Appendix E Submissions

Our Ref: 374DA23 (10/1500) STH10/00256
Contact: Tim Webster 4221 2769
Your Ref: S08/01819, MP08_0236

PCU017586

RTA

08 DEC 2010

Department of Planning
Received
9 DEC 2010
Scanning Room

#1

Manager – Water Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Attention: Swati Sharma

QUEANBEYAN CITY COUNCIL – MAJOR PROJECT 08_0236, – MR584, OLD COOMA ROAD, GOOGONG – GOOGONG WATER CYCLE PROJECT

Dear Madam

Reference is made to your letter dated 10 November 2010 regarding the subject major project application forwarded to the Roads and Traffic Authority (RTA) for consideration.

The RTA has reviewed the submitted information and does not object to the development application in principle as the intersection of Old Cooma Road and Googong Dam Road is considered adequate to cater for the traffic generation associated with the construction and operation of the proposal.

In accordance with Section 79C(1)(b) of the EP&A Act, Council as the Consent Authority, is responsible to consider any likely impacts on the natural or built environment in the road reserve fronting this proposed development. For instance there could be traffic noise impacts on adjacent residences, impacts on indigenous or non-indigenous heritage items or threatened species. The RTA will not be making a separate Part 5 environmental assessment of the environmental impacts in the road reserve for this proposal.

Yours faithfully

Adam Berry
Manager, Road Safety and Traffic Management
Southern Operations and Engineering Services

GREATER SOUTHERN
AREA HEALTH SERVICE
NSW HEALTH

#2

Incorporating

Health Services
Adelong
Albury
Ardlethan
Barellan
Barham
Barmedman
Batlow
Batemans Bay
Bega
Berrigan
Bombala
Boorowa
Braidwood
Coolamon-Ganmain
Coleambally
Cooma
Cootamundra
Corowa
Crookwell
Culcairn
Darlington Point
Delegate
Deniliquin
Eden
Finley
Goulburn
Griffith
Gundagai
Gunning
Hay
Henty
Hillston
Holbrook
Jerilderie
Jindabyne
Junee
Leeton
Lockhart
Mathoura
Moama
Moruya
Moulamein
Murrumburrah-Harden
Narooma
Narrandera
Pambula
Queanbeyan
Tarcutta
Temora
The Rock
Tocumwal
Tooleybuc
Tumbarumba
Tumut
Ungarie
Urana
Wagga Wagga
Weethalle
West Wyalong
Yass
Young

Population Health
P O Box 3095
ALBURY NSW 2640
Phone: 02 60808901
Fax: 02 60808999

13th December 2010

Department of Planning
GPO Box 39
SYDNEY NSW 2001

Attention: Lisa Mitchell
Manager Water Projects
Infrastructure Projects

Dear MS Mitchell,

Re: Environmental Assessment for Googong Water Cycle Project
Major Project 08_0236

Thank you for the invitation for comment and submission on the Googong Water Cycle Project.

On revision of the report the following comments are offered:

1. Water provided as drinking water to the development is to comply with the Australian Drinking Water Guidelines 2004. The ongoing management and monitoring of the supply is to form part of the NSW Drinking Water Monitoring Program

2. The recycled water treatment system is to be considered in relation to the Australian Guidelines for Water Recycling and the Interim NSW Guidelines for Management of Private recycled Water Schemes 2008. The recycled water treatment system is subject to approval by the relevant authorities.

3. The stormwater management strategy is to consider the impact of receiving excess recycled water and water recycling plant emergency overflows. Consideration should be given not only to the quantity but also quality of recycled water being received into the stormwater system and the subsequent impact on the receiving watercourses.

Greater Southern Area Health Service
ABN 32 238 346 308
GPO Box 1845 (34 Lowe Street) Queanbeyan NSW 2620
Tel (02) 6128 9777 Fax (02) 6299 6363
Email corporate@gsahs.health.nsw.gov.au
Website www.gsahs.nsw.gov.au

4. Open water bodies, including but not limited to creeks, stormwater channels, retention ponds and water features located within the development are to receive consideration in relation to mosquito control and the incidence of algal blooms.

5. As noted in the Report the project may have consequential impacts on the Googong Dam and foreshores due to an increase in adjacent population and the possible increase in recreational activities on and around the dam. Appropriate management measures should be considered to negate any negative impact of activities on the water catchment area, the foreshore environment and water quality.

6. Emergency management requires consideration in the event of a disaster. Consideration should be given to ingress and egress as well as points of evacuation, both during each of the construction stages as well as on completion of the project.

If anything further is required please advise.

Yours faithfully

Peter Harrington
Environmental Health Office
Greater Southern Area Health Service

NSW GOVERNMENT | Industry & Investment

#3

Your Ref: S08/01819

Our Ref: OUT10/20353

Lisa Mitchell
Manager – Water Projects
Infrastructure Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear Ms Mitchell,

Re: MP08_0236 – Environmental Assessment – Proposed Googong Township Water Cycle Project.

Thank you for your letter dated 10 November 2010 seeking Industry & Investment NSW (I&I NSW) comments on the Environmental Assessment (EA) for the above Major Project.

This is a joint response from I&I NSW providing comments on Fisheries and Agriculture issues related to this proposal which are detailed in Attachments A and B. I&I NSW advises that there are no issues related to Minerals or State Forests.

Should you have any general queries please contact Dr Trevor Daly on (02) 4478 9103. For further specific information on Agriculture issues please contact the relevant officer listed in the Attachment.

Yours sincerely

BILL TALBOT
DIRECTOR, FISHERIES CONSERVATION & AQUACULTURE

17 December 2010

Division of Primary Industries, Fisheries Conservation & Aquaculture
Port Stephens Fisheries Institute
Locked Bag 1, NELSON BAY NSW 2315
Tel: 02 4982 1232 Fax: 02 4982 1304
ABN 51 734 124 190 www.industry.nsw.gov.au

ATTACHMENT A – FISHERIES ISSUES

I&I NSW is responsible for ensuring that fish stocks are conserved and that there is "no net loss" of key fish habitats upon which they depend. To achieve this, the Department ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act respectively) and the associated *Policy and Guidelines for Aquatic Habitat Management and Fish Conservation (1999)*. In addition the Department is responsible for ensuring the sustainable management of commercial and recreational fishing and aquaculture within NSW.

I&I NSW notes that the proposed water cycle project is located in the catchments of Googong Creek and Montgomery Creek which drain to the Queanbeyan River. The potential impact of the development upon water quality and aquatic habitats in Googong Creek, Montgomery Creek and downstream in the Queanbeyan River is of particular interest to this Department in relation to this Major Project.

I&I NSW has reviewed the Environmental Assessment (EA) prepared by Manidis Roberts P/L (dated November 2010). Overall, I&I NSW has no objection to approval of the proposal as outlined in the EA and Appendices (including Statement of Commitments and site plans) but makes the following comments and recommendations:

1. I&I NSW concurs with the proposed development and implementation of a construction environmental management plan (CEMP) (incorporating soil and water and spill management plans) and an operation environmental management plan (OEMP) (C1, WQ1, WQ2, WQ5, S2 – Table 18.1).
2. I&I NSW concurs with the proposed implementation of a water quality and aquatic ecology monitoring program for the Queanbeyan River (including water quality, flow, fish migration, macrophytes and macroinvertebrate communities) to be developed in consultation with I&I NSW (WQ4, A1 – Table 18.1).
3. I&I NSW recommends that any proposed new or upgraded road crossings of Googong Creek and Montgomery Creek must be designed and constructed in accordance with the Department's *Policy and Guidelines for Fish Friendly Waterway Crossings* (2004) and *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (2004). The design of any road crossings of these waterways should be submitted to I&I NSW for approval prior to construction.
4. I&I NSW concurs with the proposed mitigation measures for water quality and hydrology (Section 7 of EA) and Ecology (Section 11 of EA), in particular:
    - Revegetation and rehabilitation of waterways and banks disturbed during laying of pipelines;
    - Development of an irrigation strategy for the application of recycled water in the township including implementation of buffer zones;
    - Removal of weeds and revegetation with native species in the riparian zones within the Googong township site;
    - Implementation and maintenance of riparian buffer zones along drainage lines within the Googong township site;
    - Use of appropriate erosion and sedimentation controls during construction;

I&I NSW requests that all the above commitments and recommendations are made approval conditions for the development by Department of Planning.

Contact:
The contact person for matters relating to fisheries and aquatic habitat is Dr Trevor Daly, Fisheries Conservation Manager – South Coast, Ph 02) 4478 9103 or email: trevor.daly@industry.nsw.gov.au

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Port Stephens Fisheries Institute
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ATTACHMENT B – AGRICULTURE ISSUES

Water Cycle Projects are not a major issue in relation to agricultural land and use issues. Accordingly I&I NSW has not provided specific comments on this particular development application for the Googong Water Cycle Project.

The agricultural Land Use Planning Team within Industry & Investment NSW retains a strong interest in; strategic land use planning matters, agricultural land rezoning; intensive agricultural developments; and major projects likely to significantly impact on agricultural resources or agricultural industries (eg mining proposals).

In place of the advice we have previously provided on specific developments such as infrastructure proposals, we have produced a series of guidelines for use by consent authorities and consultants. These guidelines are available from the I&I NSW land use planning and development web portal: http://www.dpi.nsw.gov.au/environment/landuse-planning/agriculture. The series includes a specific guideline on Infrastructure proposals on rural lands which identifies the critical agricultural issues and recommended development planning and assessment responses. The document can also be used as a benchmark for assessing environmental assessment reports of such developments.

Contact:
The contact person for matters relating to agriculture is Wendy Goodburn, Resource Management Officer, Ph 02) 4828 6635 or email: wendy.goodburn@industry.nsw.gov.au.

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Swati Sharma - Fwd: Exhibition of Environmental Assessment for Googong Water CycleProject (Major Project 08/0236)

#4

From: plan_comment
To: Swati Sharma
Date: 17/12/2010 1:28 PM
Subject: Fwd: Exhibition of Environmental Assessment for Googong Water CycleProject (Major Project 08/0236)
Attachments: Exhibition of Environmental Assessment for Googong Water CycleProject (Major Project 08/0236)

To whom it may concern,

I send these comments on behalf of Daniel Walters who received a letter from Lisa Mitchell on 10th November 2010 inviting a written submission on the above-mentioned Environmental Assessment:

Thankyou for the invitation to comment on the Environmental Assessment (EA) for the Googong Water Cycle Project. Environment Protection, Department of the Environment, Climate Change, Energy and Water has reviewed the EA. In general it appears to be a robust and thorough assessment of the potential environmental impacts of the proposal.

However, I would raise the following suggestions:
The EA states that the development will consider and avoid potential impacts on Pink-tailed Legless Lizard and Hoary Sunray habitat (page XV of Executive Summary). The Pink-tailed Legless Lizard is a declared species in the ACT, and the regional impacts on ACT populations should be considered. Any clearance of habitat should be avoided, and offset if damage can't be avoided. The development should include consideration of cumulative impacts on the species.

It is noted that older surveys has been used to determine vegetation data for the subject site. Resurveying the area now may provide different results as the vegetation may well be in better condition than previously, particularly if land use has changed.

Please contact Kathryn Tracey on 6207 5717 if you have any queries in relation to these suggestions.

