

Appendix Q

# Updated consistency Revenue meter station & scour valve at East- West junction\_Rev5 09Jan2014

## **Updated environmental review: construction of revenue meter station and connection to scour pit at Stage A – Network west/east connection**

This environmental review has been updated for a proposed change to the Approved Project. A consistency review was initially drafted based on a concept design for a new metering station at the junction of Stage A Network West/East to measure flow rates and other information for the bulk water supply from ACTEW to Queanbeyan City Council (31 January 2013). It was recommended that the consistency review be updated once the detailed design had been completed. The proposed design is summarised below and drawings are provided as Appendix A.

### **Revenue meter station**

The proposed changes from the Approved Project include construction of a small above ground section of the 225 mm diameter bulk water rising main, which transfers water from the Bulk Water Pumping Station to the interim reservoirs.

Approximately 9 m of the rising main will be installed at least 525 mm above ground along with a series of valves and a flow meter. This area will be contained by concrete hardstand (about 2 m by 9 m) and located at the boundary of Stage A Network East/West where responsibility for the rising main is transferred from ACTEW to Queanbeyan City Council.

Adjacent to the concrete hardstand will be a vehicle access area that will also comprise concrete hardstand (approximately 9 m by 5 m). A small above ground revenue gauging cabinet will be installed to the south of the access area and connected to the flow meter by underground electrical conduit. The entire meter station (including flow meter/valves and vehicle access) will be fenced with an approximately 2.7 m high chain wire fence with an access gate.

Access to the revenue meter station will be via a new approximately 3 metre wide, 60 metre long road (comprising compacted densely graded base - 20 mm) extending parallel to Googong Dam Road.

At the completion of the works all other disturbed areas will be reinstated with topsoil with seeded dryland grass and stabilised where required.

All works for the revenue meter station are located outside the Googong Foreshores boundary.

### **Scour valve**

Some minor works are also required along the 225 mm rising main to install a new scour valve to connect to an existing table drain located immediately east of the rising main before it crosses Googong Dam Road (east of the proposed revenue meter station, refer Appendix A). The scour valve will be used to drain the rising main for repairs and maintenance when required. The proposed works for the scour valve include installation of:

- A 100 mm flanged pipe extending approximately 6.7 m from the rising main to new scour valve.
- A concrete scour valve (1350 mm diameter and 3.7 m deep, with access ladder) installed flush with the ground, with grated cover.
- A 375 mm reinforced concrete pipe extending approximately 4.3 m from the scour valve to connect to a precast headwall.
- Rip rap (100 mm), mesh and dryland grass installed to stabilise existing table drain.

Should any response to the questions be 'yes', further assessment will be required. This may include a consistency assessment and/or modification report.

