



Regional Development Assessment Panel Agenda

Meeting Date and Time: Tuesday, 17 February 2026; 9.30am
Meeting Number: RDAP/63
Meeting Venue: 140 William Street, Perth

A live stream will be available at the time of the meeting, via the following link:
[RDAP/63 - 17 February 2026 - City of Bunbury](#)

PART A – INTRODUCTION

1. Opening of Meeting, Welcome and Acknowledgement
2. Apologies
3. Noting of Minutes

PART B – CITY OF BUNBURY

1. Declarations of Due Consideration
2. Disclosure of Interests
3. Form 1 DAP Applications
 - 3.1 Lot 1 (No.31) Rawling Road, Davenport - Upgrade to Wastewater Treatment Facilities associated with existing abattoir – DAP/25/02996
4. Form 2 DAP Applications
5. Section 31 SAT Reconsiderations

PART C – OTHER BUSINESS

1. State Administrative Tribunal Applications and Supreme Court Appeals
2. Meeting Closure

Please note, presentations for each item will be invited prior to the items noted on the agenda and the presentation details will be contained within the related information documentation



DAP Members
Dale Page (Presiding Member)
Clayton Higham (Deputy Presiding Member)
Tony Arias
Cr Todd Brown (Part B – City of Bunbury)
Cr Cheryl Kozisek (Part B – City of Bunbury)

DAP Secretariat
Tenielle Brownfield
Kristen Gray



PART A – INTRODUCTION

- 1. Opening of Meeting, Welcome and Acknowledgement**
- 2. Apologies**
- 3. Noting of Minutes**



PART B – CITY OF BUNBURY

1. Declarations of Due Consideration

2. Disclosure of Interests

3. Form 1 DAP Applications

- 3.1 Lot 1 (No.31) Rawling Road, Davenport - Upgrade to Wastewater
Treatment Facilities associated with existing abattoir – DAP/25/02996

4. Form 2 DAP Applications

Nil

5. Section 31 SAT Reconsiderations

Nil

PART B – ITEM 3.1 - LOT 1 (#31) RAWLING ROAD DAVENPORT – UPGRADE TO WASTEWATER TREATMENT FACILITIES ASSOCIATED WITH EXISTING ABATTOIR

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Regional Development Assessment Panel
Local Government Area:	City of Bunbury
Applicant:	Planned Focus
Owner:	Rawling Road Pty Ltd
Value of Development:	\$32 million
Responsible Authority:	City of Bunbury
Authorising Officer:	Andrew McRobert – Director Sustainable Development
LG Reference:	5.2025.224.1
DAP File No:	DAP/25/02996
Application Received Date:	27 October 2025
Report Due Date:	6 February 2026
Application Statutory Process Timeframe:	90 Days
Attachment(s):	1. Location Plans 2. Planning Report 3. Proposed Plans 4. Environmental Report 5. Bushfire Management Plan 6. Bushfire Consultant Response to DFES Referral 7. Schedule of Submissions

Responsible Authority Recommendation

That the Regional DAP resolves to:

1. **Accept** that the DAP Application reference DAP/25/02996 is appropriate for consideration as a 'Abattoir' land use and compatible with the objectives of the zoning table in accordance with Clause 16 of the City of Bunbury Local Planning Scheme No.8 and Greater Bunbury Region Scheme.
2. **Approve** DAP Application reference DAP/25/02996 and accompanying plans in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, the provisions of the City of Bunbury Local Planning Scheme No. 8 and the Greater Bunbury Region Scheme subject to the following conditions:

Conditions

Administrative

1. All development shall be in accordance with the submitted plans, prepared by Capital House Australasia, titled 'Wastewater Treatment Plant', Job Number 24165, Revision T1 & A), with the following exception:
 - a) any additional works required by Conditions 4, 5, 6, and 7 relating to access, stormwater, wastewater treatment associated with the amenities and bushfire management;

Amended plans consistent with this condition must be submitted to the City for approval prior to commencement of works

2. This decision constitutes development approval only and is valid for a period of four years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.
3. All works required to satisfy a condition of this approval are required to be installed/constructed and maintained in accordance with the approved plans and conditions of approval for the life of the development.

Access and Parking

4. Prior to the commencement of works detailed design plans shall be prepared in accordance with relevant Australian Standards, Austroads Guidelines and City of Bunbury requirements, for all access, lighting, carparking, and pedestrian movement requirements, to the satisfaction of the City of Bunbury. Once plans are approved construction is to be in accordance with the approved plans and be completed before the development is occupied.

Water

5. Prior to the commencement of works a Stormwater and Drainage Management Plan, prepared in accordance with the Department for Water's Stormwater Management Manual must be submitted for the approval of the City of Bunbury. The Stormwater and Drainage Management Plan will determine the drainage infrastructure required to support the development and as a minimum it must address:
 - a) proposed development;
 - b) storm events to be managed;
 - c) onsite-retention for 1:1 year events;
 - d) onsite-detention for 1:5 year events;
 - e) overland flow path for larger events;
 - f) effect of groundwater;
 - g) use of water sensitive urban design principles;
 - h) water quality;
 - i) protection of adjacent / nearby waterways and wetlands; and
 - j) information pertaining to all aspects of the proposed developments water requirements from a secure water source.
 - k) conclusions / recommendations.

Before the development is occupied, the recommendations of the approved Stormwater and Drainage Management Plan must be constructed and implemented to the satisfaction of the City of Bunbury.

6. Prior to the commencement of works associated with the proposed amenities:
 - a) the landowner / applicant must provide a site and soil evaluation to determine the type of on-site sewage treatment system required and the appropriate location for on-site sewage disposal; and
 - b) an application to construct or install an apparatus for the treatment of sewage and the disposal of effluent and liquid wastes must be submitted and approved by the City of Bunbury's Environmental Health Services, in accordance with the *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974*; or alternatively
 - c) the amenities be deleted from the proposal.

Bushfire Management

7. Prior to the commencement of works, an updated Bushfire Management Plan (BMP) generally in accordance with the considered BMP, shall be submitted to and approved to the satisfaction of City of Bunbury on advice from the Department of Fire and Emergency Services (DFES). The Bushfire Management Plan shall:
 - a) include a mechanism for Plots 3 and 4 to ensure that the land is managed and maintained as low threat all year round.
 - b) provide detailed plans demonstrating adequate vehicle access and water supply are provided in accordance with A3.1 and A4.1 of the Planning for Bushfire Guidelines.

The approved Bushfire Management Plan shall thereafter be implemented in full and maintained to the satisfaction of the City.

8. Before the development is occupied, a notification, pursuant to section 70A of the *Transfer of Land Act 1893*, is to be placed on the certificate(s) of title of the lot(s), including any strata or survey strata lot, falling within, or partially within, a 'bushfire prone area' as designated by an Order made by the Fire and Emergency Services Commissioner under section 18P of the *Fire and Emergency Services Act 1998*, advising of the existence of a hazard or other factor. The notification is to state as follows:

"This land is within a 'bushfire prone area' as designated by an Order made by the Fire and Emergency Services Commissioner under section 18P of the Fire and Emergency Services Act 1998, and may be subject to a Bushfire Management Plan or Bushfire Protection Criteria Assessment."

Construction Management

9. Prior to issuing a building permit, a Construction Management Plan (CMP) shall be submitted for approval to the specifications and satisfaction of by the City of Bunbury and thereafter implemented in full. The management plan shall include details regarding mitigation measures to address impacts associated with construction works and must address the following issues:
 - a) public safety and amenity;
 - b) site plan and security;
 - c) contact details of essential site personnel, construction period and operating hours;
 - d) community information, consultation and complaints management plan;
 - e) construction staging plan;
 - f) noise, vibration and dust management;
 - g) pre-work dilapidation reports for City of Bunbury assets;
 - h) traffic, access and parking management;
 - i) Traffic Management Plan to be prepared in accordance with the Main Roads WA's Code of Practice;
 - j) waste management;
 - k) earthworks, excavation, land retention / piling and associated matters;
 - l) contamination risks;
 - m) storm water and sediment control; and
 - n) any other matters deemed appropriate by the local government.

