Review of Environmental Factors Multi-program - Category B

Forest Lodge and Whites Creek Sewer Aqueduct Rehabilitation

1 Determination

This Review of Environmental Factors Multiprogram - Category B (Category B REF) is to be read in conjunction with the Review of Environmental Factors Multi-program pipeline and related infrastructure replacement, repair and upgrades (Multi-program REF) (May 2023). Together both documents assess the potential environmental impacts of the Forest Lodge and Whites Creek Sewer Aqueduct Rehabilitation. These documents were 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 Category B REF and Multi-program REF. Additional environmental impact assessment may be required if the scope of work or work methods described in either the Multi-program REF or this Category B REF change significantly following determination.

Decision Statement

The main potential construction environmental impacts of the proposal include impacts to non-Aboriginal heritage, tree removal and noise. No operational impacts are anticipated. The proposal will not be carried out in a declared area of outstanding biodiversity value and is unlikely 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 Category B REF and the Multi-program 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.

Certification

I certify that I have reviewed and endorsed this REF, 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 by:	Endorsed by:	Approved by:
[redacted] Sam Brandley Environmental Engineer Sydney Water Date: 16/04/2025	[redacted] Samantha Prior A/Environmental Assessment Team Manager Sydney Water Date: 23/4/2025	[redacted] Clement Grech Project Manager Sydney Water Date: 26/05/2025	[redacted] Murray Johnson Senior Manager, Environment and Heritage Sydney Water Date: 23/06/2025

2 Proposal Summary

Table 1 Description of proposal

Aspect	Detailed description
Location	**Forest Lodge sewer aqueduct** Forest Lodge sewer aqueduct (refer to Figure 1) is in Minogue Crescent Reserve, Forest Lodge and is about 275 m long. The aqueduct crosses Johnston's Creek from the northwest to the southeast. The aqueduct is visible from the western side of Nelson Street, Annandale to the eastern side of Minogue Crescent, Forest Lodge. **Whites Creek sewer aqueduct** Whites Creek sewer aqueduct (refer to Figure 5) is in Lilyfield and Annandale and is about 330 m long. The aqueduct crosses Whites Creek from the northwest to the southeast. The aqueduct is visible from the eastern side of Edna St, Lilyfield to the western side of Annandale St, Annandale. The aqueducts are located on land zoned RE1 – Public Recreation, SP2 – Infrastructure and R1 – General Residential in the City of Sydney Local Government Area (LGA) and Inner West LGA. Both aqueduct sewers are part of the Northern Main Submain that drains into the Bondi Ocean Outfall Sewer and ultimately Bondi Water Resource Recovery Facility (WRRF).
Approved REF	Review of Environmental Factors Multi-program pipeline and related infrastructure replacement, repair and upgrades (Multi-program REF) (May 2023).
Proposal description	The proposal is part of the sewer rehabilitation program as detailed in the Multi-program REF. A condition assessment was prepared by SAS TTI JV in April 2023. It identified that the aqueducts are structurally sound with no major defects. However, there are many localised problems such as cracks, spalling and flaking concrete, debonded render, expansion joint and sealant deterioration, staining, corrosion and multiple signs of exfiltration. These require rectification to maintain the ongoing operational and structural reliability of the assets. The scope of work for the proposal is to repair the external structure of the Forest Lodge and Whites Creek aqueducts, which includes: • site establishment • cleaning of the external aqueduct surface with low pressure water (<100 psi) and natural detergents • concrete repair works to address structural deficiencies and prevent further deterioration. Cracks will be routed out, drilled into and injected with a low viscosity crack sealant followed by a flexible joint sealant. Areas of concrete spalling will be repaired by removing the deteriorated concrete, cleaning the reinforcement if exposed, and applying a high strength, low shrink mortar • replacing the sealant in the longitudinal expansion joints • repairing vertical expansion joints by treating spalling and flaking concrete

	• cleaning and repainting cast iron cover plates to maintain corrosion protection • removing vegetation and roots growing on the aqueducts • clearing and trimming of vegetation to maintain safe clearance distances • renew waterproof roof membrane by infilling with VersEseal liquid rubber. This will create a level surface to direct water over the parapet walls and prevent the formation of standing water and buildup of debris and vegetation • potential road detours may occur when works are taking place on the Forest Lodge aqueduct that crosses Nelson Lane and Minogue Crescent • site demobilisation. A map showing the full extent of the Forest Lodge aqueduct, the method of access and setup positions is displayed in Figure 2.
Site compound	Two compounds are proposed for the Forest Lodge aqueduct works in Minogue Crescent Reserve and the PCYC carpark. **Minogue Crescent Reserve** This compound will be established in the top section of Minogue Crescent Reserve (see Figure 3). Access is gained through an existing boom gate on Minogue Crescent, where a path would be partitioned off from the public leading to the compound, secured with temporary fencing. **PCYC Carpark** This compound will be established in the top section of the PCYC carpark (see Figure 4). Access can be gained via Minogue Crescent. Site compounds have not been determined for the Whites Creek aqueduct. Consultation with appropriate landowners and council will occur prior to establishment of construction compounds as per the general mitigation measure in the Multi-program REF.
Construction plant and equipment	The following construction plant and equipment is required for the proposal. The type and quantity of plant and equipment may vary and would be confirmed by the construction contractor prior to works commencing. • scissor and boom lifts • skip bins • concrete pumps • air compressors • generators • concrete saws • jackhammers • hand tools • scaffolding • site facilities and amenities

- storage containers
- tip trucks
- concrete agitator trucks
- street sweepers
- light vehicles
- cranes/elevating work platforms.