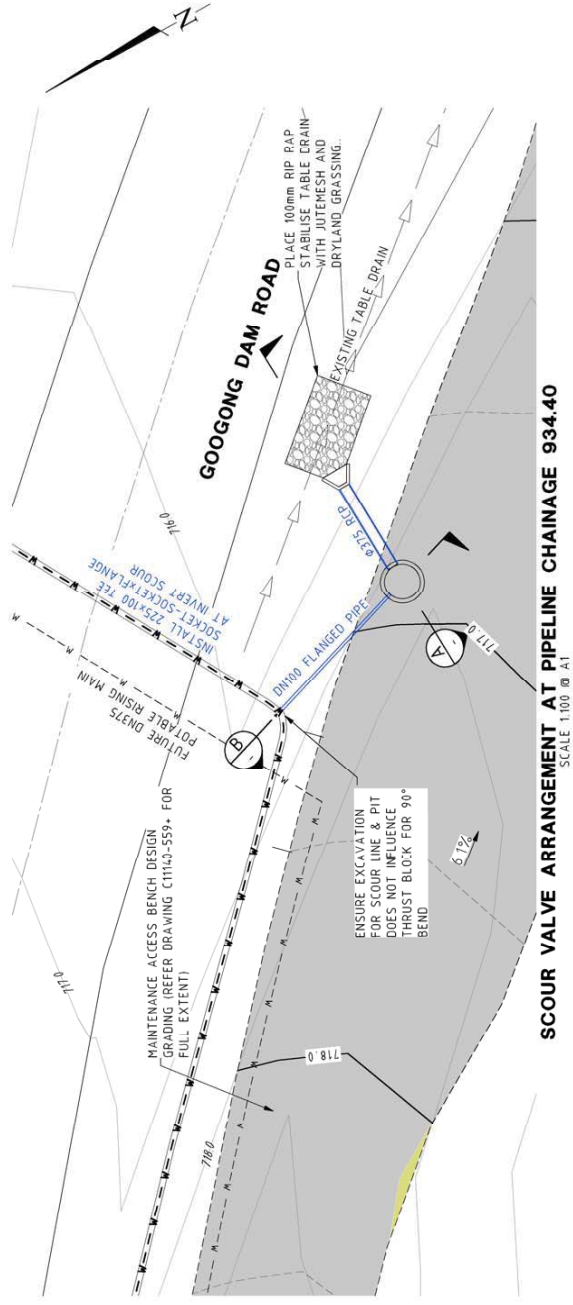
Aspect	Yes	No
<b>Approved project</b>		
Will the proposal move any infrastructure outside the approved project boundary? No.		✓
<b>Key issues</b>		
<b>Ecology</b>		
Will the proposal result in additional land clearing? Biosis, who provide ecological services, were engaged to provide an assessment of the proposed clearing of up to three immature Red Box ( <i>Eucalyptus polyanthemos</i> ) and five Late Black Wattle ( <i>Acacia meransii</i> ) all of which were planted as part of revegetation works 15-20 years ago. None of the trees were found to support hollows, bird nests or other notable fauna habitat values. Biosis concluded that, from an ecological perspective, the difference in the likely/potential impact upon threatened flora and fauna compared to the Approved Project would be inconsequential. Refer Appendix B for assessment.	✓	
Will the proposal have any impact on any threatened flora species or endangered ecological communities listed pursuant in the <i>Threatened Species Conservation Act 1995</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> ? No. Habitat on which protected species are reliant will not be impacted. No EECs are present in the proposed area.		✓
Will the proposal impact on potential or actual habitat for threatened fauna species or populations? No. Habitat on which protected species are reliant will not be impacted.		✓
<b>Traffic and access</b>		
Will the proposal substantially increase the number of vehicle movements required to complete construction? No. Only a small number of vehicles will be required.		✓
<b>Contamination</b>		
Will the proposal impact on any contaminated land beyond that already approved? No.		✓
<b>Geology, Soils and Water</b>		
Will the proposal increase the risk of releasing contaminated sediment into waterways? No. The contractor will implement erosion and sedimentation control measures in accordance with the Soil and Water Management Plan contained in the CEMP.		✓
Does the proposal have the potential to result in contaminated or sediment-laden runoff, or spills entering waterways that standard mitigation measures will not prevent if implemented? No. There is minimal risk to waterways as there are no creeks or rivers located in the vicinity of the proposed works. In addition the contractor will implement erosion and sedimentation control measures in accordance with the Soil and Water Management Plan contained in the CEMP.		✓

Aspect	Yes	No
Will the proposal result in an increased risk of erosion beyond that already approved? No.		✓
<b>Noise and Vibration</b>		
Will the proposal have any additional noise and vibration impacts beyond those already approved? No. Works will be undertaken within the approved working hours for the IWC Project.		✓
<b>Visual Amenity</b>		
Will the proposal result in additional visual amenity impact beyond that already approved?  The proposal will introduce permanent infrastructure into the landscape, including a new 2.7 metre tall chain wire fence and options for visual planting are being investigated by GTPL. However the proposed works are located in an area away from high density of residential receivers and it is not considered that the fence would be a dominant structure in the context of the surrounding landscape. In summary, the overall visual impact of the proposal will be low.		✓
<b>Heritage</b>		
Will the proposal have any direct impact on locally, regionally or State listed heritage items beyond that already approved? No.		✓
<b>Air Quality</b>		
Will the proposal result in a substantial increase of dust or vehicle exhaust emissions, which cannot be managed by through implementation of standard mitigation measures? No. Construction works will be undertaken in accordance with the CEMP and the Air Quality Management Plan.		✓
<b>Waste</b>		
Will the proposal result in the excessive generation of waste? No.		✓
<b>Socio-economic</b>		
Will the proposal impact on the socio-economic activities of the region, including access to infrastructure and public facilities and ability for local businesses to trade? No.		✓
<b>Hazards and risk (including human health)</b>		
Will the proposal impact on existing safety arrangements? No. A new access path is being created to allow for safe access to the revenue flow station. Fencing will also be provided around the site for security.		✓
Will the proposal result in the increased risk of human or environmental exposure to harmful chemicals that could not be managed by standard mitigation measures? No.		✓
<b>Utilities and services</b>		
Will the proposal impact any additional utilities or services beyond that already approved? No.		✓