Advice Notes

1. This is a development approval only. The applicant/owner is advised that it is their responsibility to ensure that the proposed development complies with all other applicable legislation, local laws and/or license requirements that may relate to the development. including approvals relating to de-watering, native vegetation clearing or working near existing infrastructure may require separate approvals from relevant private or government agencies.
2. The prescribed premises requires a works approval from the Department of Water and Environmental Regulation and licence issued under the Environmental Protection Act 1986.
3. The developer / landowner is advised of their obligations to ensure that all sand drift, waste, building materials and equipment is contained within the boundaries of the site during the construction period.
4. The City of Bunbury advises that the development must comply with the *Environmental Protection Act 1986* and the *Environmental Protection (Unauthorised Discharge) Regulations 2004* in relation to discharges into the environment. Further information can be obtained from the City of Bunbury.
5. Acid sulfate soils (ASS) risk mapping indicates that the site is located within an area identified as representing a high to moderate risk of ASS occurring within 3 metres of the natural soil surface. Please refer to Department of Water and Environmental Regulation's acid sulfate soil guidelines for information to assist with the management of deep ground disturbing works if required. <https://www.der.wa.gov.au/your-environment/acid-sulfatesoils/69-acidsulfatesoils-guidelines>
6. Please be aware that the subject land is located in a high groundwater table area. Treatments such as subsoil drainage may be required to prevent any increases to groundwater table levels on adjoining properties.

Details: outline of development application

Region Scheme	Greater Bunbury Region Scheme
Region Scheme - Zone/Reserve	Industrial
Local Planning Scheme	City of Bunbury Local Planning Scheme No. 8
Local Planning Scheme - Zone/Reserve	General Industry Zone
GBRS Zoning/Reserve	Industrial Zone & Regional Open Space Reserve
Structure Plan/Precinct Plan	N/A
Use Class and permissibility:	Additional Use A11 'A' Use – Proposed development is ancillary waste treatment facilities to existing abattoir.
Lot Size:	503,597m ²
State Heritage Register	No
Local Heritage	☒ N/A ☐ Heritage List ☐ Heritage Area
Design Review	☒ N/A ☐ Local Design Review Panel ☐ State Design Review Panel ☐ Other
Bushfire Prone Area	Yes

Swan River Trust Area	No
Special Control Area (SCA)	Flood Prone Area Bushland
Road and Rail Noise	Yes
Storm or Inundation Risk	1% AEP
Environmentally sensitive area	Yes

Proposal:

Development approval is sought to construct a new Wastewater Treatment Plant (WWTP) to the southeast of the existing Abattoir. The proposed works include:

- Construction of new purpose-built treatment facility.
- Associated amenities, including a laboratory, control room and toilet facilities.
- Access and car parking, including 5 bays and areas for chemical delivery, storage and waste removal.
- Connection of pipework from the existing facility to the new WWTP, including pipework for the treated water to return to the existing wastewater treatment ponds.
- Vegetation clearing.

The vegetation within the proposed clearing area has been identified as being in a degraded condition. A total area of approximately 25,491m² will be cleared, of which 4,153m² will be selectively cleared in accordance with bushfire asset protection zone requirements (see Attachment 3). The proposed clearing will enable construction of the WWTP, facilitate future upgrades, and assist in managing bushfire risk.

The proposed building works include the construction of the WWTP and its associated access roads, parking and infrastructure connections. This includes the upgrade of an existing gravel road to asphalt, wastewater line connection to existing wastewater lines, a new pump station, a truck turning area, a roadway (including parking and fire truck turning area) and the wastewater treatment equipment/facilities. The roadway and equipment area will be raised to the 12.00 AHD with the proposed wastewater equipment being installed on bunded pads, with a maximum height of 7m. The WWTP will be industrial in appearance, however, is positioned behind the existing abattoir and will not be visible from the surrounding public road network (see Attachment 3).

The proposal maintains a minimum 50 metre buffer between irrigation areas and all drainage lines and watercourses, consistent with existing arrangements, to protect surface water quality and reduce environmental risk.

Construction will result in a temporary increase in vehicle movements and staff; however, once operational the WWTP will only require 2–3 additional staff. The system will operate as a largely closed process with limited chemical storage, none of which require licensing under the *Dangerous Goods Safety Act 2004* or the *Environmental Protection Act 1986*. The enclosed nature of the facility will minimise potential offsite amenity impacts.

The proposed WWTP will introduce additional vehicle movements associated with chemical deliveries for the upgraded facility. While the removal of prescribed waste by a licensed operator will remain generally consistent with existing practices, the upgraded process will also generate approximately 16m³ of sludge per day requiring transport off-site to a licensed waste facility. This is anticipated to result in an increase of approximately 2–3 truck movements per day, inclusive of chemical deliveries

Background:

The existing facility has been in operation since the 1960's and is an AUS-MEAT accredited export abattoir. The facility processes meat for the domestic and international markets, and includes animal holding pens, meat processing facilities, wastewater treatment ponds and

treated wastewater irrigation areas. The facility also has meat trimming, packaging, cold storage and distribution capabilities.

Wastewater from the existing V&V Walsh facility is currently treated onsite via an established Wastewater Treatment System (WWTS). Wastewater from meat processing, rendering and associated operations is processed through a dissolved air flotation (DAF) unit, with separated solids removed offsite to a licensed waste management facility. The remaining wastewater is treated through anaerobic, anoxic and aerobic ponds, with treated water reused for washdown and irrigation. Despite incremental upgrades, the system is capacity constrained and unable to consistently meet current regulatory requirements, limiting future expansion.

The site is accessed via Rawling Road from the west, which intersects with the South Western Highway. A vegetation reserve separates the highway from the abattoir. The eastern boundary of the property abuts the Preston River, with agricultural land located beyond the river. To the north of the facility are areas of environmental conservation and Light Industry zoned land, while to the south are areas of regional open space, including part of the Kalgulup Regional Park, and a turf farm that currently receives treated wastewater from the abattoir (Attachment 1)

Environmental Regulation and Compliance

The V&V Walsh Abattoir operates under Licence L6001/1989/15 as a prescribed premises (Categories 15, 16, 55 and 83). Following commissioning of the proposed Wastewater Treatment Plant (WWTP), the licence will be amended to incorporate its operation. A Works Approval Application (WAA) was granted on 12 November 2025 (W69752024/1) by DWER under Section 54 of the *Environmental Protection Act 1986* which considers the impacts on sensitive receptors and outlines mitigation measures.

The facility is subject to ongoing environmental monitoring, including five onsite bores and routine testing of groundwater, surface water, and soils. Monitoring informed the WWTP's siting, raised/bunded design, and operational controls to minimise environmental risk, particularly with respect to groundwater interaction.

Odour is managed through the enclosed WWTP design. While the abattoir produces odour primarily from livestock handling, the WWTP is not expected to materially increase emissions. Overall, the proposal improves wastewater treatment performance, supports water reuse, and maintains compliance with State environmental legislation, while minimising impacts on land, water, and amenity.

Development Application History

The application was submitted to the City on 10 October 2026 a request for further accompanying information was sent 16 October 2025 requesting:

- Further information relating to effluent disposal associated with the proposed amenities; and
- A Stormwater and Drainage Management Plan (SDMP)

Upon receipt of this information, including an agreement to a standard condition requiring a SDMP prior to construction, the application was sent to DAP and was accepted on 31 October 2026.

Following public advertising, service authority referral and the City's detailed assessment, further information was requested on 18 December 2025 and formally accepted by the applicant 24 December 2025. The information requested was as follows:

- An updated Bushfire Assessment addressing DFES comments.
- Further information pertaining to on-site effluent disposal and the need for a Site and Soil Evaluation (SSE) to be submitted prior to decision.

- A response to all service agency referrals (see Attachment 6 & 7).