Proposal timing

The proposal is expected to commence in October 2025 and would take approximately 12 months to complete. During this time all works will be carried out during standard construction hours (e.g. 7 am to 5pm, Monday to Friday). No weekend or Public Holiday works are expected to occur.

Works will be undertaken progressively on both sides of the aqueducts starting from the east moving towards the west. This ensures the construction footprint remains as small as possible to minimise disruption.

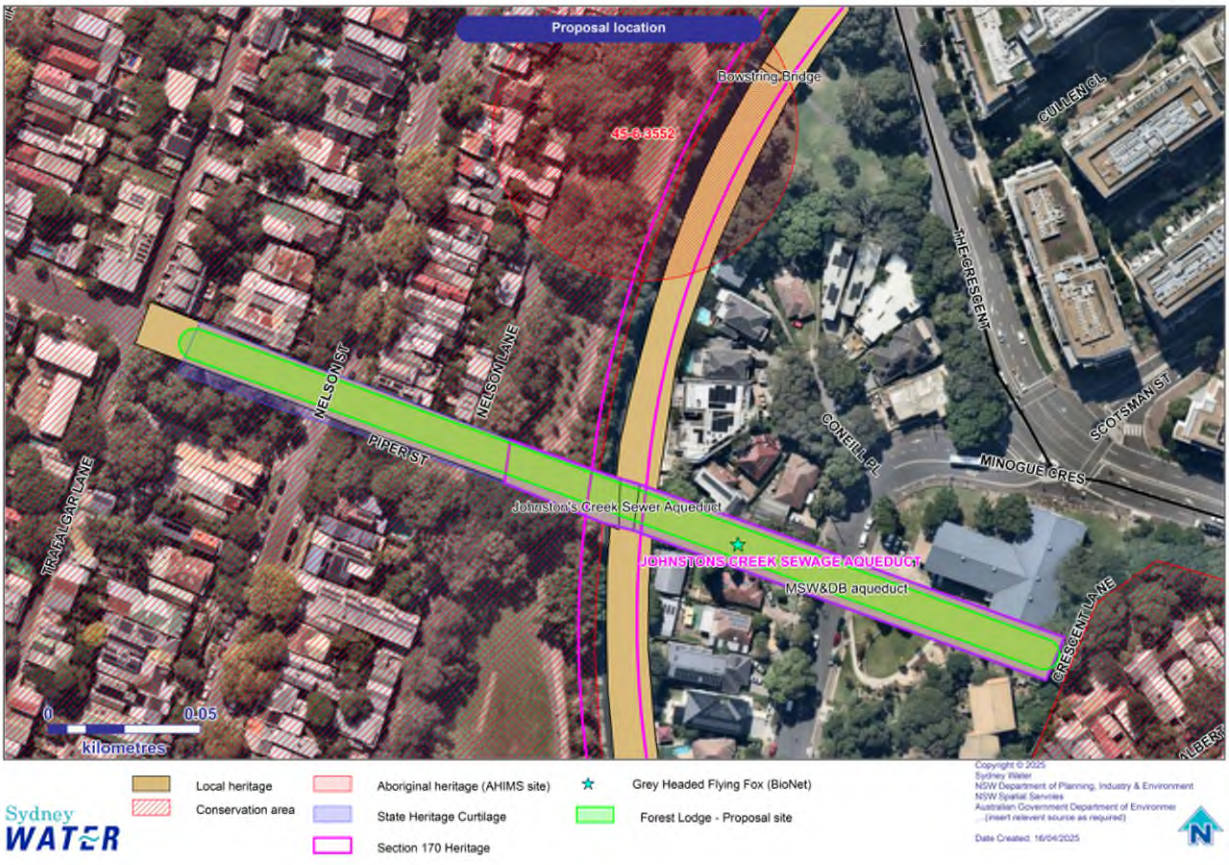

Figure 1 Johnston Creek Sewer Aqueduct (Forest Lodge aqueduct) environmental constraints

