

# Review of Environmental Factors Addendum

## Malabar System Investment Program Near Term Works – Package 3 and 4B

### Determination

This Review of Environmental Factors Addendum (REFA) assesses potential environmental impacts of the proposed change to the Malabar System Investment Program (MSIP) Near Term Works – Package 3 and 4B project. The REFA 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 Sydney Water Project Manager is accountable for ensuring the proposal is carried out as described in this REFA and the approved REF. Additional environmental impact assessment may be required if the scope of work or work methods described in this REFA change significantly following determination.

### Certification


I certify that I have reviewed and endorsed this REFA and, to the best of my knowledge, it is in accordance with the EP&A Act and the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation). The proposal has been considered against matters listed in section 171 (Appendix A) and the guidelines approved under section 170 of the EP&A Regulation. The information it contains is neither false nor misleading.

Prepared by:	Reviewed and endorsed by:	Endorsed by:
 Dike Umolu Environmental Advisor Fulton Hogan Date: 27/11/2025	 Prinya Khamphouvong Environment Representative Sydney Water Date: 10/12/2025	 Sergio Giglioli Senior Project Manager Sydney Water Date: 10/12/2025

### Decision Statement

The main potential additional construction environmental impact from the proposal change is to flora and fauna. During operation, no additional impacts are anticipated. 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. Therefore, a Species Impact Statement (SIS) and/or Biodiversity Development Assessment Report (BDAR) is not required.

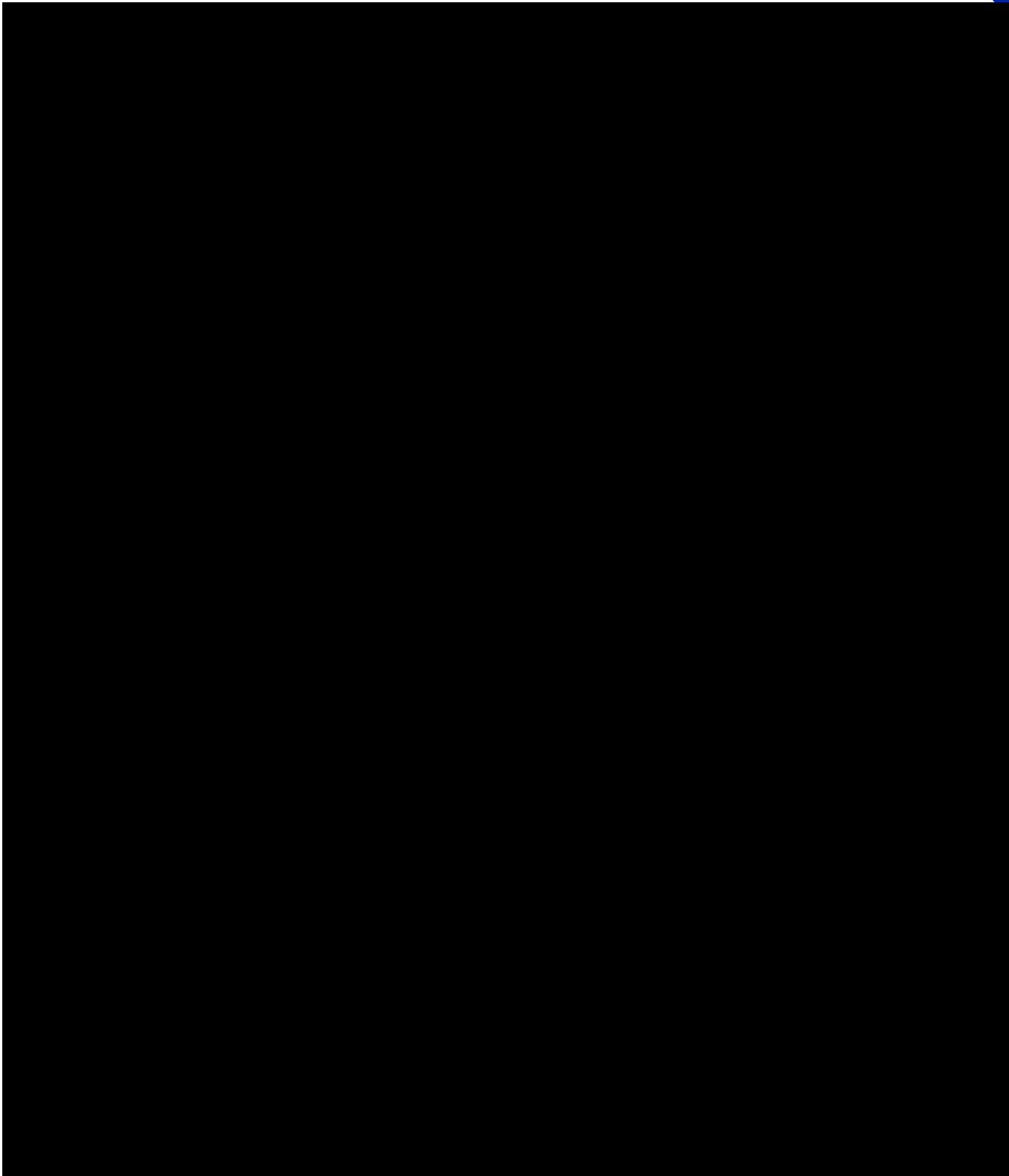
Given the nature, scale and extent of impacts and implementation of the mitigation measures outlined in this REF, the proposal is unlikely to have a significant impact on the environment. Therefore, we do not require an Environmental Impact Statement (EIS) and the proposal may proceed.

