



Review of Environmental Factors Addendum

Wollongong WRRF – changes to 3 upgrade projects

1 Determination

This Review of Environmental Factors Addendum (REFA) assesses potential environmental impacts of changes to 3 upgrade projects at Wollongong WRRF 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 for ensuring the proposal is carried out as described in this REFA and the 3 previously approved REFs for works at the Wollongong Water Resource Recovery Facility (WRRF) (approved REFs):

- Biosolids Dewatering Upgrade REF (February 2019)
- Inlet Works and Odour Control Facility (OCF) Upgrade REF (December 2020)
- Inlet Screens Upgrade REF (February 2023).

Additional environmental impact assessment may be required if the scope of work or work methods described in this REFA change significantly following determination.

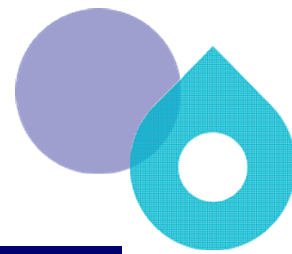
Decision Statement

The main potential construction environmental impacts of the proposal include impacts to soil and vegetation. During operation, no impacts are expected. The proposal will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats. Therefore, a Species Impact Statement (SIS) 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 REFA and the approved REF, the proposed work 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 REFA 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.



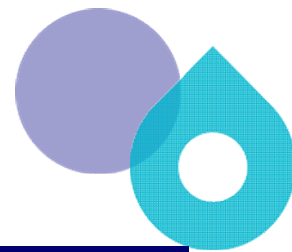
Prepared by:	Reviewed by:	Endorsed by:	Approved by:
Grace Corrigan REFA author Sydney Water Date: 30.10.23	Cara Renshaw Environment Representative Company Date: 1.11.2023	Mile Purdevski Project Manager Sydney Water Date: 1.11.2023	Elissa Howie A/Environment and Heritage Manager Sydney Water Date 3 November 2023

2 Proposal Summary

Table 1. Proposal summary

Aspect	Detailed description
Proposal location	<p>The proposal is located at the Wollongong WRRF (asset ID ST0014) on Port Kembla Road, Wollongong. The WRRF is in the Wollongong local government area, on land owned by Sydney Water. Relevant lot and DP's are:</p> <ul style="list-style-type: none"> • Lot 1 and 2, DP 1115754 • Lot 50 and 51, DP 1115767 • Lot 4, DP 261720 • Lot 2, DP 620742.
Approved REFs	<p>The proposal assessed in this addendum relates to work being performed under 3 different REFs, all within the Wollongong WRRF:</p> <ul style="list-style-type: none"> • Biosolids Dewatering Upgrade REF (February 2019) • Inlet Works and OCF Upgrade REF (December 2020) • Inlet Screens Upgrade REF (February 2023).
Proposal scope	<p>The scope of work in the approved REFs is summarised below:</p> <ol style="list-style-type: none"> 1. Biosolids Dewatering Upgrade REF (February 2019): <ul style="list-style-type: none"> • Pre-construction works • Install new dewatering system • Install new waste activated sludge thickening system • Install new recuperative thickening system • Install new digester recirculation pumps • Modify control system (SCADA) • Restore site. 2. Inlet Works and OCF Upgrade REF (December 2020): <ul style="list-style-type: none"> • Pre-construction works • Remediate inlet works structure



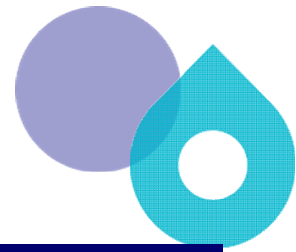


Aspect	Detailed description
	<ul style="list-style-type: none"> • Install new OCF (also referred to as Odour Control Unit or OCU) • Install odour covers and ductwork • Perform electrical work • Restore site. <p>3. Inlet Screens Upgrade REF (February 2023):</p> <ul style="list-style-type: none"> • Pre-construction works • Replace assets including step screens, screenings screw conveyors, wash presses, grit washers, grit transfer pumps, actuator • Install new assets including screening containers, flow meters, control valves, temporary bypass, recycled effluent pumps, wet well and submersible pumps, grit handling pump station • Demobilise site.
Proposal change	The changes to each of the 3 projects are summarised in Table 2 and the footprints shown in Figure 1 and Figure 2.
Justification for proposal change	Justifications for the changes are captured in Table 2.

Table 2. Proposed change and justification

Project name	Proposed change	Justification
Biosolids Dewatering Upgrade REF (February 2019)	<ul style="list-style-type: none"> • Demolish sludge dewatering building. • Refurbish sludge hoppers, including the replacement of the levelling screw, bottom feed screw, and cells. • Remove roof, and supports of the biosolids out-loading building, for works on the sludge hoppers. This will be completed using a crane located outside of the plant boundary, positioned on an existing bitumen paved area. This area may need to be expanded to allow the works to be undertaken, and therefore require some trimming or clearing of vegetation. • Install new concrete slab for Rotary Drum Thickener (RDT), pipe supports, and pipe run, in the location of the old dewatering building. 	The dewatering building is currently unused and was decommissioned in 2006. Dewatering equipment required for the upgrades will not fit within the old building as there is insufficient space. Therefore, demolition is required so that the equipment can be stored in the same location on a concrete slab instead.
Inlet Works and OCF Upgrade REF (December 2020)	<ul style="list-style-type: none"> • Install a new tertiary effluent line to connect new OCU with effluent processing areas (already assessed in approved REF). <ul style="list-style-type: none"> ○ Additional impact: This will require clearing of vegetation along the eastern boundary, 	The new effluent line is a necessary connection to supply water to the new OCU, and vegetation





