

Review of Environmental Factors

Addendum

Growth Servicing in West Dapto Package 3 (Cleveland Precinct) – additional site compound (SC2a)

1 Determination

This Review of Environmental Factors Addendum (REFA) assesses potential environmental impacts of Growth Servicing in West Dapto Package 3 (Cleveland Precinct) 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 Growth Servicing in West Dapto Package 3 (Cleveland Precinct) REF (October 2023) (approved REF). Additional environmental impact assessment may be required if the scope of work or work methods described in this REFA change significantly following determination.


Decision Statement

The main potential construction environmental impacts of the proposal include impacts to Aboriginal heritage and amenity. 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: 24.10.23	 Sarah Mitchell Environment Representative Sydney Water Date: 24/10/23	 Sam Ali Project Manager Sydney Water Date: 26/10/2023	 Elissa Howie A/Environment and Heritage Manager Sydney Water Date: 26 October 2023

2 Proposal Summary

Aspect	Detailed description
Proposal location	<p>The proposal consists of a new site compound (SC2a) and associated water and wastewater mains located within:</p> <ul style="list-style-type: none">• 129 Cleveland Road, Cleveland (Lot 313, DP1188000)• Cleveland Road, Cleveland (Lot 312, DP1188000). <p>This land is owned by Wollongong City Council, and a lease agreement for the compound would be required before construction and operation of the compound.</p>
Approved REF	<p>Growth Servicing in West Dapto Package 3 (Cleveland Precinct) REF (October 2023)</p>
Proposal scope	<p>The proposal under the approved REF consists of the construction and operation of wastewater mains, and upgrades to a wastewater pumping station (SP1012). The proposal includes constructing:</p> <ul style="list-style-type: none">• about 2.8km of DN375 gravity wastewater main south of Cleveland Road (Work Lot B)• about 1.3km of DN300 gravity wastewater main north of Cleveland Road (Work Lot C)• about 0.7km of OD315 rising wastewater main on residential roads in Horsley (Work Lot C)• capacity upgrades to SP1012 on the corner of Riverpark Way and Fairwater Drive, Horsley. <p>The proposal included two site compounds located at:</p> <ul style="list-style-type: none">• SC1 – Land adjacent to SP1012 at Fairwater Drive, Horsley (Lot 5518, DP 1039814).• SC2 – 353 Cleveland Road, Huntley (Lot 1, DP 741423), near western end of Work Lot B gravity main.
Proposal change	<p>The proposal change includes:</p> <ul style="list-style-type: none">• construction of an additional long-term site compound at Lot 313, DP1188000 (referred to as SC2a)• construction of a new access road off Cleveland Road to SC2a• installation of a 620m temporary water main via open cut trenching to connect SC2a to existing water infrastructure (at water main number 10786105)• installation of a 530m temporary wastewater main via open cut trenching to connect SC2a to existing wastewater infrastructure (at maintenance hole number 1134704). <p>The proposal change will replace SC2 assessed under the approved REF. SC2 will be repurposed as an access road.</p>



Aspect

Detailed description

SC2a will be used from late 2023 for about 36 months. SC2a will be restored in consultation with council once construction of West Dapto Package 3 is completed. Restoration will involve:

- removal and backfilling of temporary water and wastewater mains
- tidying of construction site and demobilisation
- disposal of all waste at an appropriate facility
- restoration of groundcover at SC2a to the appropriate standards.

Justification for proposal change

The previous location of compound SC2 needed to be refined following council and private landowner feedback. In consultation with these stakeholders, an alternative location was chosen. The location of SC2a was chosen as it is the optimal location based on proximity to existing water and wastewater infrastructure, for temporary mains to be connected.

Like SC2, SC2a also is:

- near the construction footprint of the wastewater infrastructure
- near the existing road network
- a sufficient size to cater for infrastructure including:
 - site office and amenities
 - storage containers
 - material stockpiling and temporary laydown
 - plant and vehicle parking.

