

Review of Environmental Factors

Addendum

Prospect South to Macarthur Distribution Systems Link – Project Modification at Prospect Reservoir

1 Project Summary

Project information

Project location

The Prospect South to Macarthur distribution system link project will supply drinking water to the Western Sydney Aerotropolis Growth Area (WSAGA) and the South West Growth Area (SWGA) to meet the demand for drinking water due to urban growth.

The approved project was planned to use new and existing infrastructure to transfer around 120 million litres (ML) per day. The project was planned to deliver around 35km of additional pipework, three new water pumping stations, upgrades to two pumping stations, 100ML of additional reservoir capacity and upgrades at Macarthur Water Filtration Plant.

The project is located in Liverpool, Camden and Campbelltown Local Government Areas (LGA), on Sydney Water land, private land and in Transport for NSW (TfNSW) and council road corridors.

The proposed modification is located at transformer kiosk at a pit on the Prospect to Pipehead Tunnel at Prospect Reservoir (Lot 304/DP 1122291).

Project scope

The approved project consists of:

- pipelines
- two new reservoirs at Oran Park (WS0477 and WS0478)
- new pumping stations at Lowes Creek (WP0432), Harrington Park (WP0414), Carnes Hill (WP0434)
- upgrades to existing pumping stations at Prospect (WP184A), Sugarloaf Valves (WP0185)
- water chlorination facilities at Oran Park Reservoir, Narellan South Reservoir (WS0301), Sugarloaf Valves and Campbelltown South Reservoir (WS0180)
- upgrades to Macarthur Water Filtration Plant (WFP) (WT0046)
- other associated infrastructure, such as pressure release valves, pipework modifications at existing assets.

An addendum was approved in February 2021 in relation to changes at multiple sites listed above.

The proposed change required to the original scope at Prospect Reservoir related to the upgrade of the high voltage (HV) power lines supplying power to the pumping station.

Approved REF

Prospect South to Macarthur Distribution System Link (December 2019)

Project change

Install a transformer kiosk at a pit on the Prospect to Pipehead Tunnel. This new kiosk will replace a ring main unit. The new kiosk will be larger than the existing unit and a larger slab is required.

The new slab would limit access to high voltage (HV) overhead wires for operation and maintenance trucks. A new section of access road is required to maintain access. This requires removal of approximately 0.015ha of "River flat Eucalypt Forest on Coastal Floodplains" (Threatened Ecological Community) (Figure 1).

Justification for project change

The new kiosk is required to replace the old ring main unit as part of the HV works associated with the upgrade to WP184A.

Currently, truck access to overhead wires near the tunnel pit for maintenance is limited. The extension of the kiosk by 1m would mean that rigid trucks do not have an adequate turning circle to access the overhead wires. The vegetation removal is required to allow continued access for truck movements along the existing track to the high voltage overhead powerlines.

2 Conclusion

This Review of Environmental Factors (REF) assesses potential environmental impacts of additional vegetation removal as part of the Prospect South to Macarthur Distribution System Link and was prepared under Division 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act), with Sydney Water both the proponent and determining authority. The State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) allows the proposal to be carried out without development consent. The proposal has also been considered against the matters listed in subsection 171 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) (Appendix A).

Any additional environmental impacts are considered minor. The assessment shows that if we adopt the measures identified in this addendum, and the original REF and addendum, the proposal would not have a significant environmental impact.

The Sydney Water Project Manager is accountable to ensure the proposal is carried out as described in this REF. If the scope of work or work methods described in this REF change significantly following determination, additional environmental impact assessment may be required.

3 Sign off

Decision Statement

During construction, the main potential environmental impacts of the proposal are typical construction impacts such as soil, flora and fauna and heritage. During operation, environmental impacts are not expected. The proposal will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats. Accordingly, a Species Impact Statement (SIS) and/or Biodiversity Development Assessment Report (BDAR) is not required.

It is considered that, given the nature, scale and extent of impacts and implementation of the safeguards outlined in this REF, the proposed work is unlikely to have a significant impact on the environment. Accordingly, we do not require an Environmental Impact Statement (EIS) and the proposal may proceed.

Certification

I certify that I have reviewed and endorsed the contents of this REF document and, to the best of my knowledge, it is in accordance with the EP&A Act, the EP&A Regulation and the Guidelines approved under section 170 of the EP&A Regulation and the information it contains is neither false nor misleading.