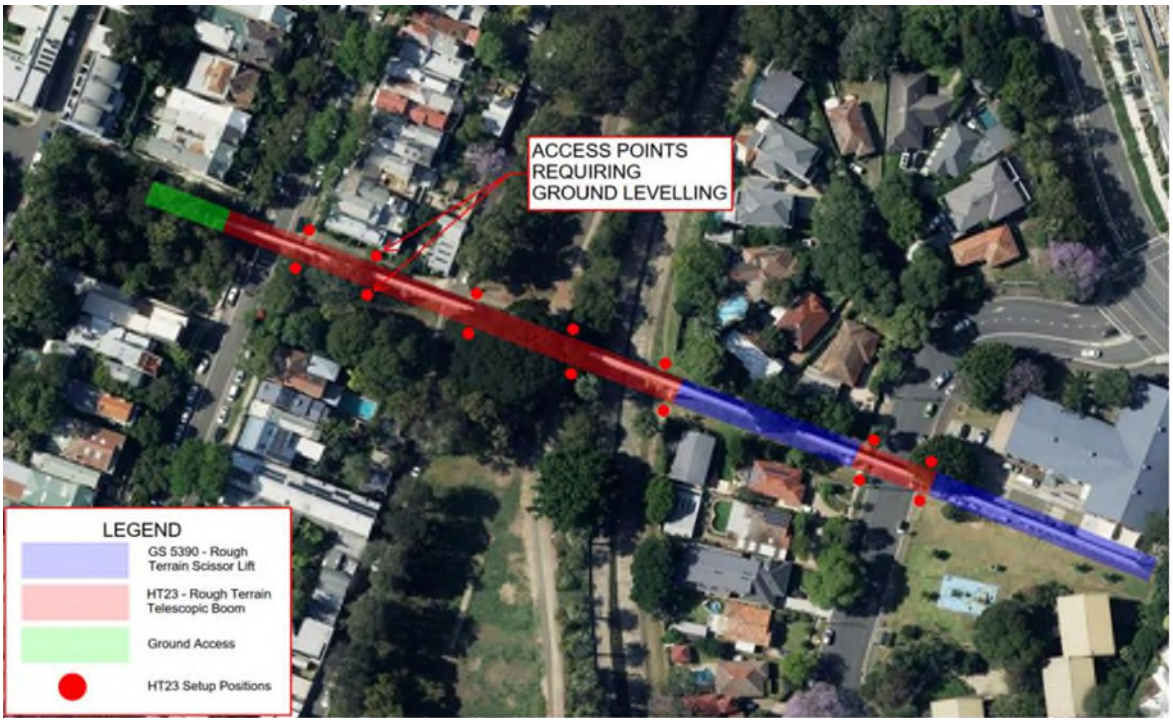

Figure 2 Forest Lodge aqueduct site access

Figure 3 Minogue Crescent Reserve Site Compound – Forest Lodge aqueduct

Figure 4 PCYC Carpark Site Compound – Forest Lodge aqueduct

Figure 5 Whites Creek aqueduct environmental constraints

3 Consultation

Sydney Water must consult with councils and other authorities for work in sensitive locations or where the work may impact other agencies' infrastructure or land. This requirement is specified in the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP). No formal consultation was required under the TISEPP (refer to Appendix B).

Adjoining landowners and the community would be consulted throughout the development of the proposal. Consultation would likely be via various communication channels such as phone calls, emails and face to face meetings to ensure each stakeholder is well-informed about upcoming activities, any potential access restrictions, initial site investigation, delivery schedules and potential impacts to access and properties.

The key stakeholders/areas affected include:

- Inner West Council & City of Sydney Council divided by Johnstons Creek
- suburbs of Annandale and Forest Lodge
- Minogue Crescent Reserve, Spindler's Park, Piper Street Reserve and Nelson St Reserve
- Minogue Crescent Road, Nelson Lane and Nelson Street
- PCYC Glebe and residents along both sides of the aqueducts
- Inner West Council Arborist Team.

The D4C Communications team, (D4C is the contractor undertaking the work), will undertake the required community engagement and notification in line with the specified timeframes and hold points below. Initial engagement will be undertaken with PCYC and councils to ensure minimal impact and facilitate prompt delivery of works.

The following hold points will be factored in when planning this work:

- 21-day newsletter introducing project and key milestones to impacted residents, local council and other stakeholders.
- Consultation with impacted stakeholders – PCYC Glebe-Leichhardt, the closest residential properties, any other impacted stakeholders or residents nearby the works and proposed site compound.
- 7-day start of work letter to impacted residents, local council, and other impacted stakeholders advising of the work and start date, nature of any works activities, implications or disruptions to parking and pedestrian movements
- 7-days full notice with a minimum of 48-hours' notice to receivers is required following individual notification for private property access.
- Update letters at key project milestones or to advise residents of scope changes.
- Thank you letters at the end of the work.
- A telephone number and email address will be provided to enable residents/stakeholders to contact the project team for further information.

4 Legislative requirements

There are additional legislative requirements beyond those already assessed in the Multi-program REF.

