Review of Environmental Factors

Northside Storage Tunnel Wet Well Desilting and Decline Tunnel Rehabilitation

1 Determination

This Review of Environmental Factors (REF) assesses potential environmental impacts of Northside Storage Tunnel (NST) Wet Well Desilting and Decline Tunnel Rehabilitation 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 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.

Decision Statement

During construction, the main potential environmental impacts of the proposal are typical construction impacts such as traffic and odour. No additional impacts are anticipated during operation. 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) 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 mitigation measures 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 REFA document and, to the best of my knowledge, it is in accordance with the EP&A Act and the Environmental Planning and Assessment Regulations (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 and the information it contains is neither false nor misleading.

Prepared by:	Reviewed by:	Endorsed by:	Approved by:
[redacted]	[redacted]	[redacted]	[redacted]
John Eames Senior Environmental Scientist Asset Lifecycle Sydney Water Date: 30/08/2023	Sally Spedding Lead Environmental Scientist Asset Lifecycle Sydney Water Date: 05/09/2023	Jordan Mulhearn Senior Project Manager Asset Lifecycle Sydney Water Date: 18/09/2023	Elissa Howie A/Environment & Heritage Manager Sydney Water Date : 9 November 2023

2 Proposed works and permissibility

Table 1 Description of proposal

Aspect	Description
Proposal need/ objective	The proposal is required to facilitate the ongoing Northern Suburbs Ocean Outfall System (NSOOS) rehabilitation program. The NSOOS rehabilitation program involves desilting and rehabilitation of the rock lined NSOOS tunnel. Wastewater flows within the NSOOS are being diverted to the NST to enable these works. Due to this wastewater diversion the NST Wet Well has filled with silt and debris. This requires removal to ensure continued operation of the NST and to provide continued capacity for the diversion needed by the NSOOS rehabilitation project. This proposal is required to meet Sydney Water's operational requirements under the Northern Suburbs Sewage Treatment System Environmental Protection Licence (EPL) No 378. The proposal objectives are to: • ensure the NST remains operable to manage dry and wet weather overflows • support the NSOOS desilting and rehabilitation program • reduce risk of asset failure and extend the service life of the asset.
Consideration of alternatives/options	No alternatives are possible. The NST Wet Well requires desilting to allow continued effective operation and enable diversion of NSOOS flows.
Location/ land ownership	The Proposal is located at the North Head Water Resource Recovery Facility (NH WRRF), Darley Road, Manly 2095 at Lot 1 DP604428 in the Northern Beaches Local Government Area. The NST wet well is located approximately 90m below ground within the NH WRRF. Refer to Figure 1.
Proposal description/ scope of work	The proposal consists of two components: 1. Wet Well desilting Approximately 4,000 tonnes of accumulated silt and debris will be removed and disposed of via existing the access ramp. The material will be dewatered in situ and all liquid waste will go to the inlet works of the NH WRRF. Dewatering will be completed with the NST wet well pumps initially then by a temporary dewatering pump arrangement. Dewatered silt and debris will be placed in sealed silt bins and disposed of at an appropriately licensed waste facility. In addition, existing silt stockpiles stored on the access ramp will be removed. 2. Decline Tunnel rehabilitation Due to deterioration of the decline tunnel, rehabilitation of a 250m length will be required to allow safe working conditions, with work including: • supplying and installing rock bolts • supplying and installing mesh • shotcreting.

Aspect	Description
	Both of these works will take up to twelve months to complete. The mitigation measures included in section 6 and the position of the works underground ensure that impacts will be minimised.
Access tracks and compound	All works will be within the grounds of the NH WRRF and access will be via existing routes. The site compound will most likely be at the 'Helipad' site at the northwest of the WRRF site. Prior to use the contractor must confirm it meets the criteria set out in section 6.
Work hours	All truck movements and deliveries to and from the plant will be scheduled to occur during standard daytime hours: 7am to 6pm, Monday to Friday and 8am to 1pm, Saturdays. Rehabilitation of 250m of the decline tunnel will be completed in 6 months single shift (standard working hours) or 4 months double shift (as per Wet Well desilting shift arrangement below). Works in the NST Wet Well will be completed in a double shift arrangement Monday to Saturday morning: 6am – 4.30pm and 4.30pm – 3.30am (this double shift arrangement will be limited to less than six months). The proposal is not expected to require work outside these hours, however, sometimes work is required at different times (e.g. for work in roads or delivery of oversize equipment). Sydney Water's Project Manager can approve work outside of standard daytime hours, following the approval process described in the mitigation measures in **Section 5**.
Proposal timing	Construction is expected to start February 2024 and take approximately 12 months - 6 months for the decline tunnel repair and 6 months for the desilting works.