Prepared by:	Reviewed by:	Endorsed by:	Approved by:

4 Legislative consideration

There are additional legislative requirements above those already assessed in Prospect South to Macarthur Distribution System Link REF (December 2019). These additional requirements are due to changes to legislation since REF approval. Only those legislative changes are described below. All other planning instruments and pieces of legislation, and their relevance to the proposal, are considered to be consistent with the approved REF.

The project change is required to facilitate development for the purpose of a water supply in unzoned land within an area covered by the State Environmental Planning Policy (SEPP) (Precincts – Western Parkland City) 2021. The project is permissible without consent in accordance with section 2.158(1) of the SEPP (Transport and Infrastructure) 2021.

Sydney Water is the proponent and determining authority under the EP&A Act. The proposal does not require development consent, and is not classified as State Significant Infrastructure. Accordingly, this REF addendum has been assessed under Division 5.1 of the EP&A Act and Sydney Water can self-determine the project.

5 Additional environmental impacts and mitigation measures

An EIA compliance review checklist was completed which concluded that additional impacts to topography, geology, and soils, flora and fauna, and heritage, could result from the proposed change compared to the approved REF. These impacts are listed in the table below, with additional mitigation measures identified.

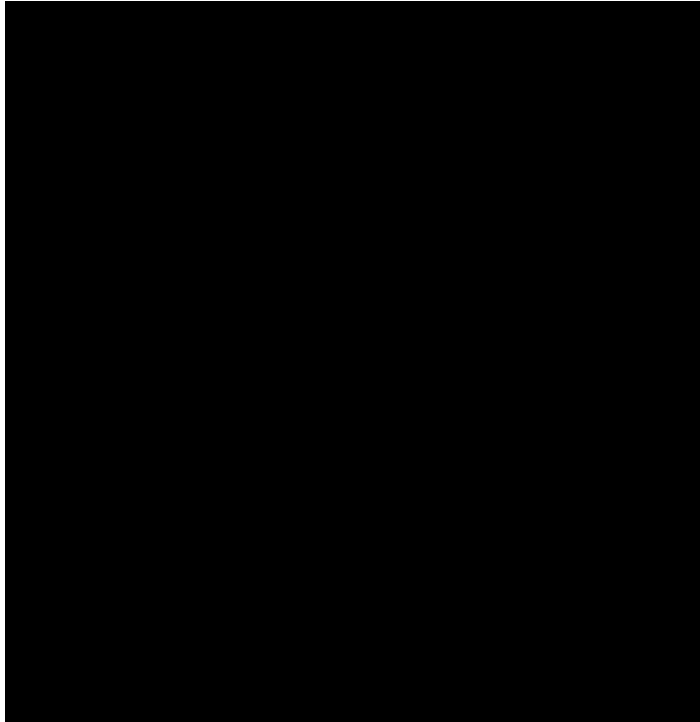
All other environmental impacts and mitigation measures identified in the original REF (December 2019) remain the same and will be incorporated into the Contractors CEMP.

Environmental impacts table		
Aspect	Additional impacts	Additional mitigation measures
Topography, geology and soils	<p>The removal of approximately 0.015ha of vegetation will generate an additional 0.015ha of cleared soil.</p> <p>Although a relatively minor amount of exposed soil in relation to the wider project, there is potential for additional localised runoff, and mud tracking if trucks drive over the soil during or after rain events. The soil type 9130bt Blacktown has poor drainage so is likely to retain water following rain events.</p>	<p>Project Soil and Water Management Plan (SWMP) to be updated to reflect new scope</p>
Flora and fauna	<p>The vegetation impacted by the proposal is the TEC “River Flat Eucalypt Forest on Coastal Floodplains”.</p> <p>Approximately 0.015ha of mature vegetation is required to be removed. This vegetation is within the field assessment area of the approved REF addendum and was assessed to be indirectly impacted (Eco Logical Australia 2020. Prospect South to Macarthur system drinking water link Flora and Fauna Assessment Addendum). As part of the addendum, a Test of Significance was performed for the River Flat Eucalypt Forest for all vegetation assessed to be both directly and indirectly impacted. Approximately 0.52ha of River Flat Eucalypt Forest assessed for direct impact (removal) along the power lines at Prospect no longer needs to be done. Therefore, the overall direct impact has been reduced, and the current Test of Significance remains valid.</p> <p>The overall additional impact is considered to be insignificant as the size of the area to be removed (0.015ha) is significantly smaller than the area of the whole threatened community (over 35ha) and also the area of this TEC previously assessed for removal (0.52ha – which remains extant). In addition, as the vegetation to be removed is on the edge of the community (and has been since at least 2009), it is likely to be more disturbed and have lower ecological value than remnant vegetation further from the access track.</p>	<p>Existing safeguards including pre-clearing checks for habitat and fauna presence are to be complied with.</p> <p>No more than the minimum amount of vegetation required to be removed to facilitate the truck movements, is to be impacted.</p>

Overall impact is assessed to be consistent with the direct and indirect impacts, and any tests of significance or assessments of significance, performed for the Addendum from February 2021.