<b>Determined by:</b>		Murray Johnson, Senior Manager Environment and Heritage, Sydney Water Date: 11/12/2025
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# 1. Proposal description

Table 1 Proposal justification, change and methodology

Aspect	Relevance to proposal
Approved REF	Malabar System Investment Program (MSIP) Near Term Works – Package 3 and 4B (May 2024).
Location and land ownership	The proposal is in Sherwin Park owned by NSW Department of Education and managed as a park and sports field by Canley Vale High School. The proposal is at Lot 1 DP 611366 in Canley Vale (refer to Figure 1-1 and Figure 1-2).
Justification for proposal change	The original REF did not include construction of two wastewater pipelines, that connect to the access pit and maintenance chamber in Sherwin Park.
Proposal change description and methodology	<p>This REFA assesses additional construction activities within Sherwin Park including the following:</p> <ul style="list-style-type: none"><li>• erect temporary fencing</li><li>• remove 6 trees</li><li>• excavate a trench about 60 metres (m) long, 1.5 m wide and 4 m deep</li><li>• install two DN250 mm wastewater pipes</li><li>• backfill excavated areas.</li></ul>
Site establishment and access tracks	Site establishment includes stripping and stockpiling topsoil. The topsoil would be reused for constructing bunds around the work area and during restoration. No additional access roads are required for the proposal change.
Proposal timing	Construction is expected to start late 2025 or early 2026 and take about 8 weeks to complete.



- Fairfield WRRF
- Approved REF proposal area
- REF Addendum proposal area
- Key Fish Habitat
- Coastal wetlands
- Coastal wetlands proximity area
- Local heritage item
- AHIMS site (50m buffer)
- Railway
- Hydroline