Project name	Proposed change	Justification
	<p>possibly involving removal of whole trees where they are directly next to the fence.</p> <ul style="list-style-type: none"> • Perform concrete repair and rectification work on 2 tanks and 2 gravity thickeners. • Install a cross-site pipe run from the grit classifiers and RE tank to the inlet works including minor excavation works for the plinths and brackets. 	<p>removal cannot be completely avoided.</p> <p>The other works are necessary maintenance activities, or connections between 2 assets required for the upgrades.</p>
<p>Inlet Screens Upgrade REF (February 2023)</p>	<ul style="list-style-type: none"> • Shift the location of new wet well and pumps north of the area identified in the approved REF. • Perform associated vegetation removal inside the fence on the northern boundary of the plant. 	<p>This change is required as a result of there being insufficient space adjacent to the existing inlet building, and proximity to existing structures (as proposed in the approved REF) making the deep excavation for the new wet well and pumps challenging.</p>



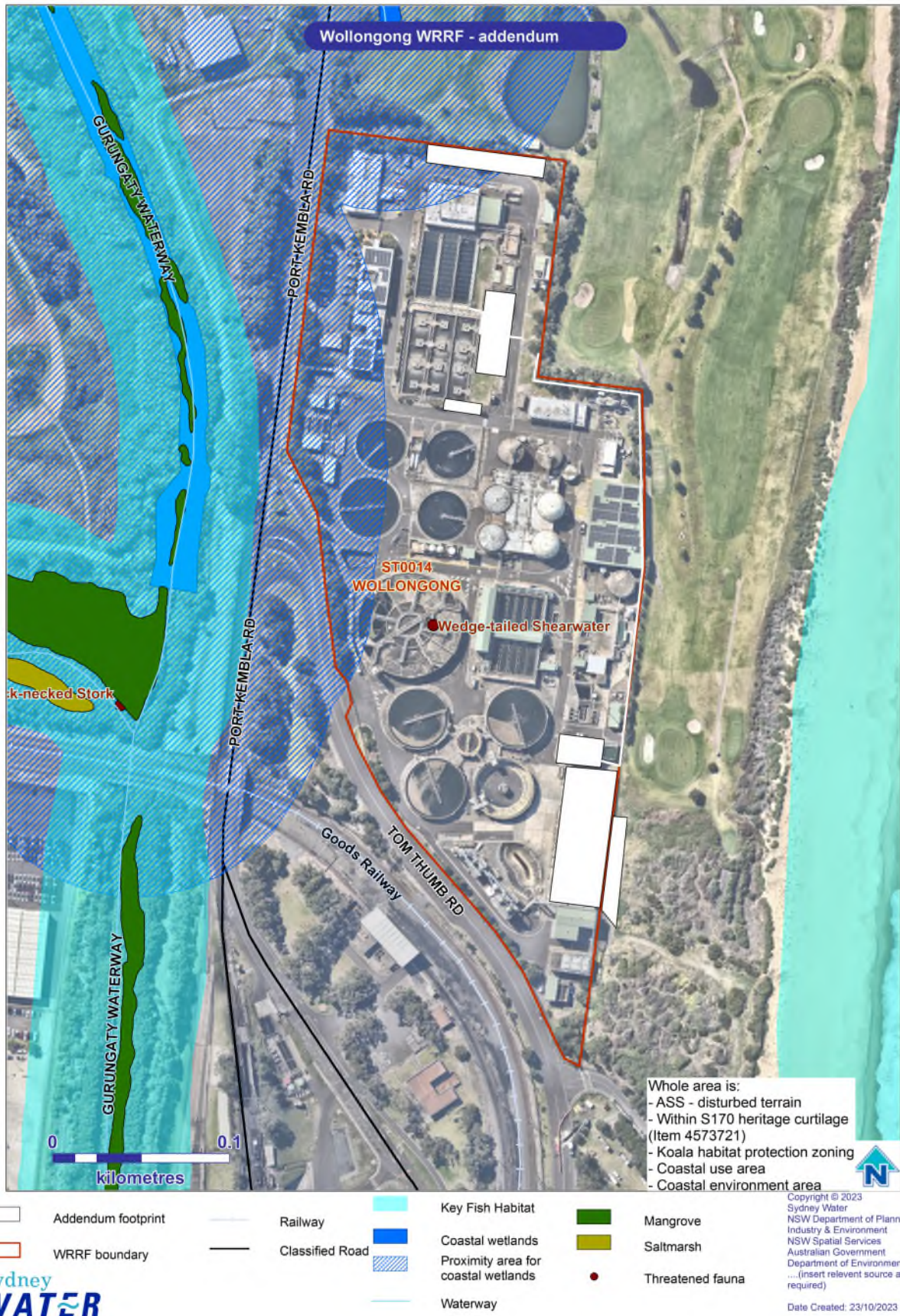


Figure 1 Proposal change and environmental constraints

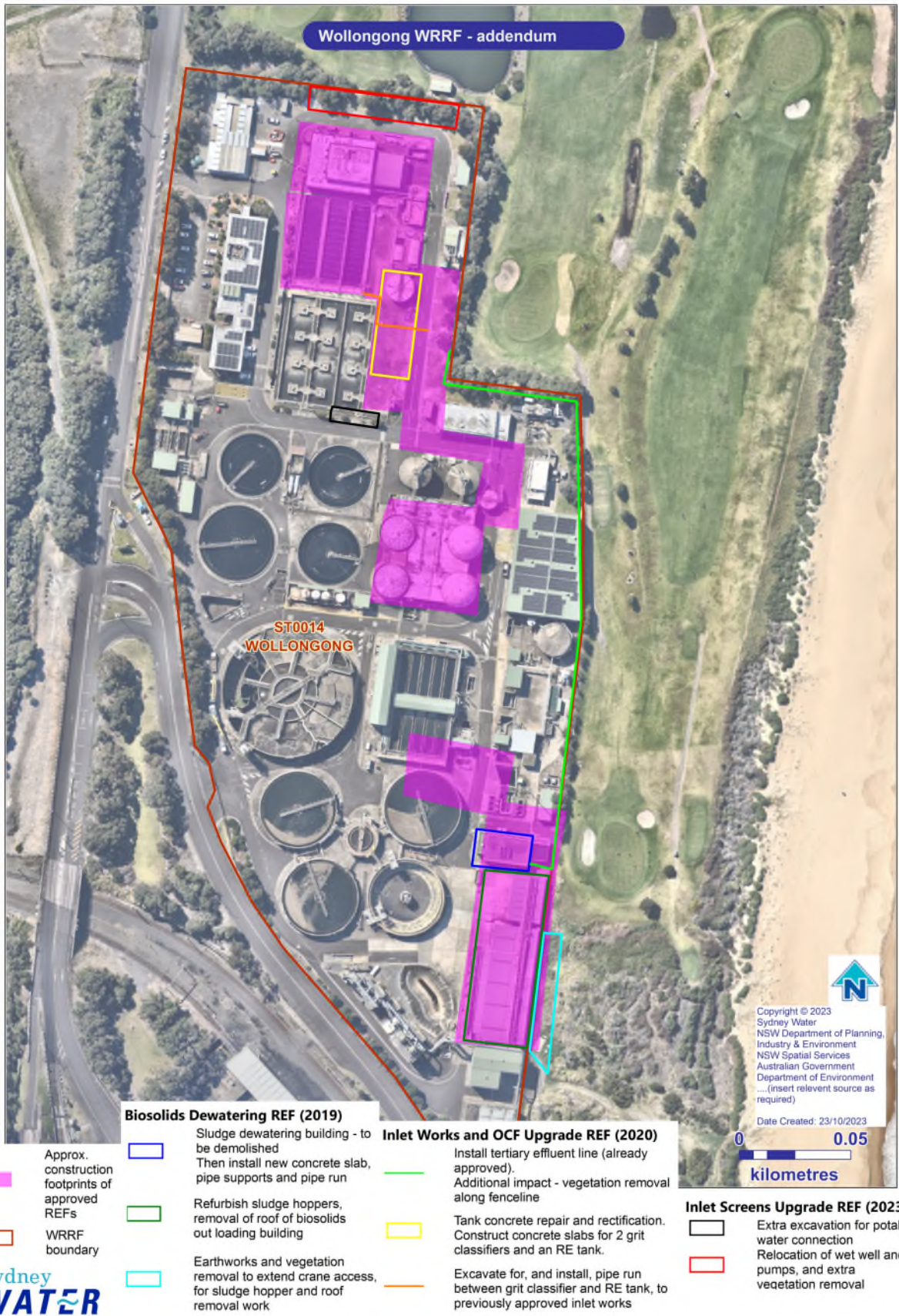
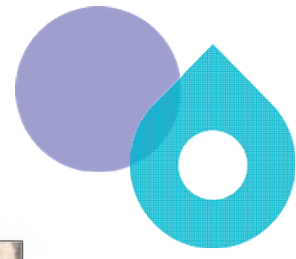


Figure 2 Approximate construction footprint of approved REFs and addendum



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 specified in the State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP).

No formal consultation was required under the TISEPP. Further detail is provided in Appendix B.

The project delivery team and plant operational team have communicated and agreed on the changed scope items assessed in this addendum. Ongoing stakeholder engagement will be in accordance with approved Community and Stakeholder Engagement Plans (CSEPs) for the previously approved projects.

4 Legislative consideration