Regards,

Cassie Schilg | EPA Liaison Officer

Environment Protection Authority
Dept. of the Environment, Climate Change, Energy and Water
☎ P: 02 6207 6251 | 🖷 F: 02 6207 6084 | ✉ E: cassie.schilg@act.gov.au

Swati Sharma - Online Submission from Robert Burne of Environmental Scientist & Resident of Wickerslack lane, Googong (other)

#5

From: Robert Burne <caburn@ozemail.com.au>
To: Swati Sharma <swati.sharma@planning.nsw.gov.au>
Date: 20/12/2010 9:19 AM
Subject: Online Submission from Robert Burne of Environmental Scientist & Resident of Wickerslack lane, Googong (other)
CC: <assessments@planning.nsw.gov.au>

While generally supporting the proposed treatment system, I am concerned that same environmental implications have yet to be adequately assessed.

1. The project is intimately associated with the proposals for stormwater management and cannot really be assessed in isolation. greater attention should be given to the details of stormwater management as part of this proposal.

2. The geological and geomorphological assessments are simply literature reviews and no detailed surveys appear to have been done to identify special aspects that may have important implications for this proposal. This is especially true for the setting of Googong Creek, which is toi be used as the discharge water-course.

3. Aquatic ecology assessment is extremely important to the impact of the discharges on the Queanbeyan River. No detailed monitoring of the river ecology appears to either have been undertaken and to be proposed for the future. Reference is made to the slightly degraded nature of the Queanbeyan River. This is likely due to the effects of the Googong Dam and the water management regime used for regulating discharge from the Dam. There is an urgent need to ensure that the discharge from Googong does not further degrade the Queanbeyan River Ecosystem, and also to ensure that the relative impacts of Googong Dam discharge and Googong Township discharge can be distinguished in the monitoring program.

4. There seems to be very little real data on surface and groundwater flows to underpin the hydrological modelling, which seems to be entirely computer based. Specifically there is no study of current discharges from Googong Creek, and the impacts of increased doischarges through the Creek as a consequence of the Googong Township Development. Similarly the important groundwater/surface water interactions appear not to have been fully appreciated. One problem here is that the studies have been undertaken in a time of drought. The recent rains and flooding have underscored the importance of groundwater recharge and discharge from surface aquifers dominated by fracture porosity, and flash-flood regimes in both the creeks and the Queanbeyan River. These situations do not seem to have been adequately considered in the proposal.

5. Many residents of Wickerslack Lane both swim in the Queanbeyan River and use the River water for domestic water supply. It is essential that this development does not degrade the water quality of this reach of the Queanbeyan River. There is particular concern about the leakage of raw sewage into the river at times of high flow through the system.

Name: Robert Burne
Organisation: Environmental Scientist & Resident of Wickerslack lane, Googong

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191 Wickerslack lane
Googong
NSW 2620

IP Address: 124-171-107-246.dyn.iinet.net.au - 124.171.107.246

Submission for Job: #3119 Project Application for Stage 1
https://majorprojects.onhiive.com/index.pl?action=view_job&id=3119

Site: #1730 Googong Water Cycle Project
https://majorprojects.onhiive.com/index.pl?action=view_site&id=1730

Swati Sharma
Environmental Planning Officer

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F: 9228 6355
E: swati.sharma@planning.nsw.gov.au

Swati Sharma - Online Submission from Susan and Trevor GIBSON of Home owner at Wickerslack (object)

#6

From: Susan and Trevor GIBSON <stnosbig@bigpond.net.au>
To: Swati Sharma <swati.sharma@planning.nsw.gov.au>
Date: 20/12/2010 9:20 AM
Subject: Online Submission from Susan and Trevor GIBSON of Home owner at Wickerslack (object)
CC: <assessments@planning.nsw.gov.au>

Googong Township Water Cycle Project Environment Assessment

Comments submitted by Susan and Trevor Gibson, 151 Wickerslack Lane, Googong, NSW. Dated 19/12.2010

40 Years using Queanbeyan River Water

We have lived beside the Queanbeyan River since 1968 and used the unfiltered river water for our household for over 40 years. We bathed ourselves (and our babies) in it, cleaned our teeth, washed our vegetables and dishes etc in the untreated river water. We pump the water directly onto our vegetable garden. We have used the river for recreation, swimming in it daily during the summer.
We have suffered no ill health from the use of the river water and it is interesting to see in this report (page 101 Table 7.2) that the 75th % and maximum faecal coliform count for Wickerslack were 8cfu/100ml Why only one reading? Where are the figures for a longer period of time? The E. coli count below Queanbeyan City at the ACT border 75th percentile was 365 and the maximum was 14,000 cfu/100mls.This was obviously due to the spillage from the Queanbeyan sewerage works. - (mismanagement??human error?-wrong phone call?).
Over this 40-year period we have seen the ecology of the river change due to eutrophication and decreased river flow and cessation of the minor spring floods. All this has occurred since the Googong dam was built in 1975. However the water released from the Googong dam has been clear and sweet and free of faecal and storm water contamination.

Lack of Data on Fauna and Flora within the River.

It is known that biodiversity and the presence of indicator species can be used to measure the health of a river. Where is the data for the Queanbeyan River in this report?
The current ecological state of the Queanbeyan River is described (page 165) as ?slightly to moderately impaired condition when all sites below Googong are considered.?
The results on Table 11.5 show that the ecological health of the river at Wickerslack in Autumn 2005 and 2006 was good. (Where are the results for 2003 and 2004?) The macro invertebrate composition (taxa richness) and abundance of specific macro invertebrates and genera was similar to the reference (model?s expectations for the habitat) and scored A on the AusRivas banding scheme.
The report states
?The details, such as composition of detected macro invertebrates? are provided in a series of Ecowise reports (Refer to appendix F)?.
These have not been published with this report in appendix F, even though it is stated that they are ?important for comparison in any monitoring of potential impacts.?

Tables 11.4 and 11.5 are not sufficient data on this aspect of river ecology. There appears to be no data published in this report as a base line. So how can the impact (or non impact) and effect on the life within the Queanbeyan River of the storm water and excess recycled water from the Googong development be assessed?

Monitoring Station at Junction Googong Creek and Queanbeyan River.

This is to be set up 12 months before the operation starts (see Section 7.3 page 103) but the development is

predicted to start in June 2011 and no station exists, and no data has been collected in the last 6 months. There seems to be no statement on what will be monitored and what data is to be collected. Is it only nitrate, phosphate levels, turbidity and conductivity that will be measured? Will the fauna and flora in the Googong Creek and adjacent Queanbeyan River also be monitored? Who will be collecting the data? And how often will it be collected and analysed? What action will result from the analysis of the data?

Spread of weeds downstream

The report indicates that the Googong and Montgomery Creek Valleys are full of weed species. The recycled water and storm water released from the Googong will increase the flow along these creeks and exacerbate the spread of weeds (see page 168 Section 11.2.4 of the report). It is stated that the weeds should be cleared before the development starts.
?Weeds need to be surveyed, mapped and managed by selective removal? Who is responsible for this? - the private landowner, Queanbeyan City Council or CIC? Will this really happen before the development starts? The creeks are on privately owned land and we doubt that the owner will remove the weeds.

Development by stages and funding.

CIC will be designing and building to cope with the first 500 households. During this period they say they will be monitoring carefully and will then build the next stage to cope with the ever-increasing population at Googong. The running of the plant will be under the control of Queanbeyan Council officers, but there is no clear indication how the hand over will occur and the future relationship between the design, building, funding and management of future stages.
Where is the guarantee that the Queanbeyan council will come up with the money to build the required capacity before it is needed? Has Council pledged to fund this project for the next 25 years regardless of cost? Can future councils rescind such a pledge?

Control of development and correct management of the Plant.

How will the Queanbeyan Council ensure that builders and drainers do not connect storm water to the sewerage system? Who will be responsible for maintaining the infra structure of this system so that it never breaks down and spills into the Queanbeyan river, even in the event of bushfire destroying pumping stations, extreme weather storms causing the holding tanks to overflow, earthquake tremors to fracture the infra structure, not to mention human error which has been responsible for sewage spills from Queanbeyan?s existing sewerage works?
Notoriously Councils find the money to react to an event or catastrophe, not to spend money to safeguard and prevent an event from happening.

Stormwater

We have concerns about the chemicals and pathogens in storm water and the recycled water (which will sometimes be discharged into the storm water) entering Googong Creek and the Queanbeyan River.
1. pesticides, fertilisers, nicotine and also chlorine for example
2. parasites from dog and cat faecal matter
3. human viruses and medications.

How will the Queanbeyan Council be monitored to prevent these pollutants from entering the waterways?

Pathogens in the recycled water.

This report states that pathogens, viruses, protozoa and bacteria will be removed from the recycled water. (See page 119(section 8.5.2.) The Table 8.2 shows log reduction requirements for pathogens in recycled water to be used for toilet flushing, washing machines and garden uses. Table 8.3 suggests that initially the processes may not reach the requirements for removal of viruses from the recycled water.
If we residents of Wickerslack continue to use the river water (as we have done so in the past 40 years) in our households, using it for bathing, cleaning our teeth, food preparation, washing dishes as well as clothes, we will definitely be exposed to human viruses from the recycled water being discharged into Googong Creek and the Queanbeyan River, even if it eventually reaches the levels required for recycled (not potable) water.

Storm Events.

This water sewerage and water recycling plant has been designed to cope with all wet weather events yet we have been told that all future weather patterns cannot be predicted because of climate change due to global warming. The storm patterns vary locally. The other night Googong Dam received 101mls of rain, Wickerslack 38mls in the same time period. What was received at the Queanbeyan Bowling Club? Their rain records were used to do the mathematical modelling and future predictions of storm events at Googong. How reliable is this model?

We are not satisfied that silt and pollutants will be effectively controlled from running off the building sites during development, and the urban area once it is built.
We believe increased erosion along Montgomery and Googong Creeks will also occur and large amounts of silt will be deposited into the Queanbeyan River.

Comments have been made that if more recycled water is released because of a storm event this (together with the storm water run off) would be diluted by water coming down the Queanbeyan River. This would only occur if the dam is 100% full and overflowing the spillway (a rare event which only happens once every 20 years).

Risk of Spills and Control of Storm Water.

Chemicals.
This development sets out methods of control of chemical spills of chemicals to be used in the water cycling plants. Who in the total life of this development will police that these chemicals are being stored correctly and that staff is being trained to handle these chemicals in any emergency that may arise during bush fires or severe storm events?

Sewage
The Queanbeyan City Council will be managing the new sewerage system and we have no faith in Council?s management on past history, and do not believe there will never be a spill of chemicals, fuels or sewage into the Googong Creek and Queanbeyan River.

This development plan in the risk assessment table 6.4 (page 89) states that changes in the water quality during the operation phase would be possible with major consequence. This means it would probably occur at sometime and would cause medium to long-term potentially irreversible impacts.
It states that failure of the treatment system and spill of pollutants will be rare and produce extreme consequences.

This means it would only occur in exceptional circumstances and cause long-term irreversible impacts.

It is essential that this recycling plant be over designed and built BEFORE the building development at each stage over the 25-year period. Aging infrastructure must be replaced before it breaks down because of old age.
It must be CORRECTLY MANAGED forever and no mistakes made (human or otherwise).
It is important to protect our Australian rivers for now and future generations, and an accidental spill MUST NEVER happen.

Health and Safety of Wickerslack Residents.

The Queanbeyan Council will not be able guarantee that in future there will (a) never be a chemical or sewage spill into the Queanbeyan River and
(b) the storm water run off from the development will not be degrading the river,
(c) the recycled water released from the development will not contaminate the Queanbeyan River with pathogens and possibly human medications.