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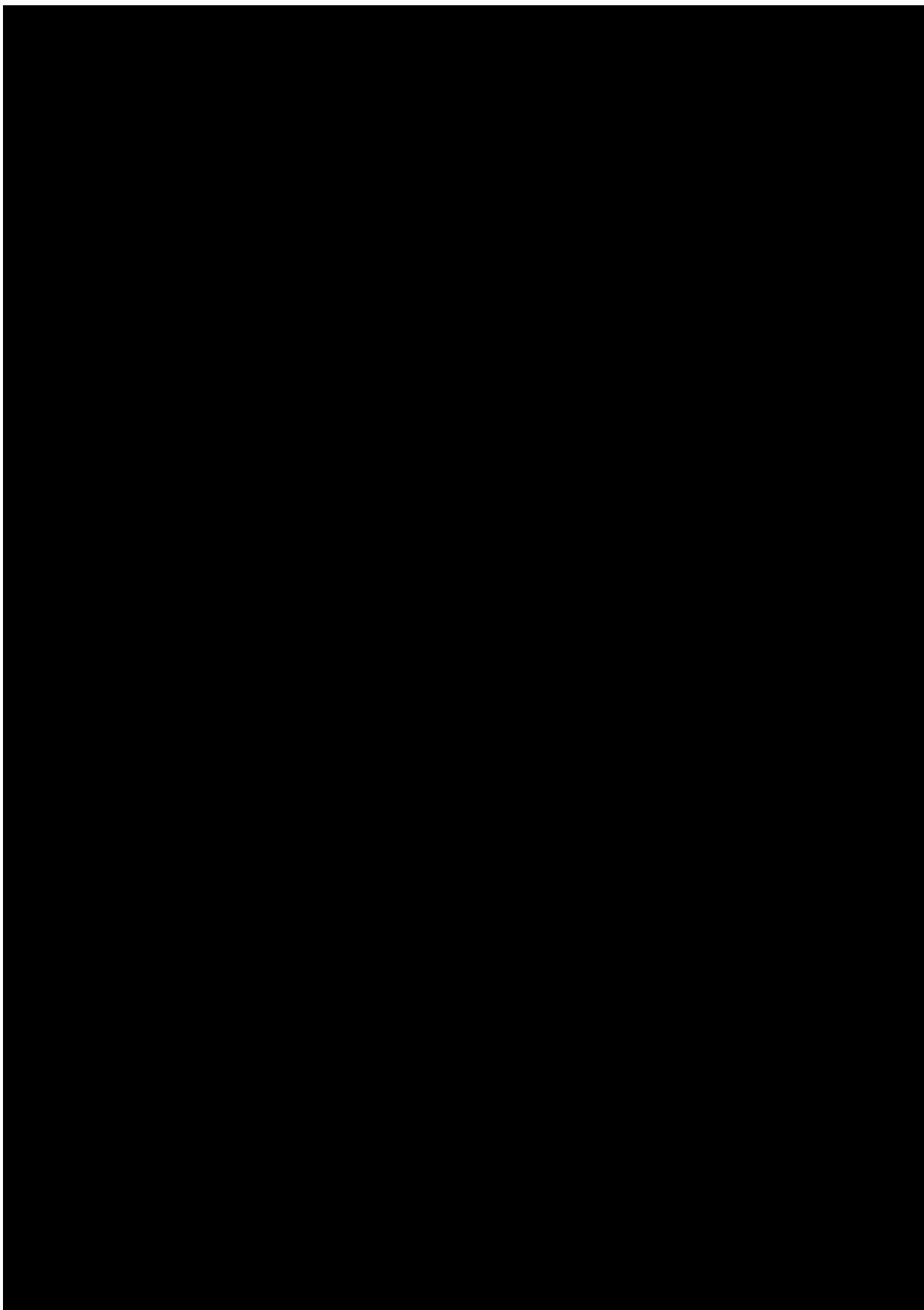
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Figure 1-1 Overview location of proposal change and key environmental constraints



The following image has been redacted to protect sensitive Aboriginal heritage.



## 2. Consultation

### 2.1 Community and stakeholder consultation – general

Our approach to community and stakeholder consultation is guided by Sydney Water’s community and stakeholder engagement guidelines.

Stakeholder and community engagement is a planned process of initiating and maintaining relationships with external parties who have an interest in our activities. Community and stakeholder engagement:

- enables us to explain strategy, policy, proposals, proposal or programs
- gives the community and stakeholders the opportunity to share their knowledge, issues and concerns
- enables us to understand community and stakeholder views in our decision-making processes alongside safety, environment, economic, technical and operational factors.

