Review of Environmental Factors

Construction and operation of a depot at Boiler Paddock South, Peter Brock Drive, Prospect

1 Determination

This Review of Environmental Factors (REF) assesses potential environmental impacts of the proposal to construct and operate a regional depot to be used by Sydney Water contractors in the West Region as part of the Partnering for Success program. The REF 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 REF. Additional environmental impact assessment may be required if the scope of work or work methods described in this REF change significantly following determination.

Decision Statement

The main potential construction environmental impacts of the proposal include impacts such as soil and water, noise, and traffic. During operation, the main environmental impacts are associated with amenity impacts such as noise and traffic. The proposal will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats. Therefore, a Species Impact Statement (SIS) and/or Biodiversity Development Assessment Report (BDAR) are not required.

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

Certification

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

Prepared by:	Reviewed by:	Endorsed by:	Approved by:
[redacted]			
Grace Corrigan REF author Sydney Water Date: 09.04.24	John Eames Snr Environmental Scientist Sydney Water Date: 22/04/2024	Fadi Alhyari Principal Project Manager Sydney Water Date: 16.05.2024	Murray Johnson Environment and Heritage Manager Sydney Water Date: 20/06/2024

2 Proposal description

Table 1 Description of proposal

Aspect	Detailed description
Proposal need and objectives	The West Region Delivery Team (WRDT) is a consortium of five Joint Venture delivery partners working in partnership with Sydney Water. WRDT delivers design, construction, maintenance, and facilities management services to Sydney Water assets across western Sydney. The construction delivery team currently operates from multiple locations across the WRDT network. There has been an increase in the volume of capital works to be delivered by the construction team. As a result, it has been identified that existing compounds would not have sufficient capacity to support this work, and additional compound areas are needed.
Consideration of alternatives/options	The preferred location was selected in consultation with Sydney Water's Property team, to meet the following requirements: • sufficient space (at least 4,000 m^2) • accessibility to main roads • central to activities within West Region (ideally around Prospect) • can be a long-term operation • relatively flat (to allow for hardstand to be installed) • secure area (with allowance for extra fencing to be installed) • suitability for the required land use. After reviewing Sydney Water's property portfolio against the above requirements, Boiler Paddock South was identified as the preferred location. This location also avoids potential future development planned around Prospect Reservoir. Benefits from construction and operation of this depot include: • additional centralised area available for compound activities • reduced need to individually identify and assess compound locations for future projects • use of Sydney Water land is a value-for-money outcome.
Proposal description and methodology	Construction of the proposed depot methodology: • install hardstand access across most of the lot and parking areas • install/connect services (e.g. water, wastewater, electricity, communications) • install additional gates, fencing, and security • install demountable buildings for site office, training room, and ablutions • install shipping containers for storage

Aspect	Detailed description
	• install bins for waste storage • install vehicle washdown facility • install covered workshop area. Operation of the proposed depot would involve typical construction compound activities across multiple projects, including: • collection, delivery, and storage of plant and equipment • laydown of construction materials, e.g. pipes, valves, precast pits • parking for staff • storage and collection of small quantities of waste/spoil in designated bins • use of office facilities • washdown of vehicles • minor equipment repairs. At the end of the partnership (end June 2030), the site would be decommissioned and rehabilitated to the same or better condition than previous (e.g. removing equipment and hardstand areas).
Location and land ownership	The street address is 544 Reservoir Road, Prospect (part of Lot 304, DP 1122291). It is on land owned by Sydney Water. The area of the proposed depot is about 7000 m^2. The proposed depot is within the Blacktown Local Government Area. However, it is unzoned land under the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (Western Parklands SEPP). Surrounding land use is largely industrial. There are no residential properties within 1 km of the proposal. Prospect Reservoir is about 300 m to the south. The location and environmental constraints at the proposed depot are shown in Figure 1 and the proposed layout is shown in Figure 2.
Site establishment and access tracks	The proposed depot would be accessed via Peter Brock Drive, near Auto Place. Hardstand entry/exit driveway would be installed within the depot to provide access. The proposed layout (Figure 2) shows the driveway entry/exit points located opposite the industrial properties at 94-102 Peter Brock Drive. Staff and truck parking will be within the depot.
Work hours	During construction, work and deliveries will be scheduled to occur during standard daytime hours where possible: 7am to 6pm, Monday to Friday and 8am to 1pm, Saturdays. Once constructed, the proposed hours of operation at the depot are: • 6am to 6pm Monday to Friday • 8am to 3pm Saturday • Provision for out of hours access in case of emergency.

Aspect	Detailed description
	These extended operating hours are outside of standard construction hours and are required for mobilisation activities (e.g. pick up of gear and equipment, time for the teams to perform pre-start checks, etc) and for demobilisation activities (e.g. drop off of gear and equipment). Given the surrounding land use, these extended operating hours are not anticipated to cause impacts to sensitive receivers. In addition, work may sometimes be required at different times (e.g. for movement of oversize equipment). Sydney Water's Project Manager can approve work outside of standard daytime hours, outside of that assessed in this REF, following the approval process described in the mitigation measures in Section 6. The depot may also be used from time to time for emergency work that is required during the evening and night time, and for deliveries of spoil and equipment and material during out of hours work. These works would be ad hoc and on an as needs basis. It is proposed that the depot be operational for the remaining duration of the Partnering for Success contract period, i.e. to 30 June 2030. If needed (for example, to locate permanent infrastructure at this site), the depot will be demobilised and rehabilitated earlier.
Proposal timing	Construction is expected to start mid 2024 and take about 3-4 months to complete. The depot will then be operational until June 2030.