Because the new Googong development will make the river water unsuitable for household and at times recreational use, we request that
(i) the Queanbeyan City Council be required in the near future, at their expense, to reticulate potable water along Wickerslack Lane, and thus safeguard the health and safety of these Queanbeyan residents.
(ii) the residents of Wickerslack be immediately informed if a spill occurs ?due to unforeseeable circumstances? so

they can cease to use the river for recreational purposes such as swimming and fishing.

Management plan of the Queanbeyan River Corridor

Finally we wish to draw your attention to Section 4 of the Management Plan of the Queanbeyan River Corridor published in 1999, and subsequently adopted by Queanbeyan City Council. (At this time Wickerslack was part of the Yarrowlumla Shire.)

It describes the section of river from the then City boundary into Yarrowlumla Shire to Googong Dam saying, ?The unit has limited impacts from urban development and contains the most natural areas of river below the dam.?

Now all management units along the Queanbeyan River Corridor will have to add to the list of threats the following,
?- Sedimentation from urban uses
- Storm water inflow, which lowers the water quality
- Sewage treatment works and the potential for overflow.?

Refer to section 4 that summarises in various tables the ?Values and Major issues of the Queanbeyan River Corridor.?

Under the section ?Water Quality and Environmental flows? it states.
?Clean water and ensuring flows in the river are able to sustain the diversity of wildlife are valued highly by the community because
- It is part of the natural environment and high quality is fundamental to the health of the environment
- It supports a healthy density and diversity of aquatic flora and fauna
- - It supports recreational activities and people would like to swim in it safely
- -People would like to be able to fish and eat their catch safely
- - It is attractive and forms a backdrop for the City and natural bushland.?

The following objectives to support the goal for water quality and environmental flows were recommended.
1 Ensure urban development does not adversely impact on water quality.
2. Adopt Best Practice environmental management measures.
3. Ensure regular management activities minimise adverse water quality impacts
4. Continue to improve water quality through improved catchment management at the catchment level including control point sources of urban run off.
5. Ensure environmental flows in the river provide sufficient quantity and quality to maintain aquatic life and river health.

We ask that the Queanbeyan Councils now, and in the future, will find the money and personnel and expertise to carry through the above objectives, manage the environment to protect the water quality of our Queanbeyan River for the present and future generations.
We ask the NSW Government to see that the Queanbeyan Council carries out the objectives of their management plan of the Queanbeyan corridor.

We ask this especially with reference to this new urban development of Googong.

Susan J Gibson and Trevor L Gibson
Queanbeyan Residents of Wickerslack Lane.

Name: Susan and Trevor GIBSON
Organisation: Home owner at Wickerslack

Address:
residential - 151, Wickerslack Lane,Googong,Queanbeyan NSW 2620
postal- PO Box 248. Queanbeyan NSW 2620

IP Address: cpe-121-223-197-110.lns3.civ.bigpond.net.au - 121.223.197.110

Submission for Job: #3119 Project Application for Stage 1
https://majorprojects.onhiive.com/index.pl?action=view_job&id=3119

Site: #1730 Googong Water Cycle Project
https://majorprojects.onhiive.com/index.pl?action=view_site&id=1730

Swati Sharma
Environmental Planning Officer

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Swati Sharma - Online Submission from Des Allen of ActewAGL Distribution (support)

#7

From: Des Allen <des.allen@actewagl.com.au>
To: Swati Sharma <swati.sharma@planning.nsw.gov.au>
Date: 20/12/2010 9:15 AM
Subject: Online Submission from Des Allen of ActewAGL Distribution (support)
CC: <assessments@planning.nsw.gov.au>

Attached Letter outlines a clarification of the location of new connection to existing assets owned by ACTEW Corporation and operated by ActewAGL Distribution.

Name: Des Allen
Organisation: ActewAGL Distribution

Address:
12 Hoskins Street
MITCHELL ACT 2911

IP Address: mail1.actewagl.com.au - 202.14.247.4

Submission for Job: #3119 Project Application for Stage 1
https://majorprojects.onhiive.com/index.pl?action=view_job&id=3119

Site: #1730 Googong Water Cycle Project
https://majorprojects.onhiive.com/index.pl?action=view_site&id=1730

Swati Sharma
Environmental Planning Officer

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ActewAGL House 40 Bunda Street Canberra ACT 2600 • GPO Box 366 Canberra ACT 2601
Telephone 13 14 93 **Facsimile** 02 6249 7237 *actewagl.com.au*

#7

File Ref : G09/2481/1
Contact : Des Allen
Tel : 6242 1456
Email :des.allen@actewagl.com.au

17 December 2010

Director General
NSW Department of Planning
GPO Box 39
SYDNEY NSW 2001

Googong Water Cycle Project
Application Number: 08_0236

Dear Sir

We refer to the above application which is currently available for public consultation.

We have perused the document 'Googong Township – Environmental Assessment November 2010' submitted in support of the above application. This proposal includes the provision for potable water to be drawn from a large bulk supply main at the existing Googong water treatment plant. The existing main and treatment plant are owned by ACTEW Corporation. ActewAGL acts as agent for ACTEW Corporation in this matter.

In accordance with your requirements, ACTEW Corporation has advised that this company has not made any reportable political donations or gifts to NSW parties during the last two years.

Our comment is in the way of a clarification of the various drawings included with the abovementioned document that show the new bulk water pumping station located to the East of the ACTEW owned main and with its new delivery main passing through the site of the Googong water treatment plant, onto the new Googong estate. A new arrangement has now been agreed between ACTEW and the developer whereby the new pumping station will be located to the West of ACTEW's main, and the delivery main to the estate will pass completely outside the Googong water treatment plant. The developer's main will enter onto the Googong Dam road further to the West and closer to the proposed estate development.

Yours faithfully

Matt O'Rourke
Manager
Infrastructure Development and Asset Management Branch

Let's power ahead.

NSW GOVERNMENT | Environment, Climate Change & Water

#8

Your reference: S08/01819
Our reference: DOC10/54855 FIL10/2655
Contact: Julian Thompson, 6992 7002

Ms Lisa Mitchell
Manager, Water Projects
Infrastructure Projects
Department of Planning
GPO Box 39
Sydney NSW 2001

21 December 2010

Dear Ms Mitchell,

RE: Environmental Assessment - Proposed Googong Township Water Cycle Project – Part 3A
***Environmental Planning & Assessment Act* 1979**

I refer to your letter dated 10 November 2010 regarding the Environmental Assessment (EA) for the proposed Googong Township Water Cycle Project.

The Department of Environment, Climate Change and Water (DECCW) has reviewed the EA and provides comments and recommendations for the Department of Planning's consideration. These comments and recommendations are in **Attachment 1** to this letter.

DECCW is happy to discuss these comments further with the Department of Planning and the proponent. If you have any queries about this matter, or wish to arrange a meeting, please contact me on (02) 6229 7002.

Yours sincerely,

JULIAN THOMPSON
Unit Head – South East Region
Environment Protection and Regulation Group

PO Box 622 Queanbeyan NSW 2620
11 Farrer Place Queanbeyan NSW
Tel: (02) 6229 7000 Fax: (02) 6229 7001
ABN 30 841 387 271
www.environment.nsw.gov.au

Attachment A

Googong Township - Water Cycle Project – Environmental Assessment

Department of Environment, Climate Change & Water (NSW) – Comments – December 2010

General

An Environment Protection Licence under the *Protection of the Environment Operations Act* 1997 is likely to be required for a Scheduled Activity (Sewage Treatment Systems) as the project approval for Neighbourhood 1A caters for up to 3,600 Equivalent Persons.

The Load Based Licensing scheme as set out in the *Protection of the Environment Operations Act* 1997 and Regulations will apply to all discharges (to irrigation and to waters) from the scheme. Fee discounts may apply in accordance with the Regulations for effluent which is beneficially reused.

DECCW generally supports the proposal to use modern sewage treatment technology to achieve good effluent quality and enable partial reuse of treated effluent in preference to discharge to waters.

Wastewater Treatment for Discharge to the Environment

The EA proposes that a membrane bioreactor plant (MBR) be used to treat wastewater from the township to a standard for a combination of non-potable re-use, irrigation and direct discharge to the environment into Googong Creek. Final disinfection (ultraviolet light and Chlorine dosing) would be undertaken for all treated effluent.

An emergency bypass system for the sewage treatment plant is also proposed which discharges to Montgomery Creek. The capacity of sewage treatment plant is 3.5 times average dry weather flows before discharge of primary treated sewage to Montgomery Creek. Each sewage pumping station is proposed to have a minimum of 4 hours of peak dry weather flow as emergency storage in the event of pump or power failure.

The MBR plant, water supply and sewerage system is proposed to be built in stages to accommodate growth of the township over the 25 year development horizon. Appropriate odour controls have been incorporated into the design of the plant and the sewerage infrastructure.

Project approval is sought in this application for Stage 1a – up to 1000 people, with sewage to be generally tankered away from sewage pumping station SPS 1, and Stage 1b – Two sewage pumping stations (SPS 1 and SPS 2) to be constructed.

In Table 5.8 of the EA the proponent sets out its proposed consent conditions for effluent quality. DECCW has reviewed these against its current expectations for modern sewage treatment systems and in light of the Water Quality Objectives assessment (ANZECC) provided in the EA. DECCW's recommendations for final effluent quality are slightly different to those suggested in the EA and are outlined below.

DECCW recommendations regarding final effluent quality

Parameter	DECCW Proposed discharge limits to Environment (90th %)	Proponent's proposed limit (90th %)
BOD	10 mg/L	10 mg/L
Suspended Solids	10 mg/L	20 mg/L
TN	10 mg/L	15 mg/L
TP	0.5mg/L	0.5 mg/L
TDS	700 mg/L	700 mg/L
Faecal Coliforms	200 cfu/100mL	No limit proposed
pH	6.5-8.5	No limit proposed
Free Chlorine (residual)	0.1 mg/L	No limit proposed
Nitrogen – Ammonia	2 mg/L	No limit proposed
Oil & Grease	2 mg/L	No limit proposed

DECCW would also propose to establish 100% concentration limits after sufficiently reliable performance data for the plant is available after commissioning. Loads limits would also be imposed for the sewage treatment plant in accordance with the Load Based Licensing protocol and the *Protection of the Environment Operations (General) Regulation* 2009.

Irrigation Water Quality
It is proposed to use recycled water (treated effluent) to contribute to the irrigation of public areas (eg parks and sporting fields). The EA has demonstrated that irrigation of treated effluent is not likely to impact on ground or surface waters or lead to a build up of nutrients in the soil. There is a small risk of a build up of salt loads in the soil. DECCW supports the development of a Recycled Water Risk Management Plan (draft statement of commitments HH2) which will expand on the analysis in the EA and provide guidance about detailed irrigation designs and nutrient, salt and hydraulic loads.

DECCW recommends that any such Risk Management Plan be drafted to comply with the requirements of the *Environmental Guidelines: Use of Effluent by Irrigation, DEC, 2004.*

Biodiversity
Sewage Pumping Station (SPS 2) is proposed to be located within 30 metres of a Pink-tailed Legless Lizard (*Aprasia parapulchella)* record and habitat. It is possible that this pump station could fail as it is designed to contain a minimum of four hours of peak dry weather flows of sewage. The pump station is located upslope of the known habitat of the Pink-tailed legless lizard.