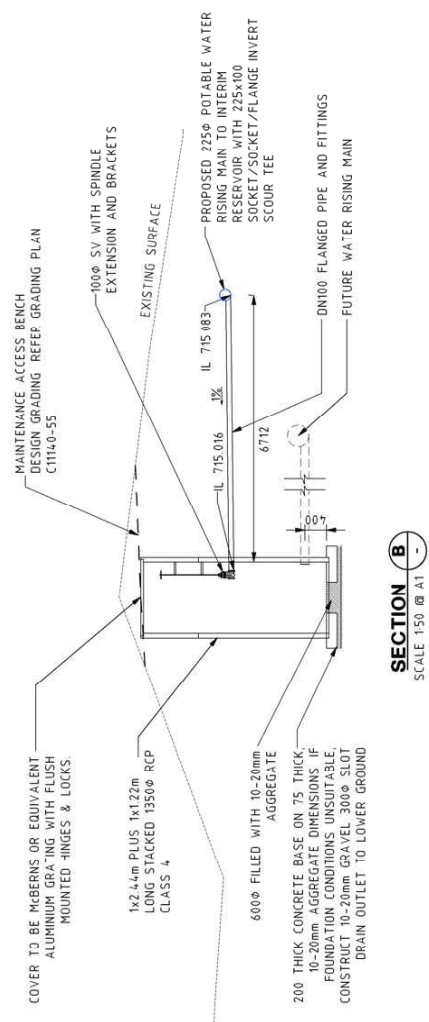
Aspect	Yes	No
<b>Other</b>		
Will the proposal result in an operational change that reduces the environmental performance of the plant and associated infrastructure in any way? No.		✓
Will the proposal have any other unspecified environmental impacts? No.		✓
<b>Comment and conclusion</b>		
Installation of new revenue meter station and scour valve connection to existing table drain are unlikely to result in additional environmental impacts, and are considered to be consistent with the Approved Project.		✓

# Appendix A Proposed layout

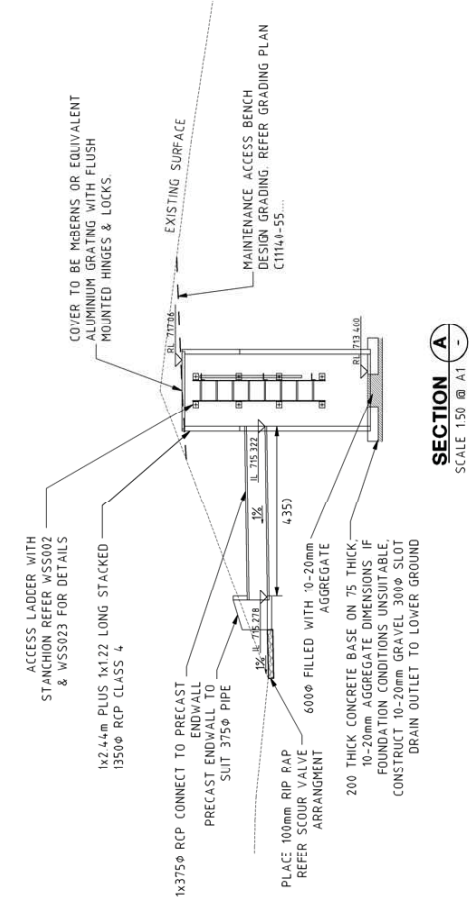
**NOTES:**  
REFER TO C1114-0-501+ FOR  
NOTES AND LEGEND.