Table 2 Consideration of additional environmental legislation relevant to the proposal

Legislation	Additional considerations
Heritage Act 1977 (Heritage Act)	Both Forest Lodge and Whites Creek aqueducts are listed on the State Heritage Register (SHR), under Section 31 of the Heritage Act. A Section 60 approval from the Heritage Council is required for activities that impact an item on the SHR unless an exemption applies. Sydney Water's Natural Assets and Heritage Team Manager completed an assessment of the proposal. This assessment confirmed that no adverse impacts to the significance of the heritage item will occur and that the proposal is compliant with the Standard Exemptions 1, 3, 13 and 18. The Minimum Standards of Maintenance and Repair are listed in Part 3 of the Heritage Regulation 2012 and apply to all items listed on the SHR. The proposal meets the requirement under Part 3 as it involves: • Weather protection - Proposed waterproof roof capping to replace failed membrane to ensure ongoing weather protection, improved maintenance, and enable removal of redundant and intrusive PVC drainpipes.

- Security - Improved barrier gates required to reduce/prevent unauthorised egress and vandalism.
- Essential maintenance & repair - Works required to repair structural damage and deterioration, arrest metal corrosion and maintain appearance by consistent application of anti-graffiti coatings.

A Section 57(2) Standard Exemption Assessment & Record keeping form (refer to Appendix C) has been completed for the works and mitigation measures incorporated into this REF in Section 5.

5 Additional environmental impacts and mitigation measures

The tables below list the additional environmental impacts that could result from the proposal and the additional mitigation measures. All other environmental impacts and mitigation measures identified in the Multi-program REF remain the same and will be incorporated into the Contractor's Construction Environmental Management Plan (CEMP).

Table 3 Environmental impacts table

Aspect	Additional impacts
Topography, geology and soils	The proposal will not require any deep excavation activities. Minor ground disturbance may occur during tree removal and use of compound sites. Upon completion of works, all exposed areas would be restored to their pre-works condition. Figure 2 shows the indicative locations where some very minor ground levelling will need to occur so the scaffolding can be safely installed at Forest Lodge Aqueduct. There is the potential for soil to become contaminated through accidental chemical or fuel spills and leaks from construction plant and equipment, and maintenance activities during operation. However, the impact is anticipated to be low and would be managed through mitigation measures in the Multi-program REF (May 2023).
Water and drainage	The Forest Lodge aqueduct passes over Johnston Creek and Whites Creek aqueduct directly intersects Whites Creek. Both creeks are concrete lined stormwater channels and are not natural waterways. Works directly above Johnstons Creek and Whites Creek will require a catch deck to protect the waterways from falling debris during repairs. This will be achieved by installing a scaffold system at ground level spanning the full length of the creek on both sides of the aqueduct. No direct impacts to these stormwater channels are expected. However, there is some potential for indirect impacts to nearby waterways or the local stormwater network through accidental leak/spillage of fuels, chemicals or debris removed from the aqueducts.
Flora and fauna	**Forest Lodge aqueduct** A threatened bat species (Grey headed flying fox) has been sighted (BioNet species sightings) within 10 m of the proposal site. The aqueduct bridge structure is considered favourable habitat for roosting bat species. Prior to any construction activities on the

Aspect	Additional impacts
	Aqueduct and/or removal of trees, a pre-clearance survey should be undertaken by a qualified ecologist. An arborist report prepared by Canopy Consulting in July 2022 identified the tree species within the study area and assessed their condition (tree locations are shown in Figure 6). 15 trees were identified along the Forest Lodge aqueduct, with 6 trees being identified as moderate risk (trees 2, 4, 7, 9, 10 and 13) and 9 as low risk (trees 1,3, 5, 6, 8, 11, 12, 14 and 15). Two trees numbered 6 and 7 are recommended for removal due to their health or structural condition. One tree numbered 13 which is comprised of a group of four trees is recommended for removal due to their proximity to the aqueduct and the damage they appearing to be causing. Trees 3, 4 and 5 are recommended to be considered for removal. While not currently a problem, these semi-mature trees possess multiple defects which will lead to increased risk in damaging the aqueduct in the future. Overall, all remaining trees are recommended for pruning to achieve clearance from the aqueduct. Before construction commences, an updated arborist report must be prepared outlining the current condition of the trees and which branches can be removed prior to trimming. **Whites Creek aqueduct** Three threatened bat species (Large Bent-winged Bat, Large-eared Pied Bat and Yellow-bellied Sheathtail-bat) have been sighted (BioNet species sightings) within 10 m of the proposal site. The aqueduct bridge structure is considered favourable habitat for roosting bat species. Prior to any construction activities, a pre-clearance survey should be undertaken by a qualified ecologist. Some minor trimming of trees that are currently impacting the structural integrity of Whites Creek aqueduct may be required. These planted trees are non-native and are managed by council. Before construction commences, an arborist report must be prepared outlining the current condition of the trees and which branches can be removed prior to trimming. **Potential impacts** The potential ecological impacts would be minor, limited to tree trimming and, if necessary, the removal of certain trees. **Offsetting** The proposal requires offsetting in accordance with the Sydney Water Biodiversity Offset Guide (SWEMS0019.13). Removal of non-locally native or exotic trees will be offset at a ratio of 1:1. The exact number to be offset will be confirmed prior to clearing by the contractor. The location for offset planting will be confirmed with council.
Heritage	**Non-Aboriginal heritage** The Forest Lodge aqueduct is listed on the SHR (SHR #01325) as Johnston's Creek Sewer Aqueduct and is locally listed (I78) on the Inner West Local Environmental Plan 2022. The aqueduct was completed in 1897 and is a major and visibly strong component of the Northern Main Sewer extension of the Bondi Ocean Outfall Sewer. The aqueduct arches and carrier are one of the first major constructions undertaken using reinforced concrete in