There are new legislative amendments to the State Environmental Planning Policies (SEPP) framework since the approval of the Biosolids Dewatering REF (February 2019) and Inlet Works and OCF Upgrade REF (December 2020). The existing SEPPs have been consolidated into new SEPPs to make the system simpler. All clauses of the SEPPs have been renumbered and are now called sections. The SEPPs relevant to this project are outlined in Table 3.

Table 3. Changes due to SEPP consolidation

Repealed SEPP	In-force SEPP	Updated SEPP reference
State Environmental Planning Policy (Infrastructure) 2007	State Environmental Planning Policy (Transport and Infrastructure) 2021	Section 2.126(2) of the TISEPP permits development by or on behalf of a public authority for the purpose of sewage treatment plants without consent on any land in a prescribed zone (with some exceptions in National Parks). The proposal involves development of a WRRF and is in land zoned SP2 Infrastructure, which is considered a 'prescribed zone'. Since Sydney Water is a public authority, the proposal can be performed as development without consent.
SEPP (Coastal Management) 2018	SEPP (Resilience and Hazards) 2021	The proposal is on land to which Chapter 2 (Coastal Management) of this SEPP applies. Part of the proposal area is on land mapped as 'proximity area for coastal wetlands.' Sydney Water has considered the impact of the proposal in relation to the integrity of the nearby wetland, and the surface and groundwater flows to and from the wetland. Refer Section 5 of the REF.

Regardless of these changes, there are no additional considerations required in this assessment above those already assessed since the approval of the Biosolids Dewatering REF (February 2019) and Inlet Works and OCF Upgrade REF (December 2020).

The impacts in this addendum are greater than that assessed in the Inlet Screens Upgrade REF (February 2023), for some environmental aspects. Therefore, re-assessment of relevant planning instruments is required (Table 4).