**SCOUR VALVE ARRANGEMENT AT PIPELINE CHAINAGE 934.40**  
SCALE 1:100 @ A1

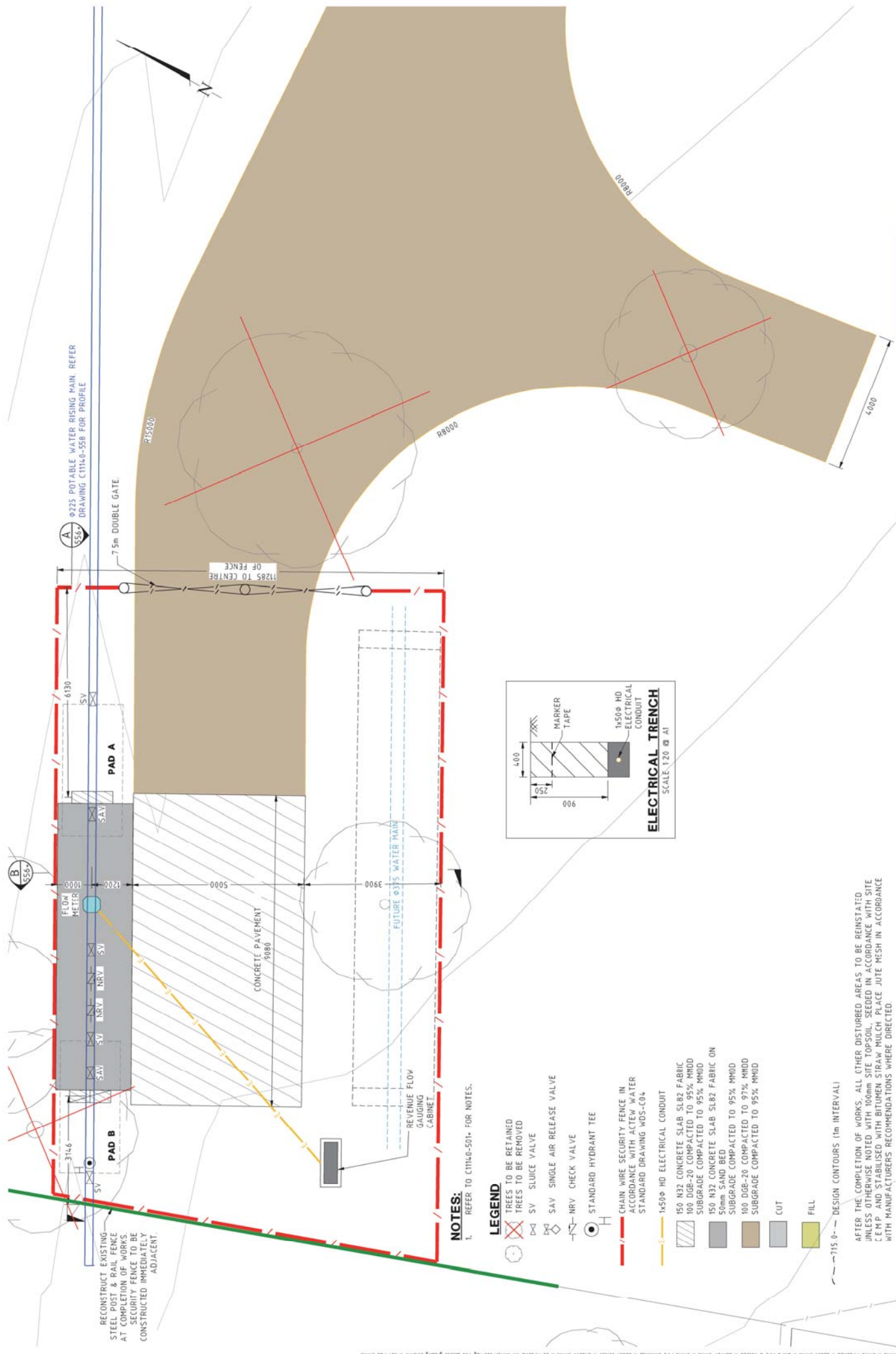


**SECTION B**  
SCALE 1:50 @ A1



**SECTION A**  
SCALE 1:50 @ A1

		<b>BULK WATER PUMP STATION</b> <b>POTABLE WATER RISING MAIN</b> <b>SCOUR VALVE ARRANGEMENT</b>	
PROJECT: GOGONG INTEGRATED WATER CYCLE		DRAWING NUMBER: C11140-554+	
CLIENT: GOGONG		SCALE: 1:100 (PLAN) 1:50 (SECTION)	
PROJECTING:		CONSULT AUSTRALIA	
DATE:		SHEET:	
DRAWN:		CHECKED:	
APPROVED:		DATE:	
REVISIONS:		SCALE:	
NO.		DATE	
1		10/07/21	
2			
3			
4			
5			
6			
7			
8			
9			
10			



9225 POTABLE WATER RISING MAIN REFER DRAWING C11140-558 FOR PROFILE

7.5m DOUBLE GATE.