This information was received on 9 January 2026, based on this information City officers concluded:

- That an SSE could be completed after decision but prior construction of the amenities, on the basis that one of the solutions put forward by the applicant was to delete the amenities entirely from the proposal; and
- That it would be reasonable to request an updated BMP via condition to the satisfaction of the City on advice from DFES.

Legislation and Policy:

Legislation

- *Planning and Development Act 2005*;
- *Planning and Development Act (Development Assessment Panels) Regulations 2011* (DAP Regs);
- *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations);
- Greater Bunbury Regions Scheme 2014.

State Government Policies and Position Statements

- State Planning Policy 2 – Environment and Natural Resources Policy (SPP2)
- State Planning Policy 2.9 – Water (SPP2.9)
- State Planning Policy 3.7 – Bushfire (SPP3.7);
- State Planning Policy 4.1 – Industrial Interface (SPP4.1)

Local Policies

- City of Bunbury Local Planning Strategy 2018 (Local Strategy);
- City of Bunbury Local Planning Scheme No. 8 (LPS8 or Scheme);
- Local Planning Policy 3.0 – Zone Development Standards (LPP3.0);
- Local Planning Policy 42 – Development Within 100m from the toe of the Preston River Floodplain Levee
- Local Planning Policy 3.1 – Access and Parking for Pedestrians, Bicycles and Vehicles (LPP3.1); and
- Local Planning Policy 41 – Development in Flood Affected Areas
- Local Planning Policy No.48 – Landscaping (LPP48).

Consultation:

Public Consultation

The proposal was advertised in accordance with Clause 64(1)(a) under Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (the ‘deemed provisions’).

The following methods of advertising were undertaken, with an advertising period of 28 days:

- letter sent an adjoining landowner and occupier.
- public notice of proposal posted on the City of Bunbury’s website; and
- copies of plans and supporting information made available at the City of Bunbury’s customer service centre.

The public advertising of the application commenced on 26 November 2026 and closed on 15 December 2025 with no submissions received.

Referrals/Consultation with Service Agencies

The application was referred to the following agencies for a period of 42 days, concluding on 12 December 2025:

- Environment Protection Authority (EPA)
- Main Roads WA (MRWA)
- Water Corporation (Water Corp)
- Department of Planning Land and Heritage (Development Referrals)
- Department of Planning Land and Heritage (Aboriginal Heritage)
- Department of Planning Land and Heritage (Bushfire)
- Department of Fire and Emergency Services (DFES)
- Department of Water and Environmental Regulation (DWER)
- Department of Biodiversity, Conservation and Attractions (DBCA)
- Western Power
- Department of Primary Industry and Regional Development (DPIRD)
- Department of Health
- West Australian Meat Industry Authority (WAMIA)

The key issues raised within the referral responses are discussed in the “Planning Assessment” section of this report. Comments received and relevant officer comments are provided in Attachment 7.

Design Review Panel Advice

No comment from the South West Design Review Panel was obtained.

Planning Assessment:

The proposal has been assessed against all the relevant legislative requirements of the State and local planning framework outlined in the Legislation and Policy of this report. The following matters have been identified as key considerations for the determination of this application:

Land Use

It is proposed to construct a new WWTP associated with the existing abattoir. The use of the land for an abattoir is established. The proposed works are considered incidental to the predominant use, as they are intended to improve wastewater treatment and enable the business to meet its environmental obligations for wastewater treatment and disposal.

The existing abattoir is an ‘A’ use on the subject site pursuant to Additional Use 11 (A11). A condition of A11 requires that, where development is proposed, the local government may require the submission of an Environmental Management Plan (EMP), prepared in consultation with a relevant public authority. The condition specifies that an EMP is to address, but is not limited to, noise emissions, dust emissions, stock handling, odour emissions, cleaning and hygiene practices, and waste disposal.

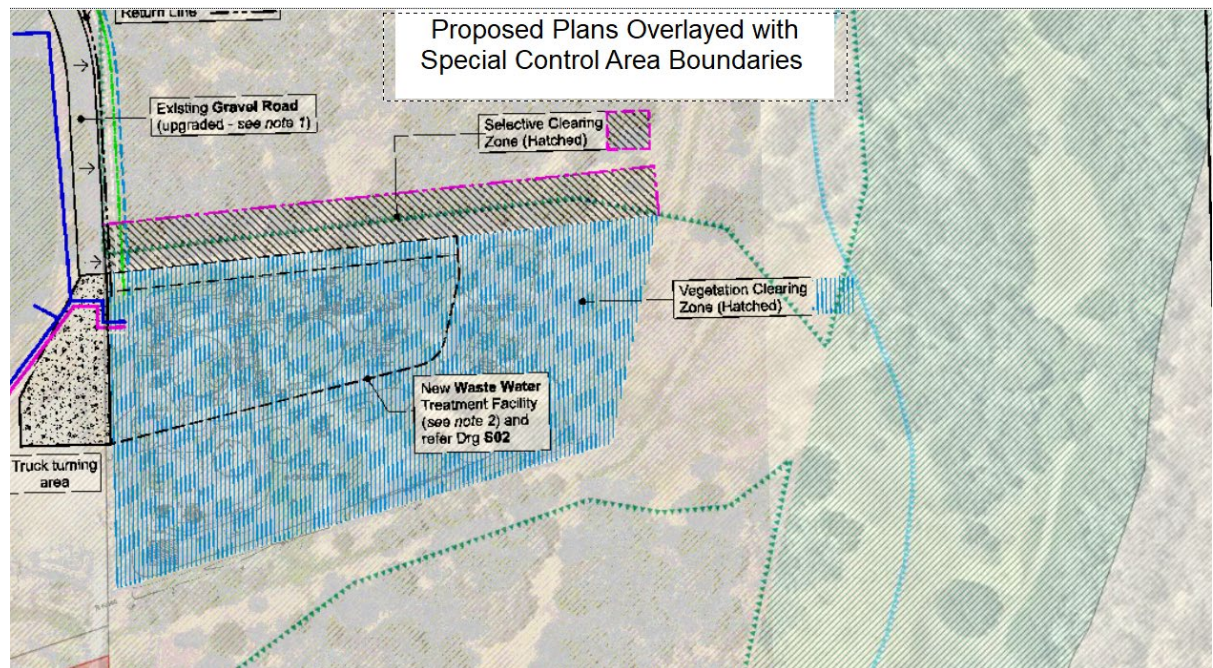
The proposed development is not expected to increase any of these off-site impacts and is anticipated to result in a net environmental benefit through improvements to the existing wastewater treatment system. Accordingly, the proposal is considered to satisfy the requirements of Additional Use 11.

Local Planning Policy – Built Form

The proposal has been assessed against the requirements relating built form and landscaping, contained within Schedule 5 ‘Zone Requirements’ of the LPS8, Local Planning Policy 3.0 Zone Development Requirements (LPP3), Local Planning Policy 48 Landscaping (LPP48) and has been determined to be compliant with all relevant built form standards.

Special Control Areas

The map below, and contained within Attachment 1, shows the extent of the Special Control Areas relating to flood prone area (shown as blue line) and bushland (shown as green line) overlaid with the proposed plans:



The proposal seeks to selectively clear land within the bushland area, however all development is located entirely outside of the flood prone area.

No further assessment of the flood prone SCA is required as the development is outside of this area. Notwithstanding this, conditions have been included in the recommendation to manage onsite stormwater management during both the construction and operational phases.

In relation to the Bushland Special Control Area (Bushland SCA), Schedule 7 of the LPS8 outlines requirements of the Special Control Areas and has the following objectives:

- ensure that the local government is presented with accurate and complete information on the ecological assets, values or features which may be included or impacted by a proposal or decision before an assessment of the proposal is undertaken;
- provide a clear framework for how ecological assets, values or features are to be considered and protected under this Scheme;
- clarify where the local government may require the protection of an ecological asset, value or feature; and
- contribute towards the achievement of the local government's conservation targets, as identified in the Local Planning Strategy.