Table 4. Re-assessment of planning instruments.

Legislation	Additional considerations
SEPP (Biodiversity and Conservation) 2021 – Chapter 4 Koala habitat protection 2021	<p>The proposal is on land mapped as koala habitat protection under this SEPP. The vegetation within the proposal footprint is mapped as non-native, including a mix of landscaped edges with planted trees and shrubs, and managed exotic grassland and landscaped areas. Historical imagery suggests that the vegetation was planted following construction of the WRRF. No koalas have been observed within the proposal footprint, and the closest known sighting is over 1km away.</p> <p>Vegetation removal is required. However, the vegetation type is not consistent with koala feed trees. Given the construction footprint is largely within the plant operational area, and a lack of sightings in the area, it is not expected that any koala habitat would be impacted.</p>

5 Additional environmental impacts and mitigation measures

Table 5 lists the additional environmental impacts that could result from the proposed change compared to the approved REFs and the additional mitigation measures. All other environmental impacts and mitigation measures identified in the approved REFs remain the same and will be incorporated into the contractor’s CEMP.

Table 5. Environmental impacts table

Environmental impacts table		
Aspect	Additional impacts	Additional mitigation measures
Topography, geology and soils	<p>The proposal area contains a mix of hardstand, grass, and landscaped/planted vegetation on relatively flat land. The soil landscape is disturbed terrain.</p> <p>The area of excavation and ground disturbance will increase from that assessed in the approved REFs for:</p> <ul style="list-style-type: none"> • installing new concrete slabs • earthworks to extend crane access • installing plinths and brackets for pipe run between grit classifier and RE tank, and inlet works • installing potable water connection. <p>The total footprint of excavation and ground disturbance required for this proposal is about 1,600m². The total footprint of excavation and ground disturbance assessed across the 3 approved REFs is about 2,300m².</p> <p>No additional compounds or laydown areas are required to store this extra material. The additional excavation and</p>	No additional mitigation measures required.

Environmental impacts table

Aspect

Additional impacts

Additional mitigation measures

ground disturbance can be managed through the mitigation measures in the approved REFs.

Flora and fauna

The Property Environmental Management Plan (Sydney Water, 2021) for the site identifies the vegetation within the proposal area as:

- exotic dominated scrub
- landscaped edges with planted trees and shrubs
- managed exotic grassland and landscaped areas.

No vegetation mapped to a specific plant community type (PCT), including threatened ecological communities, is present within the proposal area. DPE mapping indicates the vegetation within the proposal area is non-native.

Previously approved vegetation impacts included:

- minor trimming for equipment and vehicle access
- vegetation removal for new OCU and trimming of overhanging golf course vegetation.

Additional vegetation impacts are required for:

- installing effluent line inside eastern fenceline (about 300m length) – refer green line on Figure 2. Impacts required to managed exotic grasslands and landscaped areas. Clearing of vegetation along the fenceline is required where the vegetation overlaps with the alignment of the effluent line. For vegetation near the effluent line but away from the fenceline, trimming is preferred.
- relocating wet well and pumps (about 700m²) – refer red box on Figure 2. Impacts required to landscaped edges with planted trees and shrubs. Most of this vegetation will require removal, due to the deep excavation for the wet wells and pumps.
- earthworks to extend crane access (about 500m² total – although this area is not fully vegetated) – refer light blue box on Figure 2. Impacts required to exotic dominated shrub. Clearing within this footprint is required, however since the vegetation is mostly shrubs, minimal mature vegetation removal is required.

- Review vegetation offset mitigation measure 4.2 from the Inlet Works and OCF Upgrade REF (December 2020) to determine if vegetation can be replanted on the golf course side of the WRRF for screening.
- In accordance with the Sydney Water Biodiversity Offset Guide (SWEMS0019.13), each individual tree to be removed is to be replaced 1:1 (non-locally native or exotic tree or street tree).
- In TOBAN: For maintenance and construction activities that are not essential/emergency works, the use of fire in the open, including for general purpose hot works must not proceed without an exemption being approved. Contact to submit an exemption request: CDResiliencePrograms@sydneywater.com.au or CustomerHub.DutyManager@sydneywater.com.au Staff and contractors must not contact local RFS directly to seek their own exemption (replaces mitigation measure 4.8 from the Inlet Works and OCF Upgrade REF (December 2020)).

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
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Where possible, vegetation impacts will be limited to trimming, although some removal will be unavoidable.

This additional impact will be managed and offset through the mitigation measures in the approved REFs and the mitigation measures in this addendum.

Heritage

The proposal is within the heritage curtilage of the Section 170 listing of the Wollongong STP (item number 4573721), which has local significance.

Sydney Water's Lead Heritage Advisor assessed the impact of the proposal on this heritage item (Appendix C) and advised:

- the primary heritage values of the WRRF are conserved as the WRRF will be able to continue to operate efficiently and effectively
- the conservation of this primary function is consistent with Sydney Water's heritage conservation position statement, to keep assets functioning for the purpose they are built
- there will be a minor impact on the built heritage values associated with the WRRF, however the primary heritage values of the plant are conserved.

No new Aboriginal or non-Aboriginal heritage listed items have been listed within 200m of the proposal since the Inlet Upgrades REF (February 2023).

No additional mitigation measures.

Waste and hazardous materials

Additional waste would be generated from:

- additional excavation including soil and fill material
- concrete repairs
- vegetation trimming and removal
- demolishing the sludge dewatering building.

A review of the Hazcentral database did not identify any hazardous materials within the sludge dewatering building.

These waste streams can be managed using the mitigation measures in the approved REFs.