Table 2 Consideration of principles of ecologically sustainable development (ESD)

Consideration of principles of Ecologically Sustainable Development	Relevance to proposal
Precautionary principle	The proposal will not result in serious or irreversible environmental damage and there is no scientific uncertainty relating to the proposal. A key objective of this proposal is to manage wet weather and dry weather sewage overflows and associated negative environmental outcomes.
Inter-generational equity	The proposal will help to meet the needs of future generations by providing a reliable wastewater service.
Conservation of biological diversity and ecological integrity	The proposal will not impact on biological diversity or impact ecological integrity as works are mostly underground and will use existing access routes to and from the NH WRRF.
Improved valuation, pricing and incentive mechanisms	The proposal will ensure the reliability and longevity of wastewater infrastructure providing cost efficient use of resources and provide optimum outcomes for the community and environment.

Figure 1 Location of proposal and environmental constraints

This figure has been redacted to protect sensitive Aboriginal heritage information.

3 Legislative requirements

Table 3 Consideration of environmental planning instruments relevant to the proposal

Environmental Planning Instrument	Relevance to proposal
Manly Local Environmental Plan 2013	The proposal is located on land zoned SP2.
State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP)	Section 2.126 (9) of the TISEPP permits development for the purpose of the Northside Storage Tunnel by or on behalf of Sydney Water Corporation without consent on land in any of the following local government areas – (d) Manly. The proposal involves development for the purpose of the NST within the Manly LGA (now Northern Beaches Council) and therefore the proposal is permissible without consent.
SEPP (Resilience and Hazards) 2021	The works are on land to which Chapter 2 of this SEPP applies. The works are in an area mapped as coastal use and environmental area. Works are permitted without consent in these areas. In addition, works are contained underground and will not impact on the coastal zone.

Table 4 Consideration of key environmental legislation

Legislation	Relevance to proposal	Permit or approval	Timing and responsibility
Protection of the Environment Operations (POEO) Act 1997	The proposal is consistent with an existing activity under North Head Wastewater System EPL 378 and existing compliance requirements. Temporary relaxation of the EPL 378 is not required during construction/ commissioning. A variation to EPL 378 is not required for operation. Section 129 of the POEO Act relates to emission of odours from premises licensed for scheduled activities. Mitigation measures for odour and community consultation will be applied to minimise odour impact. Consultation with the EPA is required in relation to potential odour impacts and this is further detailed in Section 4. During construction, the contractor will notify EPA and all relevant authorities as soon as they become aware of any pollution incidents that have caused or	NA Consultation with EPA required – potential odour impacts.	Pre-construction

Legislation	Relevance to proposal	Permit or approval	Timing and responsibility
	threatened harm to the environment, in accordance with SWEMS0009.		
Biodiversity Conservation (BC) Act 2016	No threatened species or ecological communities are anticipated to be impacted by the proposal. Traffic mitigation measures will be applied to reduce risk to the endangered bandicoot population.	NA	Pre-construction, Sydney Water
National Parks and Wildlife (NPW) Act 1974	The proposal is not expected to impact any Aboriginal object or place and is not in a National Park. The proposal area is in the middle of the NH WRRF and therefore not adjacent to National Parks and Wildlife Service (NPWS) land. Notification to NPWS under the TISEPP not required for works, however will be required if the Helipad compound site is utilised as this site is adjacent to NPWS land.	NA TISEPP notification if Helipad compound site is selected.	Pre-construction, Sydney Water
Water Act 1912/ Water Management Act 2000	The proposal is not anticipated to encounter groundwater or require dewatering that would trigger the need for a Water Supply Works Approval.	NA	Pre-construction, Contractor
Roads Act 1993	Minimal impacts to roads are expected. A maximum of four to eight trucks per day will be required for silt and debris removal.	NA	Pre-construction, Contractor
Environment Protection and Biodiversity Conservation (EPBC) Act 1999	No matters of national environmental significance (MNES) would be impacted by the proposal.	NA	Pre-construction, Sydney Water