It also sets out requirements for environmental assessments to be undertaken. The applicant submitted an Environmental Report (refer to Attachment 4) and upon review the clearing proposed is considered to be consistent with the objectives of the Bushland SCA.

Clearing

The applicant has submitted a detailed Environmental Report in support of the proposed clearing. The submitted report demonstrates that the proposed land to be cleared is degraded vegetation. Upon review, the City does not object to the removal of this vegetation and supports the selective clearing area in accordance with the asset protection requirements. It is acknowledged upon advice from DWER that this clearing will be exempt from clearing permits by virtue of a development approval. Furthermore, the clearing of this vegetation assists the fire safety requirements for the site and clears land for anticipated future upgrades to the wastewater treatment facility.

DWER and DBCA have also reviewed the submitted the documentation and are supportive of the clearing subject to standard fauna spotting during the clearing process. Furthermore, it is noted that DWER have an active clearing permit with the business operator which allows for fertigation of wastewater into the environment, however this approval does not allow physical clearing of the land.

The proposed clearing is supported and is considered to meet the objectives of the Bushland SCA.

Bushfire

The applicant submitted a Bushfire Management Plan (BMP) as part of the application (see Attachment 5), and this was subsequently submitted to DFES for advice. DFES reviewed the application and noted that the submitted BMP did not meet the following requirements SPP3.7:

- Element 2: Siting and Design - due to the BAL rating unable to be verified, as a result of issues relating to the calculation of Plot 2, 3 and 4, which would ultimately impact the proposed bushfire management strategies.
- Element 3: Vehicle Access – due to lack of detailed drawings of the private driveway pertaining to turning areas and hard stand areas, in accordance with solution A3.1 of the Planning for Bushfire Guidelines (Bushfire Guidelines) and;
- Element 4: Water Supply – due to lack of detail pertaining to fire hydrant locations, relating to A4.1 of the Bushfire Guidelines.

These concerns were relayed to the applicant who provided a response to the DFES referral (see Attachment 6). These have since been sent to DFES who have provided the updated advice:

- The BAL rating clarifications are satisfactory, albeit a finalised BMP being required to include a mechanism for Plots 3 and 4 to ensure that the land is managed and maintained as low threat, all year round.
- The applicant's response does not provide detailed plans demonstrating adequate vehicle access and water supply in accordance with A3.1 and A4.1 of the Bushfire Guidelines.

Furthermore, DFES maintain their position that these issues should be addressed prior to determination of a development approval. In light of these comments from DFES, the City does not view these concerns as fatal to the application and has therefore included in its recommendation a condition requiring an updated BMP and development plans to be submitted prior to the commencement of works.

Prescribed Premises

The proposed upgrade and construction of a new wastewater treatment plant (WWTP) at the existing V & V Walsh meat works involves activities that fall within the definition of a *Prescribed Premises* under Schedule 1 of the *Environmental Protection Regulations 1987* and is therefore subject to regulation by DWER under Part V, Division 3 of the *Environmental Protection Act 1986*. Prescribed premises are industrial activities with the potential to generate emissions and discharges to air, land and water and are regulated through the requirement to hold a works approval and operating licence (or registration). DWER's Industry Regulation Guide to Licensing provides for prescribed premises to be assessed concurrently with planning approvals, enabling potential environmental impacts to be addressed through the environmental regulatory framework in parallel with land use planning processes.

DWER has reviewed the development application in relation to its works approval and licensing requirements and confirms that the premises is an existing licensed prescribed

premises under Categories 15 (Abattoir), 16 (Rendering operations), 55 (Livestock holding), and 83 (Fellmongering). The premises operates under Licence L6001/1989/15, which authorises the discharge of treated wastewater using the existing wastewater treatment system. A works approval (W6975/2024/1) has been granted for the construction, commissioning and time-limited operation of the proposed WWTP. The works approval is consistent with the proposed development and includes conditions limiting wastewater treatment and discharge volumes to those currently authorised. Any proposed increase in wastewater volumes or changes to discharge arrangements would require an amendment to the licence and further assessment by DWER under Part V of the *Environmental Protection Act 1986*.

DWER advised that it does not object to the proposal, however, identifies the potential for impacts on environmental and water resource values to be managed through its statutory approval processes. DWER notes that the proposed WWTP is intended to improve effluent quality and environmental performance of wastewater treatment on site. Regulation of emissions and discharges associated with construction and operation of the WWTP is undertaken through the works approval and licensing framework administered by DWER. Matters relating to wastewater treatment capacity, effluent quality and disposal pathways are therefore regulated under the prescribed premises regime and are subject to ongoing compliance with licence and works approval conditions.

Given this control the City supports the development in relation to environmental impacts that may result from treatment, reuses and disposal wastewater associated with the abattoir.

Wastewater of the Amenities

The proposed WWTP includes amenities for staff including, an office, a laboratory/control room, showers, toilets, change rooms and a kitchen/dining area. Given that the site has no sewer connection the applicant initially provided advice to the City that they intended to deal with the associated wastewater by utilising a holding tank designed for routine pump out and offsite disposal by a licenced contractor.

In response to this proposed solution, the City's Environmental Health Department has advised that this approach is not supported for permanent infrastructure as per guidance for the Department of Health. Instead, it is recommended that the wastewater from amenities be disposed on site, which would require a Site and Soil Evaluation (SSE) undertaken to ensure that wastewater can be disposed of in accordance with the *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974*. Alternatively, the Environmental Health Department suggest that the proponent could investigate with DWER and the Department of Health whether the wastewater could be connected to the proposed WWTP, given the amount of wastewater is minimal in comparison to the trade wastewater and the level of treatment the WWTP provides.

The Planning for Water Guidelines provide guidance to decision makers in relation to the above and State Planning Policy 2.9 – Water. The guidelines state that an SSE should be provided prior to determination of an application where the wastewater disposal has potential to impact on sensitive water resource areas, the lot has major constraints or where is not clear the lot is large enough to accommodate the proposed infrastructure. While the subject site has sufficient space for on-site wastewater disposal, the high groundwater table and sensitive sewage area warrant an SSE to guide the selection and location of an appropriate system.

The applicant has indicated that it would be detrimental to the proposal should this be required prior to decision or prior to construction of the development, as SSE's are required to be undertaken during winter months. The applicant has suggested that a condition be included that would require this to be done prior to occupation of the development. They have also indicated that if it is not feasible to dispose of this waste onsite, they would be willing to delete this from the scope of works entirely.

Having regard to the site context and the applicant's concerns regarding timing, a condition has been included in the recommendation requiring that a SSE be completed to the satisfaction of the City prior to the construction of the staff amenities, rather than the construction of all a works.

Conclusion

The proposed Wastewater Treatment Plant (WWTP) at Lot 1 #31 Rawling Road, Davenport is consistent with the Greater Bunbury Region Scheme, the City of Bunbury Local Planning Scheme No. 8, and relevant State and local planning policies, subject to the recommended conditions. Ancillary to the existing abattoir, the development will enhance wastewater treatment capacity, support future facility upgrades, and ensure compliance with environmental and public health standards.

The proposal has been publicly advertised and referred to relevant agencies, with no objections received that would preclude approval. Matters including bushfire management, vegetation clearing, stormwater controls, and wastewater disposal from staff amenities can be managed through conditions, including an updated Bushfire Management Plan and completion of a Site and Soil Evaluation prior to construction of the amenities. Environmental impacts are appropriately regulated under the prescribed premises framework administered by DWER.