DECCW is concerned that adverse impacts on the Pink-tailed Legless Lizard, and its habitat in that location, could be caused by overflows from the sewage pumping station. If overflows occur on a periodic basis (ie. during significant rainfall events) it is expected, over time, that the vegetation composition this species requires will be lost and replaced by nutrient loving weeds. To prevent any adverse impact on the Pink-tailed Legless Lizard habitat in the catchment around SPS 2, DECCW recommends that any potential for overflow of SPS 2 be eliminated. Measures to achieve this could include any combination of;

- Back-up pumps and uninterruptible power supply;
- Specifically design SPS 2 to contain a greater amount of sewage in the event of pump failure or power outages (eg. 24 hours average dry weather flows). This extended capacity could allow adequate time for back-up pumps or power sources to be sourced and installed;
- Physical measures to divert and capture any untreated sewage overflows from SPS2.

Aboriginal Cultural Heritage
The draft Statement of Commitments in the EA (at page 265) has two recommendations in relation to Aboriginal Cultural Heritage.

H1 - According to this commitment avoidance and mitigation of impacts to Indigenous sites will be done in accordance with DECCW guidelines and permits. As this development is being assessed under Part 3A of the EP&A Act there will be no requirement for any DECCW Aboriginal Heritage Impact Permits.

H2 – Effective implementation of this commitment would require a monitoring program conducted by archaeologists and Aboriginal people throughout the earthmoving and vegetation clearance phases of construction. The commitment should be amended to indicate this and to clarify the following:

- how unknown Indigenous heritage items (Aboriginal objects) will be located and identified during construction
- who will do this identification work
- whether all construction work will be monitored by qualified archaeologists and Aboriginal stakeholders

In the Aboriginal and Historical Archaeological Assessment (Navin Officer, Oct 2009), Appendix G to the EA, it is not clear whether Aboriginal site recording forms (or updated forms) for all of the previously recorded sites, newly recorded sites, excavated sites and collected surface sites been provided to DECCW. Provision of site cards is a legal requirement under the National Parks &

Wildlife Act that is not turned off by a Part 3A assessment process. The proponent should indicate whether this has been done and if not, provide this information to DECCW.

There are four Indigenous sites that have moderate to high, or high local significance (GA21, GA22 and GA 24, GA 26), see Appendix G, sec 8.1.2. The Statement Commitments in the EA does not specifically list or discuss these sites, nor does it recommended these sites be avoided and protected from any impact before, during and after development. DECCW recommends complete protection of the most significant sites within the development precinct. This should be included in the draft Statement of Commitments.

Noise Impacts

The EA indicates that noise levels from construction of water related infrastructure during stage 1 of the project is likely to exceed construction noise goals at nearby rural residences. The DECCW recommends the mitigation measures suggested in the EA be incorporated into any consent conditions for the project (eg. via a Construction Environmental Management Plan).

Queanbeyan City Council

SF090666
IC C10115638
OC C10115624

23 December 2010

Manager – Water Projects
Infrastructure Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

ATTN: Ms Swati Sharma

Dear Ms Sharam

RE: Googong Water Cycle Project (Major Project 08 0236)

In reference to your letter dated 10 November 2010 inviting comment on the subject proposal, consideration has been given to the issues associated with the ongoing ownership and operation of the water, sewer and recycled water system that is proposed for Googong.

Council would welcome the opportunity to discuss the proposal and the comments offered hereunder with Departmental representatives early in the new year, prior to the Department issuing its determination of the project.

Council is of the view that the current Water Supply Agreement and Service Level Agreement between Council and ACTEW exclusively applies to Queanbeyan City Council and does not provide for a third party to own or operate water supply facilities. Accordingly, Council requests that consideration be given to the inclusion of conditions of approval for the project that provide for the assets to be constructed to Council's water supply and sewerage standards and for the completed assets to be handed over to Council.

Council notes that the facilities will be constructed in stages and concurs with this arrangement. The Water Cycle Plan relies on assumptions made about the likely break up of water demand within the individual properties in the proposed township. These assumptions are used to justify the sizing of the proposed water, wastewater and recycled water assets that will be built to service the township. Council seeks conditions within the determination to ensure that the assumptions used in justifying the design of the assets proposed in the stage 1 release be demonstrated to councils satisfaction before they are adopted for the design of future stages. The initial testing and monitoring of the facilities to determine their compliance with the assumptions detailed in the project application should be undertaken at the developer's cost. Only once the system performance for each

stage has been verified should ongoing maintenance and monitoring become the responsibility of Council.

The attached Schedule 1 provides draft consent conditions that Council considers appropriate to be included in the project approval.

Council also notes that the bulk water pump station site is within Palerang LGA and therefore outside Council's jurisdiction. Nevertheless, proposed conditions of consent are also provided for this facility for consideration by the Department and Palerang Council in the attached Schedule 2.

If you have any further queries on the matter, please contact Council's City Infrastructure Group on 6285 6233.

Yours faithfully

Phil Hansen
Group Manager
City Infrastructure

SCHEDULE 1

RECOMMENDED CONDITIONS

The following conditions are recommended for that part of the project application within QCC LGA –

GENERAL CONDITIONS

IN ACCORDANCE WITH THE PLANS

The development must be carried out generally in accordance with the application and supporting documents lodged with the Department of Planning and any amendments shown as notations in red or by conditions of consent.

REASON: To ensure the development is completed in accordance with the approved plans.

EPA LICENCE

Each project stage must satisfy the licence conditions issued by EPA for the project.

REASON: To ensure the development is completed in accordance with EPA licence conditions..

TREE PRESERVATION ORDER

The applicant must comply with Council's Tree Preservation Order at all times. All trees over 3m high or 3m wide are protected. Written consent of Council to remove, lop or prune any trees (unless specifically exempted) is required.

REASON: To draw the applicant's attention to the fact that Council's Tree Preservation Order applies to the land.

SECURITY FENCING & GATE

1.8 metre high security fencing and a 6.0 m wide security gate are to be provided around the water recycling plant compound and the water supply reservoir compound.

REASON: To provide security to the infrastructure.

MATERIALS AND STANDARDS

WATER SUPPLY SYSTEM
The drinking water and non-drinking water reservoirs shall be designed and constructed as pad mounted steel reservoirs. Stage 1b supply shall be via a booster pump or other arrangement suitable to Council rather than temporary elevated tanks. **The drinking water and non-drinking water rising mains shall be designed and constructed in accordance with WSA 03 – Water Supply Code of Australia (Version 2.3) and its supplement Dual Water Supply Systems (Version 1.2) and**

Queanbeyan City Council's *Development Specification – Googong.*

- **The drinking water and non-drinking water trunk reticulation mains shall be designed and constructed in accordance with WSA 03 – Water Supply Code of Australia (Version 2.3), its supplement Dual Water Supply Systems (Version 1.2) and Queanbeyan City Council's *Development Specification – Googong.* A minimum of four (4) District Metered Areas (DMA) fare to be provided or both supplies for the ultimate development. Separate stand alone trunk mains shall be provided to service each DMA. Each trunk main shall have a flow meter (Magflow type), Pressure Regulating Valve, control function to regulate operating pressures and to be recorded via telemetry and Scada.**

REASON: To provide an adequate water supply

SEWERAGE SYSTEM

The water recycling plant shall be constructed in stages in accordance with the *Googong Integrated Water Cycle Water and Wastewater Concept Design* prepared by MWH and dated 11 October 2010.

The water recycling plant office building shall be provided with .the following amenities in Stage 1 ::

- **Laundry with industrial washing machine and dryer.**
- **Laboratory with bench, basin and cupboards.**
- **Lunch facility with air conditioning and heating.**
- **Amenities with toilet, shower, change room and clothes cupboards.**
- **Control room with air conditioning, heating, benching, phone, PC, internet, telemetry controls etc.**

The water recycling plant compound shall be provided with security lighting.

The sewerage pump stations and the sewer pressure rising mains shall be designed and constructed in accordance with WSA 04 – Sewerage Pumping Station Code of Australia (Version 2.1) and Queanbeyan City Council's *Development Specification – Googong.*

Sewerage pump stations shall be provided with

- **A discharge flow meter (Magflow type) linked to telemetry and Scada.**
- **Continuous level monitoring via a submersible level transducer providing a 4-20mA output linked to telemetry and Scada.**
- **Permanent fully housed backup generator.**
- **Crane access around site.**

REASON: To provide an adequate sewerage system..

PRIOR TO COMMENCEMENT

CC TO BE ISSUED BY AN ACCREDITED CERTIFIER

Building work in accordance with the development consent must not be commenced on site until a Construction Certificate (building) has been issued by Council or an Accredited Certifier.

REASON: To satisfy the relevant statutory requirements.

SUBMIT NOTICE OF COMMENCEMENT

A Notice to Commence Building Works must be submitted to Council two (2) days prior to commencing work and must include details of the nominated Principal Certifying Authority.

REASON: To ensure the provisions of the Environmental Planning and Assessment Act 1979 are satisfied.

NOTICE TO COMMENCE SUBDIVISION WORKS

Prior to the commencement of any subdivision works a Construction Certificate (subdivision) must be applied for and issued by Council. In order for Council to issue a Construction Certificate (subdivision) the application must be accompanied by:

1. **a Traffic Control Plan that has been prepared in accordance with the requirements set out in Council's Information Sheet for Traffic Control and has been assessed by Council's City Infrastructure Division.**
2. **a Section 138 Certificate from Council's City Infrastructure Division providing consent under Section 138 of the Roads Act 1993 to conduct work or for placement of a structure in or on a road reserve.**

A Notice to Commence Subdivision Works must be submitted to Council at least two (2) days prior to commencing work nominating Council as the Principal Certifying Authority.

REASON: To ensure the provisions of the Environmental Planning and Assessment Act 1979 are satisfied.

QCC AS PCA FOR SUBDIVISION

Queanbeyan City Council must be appointed as the Principal Certifying Authority for the subdivision works within Queanbeyan LGA, with such appointment to be made prior to the commencement of the subdivision application works. Please contact Council for a Notice to Commence Subdivision works form to complete to comply with this requirements. Alternatively the form is available from Council or downloadable from www.qcc.nsw.gov.au.

NOTE: A quotation for Council to perform the duties of Principal Certifying Authority for the subdivision works will be provided upon submission of the Construction Certificate (subdivision) to Council.

REASON: To provide for supervision of the subdivision works.

SIGN FOR BUILDING/SUBDIVISION WORKS

A sign must be erected in a prominent position on the work site prior to the commencement of works:

- **a) stating that unauthorised entry to the work site is prohibited,**
- **a) showing the name of the person in charge of the work site, and**
- **b) advising telephone numbers at which that person may be contacted during work hours and outside work hours**
- **c) showing the name of the principal certifying authority and contact details.**

The sign is to be removed when the work has been completed.

REASON: To provide notification of the work site and site supervisor to the general public in emergency situations.

TOILET FACILITIES

Toilet facilities must be provided at or in the vicinity of the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the work site.

Each toilet provided:

- **a) must be a standard flushing toilet, and**
- **a) must be connected:**
  - **(i) to a public sewer, or**
  - **(ii) if connection to a public sewer is not practicable, to an accredited sewage treatment facility approved by Council, or**
  - **(iii) if connection to a public sewer or an accredited sewage management facility is not practicable, to some other sewage management facility approved by Council.**

The provision of toilet facilities in accordance with this clause must be completed prior to commencement of any work on the site.

REASON: To provide adequate and hygienic amenities for people working on the site.