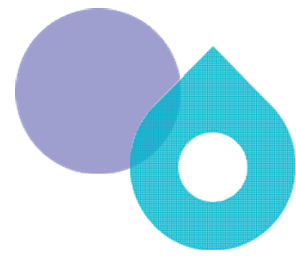
Conduct hazardous materials survey prior to commencement where works could impact hazardous materials not surveyed in previous HBM assessments (including the sludge dewatering building).

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
Traffic and access	It is likely that the northern access path in the WRRF will need to be temporarily closed while a temporary bypass for the inlet screens is installed. A detour or diversion will need to be installed to maintain access.	Engage with the plant operations team on a preferred diversion or detour route.
Cumulative and future trends	<p>While the upgrades are being installed, the proposal will not impact the treatment and processing capacity of the plant, and is therefore compliant with Minister's Conditions of Approval for the Illawarra Waste Water Strategy (18 May 2001).</p> <p>The impacts to cumulative and future trends were assessed in the Inlet Upgrades REF (February 2023). This assessment included cumulative impacts from multiple projects being delivered in parallel within the plant, and impacts to day-to-day operation of the plant.</p> <p>Implementation of the mitigation measures in this REF should be sufficient to manage this additional impact.</p>	No additional mitigation measures required.

6 Conclusion

This REFA outlines potential environmental impacts associated with changes to 3 upgrade projects at Wollongong WRRF as part of the approved REFs. Any additional environmental impacts are considered minor and potential impacts can be mitigated through implementation of the measures outlined in this REFA and the approved REFs. The proposal is not likely to significantly impact the environment.

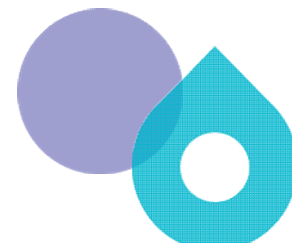


Appendix A – Section 171 checklist

There are no requirements in addition to those considered in the approved REF.



Appendix B – Consideration of TISEPP consultation

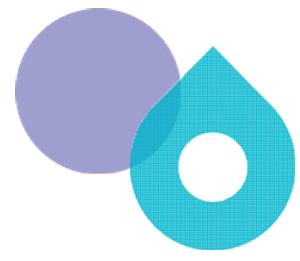


TISEPP section	Yes	No
Section 2.10, council related infrastructure or services – consultation with council		
Will the work:		
Potentially have a substantial impact on stormwater management services provided by council?		X
Be likely to generate traffic that will strain the capacity of the road system 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 of 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 <i>National Parks and Wildlife Act 1974</i> or to land acquired under Part 11 of that Act? <i>If so, consult with DPIE (NPWS).</i>		X
Will the proposal be on land in Zone E1 National Parks and Nature Reserves or on a land use zone that is equivalent to that zone? <i>If so, consult with DPIE (NPWS)</i>		X
Will the proposal include a fixed or floating structure in or over navigable waters? <i>If so, consult TfNSW</i>		X
Will the proposal be on land in a mine subsidence district within the meaning of the <i>Coal Mine Subsidence Compensation Act 2017</i> ? <i>If so, consult with Subsidence Advisory NSW.</i>		X
Will the proposal be on land in a Western City operational area specified in <i>the Western Parkland City Authority Act 2018</i> , Schedule 2 and have a capital investment value of \$30 million or more? <i>If so, consult the Western Parkland City Authority.</i>		X
Will the proposal clear native vegetation on land that is not subject land (i.e. non-certified land)? <i>If so, notify DPIE 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).</i>		X

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Appendix C – Local heritage item impact approval





1. Item

For Sydney Water's heritage items of **local** heritage significance (Non-Aboriginal), as listed on Council's LEP *Heritage List* and / or Sydney Water's *S170 Heritage & Conservation Register*.

Item name: Wollongong Sewage Treatment Plant (Water Resource Recovery Facility)

Item number: 4573721 (Sydney Water S170 register)

Curtilage: The curtilage is defined by the boundaries of Lot 2 in DP no.620742, and Lots 4 and 5 in DP no.261720, as shown on the curtilage plan

Statement of Significance: The Wollongong Water Resource Recovery Facility (Sewage Treatment Plant) is significant as the public utility which services the Wollongong City environs and as an example of a major treatment plant serving a significant urban area. This plant contains a set of structures, equipment and facilities which are representative of their function and period, and which together make up a complete treatment process. The process is demonstrated by the equipment and each element of the process is physically and logically displayed.

The establishment and subsequent upgrading and amplification of the Wollongong Sewage Treatment Plant is evidence of the extent and historic expansion of urban settlement in the district served by the plant. The level of treatment undertaken at the Wollongong Sewage Treatment Plant is indicative of community expectations for sewage treatment at the time when it was designed, with subsequent alterations demonstrating rising expectations during its period of operation.

The Wollongong Sewage Treatment Plant, therefore, has some historic and social values relating to its function and contains a set of equipment and structures that are representative of their period and type.

2. Applicant

Name: Grace Corrigan

Contact: grace.corrigan@sydneywater.com.au

3. Proposed works

Use this form for works to items of LOCAL heritage significance. Works assessed as cleaning, maintenance or repair do not need approval.