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

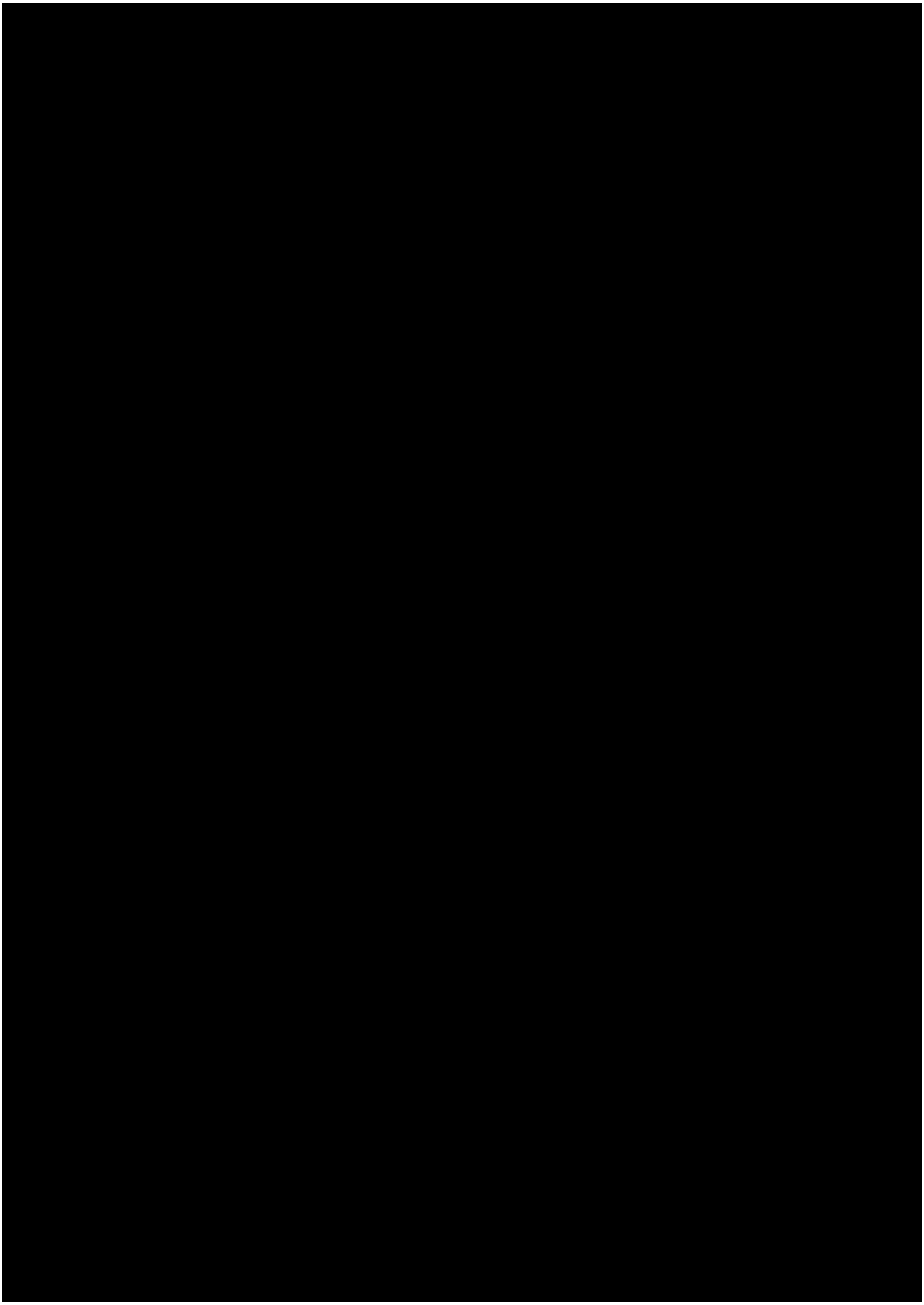

Figure 1 Location of the proposed depot and environmental constraints

Figure 2. Proposed depot layout (indicative)

3 Consultation

Community and stakeholder consultation

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

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

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

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

We will also provide local councils with reasonable notice when we would like to commence works. Blacktown City Council will be consulted about temporary driveway/s needed for the depot.

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).

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

4 Legislative requirements

Table 2 Environmental planning instruments relevant to the proposal

Environmental Planning Instrument	Relevance to proposal
State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (Western Parklands SEPP)	The site is not zoned under a Local Environmental Plan (LEP), and it is identified as unzoned land under the Western Parklands SEPP. Section 7.5(2) of the Western Parklands SEPP states 'Part 3 (other than the excluded provisions) of the State Environmental Planning Policy (Infrastructure) 2007 applies as if the Western Parklands were in a prescribed zone under that Policy.' Part 3 of the SEPP (Infrastructure) 2007 has been consolidated into Part 2.3 of the TISEPP. Part 2.3 of the TISEPP includes sections 2.126, 2.137, and 2.159 referenced below.