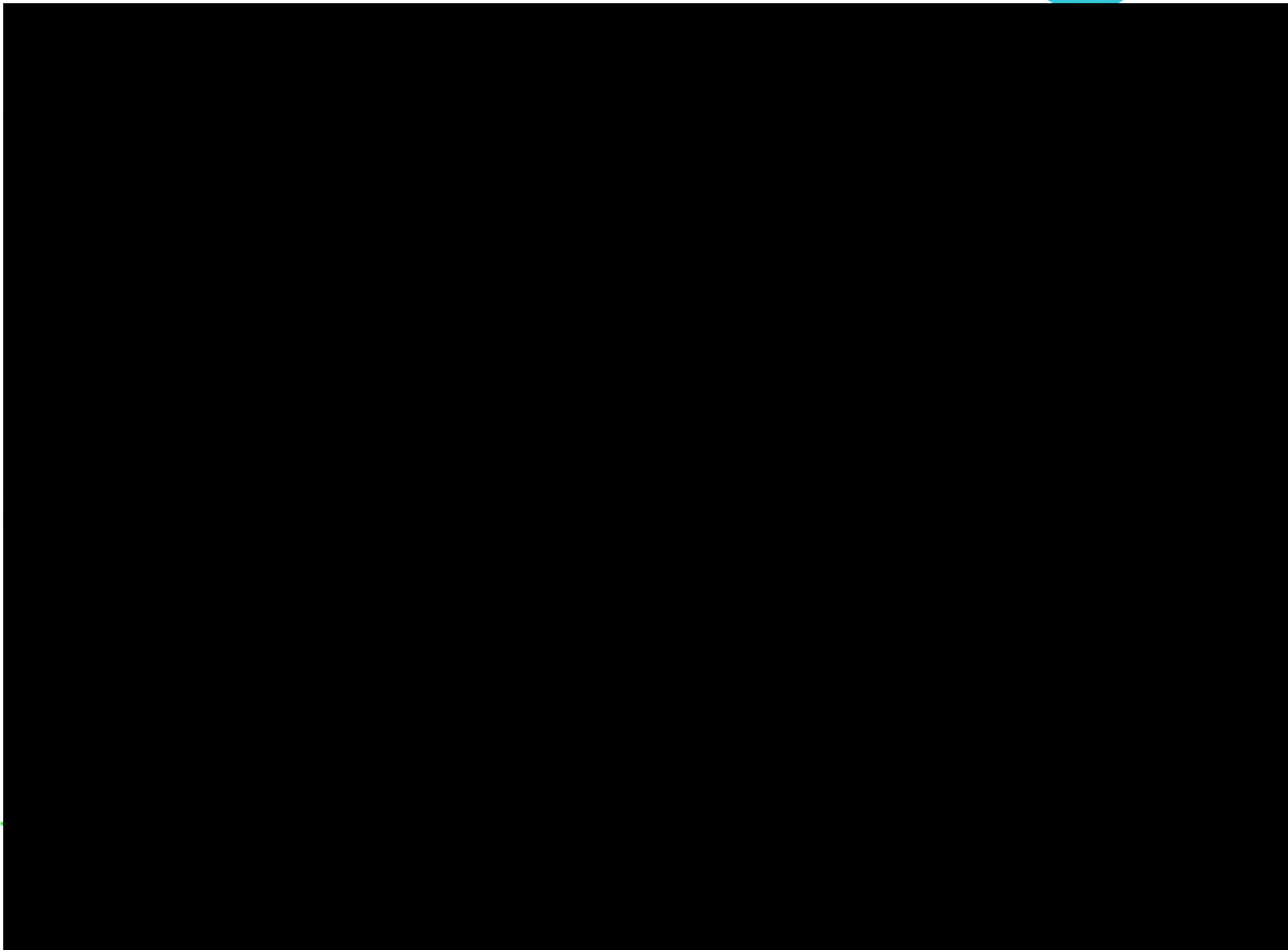
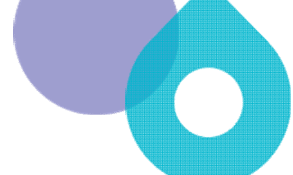


Figure 1 Proposal change Aboriginal heritage information must not be made publicly available or be published in any form or by any means by Sydney Water or our contractors / joint ventures, unless where approval has been sought from the AHIMS Registrar and provided in writing to Sydney Water. Sydney Water has removed this information out of respect for Aboriginal cultural heritage and the Aboriginal community.