CONSTRUCTION MANAGEMENT PLAN

Prior to release of any Construction Certificate a Construction Management Plan must be submitted to Council and approved by Principal Certifying Authority for the proposed construction works or, if the proposed works are staged, for each stage of the proposed construction works. The plan must:

- **a) describe the proposed construction works;**
- **b) outline the proposed construction program;**
- **c) set standards and performance criteria for each of the relevant environmental issues [see (f) below];**
- **d) describe what actions and measures would be implemented to ensure that these works comply with the specified standards and performance measures;**
- **e) describe how the effectiveness of these actions and measures would be**

monitored during the proposed works;

f) include a detailed:
   - Soil and Water Management Plan, prepared in accordance with Development Control Plan No. 41 – Soil, Water and Vegetation Management Plans;
   - Waste Management Plan;
   - Noise Management Plan;
   - Dust Management Plan;
   - Traffic Management Plan prepared in accordance with the requirements of Council's Engineering and Recreational Services Division;
   - Pedestrian Safety Plan;
   - Environmental Management Plan;

g) describe what procedures would be implemented to receive, register, report and respond to any complaints during the construction works; and

h) identify the key personnel who would be involved in the construction works, and provide contact numbers for this personnel.

The submitted Construction Management Plan may also require:

a. A Traffic Control Plan that has been prepared in accordance with the requirements set out in Council's Information Sheet for Traffic Control and has been assessed by Council's City Infrastructure Division.

b. A Section 138 Certificate from Council's Engineering and Recreational Services providing consent under Section 138 of the Roads Act 1993 to conduct work or for placement of a structure in a road reserve.

REASON: To ensure satisfactory environmental management of the site.

WASTE MANAGEMENT PLAN

The Waste Management Plan (WMP) must be submitted to Principal Certifying Authority for approval prior to issue of any Construction Certificate. Details of waste management on the site must be provided. A Waste Management Plan (WMP) must be completed to identify the type of waste that will be generated by the development and method of disposal to be utilised. The Applicant should consider whether it is possible to re-use materials either on-site or off-site.

REASON: To ensure satisfactory environmental management of the site.

ENVIRONMENTAL MANAGEMENT PLAN

An Environmental Management Plan (EMP) for the development must be submitted to and approved by the Principal Certifying Authority prior to release of the Construction Certificate. The EMP must be prepared in accordance with these conditions of approval, all relevant Acts and Regulations and accepted best management practices.

Details of the EMP must include an Environmental Controls Map (ECM) of the site and information on sub-plans including:

- Waste Management Plan;

- **Noise Management Plan;**
- **Dust Management Plan;**
- **Noise and Vibration Management Plan;**
- **Water and Soil Management Plan;**
- **Traffic Management Plan; and**
- **Hazard and Risk Management Plan.**

The EMP must provide the following information:

1. **describe the proposed operations on the subject land;**
2. **identify all the relevant statutory requirements that apply to these operations**
3. **describe what measures and procedures would be implemented to receive, register, report and respond to any complaints during these operations; and**
4. **describe the role, responsibility authority and accountability of all key personnel involved in these operations**

The development must comply with all the provisions of the above Environmental Management Plan.

REASON: To ensure satisfactory environmental management of the site.

COMPLIANCE CERTIFICATE-WATER & SEWER

Submission of an application for a Compliance Certificate under Section 307 of the Water Management Act 2000 to the Water and Sewer Authority (Queanbeyan City Council) accompanied by the relevant fee and four copies of the Civil Engineering plans for the design of the water reticulation and sewerage systems, drawn in accordance with Council's *Development Specification - Googong*, for assessment and approval by Council.

Upon approval of the hydraulic design a Compliance Certificate in accordance with section 307 of the Water Management Act 2000, will be issued by Council. The Compliance Certificate must be obtained prior to release of any Construction Certificate.

REASON: To ensure that hydraulic design is in accordance with Council standards.

ACOUSTIC REPORT PRIOR TO CC

An acoustic report prepared by a qualified acoustic consultant, must be undertaken to determine that noise levels generated by the proposed development will not exceed the levels specified in the New South Wales Industrial Noise Policy 2000. This report must be submitted to and approved by Council prior to issue of the Construction Certificate (Building).

REASON: To ensure noise levels from the development are not excessive.

SITE MANAGEMENT

INSTALL EROSION CONTROL AS PER APPROVED PLAN

Run-off and erosion and sediment controls must be installed onsite to prevent soil erosion, water pollution or the discharge of loose sediment on surrounding land by:-

(a) diverting uncontaminated run-off around cleared or disturbed areas;
(b) erecting a silt fence in accordance with the requirements of Council's DCP No 41 - Soil, Water and Vegetation Management Plans;
(c) preventing tracking of sediment by vehicles onto roads;
(d) stockpiling topsoil, excavated material, construction and landscaping supplies and debris within the site;
(e) where any material is stockpiled onsite erosion control and siltation fencing must be installed adjacent to the toe of the mound;
(f) removal or disturbance of vegetation and top soil is confined to within 3m of the approved building area; and
(g) the erosion and sediment control measures must be maintained in a good order until the excess excavation materials have been removed from the site.

REASON: To prevent soil erosion and water pollution.

BATTERS TO HAVE CATCH DRAINS

Catch drains or agricultural drains must be provided on the top side of all batters to protect them from erosion.

REASON: To reduce the possibility of scouring to the landscape.

HOURS OF OPERATION FOR CONSTRUCTION

Any works associated with the construction and/or establishment of this development must ONLY be carried out between the following hours:

Weekdays:	**7.00am to 6.00pm**
Weekends/Public Holidays	**8.00am to 4.00pm**

Note: To undertake works involving the use of equipment which creates an offensive noise is a breach of the provisions of the Protection of the Environment Operations Act 1997 and Regulations thereunder.

REASON: To ensure a noise problem does not result from the development and the impact on the local amenity is minimised.

NO BURNING ON SITE

Waste material must not be burned on site.

REASON: To prevent creating a nuisance to adjoining properties.

DAMAGE TO BE APPLICANTS EXPENSE

In the event of any damage being caused to any existing road, kerb, guttering, stormwater pit, footpath trees and/or footpath during building operation, the applicant must repair or reimburse Council for the full cost of restoration.

REASON: To prevent damage to Council's public footway area and require payment to Council where damage occurs.

FENCING OF BUILDING WORKS

Fencing between building works and Council land (other than a roadway) must be erected before commencement of any other work on site.

REASON: To ensure adequate provision is made for protection of public property.

CUT & FILL MAXIMUM 1.5M

The maximum depth of any cut or fill must not exceed 1.5 metres.

REASON: To ensure dwellings are designed and sited to suit landform.

EXCAVATION MATERIAL TO BE REMOVED & DISPOSED

All excess excavation material must be removed from the site and disposed of at an approved landfill site.

REASON: To ensure the proper disposal of waste materials.

CAR PARKING

DRIVEWAY APPLICATION FORM

A driveway application form must be submitted to and approved by Council prior to commencement of driveway works and construction of the driveway across Council's footway area must be undertaken by Council or contractors approved by Council, at no cost to the Council.

REASON: To ensure the construction of the driveway on public land meets Council's requirements.

DRIVEWAY ENTRANCES

Driveway entrances must be constructed to all lots to the standard as specified in Council's Specification for the Construction of Access Roads and Private Entrances. These entrances must be located to give Safe Intersection Sight Distance in keeping with the design speed of the road along which they are sited. Access gates must be a minimum of 3.5 metres wide. Access onto Old Cooma Road must be in accordance with the requirements of the RTA *Road Design Guide* and will require the concurrence of the RTA under Section 138 of the Roads Act 1993. Access onto the section of Googong Dam Road within Queanbeyan LGA must be in accordance with the requirements of Council's

Development Specification – Googong **for a Type A rural property access**

REASON: To ensure safe entry and exit to lots from the road.

RURAL - INTERNAL DRIVEWAY CONSTRUCTION

The internal driveway and turning bay areas for the water recycling plant and reservoir sites must at least be constructed with a minimum bitumen sealed width of 3.0m on a 5.0 m formation and minimum compacted gravel thickness of 100mm. The design must provide for heavy vehicles such as cranes and provide sufficient area to turn a rigid truck.

REASON: To ensure that adequate access is available to the building for service vehicles.

SERVICE VEHICLE PARKING

The development must be provided with bitumen sealed service vehicle parking spaces and turning bay areas of dimensions complying with the requirements of Council's Development Control Plan No 1 *Carparking Policy* and as follows -.

- **Water recycling plant – carparking for 2 work vehicles and 2 visitor vehicles. And site access for cranes and chemical deliveries to all areas.**
- **Reservoirs – spaces must accommodate a mobile crane and large rigid truck**
- **Bulk water pump station - spaces must accommodate a mobile crane and large rigid truck**

REASON: To provide adequate offstreet service vehicle parking.

LANDSCAPING

DISTURBED AREAS TO BE TREATED

All disturbed areas must be established with grass seeded hydro mulching, turfing or other approved surface treatments.

REASON: To limit the impact of development and provide an attractive urban landscape.

MAXIMUM CUT & FILL BATTERS

Maximum slope of cut and fill batters must be 1 in 4 (25%) unless rock faced. Landscaped slopes steeper than 1 in 4 must have retaining walls.

REASON: To reduce soil erosion, provide stability to excavated area and to allow for future maintenance.

TREES RETENTION

Trees over three (3) metres high, located more than three (3) metres from the external wall of the building, or where there is no external wall three (3) metres from the outside edge of the eave line must be retained on site in accordance with Council's Tree Preservation Order.

REASON: To ensure compliance with Council's Tree Preservation Order and Local Environmental Plan provisions.

BUILDING

COMPLIANCE WITH BCA

All building work must be carried out in accordance with the provisions of the *Building Code of Australia.*

REASON: To ensure all building work is carried out in accordance with legislative requirements.

EXCAVATION AND BACKFILLING

All excavations, backfilling and other activities associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.

REASON: To ensure that all construction activity associated with the development does not pose a hazard to life or property.

RETAINING WALL OVER 1 METRE HIGH

Retaining walls in excess of one (1) metre high must be designed and certified by a practising structural engineer.

REASON: To ensure that excavated or filled areas are supported by structurally sound walls.

SOIL CONDITIONS REQUIRE RETAINING WALL

If the soil conditions require it:

(a) retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil must be provided; and

(b) adequate provision must be made for drainage.

REASON: To ensure excavation work is safely and professionally retained to prevent hazards to life or property.

WASTE CONTAINERS NOT ON ROAD

Receptacles for demolition material must not be located in a public place without the prior approval of Council.

REASON: To ensure that public places and road reserves are not obstructed during demolition works.

SURVEY BY SURVEYOR

The building must be set out by a Registered Surveyor referring to the datum shown on the approved plans. A survey plan that identifies the location of the building in relation to the building envelope must be prepared upon completion of the base course brickwork and then be submitted to the Principal Certifying Authority (PCA). Where Council is not the PCA, a copy of the survey plans must be forwarded to Council.

REASON: To ensure the building has been sited in accordance with the approved plans.

ENVIRONMENTAL

NO INTERFERENCE WITH AMENITY

The applicant must implement all practical measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

REASON: To prevent nuisance to neighbours and adjoining property.

NOISE LEVEL NOT TO EXCEED 5DBA ABOVE BACKGROUND

The applicant must ensure that noise generated by the development does not exceed the criteria set by the New South Wales Department of Environment Conservation and Climate Change (DECC). This is generally a level of 5dB above background noise level.

This is measured by monitoring the level of noise from any activity within the development represent by the L_{aeq} descriptor, measured over a 15 minute period. This measurement must not exceed the background level at that time of day by more than 5dB.

REASON: To minimise the impact of noise generated by the development on surrounding residential areas.

HAZARDOUS & TOXIC MATERIALS STORAGE

To ensure hazardous and toxic materials are not a threat to the environment they must be stored in accordance with WorkCover Authority requirements.