The nature, scale and extent of the proposal’s potential impact has been evaluated in this REFA. If our work impacts the community in some way, we will consult with affected groups throughout the proposal. This includes engaging the broader community and stakeholders during plan or strategy development or before making key decisions.

We will also provide local councils with reasonable notice when we would like to commence works. Local council(s) will be consulted about matters identified in environmental planning instruments such as public safety issues, temporary works on council land, and full or partial road closures of council managed roads (refer below).

### 2.2 Community and stakeholder consultation – proposal

A summary of the additional consultation performed for the proposal change is shown in Table 2 including consultation outcomes.

**Table 2 Proposal consultation**

Stakeholder	Consultation type	Outcome
NSW Department of Education and Canley Vale High School	Email and meetings	The proposal is on land owned by the NSW Department of Education and used by Canley Vale High School. Consultation was undertaken in October 2025 about the proposed changes and no objections were raised.
First Nations and Local Aboriginal Land Council	Meetings	Consultation was conducted with First Nations people and the Local Aboriginal Land Council in September 2025 regarding the proposed [REDACTED]. No concerns were raised during this engagement.

This information has been redacted to protect sensitive Aboriginal heritage information



Residents	Door knock	Consultation was undertaken in August 2025 with impacted residents via door knocking, notifications and leaving 'Sorry We Missed You' card. No specific issues were raised as part of the consultation.
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### **2.3 Consultation required under State Environmental Planning Policies and other legislation**

No additional consultation is required by State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) for the proposal change.



### 3. Legislative requirements

Additional legislative requirements above those already assessed in the approved REF are in Table 3.

**Table 3 Consideration of key environmental legislation**

Legislation	Relevance to proposal	Permit or approval	Timing and responsibility
<i>Fisheries Management Act 1994 (FM Act)</i>	<p>Orphan School Creek is a Key Fish Habitat (KFH). Although the proposal requires excavation in mapped KFH, excavation will be above the top of bank. This area is currently a mown lawn and was previously cleared and disturbed during the construction of Sherwin Park.</p> <p>Notification to Department of Primary Industries (Fisheries) is not required.</p>	N/A	N/A

## 4. Environmental assessment

The environmental impacts checklist (SWEMS0019.01) was considered for the proposal change. Table 4 includes only the potentially impacted/ changed aspects and Table 4 lists additional mitigation measures. All other environmental impacts in the approved REF remain the same and will be incorporated into the contractor's CEMP.

**Table 4 review of environmental aspects**

Aspect	Potential additional impacts
<p><b>Flora and fauna</b></p>	<p>An ecology assessment was carried out by Waratah Ecology on 20 October 2025 to assess potential impacts of the proposal on flora and fauna (Appendix B). Findings and recommendations are summarised below.</p> <p><b>Existing Environment</b></p> <p>The proposal is adjacent to a playing field with mown grass and mature native trees. The vegetation surrounding the proposal area is mapped as Plant Community Type (PCT) 4024: <i>Cumberland Blue Box Riverflat Forest</i> which has associated Threatened Ecological Communities (TECs) under the <i>Biodiversity Conservation Act 2016</i> (BC Act) and <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act).</p> <p>Due to the absence of a native mid-storey layer, shrubs and groundcover, this vegetation does not meet the TEC listing requirements.</p> <p><b>Construction impacts</b></p> <p>The proposal requires the removal of up to 0.076 ha of native vegetation. This includes 6 trees with 2 identified as having hollows. The proposal is unlikely to require groundwater dewatering beyond what can be used for dust suppression. No impacts to Groundwater Dependent Ecosystems are expected.</p> <p>A review of the NSW BioNet Atlas and the Protected Matters Search Tool identified 23 threatened flora species and 44 threatened fauna species that are known or considered likely to occur within 5km of the proposal area.</p> <p>A habitat assessment and review of recent records was undertaken to determine the likelihood of occurrence and whether a significant impact assessment was required. Sixty five threatened species were excluded from further consideration as they do not have suitable habitat in the proposal area and are not likely to be impacted by the proposed works.</p> <p>Native bird species were identified foraging within the trees in the proposal area. Whilst suitable habitat is present throughout the site, the field survey did not record any BC or EPBC Act listed threatened flora or fauna species.</p> <p>Assessments of significance under the BC Act and EPBC Act were carried out for 2 threatened fauna species with a moderate or higher likelihood of occurrence. The 2 species are the Little Lorikeet and the Grey-headed Flying fox. The Little Lorikeet is highly mobile and there is similar habitat in the locality. Additionally, removal of vegetation is unlikely to cause fragmentation.</p> <p>Habitat to be impacted by the proposal consists of foraging habitat which is not considered to be a of high importance to the long-term survival of Grey-headed Flying fox. There are no breeding camps within the proposal area.</p>