Aspect	Additional impacts
	NSW and one of the first in Australia. The aqueduct is a major element of the historic built environment of the local area, and a long-held part of the recreational reserve. The Johnston's Creek Sewer aqueduct is of State heritage significance in terms of its historical, aesthetic, technical and representative values. Additionally, the proposal site crosses Johnston Creek which is a section 170 and local heritage item. The Whites Creek aqueduct is listed on the SHR (SHR #0135) and locally listed (I1204) on the Inner West Local Environmental Plan 2022. The aqueduct was completed in 1897 and is a major and highly visible component of the Northern Main Sewer extension of the Bondi Ocean Outfall Sewer. The arches and carrier of the aqueduct are one of the first major constructions undertaken using reinforced concrete in NSW and one of the first in Australia. The slender proportions of the supporting arches and sewage carrier along with its historical technology value are a major landmark for Sydney. The aqueduct is a major element of the historic built environment of the local area, and a long-held part of the recreational reserve. The Whites Creek aqueduct is partially located within area 18 of the Annandale Heritage Conservation Area listed under the Inner West Local Environmental Plan 2022. No change to any of the significant elements of this conservation area is proposed. **Potential impacts** The proposal is multi-staged and includes a wide scope of repair work to rectify defects. The visual aspect of the aqueduct's heritage significance will be temporarily impacted during construction from the installation of scaffolding. However, the scaffolding is temporary and will not impact the fabric of the aqueducts. The proposed works will not alter the significance of the heritage items or change the existing structures. Sydney Water's Natural Assets and Heritage Team Manager assessed the proposal. The proposed works comply with Standard Exemptions 1,3, 13 & 18 and is permissible without approval under section 57(2) of the *Heritage Act 1977*. Provided all conditions of the standard exemption (refer to Appendix C) are adhered to and the recommended mitigation measures are implemented, the potential for the proposed works to result in significant damage to the heritage item would be minimised. It is understood that the proposed works would result in significant benefits to the heritage items, rectifying defects that have been identified and improving the items overall condition. **Aboriginal heritage** Works are in a high-risk landscape for Aboriginal heritage (<200 m from waterway). A basic search of AHIMS was done on 21 November 2024 which identified one registered AHIMS site within 200 m of the Forest Lodge aqueduct (refer to Figure 1). Inspection of the site card revealed this is not an Aboriginal heritage site and further consideration of this site is not required. No Aboriginal heritage items are located within 200 m of Whites Creek aqueduct. The likelihood of encountering unexpected Aboriginal heritage items is low because the site has been heavily disturbed, and no significant ground disturbing activities are proposed. Based on the above information, the works can proceed with caution.
Noise and vibration	The proposal sites are in built-up suburban areas with the existing noise environment influenced by traffic, residential activities and natural sounds. The nearest sensitive receiver

Aspect	Additional impacts
	to the Forest Lodge aqueduct is a private residence located about 10 m to the south, with a direct line of sight to the works. The nearest sensitive receiver to the Whites Creek aqueduct is a private residence located about 5 m north. William Stuart Playground is located about 5 m north and Annadale skate park is about 5 m south. The Transport for NSW Construction and Maintenance Noise Estimator (TfNSW, 2022) was used to assess potential noise impacts. The noise management levels (NMLs) were established using the Rating Background Level (RBL) for the R3 representative environment defined in the noise estimator. This level best reflects the surrounding traffic volumes and noise catchment, which is characterised mainly by residential activities. The selected ground type used for the assessment was for 'developed settlements' (urban and suburban). The background noise levels for the assessment were: • Day – 50 dBA • Evening – 45 dBA • Night – 40 dBA. The distance-based assessment assessed the nosiest plant as concrete saw during standard construction hours and concluded: • Sensitive receivers within 60 m may experience moderately intrusive noise levels (20-30 dBA > background) • Sensitive receivers within 35 m may experience highly intrusive noise levels (>30 dBA> background). The noise contours for Forest Lodge aqueduct are shown in Figure 7 and Whites Creek aqueduct are shown in Figure 8. Figures 7 and 8 include recommended mitigation measures at different distances from residential receivers, as identified by the noise estimator tool. These are to be considered by the community team and offered where appropriate and include: • N: Notification (e.g. letterbox drop) • R1: Respite Period 1 (work up to three nights a week and six nights a month, with at least a week between the blocks of three shifts. This schedule does not require community consultation) • PC: Phone calls. This desktop assessment of potential impacts provides a conservate estimate of the noise levels associated with the proposal at any given period, the construction plant and equipment are assumed to operate at maximum sound levels only for brief stages. Additionally, it is highly unlikely that all construction equipment would be operating at maximum sound levels at any one time. As such, it should be noted that the predicted noise levels are highly conservative and actual noise levels are likely to be lower. Through the implementation of the outlined mitigation measures in the Multi-program REF, potential noise impacts would be minor and short term.
Air and energy	Air quality of the study area may be temporarily impacted by localised dust emissions generated during concrete repair works or from vehicle emissions associated with