Environmental Planning Instrument	Relevance to proposal
State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP)	The depot would be used to facilitate construction and maintenance works for Sydney Water's wastewater (sewerage), stormwater and water supply projects and assets. Under sections 2.126(10)(g), 2.137(2)(a), and 2.159(6)(i) of the TISEPP, development for the purposes of sewerage systems, stormwater management systems and water supply systems, includes construction works. Section 2.3(3) of TISEPP defines construction works to include temporary construction yards, temporary laydown areas, and temporary structures. These construction works can be carried out for activities which can be performed as development without consent. Under Divisions 18, 20 and 24, various development for the purposes of sewerage, stormwater management and water supply systems can either be carried out without consent on any land, or land in a prescribed zone (and/or under the prescribed circumstances). As identified above, under the Western Parklands SEPP the proposal is on unzoned land, which can be considered a prescribed zone. As Sydney Water is a public authority, the proposal is permissible without consent for these different systems.
State Environmental Planning Policy (Biodiversity and Conservation) 2021 (BCSEPP)	**Vegetation in non-rural areas (Chapter 2)** The proposal will require clearing of about 0.04 ha of Cumberland Shale Plains Woodland (PCT 3320). The proposal is in a local government area listed in subsection 2.3(1a), however as it is unzoned land (cl2.3(1b)), this chapter does not apply, and a council permit to clear vegetation under this SEPP is not required. In addition, subsection 2.4(1) states: 'This Policy does not affect the provisions of any other SEPP…'. **Water catchments (Chapter 6)** Chapter 6 of this SEPP applies as the proposal is within the Hawkesbury-Nepean Catchment, a regulated catchment area. Section 5 of this REF assessed potential environmental impacts on water quality and quantity, aquatic ecology, flooding, access, cultural heritage, flora and fauna, and scenic quality. The assessment confirmed that potential impacts are negligible and meet the requirements of part 6.2 of the SEPP.

Table 3 Consideration of key environmental legislation

Legislation	Relevance to proposal	Permit or approval	Timing and responsibility
Protection of the Environment Operations Act 1997 (POEO Act)	An Environmental Protection Licence (EPL) is required under Schedule 1 (Clause 42) of the POEO Act if the waste stored on-site exceeds the following limits: • more than 1,000 t of waste stored on the premise at any one time • more than 6,000 t of waste received per year from offsite • more than 5 t of hazardous waste, restricted solid waste, liquid waste, or special waste stored on the premises at any one time. During depot operation, excess spoil generated during night works may be temporarily stored at the depot. This would be stored until the relevant waste facilities open the following morning. It is not expected that the above storage limits would be exceeded.	NA	NA
Biodiversity Conservation Act 2016 (BC Act)	Cumberland Shale Plains Woodland is a Threatened Ecological Community (TEC) listed under the BC Act and is mapped as present within the proposed depot footprint. About 0.04 ha of this TEC is to be removed. Two trees with habitat features will be retained. No significant impacts are expected.	NA	NA
National Parks and Wildlife Act 1974 (NPW Act)	The proposal will not encroach on, or require access to, the nearby Prospect Nature Reserve. This nature reserve is National Parks land. Aboriginal heritage is protected under the NPW Act. No disturbance to any known or unknown Aboriginal heritage items is expected.	NA	NA
Heritage Act 1977	The proposal is within Prospect Reservoir, which is a State-significant item listed on the State Heritage Register, and local	Section 60 approval	Pre-construction, Sydney Water

Legislation	Relevance to proposal	Permit or approval	Timing and responsibility
	heritage register (under the Western Parklands SEPP). The proposal requires approval in accordance with section 60 of the *Heritage Act 1977*. A Statement of Heritage Impact (SOHI) was prepared for the proposal (Appendix D). As the proposal will not materially affect the significance of the State Heritage item, this approval can be undertaken under Sydney Water's delegation of functions of the Heritage Act.		
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	Cumberland Shale Plains Woodland is a TEC listed under the EPBC Act and is present within the proposed depot footprint. In addition, the presence of flowering eucalypt species may provide potential foraging habitat for the Grey-Headed Flying Fox (*Pteropus poliocephalus*), which is listed as Vulnerable under the EPBC Act. No significant impacts are expected.	NA	NA
Water NSW Act 2014	The proposed depot is adjacent to WaterNSW land. No access to WaterNSW land is required. Should access be required, the WaterNSW Access Protocol will be followed.	NA	NA

5 Environmental assessment

The environmental impacts checklist (SWEMS0019.01) was completed for the works which considers all environmental aspects. Table 4 includes only the potentially impacted aspects.

Table 4 Key environmental aspects and potential impacts of construction and operation

Aspect	Potential impacts
Topography, geology and soils	The proposed depot is on a grassed area. The land slopes from about 78 m AHD in the south-western corner of the site to about 71 m AHD at the northern boundary. The soil is mapped as localised salinity hazard. Historic imagery from 1943 to 2005 shows the proposed depot area and surrounds as largely undisturbed grassland and mature vegetation. Isolated, scattered development was visible in 1998. However, sub-surface soil contamination may be present from recent industrial land use west of the proposed depot. This industrial area was constructed between 2005 and 2013. Construction impacts relate to ground disturbance to install hardstand. Soil levelling will be required, by cutting and filling with existing material from the site. During operation, ground disturbance would be minimal, as most of the site would have hardstand installed. All vehicle movements would be on hardstand. A pre-construction assessment will be performed to identify any previous contamination.
Water and drainage	The proposed depot is: • about 300 m north of the nearest waterway (Prospect Reservoir) • not on flood-prone land (Blacktown City Council Flooding Precincts Mapping) • about 100 m north of high-potential groundwater dependent ecosystems (GDEs) • near WaterNSW land – Special Area (Prospect) S1 (borders the southern side of Peter Brock Drive). No publicly available groundwater data within 1 km of the proposed depot is available. However, since ground disturbance is relatively shallow, it is not expected that groundwater would be encountered. Fuel and chemical storage would be required during construction and operation, and can be managed through implementing appropriate mitigation measures. No entry to, or impacts to, WaterNSW land are required. Surface drainage will be set up to drain to the north east corner of the depot during operation. Although the topography of the depot footprint would change during construction and operation, surface water flows are not expected to change significantly during operation.
Flora and fauna	An ecological assessment (Appendix E) identified the vegetation communities within the depot footprint, assessed impacts, and identified appropriate mitigation measures. Biodiversity features were identified during a site visit (Figure 3).