Address: Primary - 339, Port Kembla Road, Wollongong, 2500. NSW. Alternate - 340, Corrimal Street Wollongong, 2500. NSW

Suburb: Wollongong

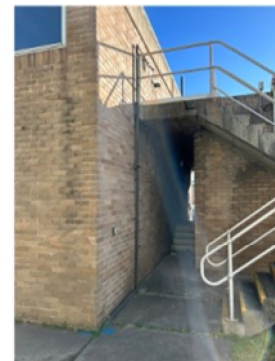
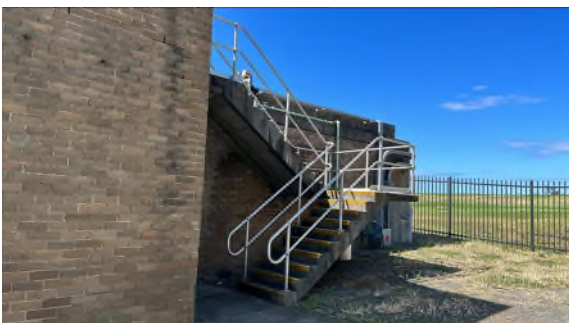
Proposal: Inlet works renewal, augmentation of Recycled Effluent Water Supply System

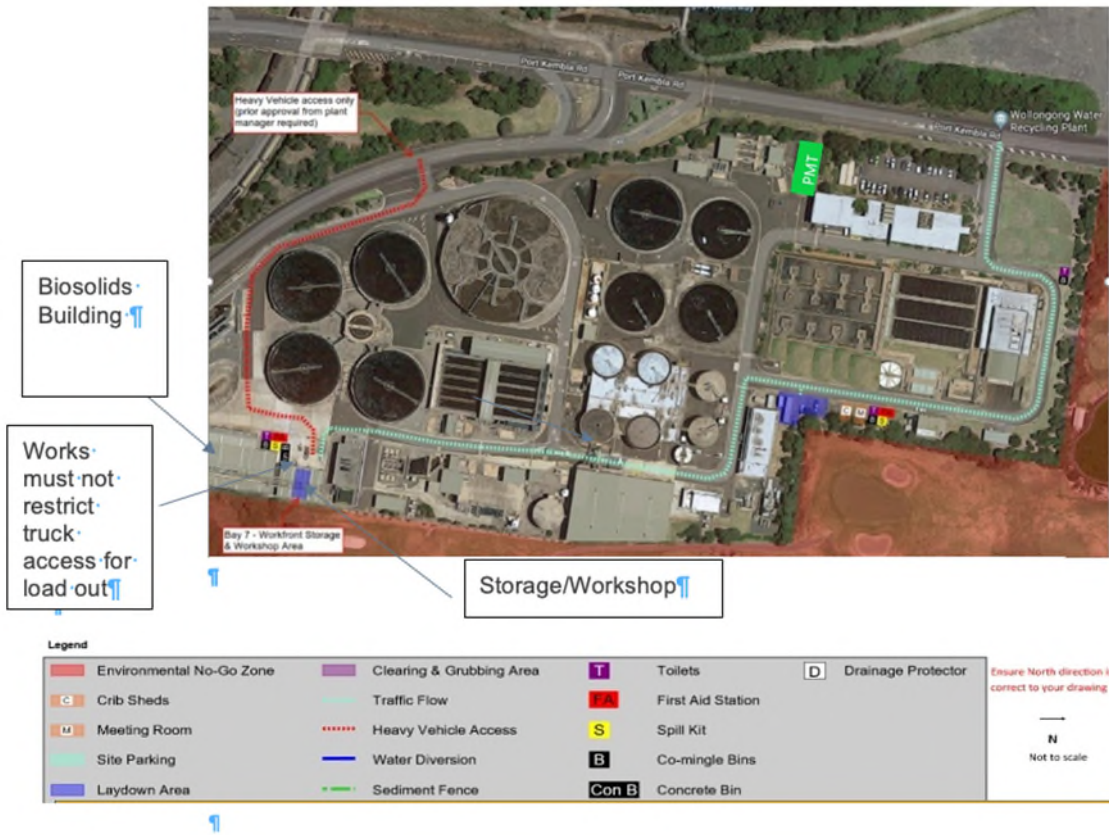
Demolition of the sludge dewatering building, due to being redundant and the lack of space within the site.



Project name	Proposed change	Justification
Biosolids Dewatering Upgrade REF (February 2019)	<ul style="list-style-type: none"> Demolish sludge dewatering building. Refurbish sludge hoppers, including the replacement of the levelling screw, bottom feed screw, and cells. Remove roof, and supports of the biosolids out-loading building, for works on the sludge hoppers. This will be completed using a crane located outside of the plant boundary, positioned on an existing bitumen paved area. This area may need to be expanded to allow the works to be undertaken, and therefore require some trimming or clearing of vegetation. Install new concrete slab for Rotary Drum Thickener (RDT), pipe supports, and pipe run, in the location of the old dewatering building. 	The dewatering building is currently unused and was decommissioned in 2006. Dewatering equipment required for the upgrades will not fit within the old building as there is insufficient space. Therefore, demolition is required so that the equipment can be stored in the same location on a concrete slab instead.
Inlet Works and OCF Upgrade REF (December 2020)	<ul style="list-style-type: none"> Install a new tertiary effluent line to connect new OCU with effluent processing areas (already assessed in approved REF). <ul style="list-style-type: none"> Additional impact: This will require clearing of vegetation along the eastern boundary, possibly involving removal of whole trees where they are directly next to the fence. Perform concrete repair and rectification work on 2 tanks and 2 gravity thickeners. Install a cross-site pipe run from the grit classifiers and RE tank to the inlet works including minor excavation works for the plinths and brackets. 	The new effluent line is a necessary connection to supply water to the new OCU, and vegetation removal cannot be completely avoided.
Inlet Screens Upgrade REF (February 2023)	<ul style="list-style-type: none"> Shift the location of new wet well and pumps north of the area identified in the approved REF. Perform associated vegetation removal inside the fence on the northern boundary of the plant. 	This change is required as a result of there being insufficient space adjacent to the existing inlet building and proximity to existing structures (as proposed in the approved REF) making the deep excavation for the new wet well and pumps challenging.