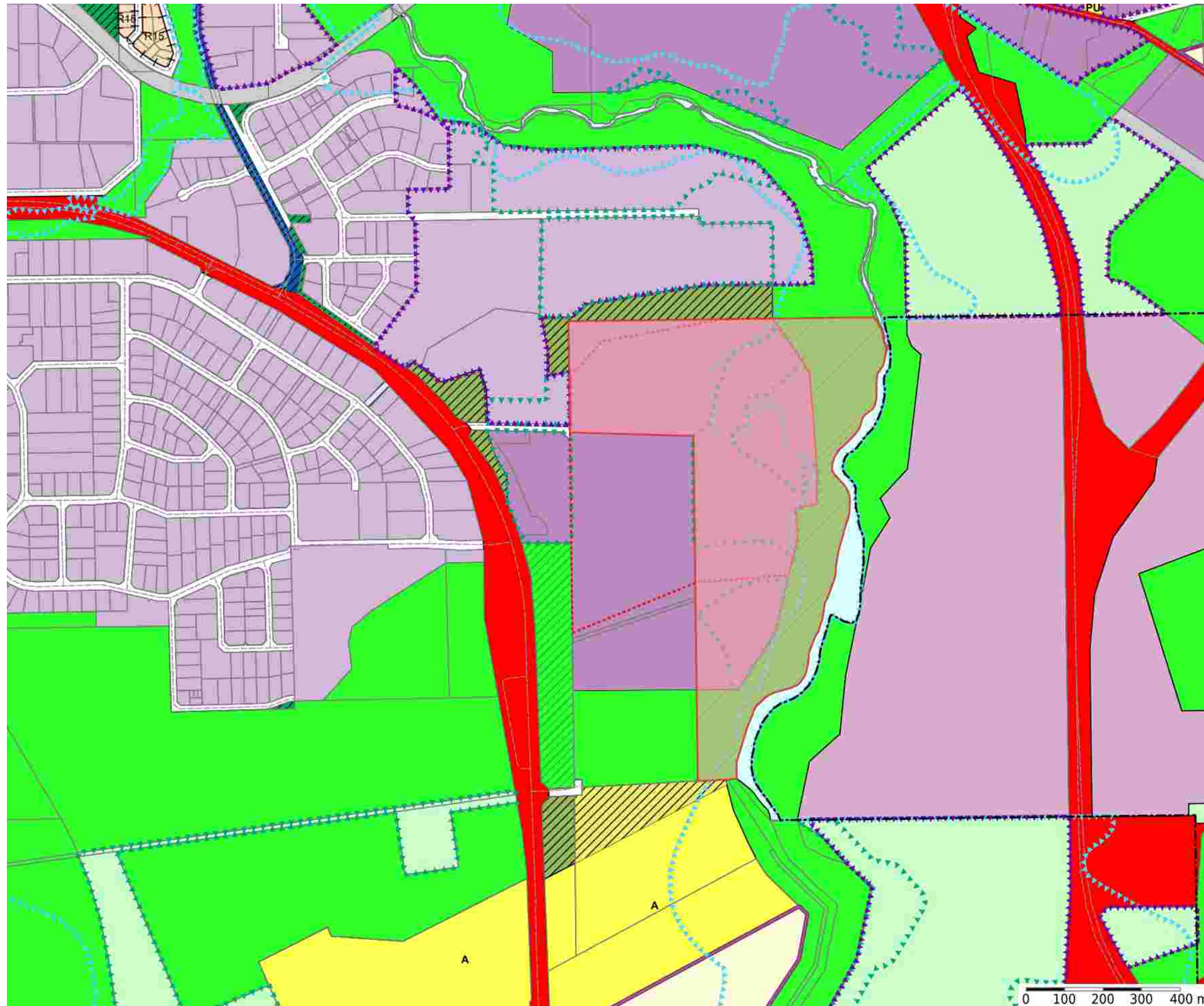
The facility is designed to minimise visibility and offsite impacts, with an enclosed treatment process, banded infrastructure, and limited additional staffing and vehicle movements. On this basis, the proposal is consistent with planning objectives and provides environmental and operational benefits.

It is therefore recommended that the Development Assessment Panel grant development approval for the WWTP at Lot 1 #31 Rawling Road, Davenport, subject to the conditions and advice notes in the officer's recommendation.



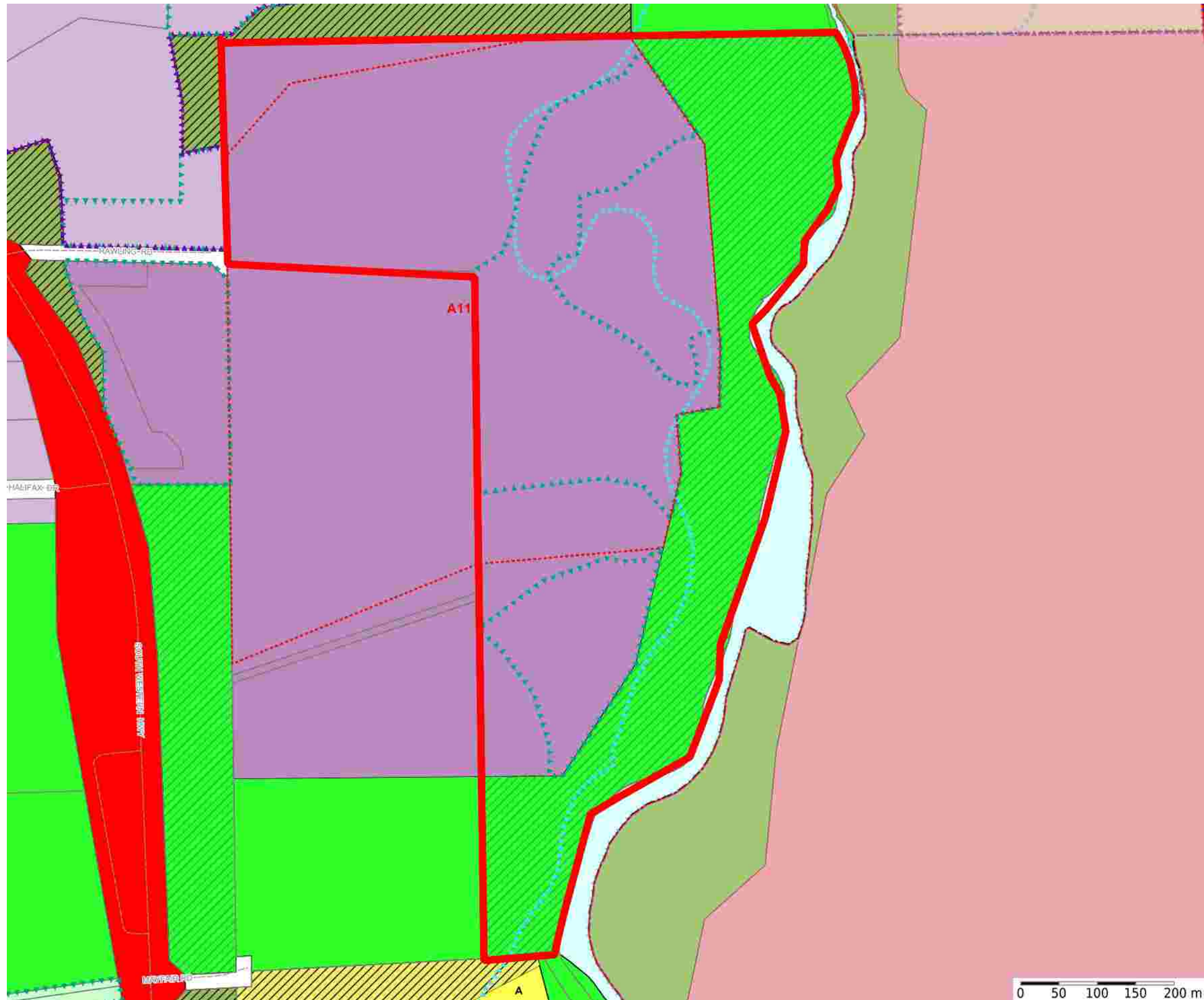
PIN	499913
Lot Types	FHOLD
Area Sqm	503597.575
Diagram/Strata Plan#	D012060 1
Lot	1
Lodged Cadastre	No
Local Dev Plan	No
Design Guidelines & DAPs PDF Link	No
Structure Plan	No
Acid Sulphate Soil	High to moderate risk, Moderate to low risk
Aboriginal Heritage	Creation / Dreaming Narrative, Artefacts / Scatter, Artefacts / Scatter; Camp
LPS8 Special Zone	BUNBURY
Public Purposes	
LPS8 Description	General industry
LPS8 RCodes	No
Additional Use	A11
Restricted Use	
GBRS Zone	Industrial
GBRS Special Area	No
GBRS Applications	No
Bush Fire Zone 2025	Yes
Geological Description	Alluvium, older river terraces
Geomorphic Wetland Classification	Palusplain, Sumpland
DOW Flood Zone	No
FMB Flood Zone	No
1% AEP Storm Event	Yes
Enviro Sensitive Area	Yes
CHRMAP Water Level	No Value
Property	
Parcel Number	65792
Assessment Number	1354
Valuation Number	2171160
StreetView	Open StreetView
Address	31 Rawling RD
Locality	DAVENPORT 6230
Title	LOT: 1 DP: 12060
Volume	1471
Folio	898