3 Consultation

Sydney Water and the delivery contractor will continue to perform stakeholder consultation in accordance with the project-specific Community and Stakeholder Action Plan (CSAP) referenced in the approved REF.

Regular meetings have been held between council, Sydney Water, and the delivery contractor. Items discussed included the location, access and design of SC2a. SC2a has been set back from the existing road corridor to avoid overlap with a future council project to upgrade Cleveland Road.

Consultation required under State Environmental Planning Policies and other legislation

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

A TISEPP consultation letter including information about the proposed location of SC2a was submitted to council on 7 September 2023, under clause 2.10(1)(e) of TISEPP. As detailed above Sydney Water and the delivery contractor have continued to provide updates to council about SC2a. We will continue to consult with council throughout pre-construction and construction on TISEPP matters. Further detail is provided in Appendix B.

4 Legislative consideration

There are no additional legislative requirements above those already assessed in the approved REF.

Under section 2.126 of the TISEPP the proposal change is permissible without consent on any land in the prescribed circumstances. The proposal change is required to facilitate development of a sewerage system carried out by Sydney Water as a public authority. As such, the proposal change is permissible without consent.

Accordingly, this REF addendum has been assessed under Section 5.1 of the EP&A Act.

5 Additional environmental impacts and mitigation measures

The table below lists the additional environmental impacts that could result from the proposed change compared to the approved REF and the additional mitigation measures. All other environmental impacts and mitigation measures identified in the approved REF remain the same and will be incorporated into the contractor's CEMP.

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
Topography, geology and soils	The proposal is on relatively flat land, between about 16m and 18m AHD. No salinity or acid sulfate soils are mapped within the proposal area. Soil type within the proposal is Fairy Meadow (SWfa), a swamp landscape characterised by alluvial plains, floodplains, valley flats and terraces.	No additional mitigation measures.

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
	<p>Shallow ground disturbance (up to 1m depth) would be required for:</p> <ul style="list-style-type: none"> levelling of soil within SC2a excavation of trench for temporary mains. <p>Additional impacts to topography, geology and soil are expected to be minor, and can be managed through the mitigation measures in the approved REF.</p>	
Water and drainage	<p>SC2a is adjacent to a tributary of Mullet Creek. The temporary mains would cross this ephemeral tributary by trenching to a width of about 0.6m and a depth of about 1m. The temporary mains would connect into the existing water and wastewater network, about 20m west of Mullet Creek. Mullet Creek is Key Fish Habitat (KFH). However, the locations of the connections are above top of bank and will not impact the waterway. No permits from NSW Department of Primary Industries Fisheries are required.</p> <p>As the area is relatively flat, any changes to surface flow from levelling out soil for SC2a would be minimal. The risk of any material travelling offsite from SC2a into the tributary can be managed through mitigation measures from the approved REF.</p> <p>While SC2a is being used, there is potential for the temporary mains to leak, impacting the surrounding waterways. Both connections would be regularly checked for leaks to prevent any overflows into environment.</p>	<p>The temporary connections into existing water and wastewater infrastructure are to be regularly checked for leaks.</p>
Heritage	<p>A Review of Aboriginal Cultural Heritage memorandum was prepared by Kelleher Nightingale Consulting (KNC) to support this REF addendum (Appendix C). The memorandum includes a review of background information, existing assessments, and database searches as well as a visual inspection of the site performed on 9 October 2023.</p>	<p>No ground disturbance or any other work is to be undertaken outside of the mapped footprint of the temporary mains and construction compound SC2a.</p> <p>Minimise plant, equipment and vehicle movements on unsealed areas outside of the approved construction footprint (e.g. for access to trench and install the temporary mains).</p>

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
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No

Aboriginal archaeological sites, Aboriginal objects, or Aboriginal heritage items were recorded within the study area (compound footprint and temporary mains) from background searches.