Figure 3. Biodiversity features within the proposal area

Existing environment

Plant Community Type (PCT) 3320 Cumberland Shale Plains Woodland is present within the proposal area, comprising of scattered mature and regenerating Grey Box *Eucalyptus microcarpa*. PCT 3320 is associated with TECs listed under the BC Act and EPBC Act. This PCT is considered low quality Cumberland Plain Woodland in the Sydney Basin Bioregion under the BC Act, as any native mid-storey or understorey species that would be diagnostic of the TEC are absent. It is unlikely that this vegetation meets the EPBC Act condition threshold.

The remaining vegetation is mapped as urban exotic/planted native vegetation, including exotic grasses and invasive weeds. Species classified as Priority Weeds within the Greater Sydney region and present on site were bridal creeper (*Asparagus asparagoides*) and fireweed (*Senecio madagascariensis*).

No threatened flora or fauna were sighted during the visit. Habitat features were found within 2 large Grey Box trees within the depot footprint – one containing a stick nest and one containing a tree hollow (Figure 4). One additional tree about 50 m east of the depot footprint contained a hollow, which was occupied by feral European honeybees at the time of the inspection. European honeybees are considered a key threatening process for multiple hollow-dependant fauna, including microbats and hollow-dependant birds.

Figure 4. Grey box trees within proposal area, to be retained

The proposed depot is also:

- near National Park land – Prospect Nature Reserve (borders the southern side of Peter Brock Drive)
- not within 200 m of any recorded threatened flora or fauna sightings
- on Category 1 bushfire prone land.

Construction impacts

Vegetation impacts will be required during depot construction. Removal of 0.04 ha of PCT 3320 is required. The 2 large Grey Box trees with habitat features will be retained. The other scattered regenerating Grey Box trees and some of the urban exotic/planted native vegetation will need to be removed for depot construction.

A Test of Significance (ToS) was performed under the BC Act for the TEC Cumberland Shale Plains Woodland, and for threatened microbat species or hollow-dependant woodland bird species which may use habitat within the site. No significant impacts are expected.

The presence of flowering eucalypt species may provide potential foraging habitat for the Grey-Headed Flying Fox (*Pteropus poliocephalus*), which is listed

	as Vulnerable under the EPBC Act. An Assessment of Significance concluded that no significant impact would result to this species from the works. While not within the study area, there is a possibility that the hive of European honeybees may move into other hollows, including those of the retained mature trees. This can be managed with the implementation of the specific mitigation measure in Table 6. The retained Grey Box trees may require trimming during operation of the depot. Offsets will be required in accordance with Sydney Water's Biodiversity Offset Guidelines. For TEC's, the offset required is 3:1 (i.e. 0.12 ha of offset or restoration).
Heritage	**Aboriginal heritage** There is one Aboriginal heritage item recorded within 200 m of the proposed depot. [redacted] This site is likely to have been destroyed during levelling of land for industrial buildings within the area. Within the depot site, there is no historic evidence of previous disturbance. There is therefore potential that sub surface deposits may be present. However, there are no high-risk landscape features for Aboriginal heritage are within 200 m of the proposed depot. High-risk landscape features include: • Within 200 m of waters / a waterway • Within a sand dune system • On a ridge top, ridge line, or headland • Within 200 m above or below a cliff face • In, or within 20 m of, a rock shelter, cave, or cave mouth. Some shallow ground disturbance will be required for levelling out of the site. Based on the above assessment, the risk of encountering any previously unknown heritage items is low. **Non-Aboriginal heritage** The proposed depot is within the curtilage of the Prospect Reservoir and Surrounding Area, which is listed on the State Heritage Register (ID 01370) and the Western Parklands SEPP (ID 4) (Figure 5). The proposed depot is also within the 'minimum required curtilage' of the Prospect Reservoir, as defined in the Prospect Reservoir Site Conservation Management Plan (Sydney Water, 2005). A SOHI was performed to assess potential impacts to this heritage listed item (Appendix D). A literature review and visual inspection was performed. The review and inspection indicated: • Previous studies have not identified any heritage items within the footprint of the proposed depot. • No areas of archaeological potential were identified on site.

- No building structural remains, archaeological deposits, wells, underground water storage systems, agricultural tools or rubbish pits were observed.

The archaeological potential of the site (the potential for relics to be present) was also assessed. There is no historic evidence of any buildings or structures within the proposed depot footprint. There is a low potential for any archaeological deposits to be present.

No elements identified within the State Heritage listing are present within the proposed depot footprint.

The SOHI concluded:

- The proposal will have negligible impact on the overall heritage significance of the Prospect Reservoir and surrounding area. No buildings or associated infrastructure of Prospect Reservoir were identified within the proposed depot footprint.
- The proposal is consistent with the policies of the Prospect Reservoir and surrounding area.
- The proposal will not impact any key heritage features or have any visual impacts on the reservoir.
- The proposal will not impact any known archaeological deposits.

The main impact would be surface development through construction of the depot. The proposal will have an initial minor adverse impact to the ground surface. This minor impact is outweighed by the lack of physical and visual impacts to the heritage significance of the site and the functional benefit of using the site for ongoing capital project delivery.

Under delegation from the NSW Heritage Council, Sydney Water via its Delegate, may approve works that will not “materially affect” the significance of an item entered on the State Heritage Register if these items are owned, controlled, and operated by Sydney Water. This delegation was deemed appropriate for this proposal, and approval was received on 9 April 2024.

Mitigation measures consistent with the conditions of approval in the delegated approval are captured in this REF.