All tanks, drums and containers of toxic and hazardous materials must be stored in a bunded and covered area. The bund walls and floor must be constructed of impervious materials and must be of sufficient size to contain 110% of the volume of the largest tank plus the volume displaced by any additional tanks within the bunded area.

REASON: To minimise threat to the environment from hazardous and toxic materials.

FLAMMABLE LIQUIDS STORAGE & HANDLING

The storage and handling of flammable and combustible liquids must be in accordance with Australian Standard AS 1940 "The Storage and Handling of Flammable and Combustible Liquids" and New South Wales WorkCover Code of Practice for Storage and Handling of Dangerous Goods..

REASON: To satisfy relevant environmental standards.

REMOVAL OF CONTAMINATED MATERIALS FROM SITE

Any soil or other material located on site, which is found to be contaminated, is not to be removed from the site until Council has received evidence from a suitably qualified environmental consultant validating that levels of contaminants in the soils are below the threshold required for the proposed disposal method.

Contaminated soils/materials must be contained on site to ensure it is not disposed of into the stormwater or sewer systems.

REASON: To ensure that any contaminated materials are disposed of properly.

REMOVAL OF CONTAMINATED WATER FROM SITE

Any surface of subsurface waters found to be contaminated on the site are not permitted to leave the site without being treated to reduce contaminated levels to below the threshold for disposal to sewer or stormwater as appropriate.

REASON: To ensure contaminated waters are managed on site before disposal.

CONTAMINATION BY WIND BORNE DEBRIS

The whole site must be kept in a clean and tidy manner at all times with provision made on site for the containment of all material that could become windborne.

Demolition materials, excavated materials and the like must be kept clear of stormwater and sewer manholes and any service easements on the premises.

REASON: To prevent contamination of the surrounding area by wind borne debris and contamination of the stormwater system by sediment.

ASBESTOS REMOVAL AND DISPOSAL

Any asbestos cement material found on the site must be removed and disposed of in accordance with the Occupational Health and Safety Act 2000, as amended, and the NSW WorkCover guidelines.

Asbestos material must be disposed of to a landfill site approved for that purpose by the Environmental Protection Authority of New South Wales or equivalent authority in the Australian Capital Territory. Written evidence that the material has been disposed of to the approved landfill must be submitted to Council.

The applicant is advised that asbestos is a hazardous material/waste and as such special requirements relate to the documentation and licensing relating to

transport. If the material is proposed to be disposed of within the Australian Capital Territory, the applicant should contact Environment ACT and the ACT Landfill section prior to utilising these facilities.

REASON: To ensure the proper disposal of hazardous asbestos material.

PLANT AND EQUIPMENT NOISE

The noise level emanating from plant and equipment installed on the premises must not exceed a level of 5dB(A) above background level when measured for a LA_{eq} 15 minute period during the day, evening or night.

REASON: To reduce the noise nuisance to neighbours and to ensure that the requirements of the Protection of the Environment Operations Act 1997 and Regulations are satisfied.

ACOUSTIC REPORT

Within six (6) months of this consent, the Applicant must submit (and following approval implement) an acoustic report prepared by a suitably qualified, experienced and independent person, that assesses all noise sources on the development and sound attenuation work require to meet New South Wales Department of Environment and Climate Change Guidelines. The report must:

a) **Include an assessment of the level of noise generated from all noise sources and cumulative noise sources on the site;**
b) **Set noise goals for sensitive noise receptors;**
c) **Identifies all reasonable and feasible measures that could be implemented on the site to reduce the noise impacts on the business;**
d) **Assess the likely effectiveness of these measures; and**
e) **Describes what measures would be implemented to achieve these noise goals.**

REASON: To ensure noise levels generated from activities on the site are not excessive and do not impact on surrounding sensitive receptors.

WASTE MANAGEMENT COMPLIANCE WITH PLAN

During the development the applicant must implement the range of waste management activities as specified in the approved Waste Management Plan.

REASON: To ensure that waste materials generated on the site are managed in an environmentally acceptable and sustainable manner.

PLUMBING AND DRAINAGE

LG WATER, SEWER & DRAINAGE REGS 1993, AS 3500 ETC

The reservoir sites and the recycled water treatment facility must be provided with a drinking water supply and a non-drinking water supply and the water recycling plant must also be provided with sanitary facilities. Such work must be carried out in accordance with the requirements of the Local Government (General) Regulations 2005, AS 3500 Plumbing and Drainage Code and the New South Wales Code of Practice – Plumbing and Drainage, with such works performed by a person licensed by the NSW Department of Fair Trading.

REASON: To ensure compliance with the Local Government (General) Regulation 2005.

INSPECTIONS OF PLUMBING & DRAINAGE

Plumbing and Drainage must be inspected by Queanbeyan City Council at the relevant stages of construction in accordance with Council's inspection schedule.

REASON: To ensure compliance with AS 3500 Plumbing and Drainage and Council's inspection schedule.

PROVISION OF A WATER METER

Provision of 20 mm water meters (drinking and non-drinking) at no cost to the Council to the reservoir sites and the recycled water treatment facility.

REASON: To provide an adequate metered water supply

SUBMIT WORKS AS EXECUTED PLAN

Works as executed plans of all sanitary drainage shall be submitted to Queanbeyan City Council prior to the issue of an Occupation Certificate.

REASON: To ensure that accurate records of sanitary drainage installations are available for future use by interested persons.

TITLE RESTRICTIONS

EASEMENTS AND RESTRICTIONS

Pursuant to Section 88B of the Conveyancing Act easements and restrictions as to use shall be created to achieve the following purposes:

(a) all requisite sewerage easements;

(b) all easements specified below and contained in the subdivision must benefit Council as well as particular lots.

- **easements to drain water,**
- **easements to drain sewer,**
- **easements for water supply**

- **easements which Council may require to provide access to maintain the constructed services.**

REASON: To ensure public utility services, access and restrictions are legalised over the land.

DEDICATION TO COUNCIL

Dedication to Council, free of cost on the subdivision survey plans, the water recycling plant site, the sewerage pump station sites, the bulk water pump station site and the water reservoir sites.

REASON: To permit Council to adequately manage utility services.

SAFER BY DESIGN

STREET NUMBERING

The water recycling plant is to be clearly identified by a street number at its entrance to Googong Dam Road. The water reservoir site is to be clearly identified by a street number at its entrance to Old Cooma Road. Street numbers are to comply with Council's rural addressing policy and should be made of a durable material, be at least 7cm in height and positioned at a height between 0.6m-1.5m above ground level on the site boundary that fronts the street.

REASON: To ensure that buildings are clearly identified by street number to allow people and services (especially emergency services) to find the building easily.

CERTIFICATION OF WORKS

INSPECTIONS WATER & SEWER AUTHORITY

Inspections must be performed by the Water and Sewer Authority (Queanbeyan City Council) when water main and sewer rising maind works reach the following stages:

(a) immediately prior to connection of new sewer pipes to the existing sewerage system,

(b) immediately prior to connection of new water pipes to the existing water reticulation, and

(c) immediately prior to the backfilling of sewer drainage trenches.

Council's City Infrastructure Division must be given 24 hours notice of the need for these inspections.

NOTE: Any inspections carried out by Council do not imply Council approval or acceptance of the works, and do not relieve the Developer from the requirements to provide an Engineering Construction Certificate Report in accordance with Council's *Development Specification - Googong*.

REASON: To ensure that hydraulic services are constructed in accordance with Council requirements.

CERTIFICATE OF COMPLETION

Certification of the completed water reticulation and sewerage system works and works as executed documentation must be included in an Engineering Construction Certification Report and submitted to Council in accordance with Council's *Development Specification - Googong*

REASON: To ensure that hydraulic services are constructed in accordance with Council requirements.

WORK IN ACCORDANCE WITH COUNCIL'S SPECIFICATIONS

All construction and restoration work must be carried out strictly in accordance with the approved drawings and Council's *Development Specification - Googong*.

REASON: To ensure construction and restoration work is in accordance with Council's requirements.

PUBLIC FACILITIES

The Developer will be responsible for all public utilities and services in the area of work and as such must notify all relevant Authorities and bear all costs associated with any repairs and/or adjustments as those Authorities deem necessary.

REASON: To ensure compliance with Utility Authorities' requirements.

PROTECTION OF WORK & SAFETY OF COMMUNITY

Lighting, fencing, traffic control advanced warning signs must be provided for the protection of works and for the safety and convenience of the public, in accordance with Council's *Development Specification - Googong*. Traffic movement in both directions on public roads and vehicular access to private properties must be maintained at all times, during the currency of the works for each project stage.

REASON: To ensure an adequate level of public safety and convenience during construction.

MONITORING

For the components identified in the *Googong Integrated Water Cycle Water and Wastewater Concept Design* prepared by MWH and dated 11 October 2010 that require monitoring to confirm compliance with the design assumptions, the developer shall undertake all such monitoring at his own expense and submit a report to Council for acceptance. In the event that test results indicate that modifications need to be undertaken to allow the stage to function in accordance with the EPA licence, the developer shall undertake rectification works prior to acceptance by Council. Upon acceptance of the works Council shall issue a Finall Compliance Certificate under Section 307 of the Water Management Act 2000.

REASON: To ensure compliance with the approved project and the Utility Authorities' requirements.

MAINTENANCE

The Developer shall maintain each stage of the completed works at his own expense, for a period of twelve (12) months after the date of the issue of the Final Compliance Certificate by Council.

The developer must lodge a cash bond with regard to such maintenance in an amount as calculated from fees set by Councils Management Plan and current at the time of issue of the Subdivision Certificate.

In that period the applicant will be liable for any part of the work which it fails to perform in the manner outlined in the Council's *Development Specification - Googong* (or as would reasonably be expected under the design conditions).

The developer must provide Council with written authorisation, that in the event of any maintenance work not being completed to the standards specified in Council's *Development Specification - Googong* within the period specified, to enter upon the subject land and undertake such maintenance work and to deduct the cost thereof from such Bond monies held by Council and to refund the balance, if any, to the developer.

REASON: To ensure works are completed in accordance with Council's requirements.

OCCUPATION CERTIFICATE

OCCUPATION CERTIFICATE - PCA

An Occupation Certificate must be obtained from a Principal Certifying Authority before occupation or use of the building. The final Occupation Certificate will not be issued until the development has been completed in accordance with this consent.

REASON: To comply with Section 109M of the Environmental Planning and Assessment Act 1979.

COPY OF OCCUPATION CERTIFICATE WITHIN 2 DAYS

The Principal Certifying Authority must provide a copy of the Occupation Certificate to Council within two (2) days of the Certificate being determined.

REASON: To comply with clause 151(2) of the Environmental Planning and Assessment Regulation 2000.

LANDSCAPING COMPLETED

The landscaping of the site shall be completed prior to occupation or use of the premises in accordance with the approved plan, and be maintained at all times to Council's satisfaction.

REASON: To ensure adequate landscaping is maintained.

COMPLIANCE CERTIFICATE WATER & SEWER

An Occupation Certificate for any part of the development shall not be issued until a certificate of compliance in accordance with Section 307 of the Water Management Act 2000 is obtained from the Water and Sewer Authority (Queanbeyan City Council).

REASON: To ensure the development is adequately serviced prior to its occupation.

ENVIRONMENTAL RISKS

VEHICLE ACCESS

Temporary vehicle access to the site must be stabilised to prevent the tracking of sediment onto the roads and footpath. Soil, earth, mud or similar materials must be removed from the roadway by sweeping, shovelling, or a means other than washing, on a daily basis or as required. Soil washings from wheels must be collected and disposed of in a manner that does not pollute waters.

REASON: To minimise transfer of soil from the site onto the road pavement.