The assessments found that no significant impact to threatened fauna species were likely.

Table 5 outlines the required tree offsets as outlined in Sydney Water's Biodiversity Offset Guide (SWEMS0019.13). Replanting in the impacted area will be done as a preference to planting outside the proposal area.

**Table 5: Tree offset multipliers**

Loss of biodiversity value resulting from works	Total impact	Offset multiplier	Offset requirements
Native trees	6 trees	3:1	18
Tree hollow	2 hollows	2:1	2 salvaged hollows or 4 nestboxes if salvage is not possible

No impacts are expected to flora and fauna during operation.

**Aboriginal heritage**

An Aboriginal Heritage Due Diligence (AHDD) was carried out by Artefact Heritage on 9 October 2025 to assess potential impacts of the proposal on Aboriginal Heritage (Appendix C).

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[Redacted text]

With the implementation of the mitigation measures, impacts to Aboriginal heritage are expected to be negligible.

No impacts to Aboriginal heritage are expected during operation.

**Water and drainage**

The proposal is about 30 m south of Orphan School Creek which is listed as Key Fish Habitat (KFH). The proposal will involve excavation in the KFH, above the top of bank in a mown lawn that was previously cleared and disturbed during the construction of Sherwin Park.

Previous site investigations in the approved REF indicate there is a low risk of encountering groundwater. The proposal is unlikely to require groundwater dewatering beyond what can be used for dust suppression. With the implementation of the mitigation measures below, impacts to water and drainage can be adequately managed and residual impacts are expected to be negligible. No impacts to water and drainage are expected during operation.

**Social and visual**

Construction methodologies are generally consistent with the approved REF. As described in the approved REF there will be temporary visual and amenity impact associated with the construction works in Sherwin Park. There will be a minor additional impact to Canley Vale High School who use the park for sporting and recreational activities. Sherwin Park will remain open apart from a small section required for the construction. Safe access around the proposal area will be maintained at all times.



With the implementation of the mitigation measures in the approved REF and this REFA, construction impacts to social and visual amenity can be adequately managed.

No social or visual impacts are expected during operation as the proposal is below ground. The impacted vegetation will be offset and adjacent residences have been consulted.

**Table 6 Mitigation measures**

Mitigation measures	
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If intercepting more groundwater than identified in the approved REF or this REFA, the contractor will obtain a groundwater Water Supply Works Approval. The Delivery Contractor is responsible for:

- providing expert hydrogeological technical information to obtain the approvals
- preparing a Dewatering Management Plan
- complying with the conditions of the approvals (such as protecting water quality; minimising aquifer extraction volumes, monitoring extraction with flow meters and recording volumes).

Maintain access to Sherwin Park during construction.

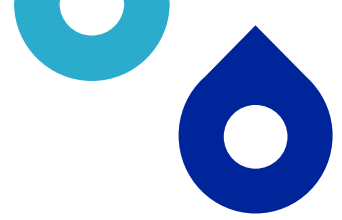
Consult Taronga Zoo's [redacted] prior to the removal of vegetation to determine the usefulness of vegetation waste as koala feed.