Aspect	Additional impacts
	construction plant and equipment. The potential impacts are expected to be minor with the implementation of the Multi-program REF mitigation measures. There are no National Pollutant Inventory sites within 1 km of the proposal sites.
Waste and hazardous materials	Construction waste streams are anticipated to include: • redundant materials • domestic waste • green waste. Waste will be stored in separate skip bins or delineated areas within the compound or taken directly off-site to a facility licenced to accept the waste. Recycling or re-use of waste streams such as green waste and concrete is encouraged where possible. When cleaning and repairing the structure, it is important to capture any debris that may fall off, especially when working above Johnstons Creek and Whites Creek. Procedures will be implemented to limit this, which could include: • Vacuum – using a dry vacuum or dust collector to collect at the source before debris or dust has fallen. This may be used for high-risk areas such as above Johnston's Creek. • Collection mat – using the base of the mobile elevated working platform or scaffolding to collect debris. • Catch deck – installing a catchment above Johnston's Creek to ensure no debris falls into the flow. Spalling and loose render will be removed from the aqueduct structure. The material removed will be bagged, then transferred to a skip bin located in the site compound. Once full, the skip bin will be removed from site and disposed of as general waste at a waste management centre. A detailed waste register will be available on site outlining all waste removed.
Traffic and access	Forest Lodge aqueduct is accessible from Piper Street and Minogue Crescent. Whites Creek aqueduct is accessible from White Street, Smith Street and Young Street. These roads will be the main access routes for the works. During construction, the works may temporarily restrict pedestrian movements and affect street parking within the immediate vicinity of the aqueducts. Road detours may be required during works on the section of the Forest Lodge aqueduct that crosses Nelson Lane and Minogue Crescent. Local traffic impacts would be managed in accordance with traffic control plans. The chain-link fence outside the PCYC (adjacent to Minogue Crescent Reserve) will be temporarily removed during construction.
Social and visual	The proposal sites are located within urban areas surrounded by residential properties. There will be minor visual impacts from the establishment of a construction compound in a public area and while scaffolds are erected around the aqueducts. All affected residential

Aspect	Additional impacts
	receivers would be notified before construction begins with potential impacts anticipated to be temporary and minor. The playground (William Stuart Playground) and skate park directly adjacent to the works at Whites Creek will be accessible throughout construction.
Cumulative and future trends	Overall, potential impacts from the proposed works are expected to be minor and localised, and unlikely to contribute to any cumulative environmental impacts on a local or regional scale. The works will not contribute to future trends such as climate change and the weatherproofing will help protect the asset from extreme weather.