The visual inspection did not identify any archaeological sites, Aboriginal objects, or areas of Aboriginal archaeological potential. The area was assessed as displaying low archaeological potential.

The review concluded that in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW, 2010), the proposal can proceed with caution.

Toolbox talk covering Aboriginal heritage should be completed by all onsite staff, prior to commencement of all activities in this addendum. The toolbox talk should include:

- clear explanation of heritage constraints
- stop work procedures
- contact details to obtain further heritage guidance if needed.

Noise and vibration

The closest sensitive receivers to the proposal include:

- rural residential structures 250m west of SC2a
- Dapto High School about 50m north of the water connection and 650m east of SC2a
- residential properties along Western Avenue – about 200m east of the wastewater connection, and separated from the proposal change by the South Coast Railway.

The likelihood of noise impact from the proposal change was reviewed against risk factors (based on Table 2 of the EPA’s 2020 Draft Construction Noise Guideline). The noise impact is low-risk, and the qualitative noise assessment is below:

- SC2a will be in use while other construction activities are being

No additional mitigation measures.

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
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performed, such as development of the wider Cleveland precinct.

- Use of SC2a will be mostly within standard construction hours.
- SC2a is not located near sensitive receivers.
- Temporary mains are only expected to generate noise while they are being connected and disconnected from the network.
- Noisy work is not expected to be required.

Although some sensitive receivers may experience short-term noise impacts, the overall noise impact is not expected to be significant and can be managed through standard mitigation measures detailed in the approved REF.

No vibratory equipment is required; therefore no vibration impacts are expected.

Air and energy

Sensitive receivers potentially impacted by changes from air quality include nearby large rural-residential properties, Dapto High School, and low-density residential receivers east of the railway line.

Air quality may be impacted by fuel emissions from plant, equipment, and vehicles, and from dust generated by vehicle movements on areas not covered by hardstand. Odour impacts are expected to be minimal, as connection to the wastewater network removes the need for temporary ablutions (e.g. porta-loos).

Impacts to air and energy are not expected to be significant, and can be managed through mitigation measures in the approved REF.

No additional mitigation measures.

Waste and hazardous materials

Stockpiling will be required within SC2a for quarry materials, and excavated materials such as topsoil and road base. Waste and

No additional mitigation measures.

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
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hazardous materials can be managed through mitigation measures in the approved REF.

Traffic and access

SC2a will be accessed via Cleveland Road. Cleveland Road is currently a two-lane divided road, with a road shoulder, and a speed limit of 50km/h. Traffic volumes on Cleveland Road are likely to be relatively low, and limited to residents, visitors, and access to the high school. There is a formalised cycle path along the northern side of Cleveland Road. Future upgrades are planned to Cleveland Road.

It is not expected that any lane or road closures would be required during mobilisation, use, and demobilisation of SC2a. A temporary hardstand access road will be installed between Cleveland Road and SC2a. The cycle path would not be impacted as SC2a is located on the southern side of Cleveland Road.

Vehicle movements along Cleveland Road would increase during use of SC2a. Movements are expected to be highest at the start and end of each work shift. Although this would increase traffic volumes along a relatively quiet road, it is not expected to contribute to any significant delays or congestion.

Traffic and access can be managed through the mitigation measures detailed in the approved REF.

No additional mitigation measures.

Cumulative and future trends

Cumulative impacts are likely to occur during installation, use, and removal of SC2a, in relation to the following aspects:

- soil and water
- Aboriginal heritage
- noise
- traffic and access.

SC2a will be installed and be in use during construction of works assessed in the approved REF, and in the West Dapto Urban Release Area and Adjacent Growth Areas

No additional mitigation measures.

Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
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Environmental Assessment (Sydney Water, 2012).

SC2a is small in size and impact compared to the construction footprints for these projects. Therefore, any cumulative impacts would be minor.