EXCAVATION PUMP OUT WATER

All excavation pump-out water must also be analysed for suspended solid concentrations, pH and any contaminants of concern identified during the preliminary or detailed site investigation, prior to discharge to the stormwater system. The analytical results must comply with relevant EPA and ANZECC standards for water quality.

REASON: To satisfy relevant environmental standards.

TRANSPORT

All haulage routes for trucks transporting soil, materials, equipment or machinery to and from the site must be selected to meet the following objectives:

- **comply with all road traffic rules;**
- **minimise noise, vibration and odour to adjacent premises; and**
- **utilise State Roads and minimise use of local roads.**

Applicants may consult Council prior to selecting the most suitable transport route.

Category 2 remediation work must ensure that all site vehicles:

- **conduct deliveries of soil, materials, equipment or machinery during the hours specified in the remediation action plan;**
- **securely cover all loads to prevent any dust or odour emissions during transportation;**
- **exit the site in a forward direction; and**
- **do not track soil, mud or sediment onto the road.**

REASON: To ensure safe traffic management and transport of materials, machinery and so on.

IMPORTATION OF FILL

All fill imported on to the site must be validated to ensure the imported fill is suitable for the proposed land use from a contamination perspective. Fill imported on to the site must also be compatible with the existing soil characteristic for site drainage purposes.

Council may require details of appropriate validation of imported fill material to submitted with any application for future development of the site. Hence all fill imported onto the site should be validated by either one or both of the following methods during remediation works:

- **Imported fill should be accompanied by documentation from the supplier which certifies that the material is not contaminated based upon analyses of the material or the known past history of the site where the material is obtained; and/or**
- **Sampling and analysis of the fill material should be conducted in accordance with the EPA Sampling Design Guidelines (1995) to ensure that the material is not contaminated.**

REASON: To ensure fill material is within acceptable standards.

SUBDIVISION CERTIFICATE

FINAL SURVEY - 6 COPIES

An application to obtain a Subdivision Certificate from Council must be made to Council.

In addition the application must be supported with the following documentation:

- **A final survey plan of subdivision and six copies including an electronic copy in the format of digital vector to the projection of MGA (GDA 94) with boundaries and other line work to be insitu to projection. This should be accompanied with an application for a subdivision certificate to be submitted to Council. Where approved drawings provide survey coordinates of structures, the final survey plan should include a schedule of the set out centreline coordinates of all listed structures as constructed in accordance with approved plans. The schedule should include type of**

structure, finished cover & invert levels of structures.

REASON: To ensure works are completed in accordance with the requirements of the Council, statutory bodies and the true location of assets supplied are appropriately coordinated and documented and to comply with Section 109 Environmental Planning and Assessment Act 1979.

STATEMENT FROM SURVEYOR

Submission to the Principal Certifying Authority of a statement prepared by a registered surveyor, stating that all water and sewer pipelines are completely located within their easements.

The statement must be submitted upon completion of the subdivision works and prior to the issue of the Subdivision Certificate.

REASON: To ensure works are completed in accordance with Council's requirements.

WATER & SEWER COMPLIANCE CERTIFICATE

A certificate of compliance in accordance with the Water Management Act 2000 is to be obtained prior to the issue of a Subdivision Certificate.

REASON: To ensure compliance with the statutory requirements of the Environmental Planning and Assessment Amendment Act 1979.

SUBMISSION FROM SERVICE AUTHORITY

Written evidence from the relevant service authority or a suitably certified or accredited person that satisfactory arrangements have been made for the supply of reticulated electricity and telephone services to each lot shall be submitted to Council.

REASON: To satisfy relevant utility authority requirements.

COMPLIANCE WITH CONDITIONS

Conditions of this development consent must be complied with prior to your final subdivision plan being signed and released by Council to enable you to register your plan with the office of Land and Property Information. In this regard you will need to provide written evidence to Council by way of a letter outlining compliance with each condition including payment of any Council bonds and certificates from Country Energy and Telstra that their requirements have been satisfied.

REASON: To ensure the development is completed in accordance with Council's conditions of consent prior to release of the subdivision certificate.

SCHEDULE 2

PROPOSED CONDITIONS

The following conditions are recommended for that part of the project application within Palerang LGA

–

MATERIALS AND STANDARDS

WATER SUPPLY SYSTEM
The bulk water supply pump station shall be designed and constructed to the requirements of ACTEW-AGL and must provide for supply from Googong or Stromlo water treatment plants. REASON: To provide an adequate water supply

CAR PARKING

SERVICE VEHICLE PARKING

- **The bulk water supply pump station must be provided with a bitumen sealed access road and service vehicle parking space and turning bay areas of dimensions that accommodate a mobile crane and large rigid truck**

REASON: To provide adequate offstreet service vehicle parking.

PLUMBING AND DRAINAGE

PROVISION OF A WATER SUPPLY

Provision of a drinking water supply at no cost to the Council to the bulk water supply pump station.

REASON: To provide an adequate water supply.

SITE FACILITIES

SITE FACILITIES
The bulk water supply pump station shall be provided with the following: • 1.8m high security fencing • suitable pump and facility protection from the environment • telemetry • suitable site security lighting REASON: To provide adequate site facilities

NSW GOVERNMENT | **Office of Water**

#10

6 January 2011

Lisa Mitchell
Major Development Assessments
Department of Planning
GPO Box 39
SYDNEY NSW 2001

c: Tim Baker
t: 02 6841 7403
f: 02 6884 0096
e: Tim.Baker@water.nsw.gov.au

Our ref : ER20439
Your ref:

Attention: Swati Sharma

Dear Swati

EXHIBITION OF ENVIRONMENTAL ASSESSMENT – GOOGONG WATER CYCLE PROJECT (MP08_0236)

I refer to your letter dated 10 November 2010 requesting a review of the exhibited environmental assessment (EA) for the Googong Water Cycle Project. The NSW Office of Water (the Office) appreciates the opportunity to comment and has identified the requirement for additional information to assist in a comprehensive assessment of the project. The key matters requiring additional information include the following with further detail provided in Attachment 1:

- Inadequate assessment of the ecological impacts of flow modifications to Googong Creek and the Queanbeyan River.
- Identification and assessment of impacts of flow modifications to water users within Googong Creek and/or the Queanbeyan River.

Should further information be required in relation to this submission please do not hesitate to contact Tim Baker on (02) 6841 7403.

Yours sincerely

m. Mignanelli

Mark Mignanelli
Manager Major Projects and Assessment

ATTACHMENT 1 – NOW DETAILED COMMENTS

ECOLOGICAL ASSESSMENT

Googong Creek

- Section 11.2 of Volume 1 of the environmental assessment indicates no aquatic values can be assessed in Googong Creek. The Office does not consider this statement to be adequately supported and requests the following:
    - Assessment of the existing ecological value of Googong Creek and its supporting riparian zone within the project site and downstream to the confluence with the Queanbeyan River,
    - Assessment of the ecological impacts due to the proposed modification to flows in Googong Creek. This is to examine both the proposed increases and reductions in flow.
    - Adequate mitigating measures and monitoring requirements for identified impacts.
- The additional assessment requirements for Googong Creek are highlighted due to the significant modifications proposed to the flow regime. These modifications are characterised by the complete loss of flows in summer and a significant increase in flows in winter/spring. Table 1 details the modelled impact from current modelled flows based on the information in Table 7.8 of Volume 1 of the EA.

Table 1.

% Flows	Summer	Autumn	Winter	Spring
50th percentile	100% reduction	61% reduction	36% increase	45% reduction
80th percentile	99% reduction	51% reduction	52% increase	82% increase

Queanbeyan River

- Due to the proposed modifications to flows within Googong Creek it is critical to assess the potential impact on the Queanbeyan River in terms of both the flow regime and the ecological response. Table 7.9 of the EA provides a broad indication of potential flow impacts for 50th percentile flows however the Office requests an assessment of the impacts for a range of percentile flows and the associated ecological impact.
- Where an impact has been identified, appropriate mitigating, monitoring and contingency measures will need to be outlined.

Montgomery Creek

- Consideration of the impacts to the flow regime and ecology of Montgomery Creek have not been addressed within the EA. Confirmation is requested as to why this is the case in consideration of the concept plan status and overall proposed assessment of the Googong Township development.

WATER LICENSING

- The environmental assessment has not considered the existence of and potential impact to any water users who may extract water from Googong Creek or the Queanbeyan River. The Office requests the proponent identify and assess the impact of the proposed flow modifications to any licensed water users and users with basic rights access to Googong Creek or the Queanbeyan River.
- Where an impact has been identified to an existing water user it will be necessary to outline appropriate mitigating, monitoring and contingency measures.

GROUNDWATER ASSESSMENT

- The Office recognises that the groundwater assessment has identified the project will result in a significant lowering of the watertable beneath the site due to reduced recharge potential and resultant impacts to baseflow discharges and groundwater users. These impacts have not been quantified in the EA and are proposed to be considered further through additional assessment. The Office supports the recommendations in Table E1 of Appendix E however would like to highlight the risk associated with delaying this assessment to after a determination by Department of Planning. The risk is associated with unconfirmed impacts to groundwater users and baseflow supplies hence it is yet to be determined whether these impacts are acceptable and whether they can be adequately mitigated.

End of Attachment
6 January 2011

NSW GOVERNMENT | Planning

PCU016795

Contact: Katrina Stankowski
Phone: 02 98738569
Email: Katrina.Stankowski@planning.nsw.gov.au
Our ref: N/A
Your ref: MP 08_0236
File: 10/22765

Ms Lisa Mitchell
Manager – Water Projects
Infrastructure Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Attention: Swati Sharma

Dear Ms Mitchell

RE: Heritage Branch comments on Exhibition of Environmental Assessment for Googong Water Cycle Project (08_0236).

Thank you for your Memorandum dated 10th November requesting any comments that the Heritage Branch may have on the Environmental Assessment for Googong Water Cycle Project (MP 08_0236) currently on public exhibition.

It is noted that this is the first time the Heritage Branch has been asked to provide comments on this project, although the Heritage Branch has been in contact and issued Approvals under the Heritage Act to CIC Australia regarding the excavation and management of GH14 site detailed within Appendix G of the EA.

The Heritage Branch has reviewed the four volumes of the report submitted- '*Googong Township water cycle project Environmental Assessment*' Volume 1 (Main Report) and Volume 2, 3 & 4 (Appendices) by Mandis Roberts, dated 11 November 2010, and has the following comments:

- Chapter 12 (Heritage) of the EA contains insufficient detail to assess the impacts the project will have on non-Indigenous heritage sites within the project area. For example, Section 12.4.2 states that "*surveys have been conducted to determine the number of non-indigenous heritage sites within the study area. Three previously recorded non-indigenous heritage sites are located within the subject site*". However, no description or detail of these three sites has been included. These sites are not referred to again in Chapter 12.
- Table 12.1 details the Indigenous and non-indigenous heritage features that could be affected by Stage 1 of the Project. However, as far as can be determined, no non-indigenous heritage items are listed in the Table. A note has been included which states that no non-indigenous heritage sites are within close proximity to infrastructure associated with Stage 1 of the project. However, the first line of Section 12.6.1 states that "The main impact relevant to non-indigenous and indigenous heritage sites is the potential to disturb identified sites during construction". Accordingly, the Heritage

Branch requests clarification on whether there are impacts to non-indigenous heritage or are there not.