Figure 6 Tree locations

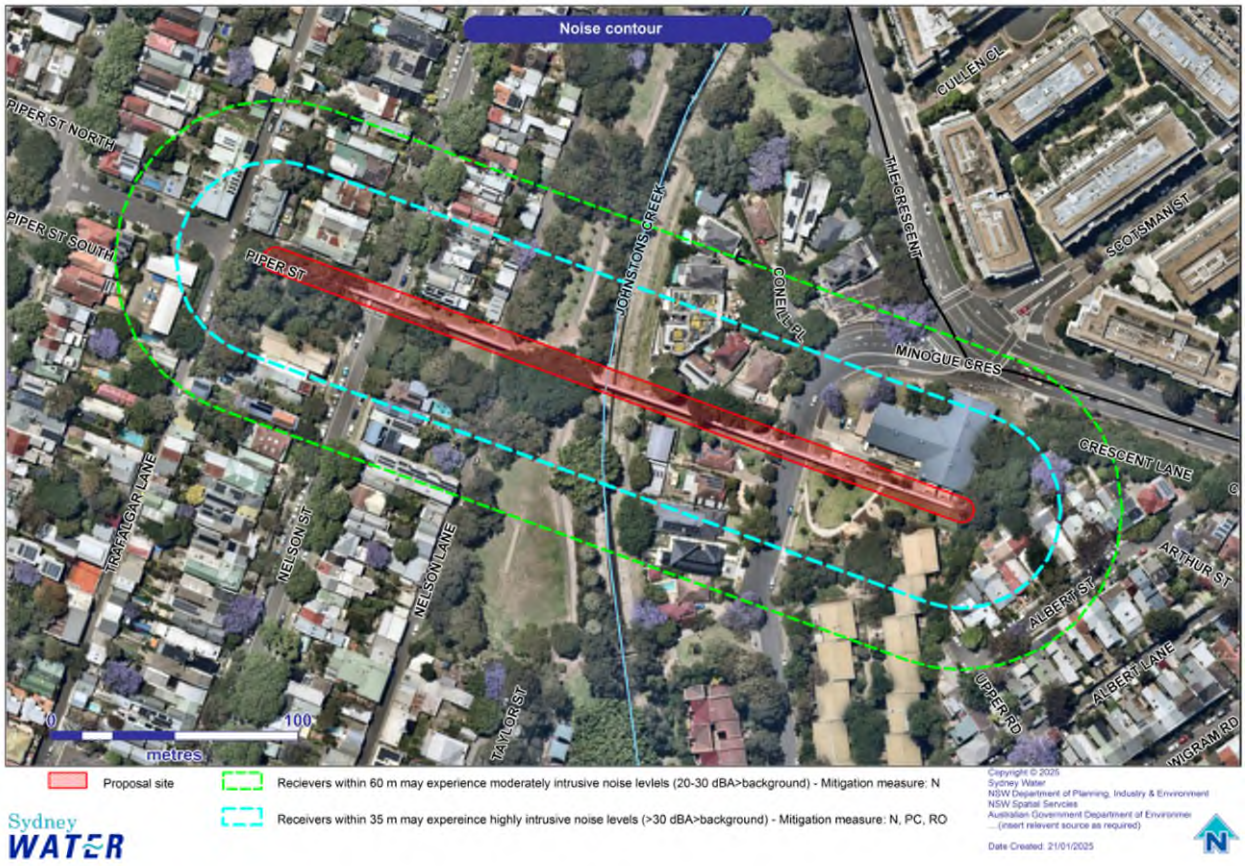

Figure 7 Forest Lodge aqueduct - noise contour (daytime)

Figure 8 White Creek aqueduct - noise contour (daytime)

Table 4 Environmental mitigation measures

Mitigation Measures	
General	

1.1	Should the proposal/methodology change from the EIA, no further environmental assessment is required provided the change:
	• remains within the assessment/study area for the EIA and has no net additional environmental impact or
	• is outside the assessment/study area for the EIA but:
	  ○ reduces impacts to biodiversity, heritage or human amenity or
	  ○ avoids engineering (for example, geological, topographical) constraints and
	  ○ after consultation with any potentially affected landowners and relevant agencies.
	The Contractor must demonstrate in writing how the changes meet these requirements, for approval by Sydney Water's Project Manager in consultation with the environmental and community representatives.

Flora and fauna	
2.1	Notify potentially affected residents of any tree removal. Notify council in relation to removal of council trees that are directly damaging or interfering with the Forest Lodge and Whites Creek aqueducts.
2.2	Vegetation removal must not occur until: • the area to be removed has been physically delineated • the Contractor's Environmental Representative has confirmed consistency with approval documentation • pre-clearing surveys for roosting bats have been completed • Sydney Water's Project Manager has provided written authorisation to commence clearing.
2.3	Offset residual impacts to native vegetation and trees in accordance with the Biodiversity Offset Guideline (SWEMS0019.13).
Waste Generation	
3.1	Manage any lead paint encountered in accordance with the WHS Regulation (2017) Part 7.2 and the Australian Standard Lead Paint Management Guidelines. Consult with Property Environmental Services where works involve removal of lead-based paint. Develop a Lead Management Plan if required.
Heritage	
4.1	A heritage targeted site induction should be provided to all contractors engaged to perform the works, to identify heritage significance of aqueducts and heritage fabric.
4.2	A photographic archival record must be taken prior to alterations and throughout the construction process, to document changes. The photographic record must be forwarded to Sydney Water's Heritage Team.
4.3	A Sydney Water Heritage Advisor should be consulted in the final selection of paint colours to ensure the colour selection is appropriate for the structures. Samples should be provided for review.
4.4	Proposed security barriers/gates should be installed in such a way that does not result in permanent damage to the structures. Fixing should be minimised and should use existing penetrations where possible.

6 Conclusion

This Category B REF outlines potential environmental impacts associated with non-Aboriginal heritage, tree removal and noise. Any additional environmental impacts are considered negligible and potential impacts can be mitigated through implementation of the measures outlined in this Category B REF and the Multi-program REF. The proposal is not likely to significantly impact the environment.