4 Consultation

Community and stakeholder consultation

Our approach to community and stakeholder consultation is guided by the Guidelines for Community and Stakeholder Engagement (Sydney Water, 2021).

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, projects 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 REF. The community and council will be notified of these works as part of the NH WRRF Community Reference Group which has been established for the NH WRRF. Community notifications/ leaflets will be distributed to notify residents of any potential impacts (eg truck movements and odour) prior to works, as required.

Consultation with EPA

As works have to potential to cause spikes in H_2S emissions during construction, the Sydney Water Wastewater & Environment Custodian has been consulted about the work. In addition, the Sydney Water Senior Environmental Regulatory Specialist (SW SERS) has met with the NSW Environment Protection Authority (EPA) regarding the works. The local community will be notified prior to works, to highlight potential construction impacts as well as the reason for, and benefits of, completing these works to prevent further operational breaches and odour impacts in the future.

The project team for NSOOS and SW SERS met with EPA on 6 December 2022 to discuss the whole scope of NSOOS desilting and rehab works. At the meeting EPA suggested we manage our odour risk and consult with customers about this. As a result, Sydney Water will undertake the following:

- The local community will be notified prior to works, to highlight potential construction impacts as well as the reason for, and benefits of, completing these works to prevent further operational breaches and odour impacts in the future.
- A fact sheet describing the NST Wet Well Desilting works, the potential impacts and what we are doing to mitigate those impacts will be sent to Operations, the WRRF, Customer Delivery Environment and the Customer Hub.
- The EPA will be sent the fact sheet and updated at the same time.

5 Environmental assessment

The works are underground at the North Head WRRF ST0020, Lot 1 DP604428, in the Northern Beaches local government area. The site is at Blue Fish Point on the northern headland of Sydney Harbour and is surrounded by dense bushland of the Sydney Harbour National Park and adjacent to the Tasman Sea. The whole of North Head, excluding the WRRF is a listed National Heritage Place and locally heritage listed on the Manly Local Environmental Plan 2013 (ID: I179 – Quarantine Station and Reserve). Threatened flora

(Sunshine Wattle) and an endangered population of Long-nosed Bandicoot have been identified within the WRRF boundary.

Residential receivers are approximately 570m to the west of the worksite. Silt from the excavation will be transported via the existing access road from the WRRF and then via main roads to a disposal site or for offsite reuse.

The environmental impacts checklist (SWEMS0019.01) was completed for the works which considers all environmental aspects. Included in the table below are only those aspects which are potentially impacted.

Table 5 Key environmental aspects and potential impacts

Aspect	Potential impacts
Topography, geology and soils	No impact to topography geology and soils as the works will be contained underground within the NH WRRF.
Water and drainage	All dewatering of the silt will be directed to the NH WRRF head of works for treatment and disposal, so no impact to waterways or drainage is expected. Dewatering of the wet well will be pumped directly to the head of works. The silt bins will be watertight/ sealed to prevent any leaks/ run off during off-site transport. During de-silting, wet material will be stored and compressed at the top of underground ramp and allowed to dewater by gravity back into the wet well. During works an approved Flow Isolation and Flow Management Plan will be in place for the NST, which manages the risk of wastewater overflows.
Flora and fauna	The only potential impact to flora and fauna is possible impact to endangered fauna from truck movements to and from the worksite. The North Head population of the Long-nosed Bandicoot is present in the area surrounding the plant and is listed as an endangered population. There will be an estimated additional 4-8 truck movements per day (peak – during silt removal phase) for delivery, removal of silt bins and materials for tunnel rehabilitation. This will occur during standard daytime construction hours and/or in accordance with site traffic management agreements. Work vehicles must obey speed limits and drivers should be alert for the presence of Long-nosed Bandicoots in the area and take care to avoid impact while driving to and from site.
Heritage	[redacted] Works will be near the NSOOS which is a s170 listed item – however no impacts are expected.
Noise and vibration	Desilting and tunnel rehabilitation works are approximately 570 m from sensitive residential receivers and will be completed underground. This means noise and vibration impacts will be limited to additional truck movements for silt and rehabilitation material transport. Truck movements will be limited to