- Site mobilisation
- Earth works, leveling and underground trenches for temporary facilities
- Civil foundation / footings for the temporary facilities
- Replacing the five existing step screens, with five centre flow band screens to deal with assessed capacity
- Replace screenings screw conveyors with two sluice launders as method of screenings transfer
- Modify existing inlet works building to accommodate 4x wash presses and spirotainers
- Replace existing washpresses with four new washpresses to provide enough capacity for hydraulic and solids loads, supply two additional screening spirotainers and replace screw conveyors with two sluice launders
- Balance airflow between grit tanks with installation of flow meter(s) and automatic control valves
- Replace two grit vortex washers, two grit transfer pumps and relocate grit vortex washers
- Replace penstock actuator that is at end of life
- Temporary bypass for channel modifications
- New RE pumps to supply re-use water to screens, launders, washpresses and grit classifiers
- 1x new drainage pump system + ancillaries
- 1x new grit handling hardstand sump pump station + ancillaries





4. Analysis of proposal

The Wollongong WRRF (the plant) is listed for the function and purpose it serves. It is recognised for its historic and social cultural heritage values relating to its function. The plant also contains a set of equipment and structures that are assessed as representative of their period and type.

The plant has undergone continuous upgrades and expansion. These changes are expected to continue throughout the life of the plant. These proposed works are another stage of progression and reflect the latest technologies and efficiencies in wastewater treatment.

The proposed demolition of the sludge dewatering building will remove some of the fabric that is assessed as being representative of the period it was built. However, the building is no longer required and is redundant. It has been sitting idle since 2006. Attempts were made to re-use the building as part of these proposed works but due to the space constraints within the site it is now proposed to be demolished. Removing the building will create space within the plant to allow the upgrade works to proceed. It is to be replaced with a concrete slab, open for storage within the constraints of the site.

All the other proposed works outlined above, are necessary to upgrade the plant to meet current and future needs. None of these works are assessed as having an adverse impact on the heritage values of the plant.

The works proposed will ensure the plant continues to operate effectively and efficiently into the future. The primary heritage values of the plant are conserved by these works, as they will keep the plant operating as a wastewater treatment / recovery facility. The removal of the sludge dewatering building, and the other upgrade works, conserves the primary function of the plant, and embodies the heritage values. The proposed works are in accordance with Sydney Water's heritage conservation position statement, that is to keep its assets functioning for the purpose they were built.

The proposed works will have a minor impact on the built heritage values associated the Wollongong WRRF, but they conserve the primary heritage values of the plant and as such, are acceptable.

Appraisal:

This item of local heritage significance, included on Sydney Water's S170 Register but not on Council's LEP Heritage List, will be impacted by the proposed works. The proposed works have been assessed and are approved subject to the consent conditions.

Approved by:



Phil Bennett, Lead Heritage Adviser

Asset Lifecycle

(31/10/2023)

Entered in SWIM (/ Contribution Folders / Govern Sydney Water / ... / Heritage / Approvals)

Notes:

- Compliance with Part 6 of the *National Parks and Wildlife Act 1974* and Part 6 (Division 9) of the *Heritage Act 1977* is required.
- Compliance with clause 14 of the State Environmental Planning (Infrastructure) Policy 2007 may also be required.

References

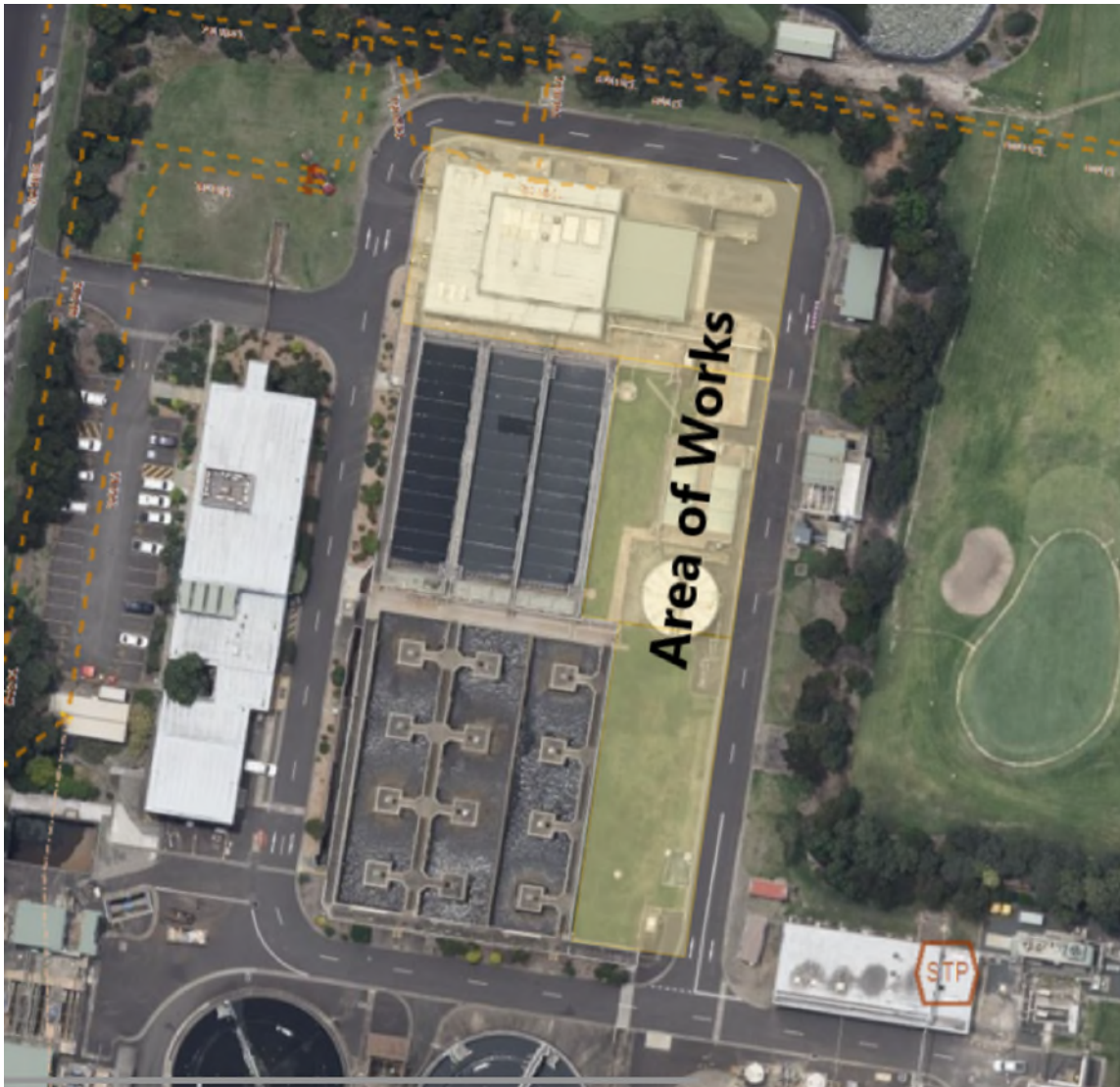
Parent document number	Parent document title
SWEMS0031	Heritage Compliance Procedure