Figure 5. State and national heritage listings within and around the proposal.

Noise and vibration	The likelihood of noise impact from the proposal was reviewed against risk factors (based on Table 2 of the EPA's 2020 Draft Construction Noise Guideline). The review indicated that the construction noise impact would be low risk and therefore a qualitative noise impact assessment was undertaken. **Existing environment** There is existing background noise from high traffic volumes along the M4 Western Motorway (over 80,000 vehicles per day) which is about 230 m north of the proposed depot. There are no residential properties within 1 km of the proposed depot. Nearest non-residential receivers are industrial businesses along Peter Brock Drive, which are typically open between 7:30am and 6pm weekdays. There is also a data centre which is open 24 hours a day.

	Construction noise impacts A minor increase in noise is anticipated to nearby industrial buildings during depot construction from delivery of site sheds, and movement of trucks and other equipment. 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. **Operational noise impacts** There will be ongoing use of the compound during operation. The site would be mostly used during standard construction hours. Contingency has been provided for some vehicle movements and spoil deliveries outside of standard construction hours. Due to the distance to sensitive receivers and predominantly daytime use of the depot, noise impacts are expected to be minimal. **Vibration impacts** Vibratory equipment may be used during construction to compact the hardstand. No structures are expected to be impacted. No operational impacts are expected.
Air and energy	Receivers in nearby industrial buildings are most likely to be impacted by changes to air quality during depot construction and operation. During construction, dust may be generated during vehicle movements on unsealed areas, stockpile creation and movement, and during ground disturbance. Dust generation would be more likely in dry and windy conditions, and in areas not covered by hardstand. During operation, dust generation is most likely from uncovered stockpiles, as vehicle movements are expected to be on hardstand. Odour may be generated from waste stored on site. As waste would be regularly moved off site, any additional odour is not expected to be significant or long-term. There would be minor emissions from plant, equipment, and vehicles during construction and operation of the depot. If this machinery is poorly maintained, or left running unnecessarily, overall fuel emissions would increase. The depot is expected to be connected to mains power. Implementing mitigation measures to manage stockpiles and vehicle movements will minimise the risk of adverse air quality impacts.
Waste and hazardous materials	During depot operation, small quantities of waste will be stored on site in designated bins. This is for waste that would not be able to be taken directly to a licenced waste facility or re-used elsewhere. The proposed spoil storage and waste storage areas are shown in Figure 2. Typical waste material generated during construction would include material scraped from the surface during site establishment and from vegetation removal.

	Typical waste streams during operation include spoil, construction waste, and vegetation, and other general construction waste. Waste quantities are expected to be below the limits that trigger the requirement for an EPL. Waste stored on site will be monitored to ensure the EPL trigger is not exceeded.
Traffic and access	The proposed depot is on vacant land near an industrial area, accessed from Peter Brock Drive (near Auto Place). Access to the site will be restricted to site staff and contractors, and authorised visitors. Parking spaces will be provided within the depot. This would minimise the need to use on-street parking on the streets surrounding the depot. One bus route operates along Peter Brock Drive between about 5:30am and 6:45pm, Monday to Friday only. Use of the depot will increase vehicle movements on local roads. The quantity of vehicle movements will fluctuate based on project needs. This increase is not expected to significantly impact Peter Brock Drive and the connecting road of Reservoir Road. The proposed depot is on Sydney Water land, and no other private property access would be impacted. There are no footpaths adjacent to the depot, so pedestrian volumes in the area are expected to be low. There is a cycle path along Peter Brock Drive, which would not be blocked during construction or operation. The southern driveway entrance would be entry only. The northern driveway entrance would be for both entry and exit. Although a hardstand turning circle would be installed, some reversing may be required to exit the site.
Social and visual	Potential amenity impacts related to noise, air quality, and traffic and access have been assessed above. The depot consists of demountable buildings, site amenities, and material storage bays with fencing around the perimeter. Installing these assets would result in a minor change to the visual amenity of the area. Lighting may be needed occasionally when working outside of standard construction hours. Lighting will be directed away from businesses and road users where possible. The proposed depot is only expected to be visible to nearby businesses and road users. Social and visual impacts are considered minimal.
Cumulative and future trends	There is a state significant development application currently in progress for the nearby data centre at 90 Peter Brock Drive. This is to expand the property to include adjacent properties at 94-102 Peter Brock Drive. This proposed development was determined in September 2023. This proposed development would not encroach on the proposed depot. However, there may be cumulative amenity impacts (e.g. noise, dust, traffic) during expansion of the data centre, should the application proceed.

Upgrades to drinking water assets (new pipelines and other infrastructure) are currently being performed within Prospect Reservoir. The location of this depot was chosen to avoid current and future development within Prospect Reservoir.

There is also potential for cumulative waste impacts related to multiple projects using the compound. The limit on storage space would minimise this cumulative impact.

The proposed depot is not expected to impact, or be impacted by, future trends. The proposed depot is outside of flood-prone land, and the small-scale vegetation impacts would not increase bushfire risk.

