.

- 34 The stormwater management systems shall continue to be operated and maintained by the applicant in accordance with the final operation and maintenance management plan until such times as the development is delivered to Penrith City Council. Regular inspection records are required to be maintained and made available to Council on request. All necessary improvements are required to be made immediately upon awareness of any deficiencies in the stormwater management system.

- 35 **Prior to the issue of a Construction Certificate** additional geotechnical investigations and testing shall be undertaken on the permeability of the proposed basin. The permeability of the basin shall be designed to ensure that a permanent water level is maintained in all weather events to sustain the growth of the macrophyte zone.

The test results of the geotechnical investigations shall be submitted to Penrith City Council for approval prior to the issue of a Construction Certificate. If the geotechnical testing indicates the basin floor is not within acceptable permeability limits then a geotechnical designed liner is to be constructed. Details of the liner are to be submitted to Penrith City Council prior to the issue of a Construction Certificate.

- 36 **Prior to the issue of a Construction Certificate** additional salinity testing is to be undertaken to ensure the basin is able to sustain the growth of the proposed macrophyte zone. Results of the salinity testing are to be provided to Penrith City Council prior to the issue of a Construction Certificate.

- 37 **Prior to the issue of a Construction Certificate** a minimum 4m wide heavy duty concrete accessramp is to be provided from a public road to the lake foreshore to permit maintenance machinery and Rural Fire Service vehicles to access the lake. The access ramp is to be at maximum gradient of 1 in 4 (vertical to horizontal).

Full details of the ramp including location are to be submitted to Penrith City Council for approval prior to the issue of a Construction Certificate.

- 38 **Prior to the issue of a Construction Certificate** the Certifying Authority shall ensure that maximum slope of all batters shall be 1 in 5 (vertical to horizontal). Batter slopes of 1 in 3 are not acceptable.
- 39 **Prior to the issue of a Construction Certificate** the Certifying Authority shall ensure that the invert level of all inlet pipes from Villages 2 and 5 are not submerged below the permanent water level of the basin.
- 40 **Prior to the issue of a Construction Certificate** the Certifying Authority shall ensure that access to the basin for the purposes of a static water supply for firefighting purposes complies with the requirements from the Office of Environment and Heritage. The design of the trail access shall comply with the following requirements:
- Trail access to the static water supply shall be provided for Category 1 vehicles.
 - Trail access requires 4 metre wide with an additional one metre wide strip on each side of the trail clear of bushes and long grass.
 - Trail requires a minimum vertical clearance of 4 metres to any overhanging obstruction, including tree branches.
 - A turn around area with a radius of 12 metres.
 - A hard stand near the water source to allow vehicles (15 tonne) to park and draught water.
 - Height above water source not to exceed 4 metres.
 - If to be available to aircraft, requires no power lines, poles within 130m of water source. Water source requires 35metre width / diameter. No structures within 2 metres of water source.
 - Signage to indicate direction to water source and if dead end / turn around.

Landscaping

- 41 The proposed planting of macrophytes for water treatment and soil stabilisation are to be constructed in accordance with the stamped approved plan, Sections F5 “Planting Techniques”, F8 “Quality Assurance Standards” and F9 “Site Management Plan” of Penrith Council’s Landscape Development Control Plan.

Landscaping shall be maintained:

- in accordance with the approved plan, and
- in a healthy state, and in perpetuity by the existing or future owners and occupiers of the property.

If any of the vegetation comprising that landscaping dies or is removed, it is to be replaced with vegetation of the same species and, to the greatest extent practicable, the same maturity as the vegetation which died or was removed.

- 42 No trees are to be removed, ringbarked, cut, topped or lopped or wilfully destroyed (other than those within the proposed building footprint or as shown on the approved plans) without the prior consent of Penrith City Council and in accordance with Council’s Tree Preservation Order and Policy.

SIGNATURE

Name:	Gavin Cherry Principal Planner
Signature:	

For the Development Services Manager