Retain dead tree trunks, bush rock or logs in-situ unless they are in the impact area and moving is unavoidable. Reposition material elsewhere on the site or approved adjacent sites. If native fauna is likely to be present, a licenced ecologist should conduct a pre-clearance inspection and undertake fauna relocation.

Inspect vegetation for potential fauna prior to clearing or trimming. If fauna is present, or ecological assessment has determined high likelihood of native fauna presence (including hollow bearing trees), engage WIRES or a licenced ecologist to inspect and relocate fauna before works.

Protect trees in accordance with the requirements of Australian Standard 4970- 2009 for the Protection of Trees on Development Sites. Do not damage tree roots unless absolutely necessary, and engage a qualified arborist where roots >50mm are impacted within the Tree Protection Zone. Protect trees in accordance with the Program Delivery Guidance Standard 9.3 Biodiversity Management (ENV-GS-003).

The location of offset replanting will be prioritised in the proposal area.



## 5. Conclusion

Sydney Water has prepared this REFA to assess the potential environmental impacts of the proposal change to the Malabar System Investment Program Near Term Works – Package 3 and 4B project.

The main potential additional construction environmental impacts of the proposal change include impacts to flora and fauna. During operation, no additional impacts are expected. Given the nature, scale and extent of impacts and implementation of the mitigation measures outlined in this REFA and the approved REF, the proposal is unlikely to have a significant impact on the environment.

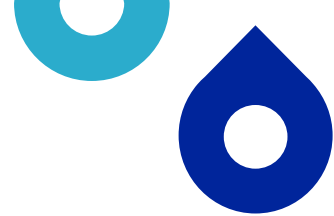


# Appendix A – Section 171 checklist

Requirements in addition to the approved REF are considered in the table below.

Section 171 checklist	REF finding
Any environmental impact on a community	There may be short-term impacts on the community with reduced access to Sherwin Park. There will be environmental improvements by implementing the EPA's requirements to minimise odour and provide a more efficient and reliable wastewater service.
Any environmental impact on the ecosystems of the locality	The proposal will result in minor environmental impacts to ecosystems of the locality as vegetation clearing is required. These impacts will be offset in accordance with the Sydney Water Biodiversity Offset Guideline. The proposal will lead to environmental improvements by ensuring a reliable wastewater service to collect and treat wastewater, minimising any impact on the ecosystem and Orphan School Creek.
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	There may be temporary impacts to the locality from construction activities such as visual impacts and temporary reduced access to Sherwin Park. The works protect the locality in the longer term, through reduced odour problems and reduced overflows to Orphan School Creek.
Any impact on the habitat of any protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i> )	The proposal will result in the removal of some habitat of protected animals, however it will not result in a significant impact to any of the threatened species within the construction corridor. Mitigation measures, including biodiversity offsets have been identified to avoid or minimise impacts on habitat areas.
Any endangering of any species of animal or plant or other form of life, whether living on land, in water or in the air	The proposal will not endanger any species. Assessments of significance concluded that the proposal is unlikely to significantly impact threatened fauna species (refer to Appendix B).
Any long-term effects on the environment	The proposal will not have any long-term impacts on the environment but will have a long-term benefit by reducing odour, providing a reliable and modern wastewater service for the area.

Section 171A of the EP&A Regulation requires a determining authority to take into account the matters a consent authority must consider under Part 6.2 of the BCSEPP for a proposal within a 'regulated catchment'. As the proposal is within the Georges River catchment, the requirements of Section 171A are applicable and have been considered. Impacts to water quality and quantity, aquatic ecology and works on flood liable land would be negligible. The proposal would have a minor impact on recreation and public access and these impacts are discussed in Section 4.



# Appendix B – Ecological Assessment



# Appendix C – Aboriginal Heritage Due Diligence

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