Aspect	Potential impacts
	standard working hours and/or in accordance with site traffic management agreements to minimise impacts.
Air and energy	The proposed works will generate emissions through use of plant, vehicles, and equipment. However, the works themselves are underground so potential impacts will be limited to the transportation of the waste and possible release of hydrogen sulfide (H_2S) when disturbing the silt. No odour impacts are expected during decline tunnel rehabilitation. Dewatering of silt and debris will be completed by compression and gravity at the top of the underground NST access ramp. This process will be completed under NST scrubber ventilation, to treat odour prior to discharge. Once dewatered, silt will be stored for short periods (less than 24 hours) in a sealed and covered skip bin on a ventilated site above ground ready for transport. In addition, desilting is planned to occur in July/ August /September to take advantage of lower ambient temperatures with less biological activity, and to minimise odour impacts. There are difficulties in quantifying the exact timing and nature of odour impacts because there is not a standard odour generation rate for this type of work. However, the potential for H_2S spikes when disturbing the silt and debris in the NST wet well is high (particularly when working upstream of the trash rack) and customer complaints are considered likely, depending on weather/ wind direction. The works upstream of the trash rack will be done first and are anticipated to take about five days. The NH WRRF has had H_2S exceedances in the past (e.g. SWIRL INC-27763 1/10/2019). Outcomes and findings from this incident indicate that stagnant conditions in the NST Wet Well led to fermentation and generation of H_2S. Once complete, the desilting works are expected to reduce the risk of similar operational exceedances by removing the silt and debris that is causing this issue. Once complete the works will reduce ongoing operational odour risks that would increase if silt is allowed to continue to build up. NH WRRF has an existing air quality monitoring program, with the nearest monitoring point about 160m from the wet well. This is continuously monitored and reported to the EPA. This existing program does not monitor odour, however odour monitoring for these works will be put in place to help assess and manage impacts during construction. As works have to potential to cause spikes of H_2S, Sydney Water will further notify the EPA regarding the works as per section 4. The local community will be notified prior to works, to highlight potential impacts as well as the reason for, and benefits of, completing these works to prevent operational breaches and odour impacts in the future.
Waste and hazardous materials	Based on previous desilting works, including the current NSOOS desilting project, the material in the wet well is likely to comprise scum, grit, organics, coarse material, oils and solids (it may also include large rocks, concrete, steel cable, timber, anchor plates etc which may require be disposal separately).

Aspect	Potential impacts
	The silt component is expected to be classified as General Solid Waste (GSW) Putrescible and will be disposed to a licensed waste facility.
Traffic and access	Truck movements for transport of material during the works will occur during standard work hours via established truck access routes. Truck movements from the plant are currently about 3-4 movements per day. For up to 6 months of desilting works, an additional 4-8 truck movements per day will be required. This number will reduce for the 4-6 months of decline tunnel rehabilitation. The truck movements are time limited for the duration of the project and the community will be informed of the increase in vehicle movements via NH WRRF Community Reference Group. The access roads are considered fit for purpose and will not be adversely impacted by these additional vehicle movements as they are designed to service projects using similar sized vehicles (eg Biosolids Phase 2). All workforce parking would be within the NH WRRF.
Social and visual	All works will be contained underground within the NH WRRF. Minor social impacts are associated with additional truck movements and transportation of silt for disposal.
Cumulative and future trends	The NH WRRF is subject to various construction works to upgrade and maintain the plant including proposed works to excavate a new access point to the NSOOS, which will be occurring at the same time. It is expected that there would be only a minor cumulative impact with the addition of these localised desilting works at the NH WRRF.