6 Environmental mitigation measures

Table 5 Mitigation measures

Mitigation measures
General
Should the proposal change from the REF, and different /additional use of the depot than described in this REF is required, no further environmental assessment is required provided the change: • remains within the assessment 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; - 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. Consultation will also be undertaken with Sydney Water's heritage advisors in case additional or amended heritage approvals are required.
The delivery contractor will carry out a project-by-project check to ensure consistency with this REF's TISEPP permissibility (i.e. that projects which are using the depot are projects that can be performed as development without consent). If not, additional assessment may be required – contact the Environment and Heritage team.
WRDT will consult with the Project Manager for Quakers Hill Advanced Treatment Upgrade regarding the design and layout of the depot.
The REF will be reviewed if there are changes to the surrounding land use (e.g. elsewhere within Prospect Reservoir) that may change the assessment outcome. The suitability of the depot is to be reviewed regularly, pending future growth requirements. Decommissioning and restoration is to occur by 30 June 2030 or earlier if the site is needed for permanent projects.
Prepare a Construction Environmental Management Plan (CEMP) for the site establishment addressing the requirements of this environmental impact 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 and boundaries of the work area, including locations of laydown and storage areas for materials and equipment • location of environmental controls (such as erosion and sediment controls, fences or other measures to protect vegetation, spill kits) • location and full extent of any vegetation disturbance. The CEMP will delineate approved disturbance boundary before construction.
Prepare a Depot Management Plan (DMP) for the operation of the depot, addressing the requirements of this environmental impact assessment. The DMP should specify licence, approval and notification requirements. Prior to operation, all project staff and contractors will be inducted in the DMP. The DMP must be readily available on site and include as a minimum: • risk assessment • site layout plan • roles and responsibilities • incident management

Mitigation measures

- complaints handling
- procedure for managing and recording the volume of waste stored on site.

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

- predicted/onset of heavy rain during works
- spills
- unexpected finds (e.g. heritage and contamination)
- 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 (e.g. *Protection of the Environment Operations Act 1997)*, Sydney Water's employees and contractors will follow SWEMS0009. Attach SWEMS0009 to the CEMP.

Complaints to be managed in accordance with Sydney Water's Complaints Procedure and Community Engagement Plan.

A pre-condition site assessment to be performed before site occupation to identify any existing contamination.

Topography, geology, and soils

Prevent sediment moving offsite in accordance with Managing Urban Stormwater, Soils and Construction, Volume 1 and 2A (Landcom 2004 and DECC 2008), including, but not limited to:

- divert surface runoff away from disturbed soil and stockpiles
- install sediment and erosion controls before construction starts
- reuse topsoil where possible and stockpile separately
- inspect controls at least weekly and immediately after rainfall
- rectify damaged controls immediately
- remove controls once surfaces have been stabilised, including removing trapped sediment in drainage lines.

Minimise ground disturbance and stabilise disturbed areas progressively.

Contractor to ensure imported material is Virgin Excavated Natural Materials (VENM) or meets a relevant NSW EPA Resource Recovery Order and Resource Recovery Exemption, or is a commercially supplied material that is not waste.

If using materials that are subject to a NSW EPA Resource Recovery Order/Exemption the contractor must ensure the conditions in that Order/Exemption are strictly adhered to.

Stop work in the immediate vicinity of suspected contamination. Indicators of contamination include discoloured soil, anthropogenic material within fill, asbestos, chemical or petrol odours and leachate. Contain disturbed material on an impermeable surface and cordon areas off. Notify the Sydney Water Project Manager and the Environmental Representative (who will contact Property Environmental Services) to agree on proposed management approach.

Stop work during heavy rainfall or in waterlogged conditions when there is a risk of sediment loss off site.

Sweep up any sediment/soil transferred off site at least daily, or before rainfall.

Eliminate ponding and erosion by restoring natural landforms to the pre-works condition.

Mitigation measures

Adopt appropriate soil salinity mitigation measures in accordance with Western Sydney Salinity Code of Practice (Western Sydney Regional Organisation of Councils, 2003). This may include:

- (if relevant) treat existing salinity with gypsum
- (if relevant) establish salt tolerant species in existing or potential salinity problem areas after construction
- stabilise existing areas of erosion
- minimise water use on site
- avoid rotation and vertical displacement of the original soil profile
- backfill excavations deeper than one metre in the same order, or treat or use this material as fill at depths more than one metre from the finished level.

The site will be designed to ensure that dirt/mud is not tracked offsite by vehicles (e.g. use of hardstand, rumble grids at exit).

The site will be designed to minimise changes to flood patterns, surface water movement, and stormwater movement during operation (e.g. directing surface water to existing drains or low points).

A post-occupation contamination assessment is to be undertaken by the contractor (WRDT) to confirm no contamination has occurred from the use of the site, before its return to Sydney Water.

Water and drainage

Keep functioning spill kit on site for clean-up of accidental chemical/fuel spills. Keep the spill kits stocked and located for easy access.

Locate portable site amenities, chemical storage and stockpiles of erodible materials away from watercourses, drainage lines and flood prone areas.

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.

Conduct refuelling, fuel decanting and vehicle maintenance in compounds where possible. If field refuelling is necessary, designate an area away from waterways and drainage lines with functioning spill kits close by.

Conduct any equipment wash down within a designated washout area. Ensure the area is bunded and any wastewater is captured within the site.

Ensure equipment is leak free. Repair oil/fuel leaks immediately or remove from site and replace with a leak-free item.

Bund potential contaminants and store on robust waterproof membrane, away from drainage lines.

Flora and fauna

Provided it is essential for delivering the project, Sydney Water's Project Manager can approve the following vegetation removal and tree trimming, without additional environmental assessment (but only after consultation with the Environmental and Community Representatives and affected landowners). Sydney Water considers vegetation removal in these circumstances has minimal environmental impact.

- Any minor:

- vegetation trimming or
- removal of exotic vegetation or
- removal of planted native vegetation

Mitigation measures

where the vegetation is not a threatened species (including a characteristic species of a threatened community or population), heritage listed, in declared critical habitat or in a declared area of outstanding biodiversity value.

- Any removal of remnant vegetation where there is no net change to environmental impact (e.g. a different area of vegetation is removed but the total area is the same or less than assessed in the EIA).