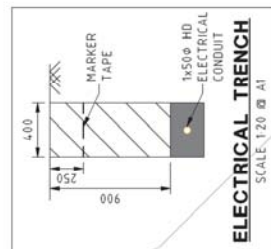
PAD A

PAD B

CONCRETE PAVEMENT 5080

REVENUE FLOW GAUGING CABINET

FUTURE Ø150 WATER MAIN



**ELECTRICAL TRENCH**  
SCALE 1:20 @ A1

**NOTES:**  
1. REFER TO C11140-501+ FOR NOTES.

**LEGEND**

- TREES TO BE RETAINED
- TREES TO BE REMOVED
- SV SLUICE VALVE
- SAV SINGLE AIR RELEASE VALVE
- NRV CHECK VALVE
- STANDARD HYDRANT TEE
- CHAIN WIRE SECURITY FENCE IN ACCORDANCE WITH ACTIVE WATER STANDARD DRAWING WDS-C04
- 1x50 Ø HD ELECTRICAL CONDUIT
- 150 N32 CONCRETE SLAB S182 FABRIC
- 100 DGB-20 COMPACTED TO 95% MMD
- 150 N32 CONCRETE SLAB S182 FABRIC ON 50mm SAND BED
- 100 DGB-20 COMPACTED TO 95% MMD
- 100 DGB-20 COMPACTED TO 97% MMD
- SUBGRADE COMPACTED TO 95% MMD
- CUT
- FILL
- DESIGN CONTOURS (1m INTERVAL)

RECONSTRUCT EXISTING STEEL POST & RAIL FENCE AT COMPLETE FENCE WORKS. SECURITY FENCE TO BE CONSTRUCTED IMMEDIATELY ADJACENT.

AFter the completion of works, all other disturbed areas to be reinstated unless otherwise noted with 100mm site topsoil, seeded in accordance with site comp. and stabilised with bitumen straw mulch. Place jute mesh in accordance with manufacturer's recommendations where directed.

		<b>REVENUE METER SITE GENERAL ARRANGEMENT PLAN</b>	
PROJECT: GOOGONG INTEGRATED WATER CYCLE		DRAWING NUMBER: C11140-555+	
PROJECT NO:		SHEET NO:	
DATE:		DRAWN BY:	
CHECKED BY:		APPROVED BY:	
PROJECT NO:		SHEET NO:	
DATE:		DRAWN BY:	
CHECKED BY:		APPROVED BY:	











# Appendix B Ecological advice

19 December 2013

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## **Googong IWC Network (east) – Consistency Assessment**

**Biosis project number: 17575**

Dear Mr Fields,

This letter presents the results of a consistency assessment for impacts upon ecological values caused by a minor change to the design of the Googong Integrated Water Cycle (IWC) network Project (east).

The original design involved the construction of two in ground water main pits on the pipeline within the road reserve for Googong Dam Road. The required design change involves the location of the two water main pits above ground and the construction of a short access road off Googong Dam Road to reach the pit location.

The design change will result in the removal of a maximum of an additional three immature Red Box (*Eucalyptus polyanthemos*) and five Late Black Wattle (*Acacia mearnsii*), all of which were planted during revegetation works undertaken approx. 15 to 20 years ago. None of the subject trees support hollows, bird nests or other notable fauna habitat values. The groundstorey throughout the vicinity of the subject area comprises native pasture of low species diversity and overall poor quality.

### **Consistency with the concept and project approvals**

In accordance with the Construction Environmental Management Plan (CEMP), a consistency assessment is required where there will be alterations to the approved project design. Should the modified design be determined by Googong Township Pty Ltd (the proponent) to be consistent with the approved project, no additional approval (i.e. from the Department of Planning and Infrastructure) is required.

As detailed in the Googong Township Water Cycle Project Stage A – Network Pre-clearing Survey Report (Biosis Research 2012), the vegetation in the locality of the subject area is of high value to native birds, including several species of threatened woodland birds. However, with regard to the potential for additional impacts to the ecological values of the area (i.e. fauna habitat etc), the additional impacts resulting from the additional removal of up to eight immature previously planted native trees will be negligible. The likelihood for significant impacts upon threatened species, threatened ecological communities and migratory species remains low. Overall, from an ecological impact perspective, the difference in likely/potential impact upon threatened flora and fauna between the revised design and the previously approved design is considered to

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be inconsequential. Accordingly, the conclusion of our assessment is that the revised design is consistent with current approvals.

I trust that the information and assessment provided herein is of use. Please do not hesitate to contact me should you wish to discuss.

Yours sincerely

A handwritten signature in black ink, appearing to read "Robert Speirs".

**Robert Speirs**  
Senior Ecologist