6 Environmental mitigation measures

Table 6 Mitigation measures

Mitigation measures
Prepare a Construction Environmental Management Plan (CEMP) addressing the requirements of this environmental assessment. The CEMP should specify licence, approval and notification requirements. Prior to the start of work, all project staff and contractors will be inducted in the CEMP. The CEMP must be readily available on site and include a site plan which shows: • go/no go areas including locations of lay-down and storage areas for materials and equipment • location of environmental controls (such as erosion and sediment controls, fences or other measures to protect vegetation or fauna, spill kits) • location and full extent of any vegetation disturbance.
Sydney Water's Project Manager (after consultation with the environmental and community representatives and affected landowners) can approve temporary ancillary construction facilities (such as compounds and access tracks), without additional environmental assessment or approval if the facilities: • limit proximity to sensitive receivers • do not disrupt property access • have no impact to known items of non-Aboriginal and Aboriginal heritage • are outside high risk areas for Aboriginal heritage • use existing cleared areas and existing access tracks • have no impacts to remnant native vegetation or key habitat features • have no disturbance to waterways • do not require additional safeguards beyond those included in the EIA • do not disturb contaminated land or acid sulfate soils • will be rehabilitated at the end of construction. The Delivery Contractor must demonstrate in writing how the proposed ancillary facilities meet these principles. Any facilities that do not meet these principles will require additional environmental impact assessment. The agreed location of these facilities must be shown on the CEMP site plan and appropriate environmental controls installed.
Should the proposal/methodology change from the REF, no further environmental assessment is required provided the change remains within the assessment/study area for the REF and has no net additional environmental impact; or is outside the assessment/study area for the REF) 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.

Mitigation measures

Prepare an Incident Management Plan (IMP) outlining actions and responsibilities during:

- predicted/onset of heavy rain during works
- spills
- other potential incidents relevant to the scope of works.

All site personnel must be inducted into the IMP.

To ensure compliance with legislative requirements for incident management (eg *Protection of the Environment Operations Act 1997*), Sydney Water's employees and contractors will follow SWEMS0009. Attach SWEMS0009 to the CEMP/EWMS.

Store all chemicals and fuels in accordance with relevant Australian Standards and Safety Data Sheets. Record stored chemicals on site register. Bunded areas to have 110% capacity of stored liquid volume. Chemicals and fuels in vehicles must be tightly secured. All chemicals to be clearly labelled.

If native fauna is encountered on site, stop work and allow the fauna to move away unharassed. Engage WIRES or a licensed ecologist if assistance is required to move fauna.

All drivers should be inducted on the presence of long-nosed bandicoots at NH WRRF. All vehicles are to obey speed limits and drivers should be alert for the presence of Long-nosed Bandicoots in the area and take care to avoid impact while driving to site.

Track energy use as per SWEMS0015.28 Contractor NGER template.

Switch off vehicles/machinery when not in use.

Ensure work vehicles do not obstruct vehicular or pedestrian traffic, or private driveway, public facility or business access unless necessary and only if appropriate notification has been provided.

Manage waste in accordance with relevant legislation and maintain records to show compliance eg waste register, transport and disposal records. Record and submit SWEMS0015.27 Contractor Waste Report.

Minimise the potential for odours by ensuring silt and debris is stored for less than 24 hours (sealed and covered skip bin) on a ventilated site above ground ready for transport.

Odour monitoring at the site will be put in place to determine any impacts to nearby sensitive receivers.

Cover all transported waste, any silt or debris must be stored and transported in sealed containers

If fibro or other asbestos containing material is identified, restrict access and follow Sydney Water's Asbestos Management – Minor Works procedure, Document Number 746607 and SafeWork NSW requirements. Contact Sydney Water Project Manager (who will consult with Property Environmental Services propertyenvironmental@sydneywater.com.au).