6 Conclusion

This REFA outlines potential environmental impacts associated with an additional compound as part of the approved REF. 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 REF. The proposal change 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 the <i>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

Appendix C – Review of Aboriginal cultural heritage memorandum

Aboriginal heritage information must not be made publicly available or be published in any form or by any means by Sydney Water or our contractors / joint ventures, unless written approval has been provided to Sydney Water from DPE's AHIMS Registrar .

For publicly displayed REFs, all Aboriginal heritage information that identifies individual sites must be removed.



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20 October 2023

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**RE. WEST DAPTO PACKAGE 3: COMPOUND AND PROPOSED UTILITIES, CLEVELAND NSW
REVIEW OF ABORIGINAL CULTURAL HERITAGE**

Background

Sydney Water is undertaking the planning, construction and delivery of various water and wastewater servicing infrastructure within the West Dapto Urban Release Area (WDURA) and Adjacent Growth Areas (AGAs). Sydney Water is constructing infrastructure in sections to support the staged development of the areas and meet future water and wastewater demand. Sydney Water has refined a preferred water and wastewater servicing option for the West Dapto Package 3 (WD3) of the WDURA, required to manage the future demand expected from the development of the Cleveland precinct.

The WD3 works are to be partially undertaken under an existing Project Approval (MP09_0189) issued under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) by the Department of Planning and Infrastructure in 2013, and partially under a Review of Environmental Factors (REF) assessed under Division 5.1 of the EP&A Act.

Sydney Water engaged Kelleher Nightingale Consulting Pty Ltd (KNC) to undertake a preliminary archaeological assessment for the proposed WD3 infrastructure, comprising a consistency assessment for the Part 3A portion and a due diligence assessment for the REF portion. Both determined that further Aboriginal heritage assessment would be required, which was subsequently completed by KNC in 2023 (see below).

Sydney Water has now identified the location of a compound required for the project, and associated utility lines (Figure 1). The proposed works comprise stripping of topsoil within the compound area and excavation of a pipe trench for the utilities approximately 0.6m wide and 1m deep. The 'study area' for this memo comprises the compound area shown in orange and the proposed pipe alignment shown in red on Figure 1. Sydney Water requested KNC to provide a due diligence review of Aboriginal heritage within the study area. Review of background information, existing assessments and database searches have established that no archaeological sites containing Aboriginal objects are known to exist within the study area.

Previous Assessment

KNC has previously completed comprehensive Aboriginal archaeological and cultural heritage assessment for the WD3 project. This has included a full consultation process with registered Aboriginal stakeholders and a test excavation program in accordance with the Heritage NSW *Code of Practice for archaeological investigation of Aboriginal objects in New South Wales* and conditions of the Part 3A Project Approval.