**Heritage –
Aboriginal and
non-Aboriginal**

Aboriginal heritage



No additional safeguards required.

Non-Aboriginal heritage

The proposed works are within the footprint of:

- Section 170 Sydney Water Heritage Listed item Prospect Reservoir (ID 4575804)
- State Heritage Register Listed item Prospect Reservoir and surrounds (ID 01370)
- SEPP (Precincts – Western Parklands City) 2021 items:
 - Item 4 – Prospect Reservoir – state significance
 - Item 5 – Spotted Gum Forest – local significance

A section 60 approval is not required for these additional works as the vegetation to be removed has been assessed as non-significant. The vegetation removal will be done under Section 57(2) Exemption 13, negating the need for a s69 approval.



Figure 1 Project Change

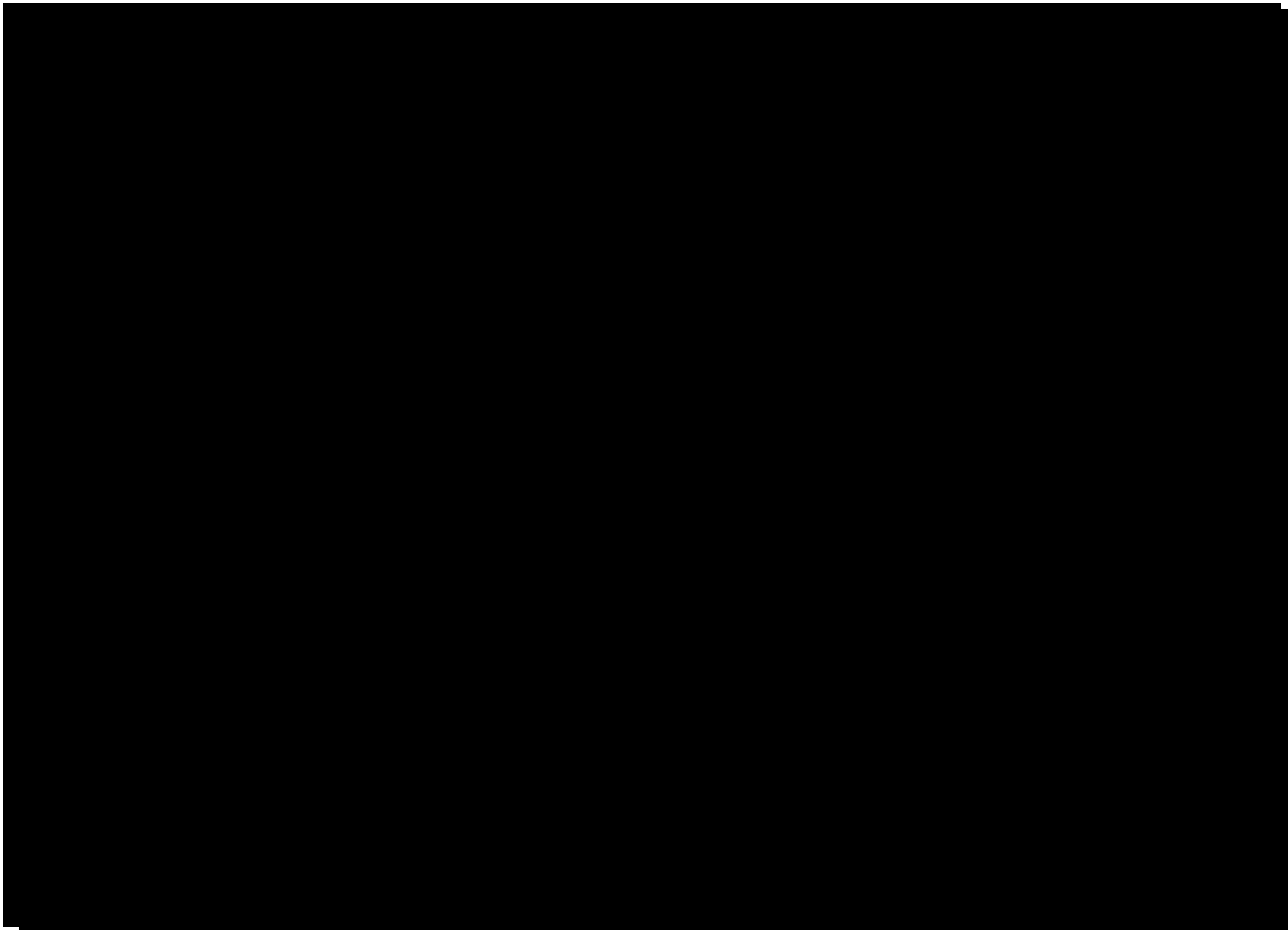


Figure 1. Zoomed in map of additional vegetation removal required.