Written explanation of the application of this clause (including justification of the need for trimming or removal and any proposed revegetation) should be provided when seeking Project Manager approval. Any impacts to native vegetation and trees must be offset in accordance with the Biodiversity Offset Guideline (SWEMS0019.13).

The avoid, minimise, then offset hierarchy should be adopted when considering impacts to vegetation within the study area. Residual impacts to native vegetation and trees (up to 0.04 ha of native vegetation removal) will be offset or restored in accordance with the Biodiversity Offset Guideline (SWEMS0019.13) at a ratio of 3:1 in the surrounding area or within a suitable site within the west region.

Physically delineate vegetation to be cleared and/or protected on site and install appropriate signage prior to works commencing. An arborist should be engaged to ensure the structural root zones of the retained trees are adequately protected.

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

If any threatened species (flora or fauna) is discovered during the works, stop work immediately and notify the Sydney Water Project Manager. Work will only recommence once the impact on the species has been assessed and appropriate control measures provided.

Manage biosecurity in accordance with:

- *Biosecurity Act 2015* (see NSW Weedwise), including reporting new weed infestations or invasive pests
- contemporary bush regeneration practices, including disposal of sealed bagged weeds to a licenced waste disposal facility.

Record Pesticides and Herbicides use in accordance with SWEMS0017.

During depot construction, to prevent spread of weeds, clean all equipment including PPE prior to entering or leaving the work sites.

Develop a Weed Management Plan to mitigate the establishment and spread of priority weeds onsite during operation.

In a TOBAN, activities involving general purpose hot works (that are not essential/emergency works) require an exemption. Exemption request are to be submitted to CDResilienceProgram s@sydneywater.com.au or CustomerHub.DutyManager@sydneywater.com.au

Review this mitigation measure regularly during depot operation based on updates to Sydney Water advice.

Impacts to hollow-bearing trees and their structural root zones should be avoided where practical.

When practical, adequately trained personnel should be engaged to remove the hive of European honeybees.

Heritage

Do not make publicly available or publish, in any form, Aboriginal heritage information on sites / potential archaeological deposits, particularly regarding location.

Mitigation measures

Repeat the basic AHIMS search if it is older than 12 months. Conduct additional assessment if new sites are registered and could be impacted by the works.

A toolbox talk on types of artefacts which could be present should be provided to all staff before performing any ground disturbance. YouTube link to the artefacts video = https://youtu.be/kShPePNwADw (2:16 mins; no audio).

If any Aboriginal object or non-Aboriginal relic is found, cease all excavation or disturbance in the area and notify Sydney Water Project Manager in accordance with SWEMS0009.

All staff and users of the depot must comply with the conditions provided in the section 60 approval:

- Care is taken not to impact any significant heritage fabric or items of environmental heritage.
- Sydney Water's Incident Management Procedure (SWEMS0009) must be included in the Construction Environmental Management Plan/Environmental Work Method Statement for site establishment, and Depot Management Plan for operation.
- Stop all activities, notify Sydney Water's heritage team and follow SWEMS0009 if any of the below identified circumstances occur:
    - relics are discovered which require notification under section 146 of the Heritage Act 1977, and/or
    - any Aboriginal "objects" are discovered that require notification under section 89A of the National Parks and Wildlife Act 1974, and/or
    - heritage objects, including possible human skeletal material (remains) are unexpectedly discovered.
- this approval shall be void if the activity to which it refers is not physically commenced within five years after the date of the approval.

Noise and vibration

Works must comply with the Interim Construction Noise Guideline (EPA, 2009), including scheduling work and deliveries within the approved working hours of:

- 6am to 6pm Monday to Friday
- 8am to 3pm Saturday
- Provision for out of hours access in case of emergency.

Any proposed work outside of these hours must be justified.
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.

Incorporate **standard daytime hours noise management mitigation measures** into the CEMP, including but not limited to:

- implement a noise complaints handling procedure
- appropriate plant will be selected for each task, to minimise the noise impact (eg all stationary and mobile plant will be fitted with residential type silencers)
- engine brakes will not be used when entering or leaving the work site(s) or within work areas
- regularly inspect and maintain equipment in good working order
- arrange work sites where possible to minimise noise (eg generators away from sensitive receivers, site set up to minimise use of vehicle reversing alarms, site amenities and/ or entrances away from noise sensitive receivers).

Mitigation measures

If works **beyond standard daytime hours are needed greater than on an ad hoc basis**, the Contractor would:

- justify the need for out of hours work (OOHW) and why it is not possible to carry out the works during standard daytime 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.

Air and energy

Use alternatives to fossil fuels where practical and cost-effective.

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

Maintain equipment in good working order, comply with the clean air regulations of the *Protection of the Environment Operations Act 1997*, have appropriate exhaust pollution controls, and meet Australian Standards for exhaust emissions.

Switch off vehicles/machinery when not in use.

Implement measures to prevent offsite dust impacts, for example:

- water exposed areas (using non-potable water source where possible such as water from excavation pits)
- cover exposed areas with tarpaulins or geotextile fabric
- modify or cease work in windy conditions.

Cover all transported waste.

Waste and hazardous materials

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.

Provide adequate bins for general waste, hazardous waste and recyclable materials.

Minimise stockpile size and ensure delineation between different stockpiled materials.

Minimise the generation of waste, sort waste streams to maximise reuse/recycling in accordance with the *Waste Avoidance and Resource Recovery Act 2001*.

Manage waste and excess spoil in accordance with the NSW EPA Resource Recovery Orders and Exemptions (if applicable) and / or Waste Classification Guidelines. Where materials are not suitable or cannot be reused onsite or offsite, recycle soils at a licensed soil recycling facility or dispose at an appropriately licenced landfill facility.