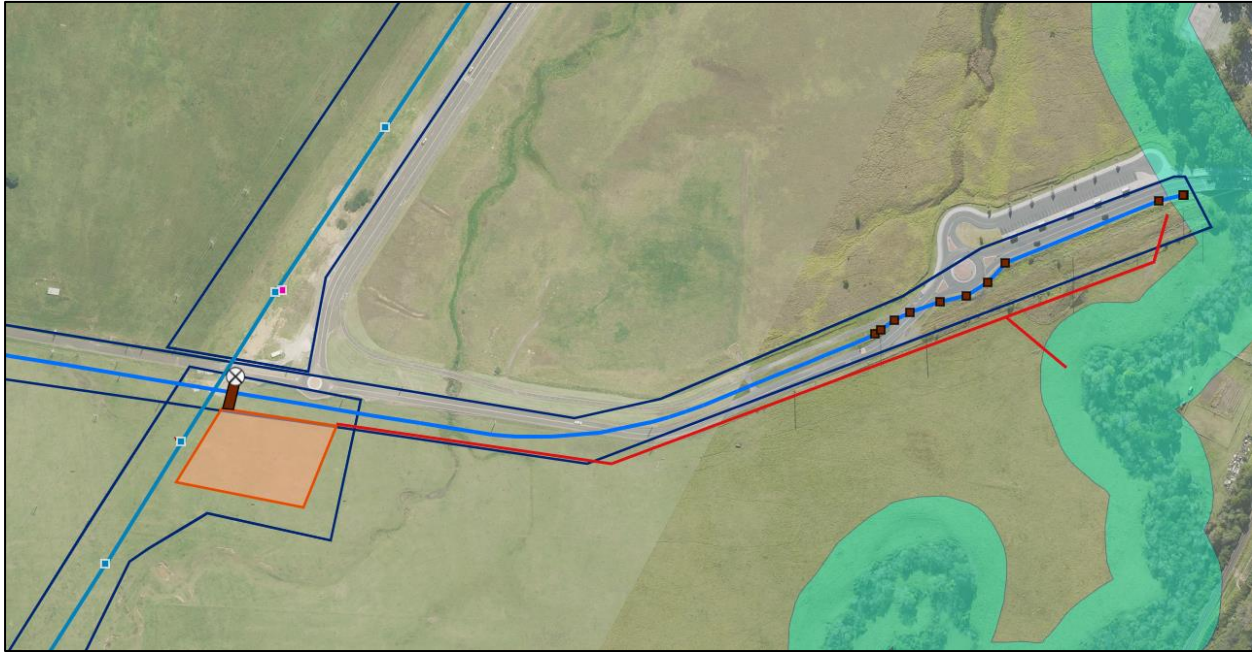


Figure 1. The 'study area' for the due diligence review, comprising the compound (orange) and proposed utility alignment (red lines). Alignments assessed during previous Aboriginal heritage assessment for WD3 indicated in blue.

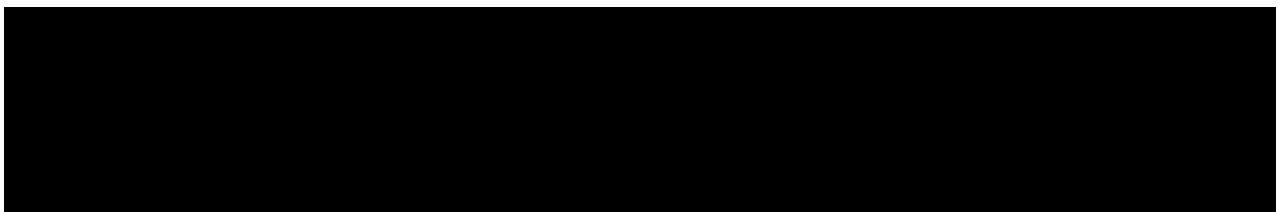
The following documents have previously been prepared for the WD3 works and incorporate the majority of the current study area:

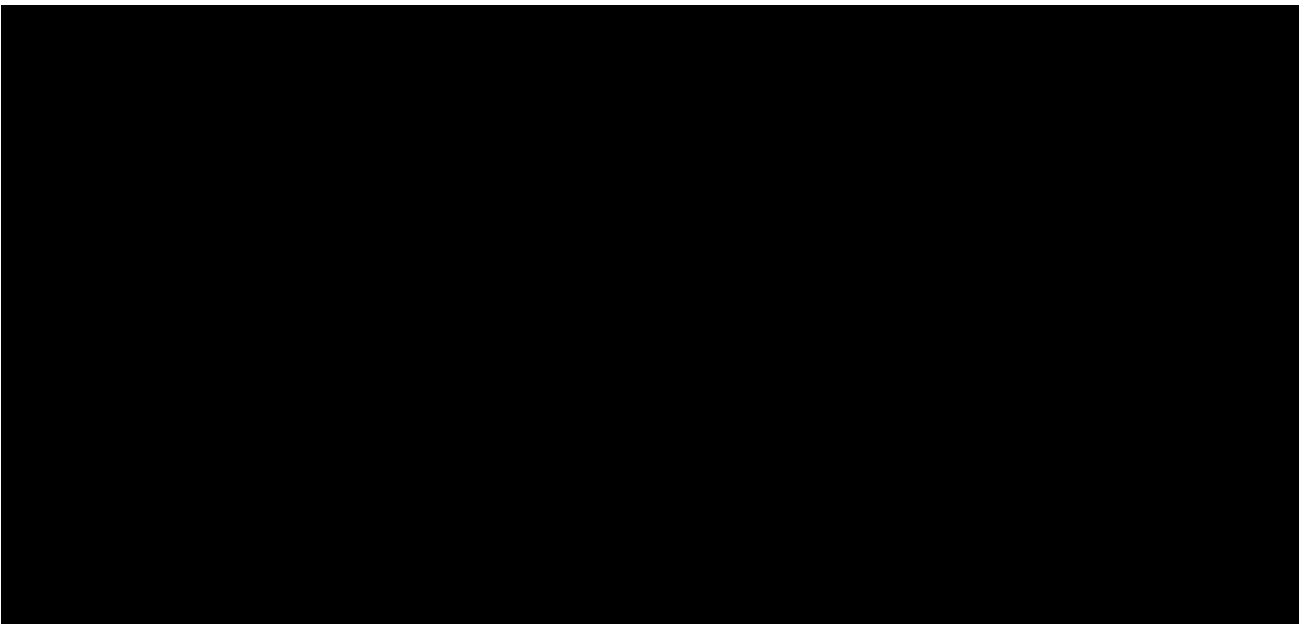
- Kelleher Nightingale Consulting Pty Ltd (KNC), 2023a. *West Dapto Package 3: Water and Wastewater Servicing. Aboriginal Heritage Consistency and Due Diligence Assessment*. Report for Sydney Water.
- Kelleher Nightingale Consulting Pty Ltd (KNC), 2023b. *West Dapto Package 3: Water and Wastewater Servicing. Aboriginal Cultural Heritage Assessment Report*. Report for Sydney Water.
- Kelleher Nightingale Consulting Pty Ltd (KNC), 2023c. *West Dapto Package 3: Part 3A Consistency Assessment, Water and Wastewater Services. Aboriginal Archaeological Assessment – Test Excavation Report*. Report for Sydney Water.

The existing Aboriginal heritage assessments are compliant with relevant legislation and guidelines, including:

- *Code of Practice for archaeological investigation of Aboriginal objects in NSW*
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*
- *Aboriginal cultural heritage consultation requirements for proponents 2010*
- *National Parks and Wildlife Act 1974*
- *National Parks and Wildlife Regulation 2019*

These assessments formed the basis for the due diligence review. No Aboriginal archaeological sites, Aboriginal objects or Aboriginal heritage items were identified within the study area during these assessments.