Works must comply with the Construction Noise Guideline (Draft, 2021), including scheduling deliveries and silt bin delivery and removal only during standard daytime working hours of 7am to 6pm Monday to Friday and 8am to 1pm Saturday. No work to be scheduled on Sunday nights or public holidays. Any proposed work outside of these hours must be justified (see mitigation measure below).

Mitigation measures

The Proposal will also be carried out in accordance with Sydney Water's Noise Management Procedure SWEMS0056.

All reasonable and feasible noise mitigation measures should be justified, documented and implemented on-site to mitigate noise impacts.

As works beyond standard daytime hours are needed, the Contractor would:

Consider potential noise impacts in their EWMS and:

- implement the relevant standard daytime hours mitigation measures; Sydney Water's Noise Management Code of Behaviour (SWEMS0056.01)
- document all reasonable and feasible management measures to be implemented (particularly around truck movements)
- identify additional community notification requirements, if required
- document a complaint handling procedure.

If works **beyond agreed working hours are needed**, the Contractor would:

- justify the need for out of hours work (OOHW) and why it is not possible to carry out the works during agreed working hours
- consider potential noise impacts and: implement the relevant standard daytime hours mitigation measures; Sydney Water's Noise Management Code of Behaviour (SWEMS0056.01) and document all reasonable and feasible management measures to be implemented
- identify additional community notification requirements and outcomes of targeted community consultation
- seek approval from the Sydney Water Project Manager in consultation with the environment and communications representatives.

Undertake works in accordance with Sydney Water Communications policies and requirements including:

- liaison with EPA regarding potential H_2S exceedances
- notify impacted residents and businesses
- respond to community enquiries promptly.

Appendix A – Section 171 checklist

Section 171 checklist	REF finding
Any environmental impact on a community	There may be minor, temporary impacts on the community from trucks transporting silt off-site (approximately four to eight per day) and potential odour impacts. There will be environmental improvements by reducing the risk of operational H_2S exceedances by removing the silt and debris. Works will allow ongoing essential maintenance work on the NSOOS ensuring ongoing provision of a reliable wastewater service to the local community and wider community served by the NSOOS.
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 proposed work will not result in environmental impacts to ecosystems of the locality. There will be environmental improvements by ensuring a reliable wastewater service will collect and treat wastewater, minimising any impacts on the ecosystem.
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	The proposed work will not result in a reduction of 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 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.
Any impact on the habitat of any protected animals (within the meaning of the *Biodiversity Conservation Act 2016*)	The proposed work will not have any impact on the habitat requirements 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 proposed work will not be endangering any species of animal, plant or other form of life, whether living on land, in water or in the air. Truck drivers will be inducted into the presence of the Long-nosed Bandicoots to ensure no inadvertent impacts during transporting spoil/ silt off-site.
Any long-term effects on the environment	The proposed work will not have any long-term impacts on the environment but will have a long-term benefit by maintaining a reliable 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.

Section 171 checklist	REF finding
Any risk to the safety of the environment	The proposed work 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.
Any pollution of the environment	Environmental mitigation measures will mitigate the potential for the proposed work to pollute the environment. There is potential for short-term odour impacts. Mitigation measures for odour and community consultation will be applied to minimise odour impact. In addition, Sydney Water will notify the EPA about the works.
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 proposed work forms part of Sydney Water's major program of work on the desilting of the NSOOS.
Any other relevant environmental factors.	The proposed work 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?		N
Be likely to generate traffic that will strain the capacity of the road system in the LGA?		N
Connect to, and have a substantial impact on, the capacity of a council owned sewerage system?		N
Connect to, and use a substantial volume of water from a council owned water supply system?		N
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?		N
Excavate a road, or a footpath adjacent to a road, for which the council is the roads authority, that is not minor or inconsequential?		N
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?		N
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?		N
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)?		N
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?		N
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).*	Y (if helipad site used)	
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).*		N
Will the proposal include a fixed or floating structure in or over navigable waters? *If so, consult TfNSW.*		N
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.*		N
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*.		N
Will the proposal clear native vegetation on land that is not subject land (ie 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).*		N

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