LEGEND

- Scheme Area Boundary
- GBRs Boundary
- Az** GBRs Labels
- Additional Uses
- Restricted Uses
- R1
- R2
- R3
- R4
- R5
- R6
- R7
- R8
- R9
- R10
- R11
- R12
- R13
- R14
- R15
- Az** R Code Label
- R Codes
- Az** LPS8 Special Zone Labels
- LPS8 Special Zones
- SCA Abattoir
- SCA Abattoir Notification Area
- SCA Bushland Areas
- SCA Development Area
- SCA Flood Prone Areas
- SCA Public Drinking Water Zone
- SCA Water Treatment Plant
- SCA Wellhead Protection Zone
- Roads
- Property Boundary
- Public Purposes
- Cemetery
- Drainage
- Education
- Emergency services
- Government services
- Infrastructure services
- Az** Activity Centre Labels
- LPS8 Zones and Reserves
- Civic and community
- Public Purposes
- District centre
- Local centre
- Neighbourhood centre
- Regional centre
- District distributor road
- Environmental conservation reserve
- General industry
- Industrial development
- Light industry
- Local distributor road
- Local road
- Mixed use commercial
- Mixed Use Residential



LEGEND

- Scheme Area Boundary
- GBRS Boundary
- Az** GBRS Labels
- Additional Uses
- Restricted Uses
- R1
- R2
- R3
- R4
- R5
- R6
- R7
- R8
- R9
- R10
- R11
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- Mixed use commercial
- Mixed Use Residential

Proposed Wastewater Treatment Plant V&V Walsh

Lot 1 DP 12060, 31 Rawlings Road, Davenport

Regional Development Assessment Panel application

City of Bunbury

DOCUMENT CONTROL

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Executive Summary

On behalf of V&V Walsh, Planned Focus is pleased to present this application for Development Approval to the City of Bunbury and the Development Assessment Panel (DAP). Development Approval is required under both the City of Bunbury Planning Scheme No.8, and the Greater Bunbury Region Scheme.

V&V Walsh is one of Australia's largest meat processing plants, and one of the largest employers in Bunbury.

This application represents a significant and essential investment by V&V Walsh to upgrade management of waste associated with the facility. Contemporary wastewater management is central to the ongoing viability and success of this operation, including environmental licencing. The new Wastewater Treatment Plant is state of the art, and the first of its kind in the meat processing sector in Australia.

The plant upgrade is anticipated to be catalyst for further business growth, including as the live shipping industry is phased out. The plant also has potential to provide the greater Bunbury area with high quality recycled water.

The following report sets out evaluation of the proposal against the applicable planning framework, concluding approval is appropriate.

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1 Introduction

V&V Walsh is one of Australia's largest meat processing plants, and one of the largest employers in Bunbury. Wastewater is an integral environmental and operational consideration in the V&V Walsh business.

The Wastewater Treatment Plant (WWTP) upgrade has been developed through extensive consultation with relevant experts, as well as pre lodgement consultation with the Department of Water and Environment Regulation (DWER) and the City of Bunbury (COB).

The V&V Walsh facility accepts lamb, sheep and cattle by truck, and they can currently process approximately 5,000 sheep and 400 cattle per day. The facility has been in operation since the 1960's and is an AUS-MEAT accredited export abattoir.

The facility processes meat for the domestic and international markets, and includes animal holding pens, meat processing facilities, wastewater treatment ponds and treated wastewater irrigation areas. The facility also has meat trimming, packaging, cold storage and distribution capabilities.

2 Location

The V&V Walsh facility is located at 26 and 31 Rawling Road, Davenport. The proposed WWTP is located at the rear of 31 Rawling Road, Lot 1, Deposited Plan 12060.

A copy of the Certificate of Title is provided at Appendix 1.

The subject land is accessed via Rawling Road which intersects with the South Western Highway, and the facility is separated from the Highway by a vegetated reserve. The rear of the property runs along the Preston River, and beyond the river east is farming land. North of the facility is some areas of environmental conservation and Light Industry zoned land, and south are areas of Regional Open Space, some of which is known as the Kalgalup Regional Park, and a turf farm which presently receives treated wastewater from the V&V Walsh operations.

Figure 1 – Location



3 The proposal

The WWTP system has been designed by leading international experts Veolia.

The WWTP design has origins in circular economy¹ aspirations and arose from a front-end engineering design (FEED) project that was commissioned and co-funded by V&V Walsh and the Australian Meat Processing Corporation around innovation and integrated Bio-Resource Recovery systems.

This proposal reflects only the WWTP component of this body of work, but being part of this broader Bio-Resource Recovery concept means the WWTP could be adapted in the future if desired to integrate further biogas and bio fertiliser plant options for waste residue that is presently disposed of elsewhere. The overall concept includes emission reduction and energy efficiency outcomes. If they were to be pursued, the add on features would be subject to separate approval/s.

3.1 Current Wastewater Treatment System

Wastewater is currently treated at the V&V Walsh premises through an existing Wastewater Treatment System (WWTS). The flowrate in this system is variable each day depending on the through put of animals. All meat processing, rendering plant and biofilter wastewater is presently directed through a dissolved air filtration (DAF) unit to separate solids.

The solids are removed offsite for disposal at a licenced waste management facility, whilst the remaining wastewater passes through an onsite pond system which comprises several anaerobic, anoxic and aerobic treatment systems. This principle is the same in the new system but condensed and more efficient. The treated wastewater is presently reused in the washdown area, in the adjoining turf farm irrigation via a central pivot (year-round), and via on-site irrigation of pasture and a tree lot.

The V&V Walsh business ethos is aligned with continuous improvement and achieving high environmental operating standards. In recent years, the business has improved the performance of the solid screening and the DAF to remove additional solids from the wastewater, however the existing system is unable to meet regulatory requirements from DWER. Combined with capacity restriction, this is limiting future growth of the business.

3.2 Proposed Wastewater Treatment Plant

The new WWTP system is designed to improve wastewater quality and volume available for reuse compared to the existing WWTS. This has significant benefits to the operations, geared towards:

- Reducing waste.
- Improving treated waste outcomes.
- Reducing risk to the environment, and
- Reducing likelihood of offsite amenity impacts.

The subject land is gently sloping towards the Preston River, with the site of the WWTP relatively flat. The site is on the Swan Coastal plain, and the soils are characterised as sand plain. The WWTP is within the Bunbury East – Yarragadee groundwater sub-area, but it is not within any declared catchment area.

The subject land has one major drain line that runs from the South Western Highway between the meat processing facility and the turf farm, discharging into the Preston River, as well as a minor

¹ Circular Economy principles include designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.

perennial watercourse that exists immediately north of the WWTS. A 50m buffer exists between the irrigation zones and the watercourses / drainage lines within the site and these are maintained in the new WWTP layout.