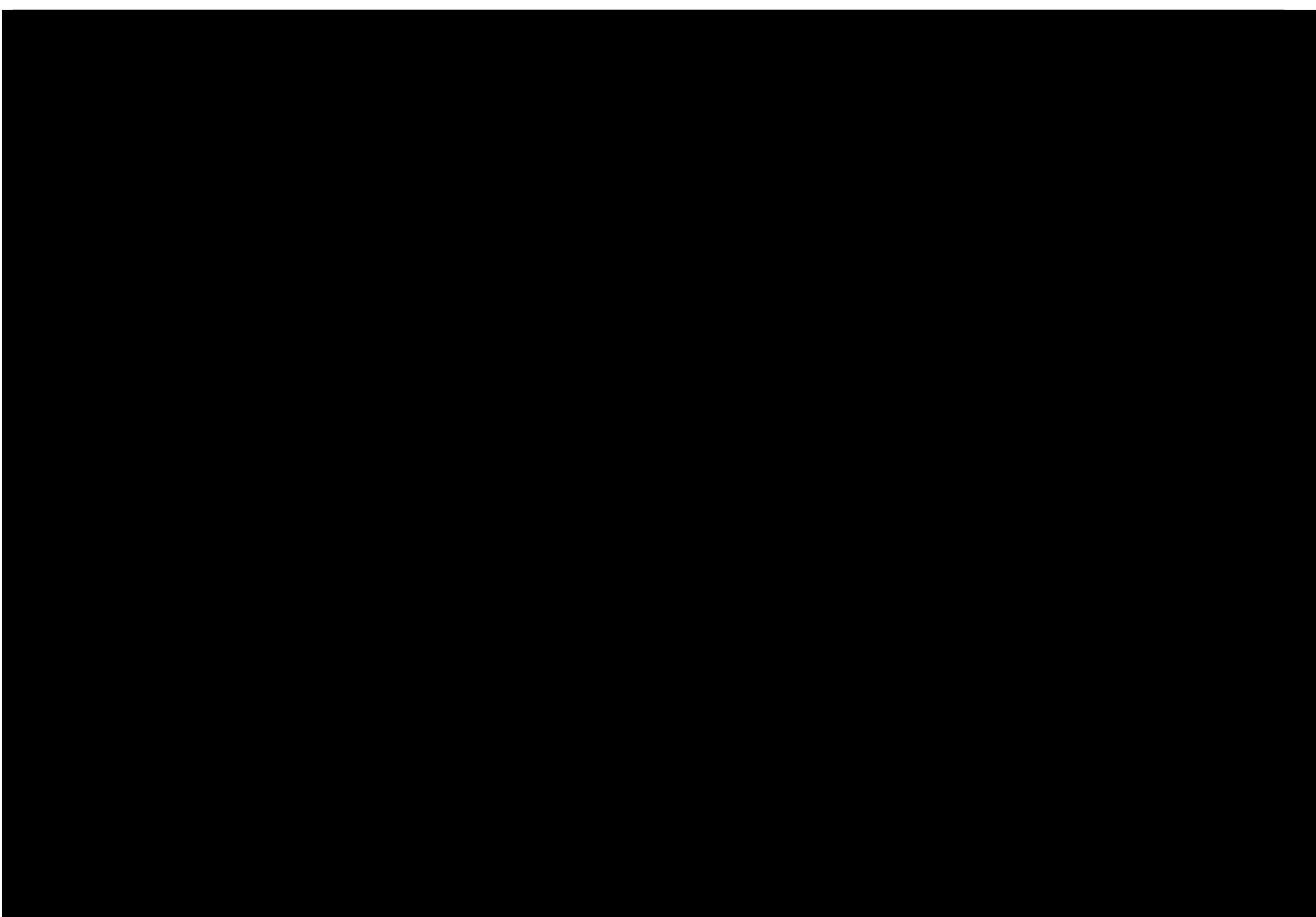


Figure 2. Map showing the location of the additional vegetation removal within the vegetation impacts assessed for the full project