- The lack of sufficient detail regrading non-indigenous heritage provided in the EA has meant that Appendix G 'Googong New Town Trunk Water and Recycled Water System Aboriginal and Historical Archaeological Assessment' by Navin Officer Heritage Consultants (dated October 2009), has had to be relied upon for all information regarding this topic. It is considered that this report is adequate regarding the detail and mitigation measures provided for the management of non-indigenous heritage. The Heritage Branch does recommend that some of the information contained within Appendix G should be included in Chapter 12 of the EA to address the issue raised under point 1 and 2
- The Heritage Branch generally agrees with the three draft Statement of Commitments put forward by the Applicant. However, the Heritage Branch requests that draft commitment NH3 is amended to reflect current legislative requirements set out in Section 146 of the NSW Heritage Act regarding the notification to the NSW Heritage Council of discovery of any 'Relics', which it is noted, is not turned off by the Part 3A process.

I hope that this information is of assistance. If you have any further enquiries regarding this matter, please contact Katrina Stankowski at the Heritage Branch on (02) 98738569.

Yours sincerely

17/11/2010

Vincent Sicari
Manager
Conservation Team
Heritage Branch
Department of Planning

A. J. and D. Dempster's response to the sewage treatment development application for Googong, December 2010.

We are objecting to the deposition of sewage recycling liquid from the proposed Googong town into the Queanbeyan River, which we use for our household water, without adequate compensation to the loss of our long standing amenity, good river water. We have used it since 1976 for cooking, washing dishes, bathing and brushing teeth with no ill effects. We have hosted local, interstate and international visitors from babies to adults with no ill effects to them. While the developer and perhaps the Dept. of Health say that the output of the sewage plant is cleaner than the river water there is an overwhelming psychological concern that this is not so.

We understood from the initial consultations in 2008 that osmosis filtration with the ability to filter out pharmaceuticals, etc., would be used in the sewage plant. We appreciate that dealing with the salt output from that would present great problems. However the proposed downgrading of the system using a relatively coarse membrane, chlorination and u/v treatment will leave a huge quantity of medical chemical problems in our water supply. This will cause serious health problems to the residents who have riparian rights. There is hard evidence that medications in sewage alter the ? of aquatic creatures downstream.

Any developer who wishes to build infrastructure that impinges detrimentally on long established residents, pre 1968, should seek to amicably determine with the residents a satisfactory outcome. There is an established system in the UK that if developers affect the status quo in order to make money , they should pay to satisfactorily rectify the problem. The relevant NSW Government Departments should support these viewpoints and best practices. Here are two possible solutions;

1 Supply potable water to Wickerslack Lane

2 Instal a 20,000 gallon watertank, pump, guttering, piping, etc for a gravity fed rainwater system to the thirteen houses where necessary as a minimum. Since there are a range of plumbing systems in use negotiations with each householder would be sensible.

For 161 Wickerslack Lane new guttering, a pump and switching gear to send water from the small tank at the house to a 20,000 tank uphill and back would be the least requirement. The guttering while adequate for the present small tanks spill too much water in heavy rain. Any agreements should apply to the house, not specifically to the present residents as the houses may change ownership.

The normal outflow and environmental releases from Googong Dam should continue. This will help to dilute the input from Googong town. Protocols should be in place to have extra water released from the dam when sewage plant breakdowns occur that cause partially treated sewage to be sent to the river. Wickerslack residents and relevant authorities should be warned of such events.

The developer has partially dealt with the stormwater. However it has not dealt adequately with the effect of releasing stormwater on the amount of bank erosion in Googong Ck or the on the badly constructed dams. Two dams have been over topped and in their normal state have insufficient height from top water level to the top of the damwall, it should be 1 metre minimum. The spillways are inadequate for the catchment. When those dams were being built we suffered dirty river water for some considerable time. The developer has talked to the landholder but not about stabilising the silt deposits at the river. The Department should ensure that there is a DA to specifically deal with stormwater and soil erosion.

D. and A. J. Dempster,
161 Wickerslack Lane,
Googong, 2620, NSW
62975608
daviddempster161@live.com

Submission to NSW Department of Planning: Part 3A Statement for Googong Sewerage System

Background

This is submitted by Roger and Elizabeth Clement who have lived at 155 Wickerslack Lane since 1973 and continue to exercise their riparian right to water from the Queanbeyan River for all household and garden needs except for water for drinking, cooking and teeth cleaning for which rainwater is used. We are one of around thirteen families along the eastern side of Wickerslack Lane whose lands front onto the river which is used to meet their everyday water needs. All fifteen families are located about 1 km downstream from the junction of Googong Creek and the Queanbeyan River.

The developer informed residents at a meeting on Monday 13 December in Queanbeyan that their preferred option would have been to return excess recycled water (i.e. the output from sewerage treatment) to Googong Dam from whence it came because the water qualities were similar. However this had been rejected by the NSW and ACT authorities. Thus the excess recycled water and any sewerage spillage from the sewerage works would now flow down Googong Creek and into the Queanbeyan River.

They also admitted that additional storm water (compared with the speed and volume of flows from the same land when used for agriculture) would also be flowing down Googong Creek because of the hard surfaces in the Googong Town. They agreed that in total this additional recycled water and storm water flows down Googong Creek would prove to be a significant increase but could offer no modelling or analysis to identify the likely impact.

Principle Objections and Recommendations

It is our firm view that the analysis provided in the present part 3A documentation is so deficient that it should be withdrawn, the papers rewritten to take account of the further analysis of all the major risks involved, and resubmitted for further public comment.

The risks not properly taken into account are firstly the risk of a major sewerage spillage from Googong treatment plant, the consequent damage this would do to the ecology and landforms in Googong Creek, the ecology of Queanbeyan River downstream from its junction with Googong Creek all the way to Lake Burly Griffin and the economy and amenity for the people of Queanbeyan and Canberra.

The second major risk is due to the insidious effects of the additional flows of recycled water and storm water arising from Googong Township down Googong Creek. The developer acknowledges that these additional will be significant and makes a lame offer of remediation if required without undertaking any analysis of the size frequency and distribution of such flows. Local storm patterns and maximum precipitation events are likely to make this situation even more fraught. The very steep and narrow nature of Googong Creek and the poor construction standard of the existing dams, make it very difficult if not impossible to

undertake remediation after the event. Just getting machinery into and out of the creek may well do even more damage than has already occurred.

These two risks are elaborated on below together with further recommendations in the event of the proposed sewerage treatment plant proceeding.

The High Risk of a Serious Sewerage Spill

In support of this conclusion we offer the following observations on the likelihood of such a spill occurring risks:

. The sewerage treatment plant and the sewerage pumping points need substantial amounts of electric power to operate which power is subject to major interruptions lasting substantially longer than the four hours bypass storage of the sewerage plant. The causes of this power outage could include either a major bushfire destroying the several poles of the major supply to Googong township or major lightning strike doing major damage to the substation or switching yards supplying Googong township. Power cuts in such circumstances are often for 24 hours or more.

. In the event of a major rain event such as a one in 20 year flood or a shorter maximum precipitation event the storm water systems of Googong township and their back- up over ground flows along streets will be overwhelmed, allowing major ingress of storm water into the sewerage system with resulting major overflows beyond the four hour bi-pass capacity of the sewerage plant.

- Such rain events will occur and their risk is increased by an identified local storm condition which applies to storm cells in Queanbeyan and Canberra region, and their storm paths bringing them into contact with uplifting terrain adjacent to hills and ridges. Such a storm drowned 7 people in Canberra in the Woden Valley in the 1970s when it dropped very heavy rain on Mt Taylor. More recently in the 1980s a storm which came down the Queanbeyan River Valley and over the slopes of Mt Jerrabomberra dumped 68mm of rain in less than 40 minutes causing major flooding of houses in southern Queanbeyan and overwhelming both the storm water system and its over ground backup. It quickly filled and overflowed a detention basin at South Queanbeyan Primary School which Queanbeyan Council claimed at the time had been built to contain a one in one hundred year rainfall event.
- The Googong township will sit on top of a ridge well elevated above the Queanbeyan River and is therefore subject to major uplift of storms passing down the Queanbeyan River storm path (typically south to north).

. To the above scenarios must be added major human error causing the plant to overflow significantly. Queanbeyan Council has poor record in this regard with three major sewerage spills in the past ten years with two related to human error.

. Also of major concern over time is the ability of any local government authority in Australia to control the turning of storm water into sewerage system. Every sewerage

plant in Canberra and Queanbeyan overflowed in the flood events of the past three weeks in the region. All of these flood events were between one in five and one in ten year events and the sewerage overflows were in part at least due to substantial; infiltration of the sewerage system by storm water. The record of Councils elsewhere in Sydney and right across the eastern states is universally poor in this regard.

. Finally on this we can say with certainty that over the life of the proposed sewerage system, the likelihood of occurrence of major flood and fire events and their intensity will increase substantially due to climate change.

Conclusion about likelihood of a major sewerage spillage

The above evidence naturally leads to the conservative conclusion that over the first ten years from commissioning, the likelihood is close to one of a major sewerage spill from this sewerage works with major impacts on the ecology, economy and amenity of Queanbeyan River and its users. Further we can say with certainty that this likelihood will increase further over the life of the plant due to increasing levels of storm water inflow to the system and because climate change will make extreme fire and rain events more likely.

The Impact On the Ecology and Sediments in Googong Creek

The papers basically dismiss the risk of serious damage to Googong Creek and the Queanbeyan River form consequential sedimentation due to increased run-off from the hard surfaces of Googong township and the need to dispose of surplus recycled water. It almost certainly underestimates the impact of major rain events and maximum precipitation events both now and into the future. The evidence of storm paths down the Queanbeyan River valley and unusually heavy rainfalls over a short period are substantial. For example the major rainfall events recorded on the lower slopes of Mt Jerrabomberra which is less than 4 kms from the Googong site. In fact Mt Jerrabomberra forms the northern end of the ridge on which Googong township will sit. The tragic loss of seven lives in the Woden incident in the 1970s was avoidable because the local farmer warned ACT authorities he had seen such floods twice in the previous fifty years but they took no action to address these maximum flows off Mt Taylor which were exacerbated by the hard surfaces of the new suburbs in the Woden area.

There needs to be careful estimates made of the increase in volumes due to runoff from hard surfaces and the additional recycled water. This then needs to be carefully modelled for a range of scenarios to identify the impact on Googong Creek and the likely movement of sediments and the flow on effects for the Queanbeyan River. If, as seems likely, there are major sediments movements projected then serious amelioration proposals need to be identified and implemented before the township is built because as already explained the chances of being able to do anything about the problems once they have happened will be

likely to be highly constrained due to the terrain of Googong Creek and its narrow steep gorge structure.

Additional Recommendations If the Decision is taken to Proceed Immediately

1 **There needs to be an immediate effort made to reach agreement with the ACT Government to allow the operators at Googong Dam to immediately release additional water into the Queanbeyan River from the dam to substantially dilute the impact of any sewerage or chemical spill into the River from Googong township. The agreement must be in place before the sewerage system at Googong is commissioned**.

2 **There should be weekly full monitoring in both the exit of Googong Creek into the Queanbeyan River and in the river itself just below the junction of Googong Creek and the River with the results published on line within hours of them being completed. This full testing regime should extend to the Wickerslack sampling site and also to the sites in Queanbeyan.**

3 **Queanbeyan Council should be responsible for immediately notifying the Wickerslack residents relying on this water and Queanbeyan and Canberra residents if there any elevated levels of readings from the river above prescribed human health guidelines**.

4 **The QCC should move immediately to make the developer contribute to a scheme for the reticulation of potable water or 20,000 gallon rainwater tanks pumps and roof guttering in Wickerslack Lane at no additional capital cost to these residents.**

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