The overall proposal WWTP comprises:

- New, purpose-built treatment equipment, largely all within contained tanks and pipework, located standalone at the rear of the facility.
- WWTP associated amenities, laboratory, control room and car park including 5 bays and areas for chemical delivery, storage and waste removal.
- Connecting pipework from the existing facility to the new WWTP, pipework for treated water to return to the re-purposed WWTS ponds.
- Some associated vegetation clearing to accommodate the new WWTP site.
- The WWTP will be accessed via existing accessways which as necessary will be upgraded.
- Temporary measures during construction, including relative to stormwater and groundwater management.

The proposed WWTP system comprises:

- Pre-treatment
- Primary treatment
- Secondary Treatment
- Tertiary Treatment
- Treated water storage
- Sludge management and removal off site by a third-party licenced operator
- Irrigation of treated wastewater

For business continuity, the WWTP will be constructed while the processing facility is in operation, with the existing WWTS continuing to treat wastewater until the new WWTP is commissioned. Ultimately the WWTP will seamlessly operate as part of the existing facility.

Whilst the WWTP will eventually upgrade the existing waste system, the existing WWTS ponds will remain, and then transition, including for contingency and treated wastewater storage.

The WWTP plans are provided in Appendix 2.

These depict the layout within an area that has historically been used for grazing livestock and is largely cleared, however a level of clearing at the periphery is compelled to facilitate the development, including for fire risk management. Vegetation clearing is discussed further below.

The detailed design of the WWTP will be resolved once approvals are in place however the key features and principles of the development are fixed, and include:

- The WWTP will occupy a footprint of approximately 1ha, inclusive of Asset Protection Zone (APZ), which is discussed further later in this report.
- The WWTP is industrial in presentation however positioned at the rear of the site, behind the Abattoir facility, it is not visible from the surrounding public road network, with potential only for filtered, distance views from surrounding land.

- The WWTP will be up to 7m in height. The WWTP will be constructed on a new pad set at 12.0m AHD. This is broadly relative to 1m above seasonal groundwater levels noting that parts of the WWTP are also bunded.
- New water, power and pipelines are constructed to connect to the existing WWTS, positioned alongside existing infrastructure.
- Whilst there will be disruption and an increase in vehicle movements and staff required to construct the WWTP, once it is operational, the WWTP will require 2-3 new and additional staff to operate.
- Being largely a closed system, some chemicals are required to facilitate the process, with the delivery and storage of these catered for in the layout and design. The chemicals to be used do not involve the storage of quantities of potentially hazardous or combustible materials that require a licence under the *Dangerous Goods Safety Act 2004* or the *Environmental Protection Act 1986*.
- The closed nature of the system limits potential for amenity impacts such from odour and noise.

4 Prescribed premises

V&V Walsh is a prescribed premises under Category 15, Abattoir, of Section 1 of the *Environmental Protection Regulations 1987*, operating under licence.

The V&V Walsh Abattoir currently operates under licence number L6001/1989/15, licenced for Prescribed Premises Categories 15, 16, 55 and 83 under Part V of the *Environmental Protection Act 1986*.

It is expected that, once the WWTP is constructed and commissioned, L6001/1989/15 will be amended to include operation of the WWTP within the Facility under Category 15.

Given this and separate to this application for Development Approval under the Planning Scheme, GHD has prepared and lodged a new application for Works Approval (WAA) for the WWTP with the DWER in accordance with Section 54 of the *Environment Protection Act 1986*.

The WAA provides information to DWER on the construction and commissioning works associated with the WWTP, the potential impacts to sensitive receptors that are likely to result from the project, and how these impacts will be minimised and adequately controlled.

The WAA can be provided on request. Draft decision report W6975/2024/1 has recently been granted.

Under the existing licensing arrangement, the V&V Walsh operations are closely monitored for ongoing environmental compliance. This includes 5 onsite bores and routine testing with regards to hydrology and potential impacts to waterways, land and groundwater. This has been considered when selecting the WWTP location and finished levels. The general groundwater standing levels demonstrate groundwater levels have been slowly declining.

Whilst the facility itself does produce odours, there is no history of non-compliance or odour impact on sensitive receptors. The nature of the WWTP is not expected to increase odours because odour control is contained and integrated into the design of the facility. The main odour at the facility comes from the livestock entering the facility, whereas the waste products, and compared to domestic wastewater, typically produces less odorous gases.

5 Vegetation clearing

The environmental values of the WWTP location, particularly with regards to vegetation, have been closely examined.

GHD undertook a spring flora and fauna survey. This examined vegetation type and condition and recorded any key species including any Threatened or Priority Flora, as well as assessing fauna habitat.

The findings of this survey have informed the following reports:

- Exemption to clearing native Vegetation, GHD 4 October 2024 (See Appendix 2). This report demonstrates the area to be cleared contains woodland to open forest, and includes flooded gum and peppermint species, this vegetation is in a completely degraded condition.
- *Environment Protection and Biodiversity Conservation Act (1999)* Significance Assessment, GDH 4 October 2024 (See Appendix 3)

These evaluations have concluded:

- The proposed WWTP is exempt under Regulation 5, item 1 of the *Environment Protection (Clearing of native vegetation) Regulations 2004* – clearing to construct a Building. DWER has provided confirmation of this position. The granting of this Development Approval will ultimately approve the associated clearing.
- In relation to the Commonwealth *Environment Protection and Biodiversity Conservation Act (1999)*, clearing for construction of the WWTP is not considered to be significant regarding any Matters of National Environmental Significance (MNES).
- A clearing management plan will be implemented. It is appropriate to undertake pre-clearance fauna searches and relocate any fauna by suitably qualified persons during the clearing process.

The clearing footprint is larger than the WWTP footprint. This caters to Bushfire considerations, achieving a Building Envelope with a grassland vegetation classification.

6 Planning framework

6.1 City of Bunbury Local Planning Scheme No.8

The subject land is in the General Industry zone under the City of Bunbury Local Planning Scheme No.8 (the Scheme).

Although Abattoir is X prohibited in the General Industry zone, the Scheme applies Additional Use A11 to the subject land, which specifically lists “Abattoir” as a discretionary A use on the subject land. The use of the land as Abattoir has existing Development Approval. This application for Development Approval is required for the works component.

A11 sets out conditions to be addressed, which are discussed in more detail below, not all of which are relevant to this WWTP proposal.

Further to the zone and the A11, the Scheme also applies a Special Control Areas (SCA) provision to parts of the subject land at 31 Rawling Road, including SCA Bushland and SCA Flood Prone Areas, however the WWTP is not located within these parts of the subject land so hence neither apply.

Objectives of the General Industry zone are:

- *To provide for a broad range of industrial, service and storage activities which, by the nature of their operations, should be isolated from residential and other sensitive land uses.*
- *To accommodate industry that would not otherwise comply with the performance standards of light industry.*
- *Seek to manage impacts such as noise, dust and odour within the zone.*
- *To promote the establishment of industrial development that reinforces but does not compete with the role and functions of strategic industrial areas.*

6.2 Greater Bunbury Region Scheme

The subject land is in the Industrial zone under the Greater Bunbury Region Scheme (GBRS). The subject land includes a portion to the rear as Regional Open Space, with Environmental Conditions EC697 applied.

Whilst the use of the land is consistent with the Industrial zone, the land abuts Regional Open Space and EC697 which compels approval under the GBRS as well as the City of Bunbury Scheme. There are circumstances where the City has delegated authority to determine the GBRS application however this application is anticipated to be referred to the Department of Planning, Lands and Heritage, who administer the GBRS, as well as to the DWER and Department of Biodiversity, Conservation and Attractions (DBCA) for their input as well.

The development of the WWTP is consistent with the Industrial zone under the GBRS however it is acknowledged that although the WWTP is setback from, it is proximate to the Regional Open Space and the EC697.

In this regard, the spring flora and fauna evaluation carried out by GHD discussed above, in hand with the operational characteristics of the proposed WWTP, are considered to sufficiently address these GBRS considerations. The V&V Walsh land is freehold, not reserve land.