Prevent pollutants from escaping including covering skip bins.

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).

Regional Project Manager to monitor quantities of waste material e.g. excavated spoil being stored on site at any one time and annually. Quantities should not exceed the requirements under clause 42 of Schedule 1 of the POEO Act. Contractor to obtain an EPL from the EPA if these requirements are exceeded.

Mitigation measures
Traffic and access
All vehicles to park within the depot and not on nearby roads.
Manage sites to allow people to move safely past the works, including alternative pedestrian, bicycles, pram and wheelchair access (e.g. when there are large deliveries).
WaterNSW vehicles and personnel should always have access to their nearby land.
Social and visual
Temporary and permanent lighting to be pointed within the depot, to reduce light spill on to road users, nearby businesses, and nearby vegetation as much as practicable.
The depot will be restored to pre-existing condition or better.
Maintain the compound in a clean and tidy condition.
Cumulative and future trends
Continue to liaise with Sydney Water Property team and project delivery teams at Prospect Reservoir to minimise cumulative impacts.

Appendix A – Section 171 checklist

Section 171 checklist	REF finding
Any environmental impact on a community	There may be short-term impacts on the community from soil and water impacts, noise, and traffic during construction. There may be longer term impacts during depot operation from noise and traffic impacts. However, given the distance to sensitive receivers, these impacts would be minor. Any impacts would be managed by implementing the mitigation measures in this document.
Any transformation of a locality	The proposal will not result in the permanent transformation of a locality. Following demobilisation of the depot, the site would be rehabilitated.
Any environmental impact on the ecosystems of the locality	The proposal will require the removal of about 0.04 ha of a TEC, but will not result in environmental impacts to ecosystems of the locality. Following demobilisation of the depot, the site would be rehabilitated.
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	The proposal will not result in a reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality. Following demobilisation of the depot, the site would be rehabilitated.
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 occur on land that is state heritage listed, however it 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. The heritage value of the reservoir would not be significantly impacted.
Any impact on the habitat of any protected animals (within the meaning of the *Biodiversity Conservation Act 2016*)	The proposal will require the removal of about 0.04 ha of a TEC, however two habitat trees can be retained. As such, the proposal will not have any impact on the habitat of any protected animals.
Any endangering of any species of animal or plant or other form of life, whether living on land, in water or in the air	The proposal will not be endangering any species of animal, plant or other form of life, whether living on land, in water or in the air.
Any long-term effects on the environment	The proposal will not have any long-term impacts on the environment but will have a long-term benefit by providing a depot for construction and maintenance of wastewater, stormwater, and drinking water assets in western Sydney. By maintaining these assets, we will have an indirect positive long-term impact by making sure these assets operate effectively. Following demobilisation of the depot, the site would be rehabilitated.

Section 171 checklist	REF finding
Any degradation of the quality of the environment	The proposal will not cause the degradation of the quality of the environment.
Any risk to the safety of the environment	The proposal will not increase risk to the safety of the environment.
Any reduction in the range of beneficial uses of the environment	The proposal will not have any reduction in the range of beneficial uses of the environment. The land is currently unused and fenced off from public access.
Any pollution of the environment	Environmental mitigation measures will mitigate the potential for the proposed depot to pollute the environment. No pollution of the environment is expected.
Any environmental problems associated with the disposal of waste	The disposal of wastes will be conducted 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 may have minor cumulative environmental effects with other existing or likely future activities (e.g. proposed data centre upgrade, any future works at Prospect Reservoir).
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 proposed activity.
Any applicable local strategic planning statements, regional strategic plans or district strategic plans made under the EP&A Act, Division 3.1	The proposed depot would support various projects related to renewal, maintenance, growth, and other planning programs and strategies.
Any other relevant environmental factors.	The proposal has been assessed against the factors listed above, and there are no other relevant environmental factors to consider.

Appendix B – Consideration of principles of ecologically sustainable development (ESD)

Principle	Proposal alignment
Precautionary principle - *if there are threats of serious or irreversible environmental damage, lack of scientific uncertainty should not be a reason for postponing measures to prevent environmental degradation. Public and private decisions should be guided by careful evaluation to avoid serious or irreversible damage to the environment where practicable, and an assessment of the risk-weighted consequences of various options.*	The proposal will not result in serious or irreversible environmental damage and there is no scientific uncertainty relating to the proposal.
Inter-generational equity - *the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.*	The proposal will provide a site for workers performing essential infrastructure maintenance works. This will benefit future generations by maintaining and providing wastewater, stormwater, and drinking water infrastructure.
Conservation of biological diversity and ecological integrity - *conservation of the biological diversity and ecological integrity should be a fundamental consideration in environmental planning and decision-making processes.*	The proposal will not significantly impact biological diversity or ecological integrity. About 0.04 ha of vegetation will need to be removed, however mature habitat trees within the depot footprint will be retained. The vegetation requiring removal would be offset.
Improved valuation, pricing and incentive mechanisms - *environmental factors should be included in the valuation of assets and services, such as 'polluter pays', the users of goods and services should pay prices based on the full life cycle costs (including use of natural resources and ultimate disposal of waste) and environmental goals*	The proposal is necessary to ensure the successful maintenance of wastewater, stormwater and drinking water assets. This compound would be available for construction and maintenance teams working across multiple projects in West Region. It provides an optimum outcome for the community and environment with respect to financial cost.

Appendix C – Consideration of TISEPP consultation

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

Appendix D – SOHI

Appendix E – Ecological assessment

SW90 06/24

SWEMS0025.03v1