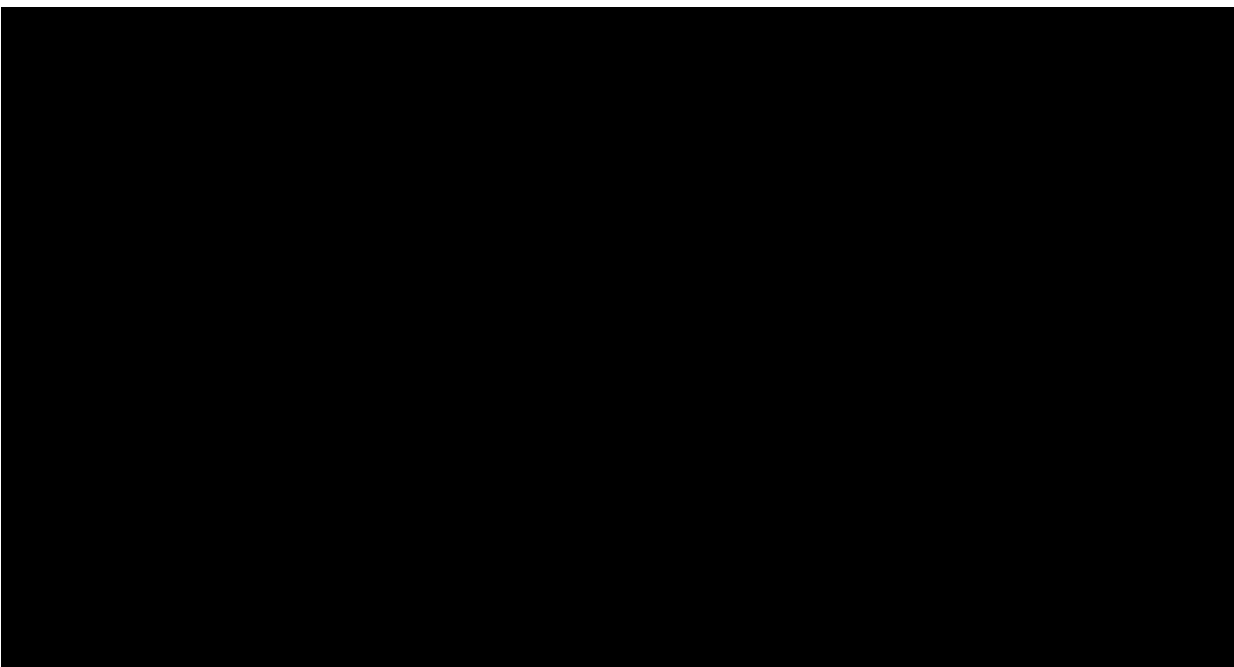


The findings of the AHIMS search correlate with the findings of the detailed Aboriginal heritage assessments listed previously. No Aboriginal archaeological sites, Aboriginal objects or Aboriginal heritage items were identified by the AHIMS search within the current study area.

In addition, a search was undertaken of the following statutory and non-statutory heritage registers for Aboriginal heritage items:

- State Heritage Register and State Heritage Inventory
- Wollongong Local Environmental Plan 2009
- Section 170 Heritage and Conservation Registers
- National Heritage List
- Commonwealth Heritage List, and
- Australian Heritage Database (Register of the National Estate – Non-statutory archive), and
- Australian Heritage Places Inventory (Register of the National Estate – Non-statutory archive).

No Aboriginal archaeological sites, Aboriginal objects or Aboriginal heritage items were recorded on these databases within the study area.



Visual Inspection

Following the review of background information and database searches, a visual inspection of the study area was undertaken. The visual inspection was completed on 09/10/2023 by Ana Jakovljevic (Archaeologist, KNC) and involved a pedestrian walkover of the study area.

The study area is located within a low lying alluvial flat landform adjacent to 1st order drainage running from the south-west and emptying into Mullet Creek approximately 700m to the north. It is located south of Cleveland Road and the Daisy Bank Drive/Fowlers Road roundabout, with the proposed utility alignment generally running south of the road corridor. The compound is located west of the drainage line and south of the roundabout intersection.

The study area was covered in short pasture grass with low ground surface visibility at the time of inspection. Conditions during the site inspection were dry, however, the ground was found to be undulating as a result of stock trampling during recent high rainfall events. It can be expected this has caused mixing of the surface and shallow subsurface deposits. Significant erosion was observed in areas along the banks of the drainage line. Inspection of these eroded soil profiles confirmed the presence of shallow topsoils (A Horizon), with subsoil clays (B Horizon) exposed at an average depth of 30cm. In general, the study area is located within a very low lying alluvial flat landform that is subject to repeated flooding events and as such would not provide suitable conditions for intensive Aboriginal occupation, or preservation of subsurface deposit.

No archaeological sites, Aboriginal objects or areas of Aboriginal archaeological potential were identified within the study area during the visual inspection. The visual inspection assessed the area as displaying low archaeological potential.

Conclusion

The Aboriginal heritage due diligence review of the proposed WD3 compound and utility works adjacent to Cleveland Road was undertaken for the study area as shown in Figure 1. Assessment included review of background information and existing assessments for the WD3 package, database search review and a visual inspection of the study area.

No archaeological sites, Aboriginal objects, Aboriginal heritage items or areas of archaeological potential were identified within the study area by the due diligence review. According to the Heritage NSW *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*, the proposed works can proceed with caution.

If you have any questions or require further information, please do not hesitate to contact me on 02 9232 5373 or email Matthew.Kelleher@knconsult.com.au.

Yours sincerely,



Dr Matthew Kelleher
Director/Archaeologist