Appendix A – Section 171 checklist

Requirements in addition to the Multi-program 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 from tree removal, noise and non-Aboriginal heritage impacts. There will be environmental improvements by providing a reliable sewer service to the local community. The proposal will result in long term benefits to non-Aboriginal heritage item.
Any transformation of a locality	The proposal will not result in the transformation of a locality.
Any environmental impact on the ecosystems of the locality	The proposal will not result in environmental impacts to ecosystems of the locality.
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	The proposal will not reduce the aesthetic, recreational, scientific or other environmental quality or value of the locality.
Any effect upon a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or any other special value for present or future generations	The proposal will not have an adverse impact on the significance of the heritage item. The proposal will have a long term benefit by maintaining the heritage item.
Any impact on the habitat of any protected animals (within the meaning of the *Biodiversity Conservation Act 2016*)	The proposal involves trimming and removal of planted vegetation within the proposal site, however this will not have any impact on the habitat of protected animals.
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 be endangering any species of animal, plant or other form of life, whether living on land, in water or in the air.
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 providing a reliable and modern wastewater service for the area.
Any degradation of the quality of the environment	The proposal will not cause the degradation of the quality of the environment.
Any risk to the safety of the environment	The proposal will not increase risk to the safety of the environment.
Any reduction in the range of beneficial uses of the environment	The proposal will not reduce the range of beneficial uses of the environment.

Section 171 checklist	REF finding
Any pollution of the environment	Environmental mitigation measures will mitigate the potential for the proposal to pollute the environment. No pollution of the environment is expected.
Any environmental problems associated with the disposal of waste	Waste disposal will be in accordance with the environmental mitigation measures, and no environmental problems associated with the disposal of waste are expected.
Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply	The proposal will not increase demand on resources, that are, or are likely to become, in short supply.
Any cumulative environmental effect with other existing or likely future activities	The proposal will not have any cumulative environmental effect with other existing or likely future activities.
Any impact on coastal processes and coastal hazards, including those under projected climate change conditions	The proposal will not have any impact on coastal processes or hazards, and coastal processes and coastal hazards will not have any impact on the proposal.
Any applicable local strategic planning statements, regional strategic plans or district strategic plans made under the EP&A Act, Division 3.1	There are no applicable strategic planning statements or plans, as the proposal forms part of a renewals.
Any other relevant environmental factors.	The proposal has been assessed against the factors listed above, and there are no other relevant environmental factors to consider.

Appendix B – Consideration of TISEPP consultation

TISEPP section	Yes	No
Section 2.10, council related infrastructure or services – consultation with council		
Will the work:		
Potentially have a substantial impact on stormwater management services provided by council?		x
Be likely to generate traffic that will strain the capacity of the road system in the LGA?		x
Connect to, and have a substantial impact on, the capacity of a council owned sewerage system?		x
Connect to, and use a substantial volume of water from a council owned water supply system?		x
Require temporary structures on, or enclose, a public space under council's control that will disrupt pedestrian or vehicular traffic that is not minor or inconsequential?		x
Excavate a road, or a footpath adjacent to a road, for which the council is the roads authority, that is not minor or inconsequential?		x
Section 2.11, local heritage – consultation with council		
Is the work likely to affect the heritage significance of a local heritage item, or of a heritage conservation area (not also a State heritage item) more than a minor or inconsequential amount?		x
Section 2.12, flood liable land – consultation with council		
Will the work be on flood liable land (land that is susceptible to flooding by the probable maximum flood event) and will works alter flood patterns other than to a minor extent?		x
Section 2.13, flood liable land – consultation with State Emergency Services		
Will the work be on flood liable land (land that is susceptible to flooding by the probable maximum flood event) and undertaken under a relevant provision*, but not the carrying out of minor alterations or additions to, or the demolition of, a building, emergency works or routine maintenance? * (e) Div.14 (Public admin buildings), (g) Div.16 (Research/ monitoring stations), (i) Div.20 (Stormwater systems)?		x
Section 2.14, development with impacts on certain land within the coastal zone– council consultation		
Is the work on land mapped as coastal vulnerability area and inconsistent with a certified coastal management program?		x
Section 2.15, consultation with public authorities other than councils		
Will the proposal be on land adjacent to land reserved under the *National Parks and Wildlife Act 1974* or land acquired under Part 11 of that Act? *If so, consult with DPE (NPWS).*		x
Will the proposal be on land in Zone C1 National Parks and Nature Reserves or on a land use zone that is equivalent to that zone? *If so, consult with DPE (NPWS).*		x
Will the proposal include a fixed or floating structure in or over navigable waters? *If so, consult TfNSW.*		x
Will the proposal be on land in a mine subsidence district within the meaning of the *Coal Mine Subsidence Compensation Act 2017*? *If so, consult with Subsidence Advisory NSW.*		x
Will the proposal be on land in a Western City operational area specified in *the Western Parkland City Authority Act 2018,* Schedule 2 and have a capital investment value of $30 million or more? *If so, consult the Western Parkland City Authority*.		x
Will the proposal clear native vegetation on land that is not subject land (i.e. non-certified land)? *If so, notify DPE at least 21 days prior to work commencing. (Requirement under s3.24 Chapter 3 Sydney Region Growth Centres - of the SEPP (Precincts – Central River City) 2021).*		x

Appendix C – Section 57(2) Exemption Record