5. Consent conditions

Conditions imposed to ensure compatibility between the proposed work and the heritage significance of the proposed location.

6. Documents provided

Maps, plans, photographs, etc to illustrate the proposal.



Below are the 3D snap shots of Proposed Inlet Works upgrade from the Concept design:

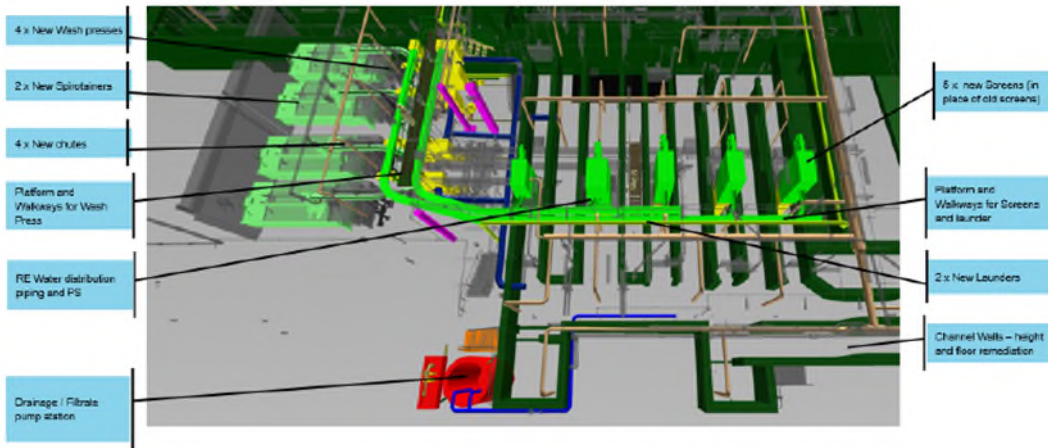


Figure 1 – Overall Scope of Proposed Inlet Works Upgrade

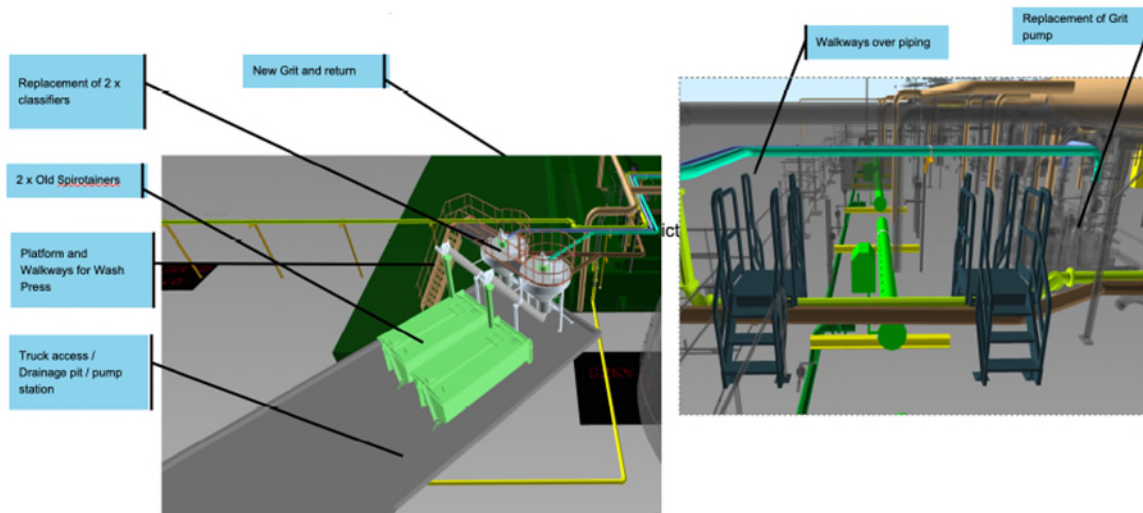


Figure 2 – Platform, Walkway and Spirotainers