6.3 Bushfire Prone

Most of the subject land is identified by the Department of Fire and Emergency Services (DFES) as bushfire prone. JBS&G have carried out risk assessment and prepared a Bushfire Management Plan (BMP – See Appendix 4).

The vegetation clearing proposed has been considered in context of bushfire risk. A Building Envelope results that achieves a Grassland Vegetation classification, with designated Asset Protection Zones (APZ). This includes a 21m APZ on the northern side of the WWTP, and an 8m APZ around the south and eastern sides. The area west of the WWTP is the existing WWTS and Abattoir, which is exempt.

The result is the WWTP will be located within an area classified as BAL29 or lower. This includes the Laboratory building. It is noted that there is an Emergency Access Way that exists via the Turf Farm to the south, in addition to the internal accessways that connect via Rawlings Road. The site layout plan also includes vehicle turnaround areas – vehicles can loop in both the loading / unloading area west, as well as north within the APZ.

6.4 Aboriginal Heritage

The facility is located on the traditional lands of the Wardandi Noongar Aboriginal people. There are several identified registered places within a 5km radius of the subject land however none are within the WWTP footprint.

6.5 City of Bunbury Local Planning Strategy

The City of Bunbury Local Planning Strategy (LPS) recognises the V&V Walsh operations within a higher impact industrial area, with ecological linkages and conservation areas abutting. The South Western Highway is identified as a Primary Regional Road, with connection to the Bunbury Outer Ring Road to the south. The site is also near to the Bunbury Airport, with road linkage to the Bunbury Port.

Whilst the LPS places due emphasis on the natural environment, the WWTP is within an area that is largely cleared, and which has been previously used for grazing livestock. The highest environmentally valuable areas around the subject land are preserved, and the WAA process, in hand with this Development Approval, seeks to improve environmental operation of the existing Abattoir, demonstrating a development and operation that does not pose undue risk to these characteristics.

Other relevant objectives of the LPS, and which the WWTP is consistent with are:

- Maintain support for local businesses.
- Create an environment that will attract new businesses.
- Recognising the importance of the Bunbury Port and industrial land to the regions ongoing prosperity.
- Build on the City's competitive advantages.
- For industry, there is a push towards more employment opportunities in intensive, clean, light and high tech and service industries.
- Avoid land use conflicts.

6.6 Bunbury Geographe Sub-regional Strategy

Adopted after the LPS, the Bunbury Geographe Sub-regional Strategy (BGSRS) establishes higher order directions for the sub-region, including the City of Bunbury as well as surrounding Local Governments of Dardanup, Capel, Harvey, Collie and Donnybrook-Balingup.

The Strategy plans for a step change in the magnitude of the sub-region's population and economy, in a manner that leverages the sub-regions strengths and maintains its uniqueness. Some relevant principles of the BGSRS, which the WWTP is considered consistent with, include:

- Diversify and strengthen the local economy.
- Protect and enhance environmental values in the context of climate change.
- Ensure sustainable regional outcomes by coordinating the provision of infrastructure to support growth. This includes strategic directions to support measures to improve water efficiency and re-use of grey-water where appropriate.

6.7 City of Bunbury Local Planning policies

The City has several Local Planning policies. Whilst some apply, these generally have limited applicability given the nature of this development. These are as follows:

Zone Development requirements.

These are more relevant to visible development; however, an objective of this policy is to design, construct and operate new development to protect:

- *Biodiversity, ecosystems and natural landscape values of state, regional or local significance, and*
- *Soil, air and water quality of receiving environments.*

And

- Apply water sensitive urban design principles
- Employ good urban design principles
- Designed, sited and constructed to minimise potential for land use conflict and off-site impacts
- Effective separation and buffering for high impact land uses or where there is potential for adverse impacts on sensitive land uses or the amenity of the surrounding area.

This policy then sets out setbacks and a maximum 5 storey (20m) height preference for the General Industry zone which is satisfied. As the WWTP is at the rear and set well away from boundaries, it readily exceeds the policy front setback suggestion of 4.5m and nil setbacks to side and rear boundaries.

Landscaping is encouraged noting the subject land is already vegetated, especially at the boundaries, and the WWTP will generally not be visible outside of the boundaries of the subject land.

Public Art for major developments.

Whilst this development is a significant investment, it is updating and improving operational infrastructure of an existing business, hence, is not considered relevant. It is noted that prior DAP approval was granted for the Cool room and Warehouse expansion at the front of the V&V Walsh operations in March 2022 and no public art condition was imposed.

Stormwater Disposal from Private, Commercial and Industrial properties

This policy requires industrial development to provide 1.0 cubic metres of stormwater storage for each 65m² of impervious area, with additional required in areas of clayey or silty soils, high groundwater table and/or where the total impervious area of the site exceed 1500m².

The principles of water sensitive design will be applied where possible, noting the WWTP system is largely enclosed, and there is necessity to retain a contingency bund around the WWTP and specifically for chemical storage.

Some stormwater runoff is anticipated from the WWTP development, and therefore a basic system of open channel v-drains/ swales and shallow detention basins has been included to limit the impact of the development of the surrounded drainage systems and land use. The main process components will be raised marginally above surrounding ground levels and “clean” storm water will be directed towards drainage swales. Stormwater control will be incorporated into the detailed design to maintain predevelopment flows. A condition of approval is expected which requires final details in this regard to be provided to the City.

Landscaping

This policy repeats the landscaping sentiments in the zone development requirements policy discussed above.

7 Key planning issues

The following section provides an evaluative response to the key planning issues associated with this application, setting out the reasons why approval is warranted.

7.1 Land use

The proposed WWTP is integral to the ongoing operation of V&V Walsh, with the existing WWTS, and the proposed WWTP part of the primary, existing Abattoir land use.

The WWTP represents a significant investment into improved compliance, and ultimately a more sustainable method of managing wastewater. The WWTP will enable consistent and more reliable wastewater management than the current outdated WWTS.

The use of the WWTP is considered to maintain the status quo, appropriate within the General Industry zone and in context of A11 – Abattoir.

7.1.1 Staffing

V&V Walsh are a large local employer. The WWTP will require minimal staff to operate it. 2-3 additional new staff is a minor increase readily accommodated.

7.1.2 Traffic

There will be an increase in traffic during construction. The internal access road, and the existing access from Rawling Road are sufficient to cater for this. Further, there is an Emergency Accessway exit also available via the turf farm.

The new WWTP employs different science than the existing WWTS which will require occasional deliveries of chemicals.

The removal of prescribed waste via licenced operator is comparable to the existing arrangement, however, there will be an additional 16 cubes per day of sludge trucked off site to a licenced waste facility whereas there is presently no ongoing sludge process in the current system.

Overall, this is estimated to equate to an additional 2-3 trucks per day which includes chemical deliveries. This will not be discernible given the volume of existing truck movements at the facility.

7.1.3 Parking

The WWTP is removed from the main facility and staff parking area so a small parking area plus loading / unloading areas are provided adjacent to cater for WWTP operations.

7.1.4 Additional Use A11 conditions

Whilst the use of this land for the current purpose of Abattoir has existing approvals, Abattoir is an A use. In particular, the requirements of A11 apply. Whilst this is an application for works, the following table addresses the requirements of A11.

Table 1: Additional Use A11 evaluation

A11 condition	Applicant Comment
1. <i>Prior to submitting any application for development approval, the local government may require the proponent to submit an Environmental Management Plan (EMP), prepared by a suitably qualified person to the specifications and satisfaction of the local government in consultation with the relevant public authority. The EMP is to be based upon sustainability principles demonstrating, among other things, containment of all off-site impacts within the off-site buffer from existing and proposed uses:</i> a. <i>Once approved the EMP shall form part of the conditions of any approval issued for development.</i> b. <i>The EMP shall address but is not limited to criteria, measures and mechanisms to control:</i> i. <i>noise emissions - including assessment of the need for a detailed noise modelling study;</i> ii. <i>dust emissions;</i> iii. <i>stock handling and management;</i> iv. <i>odour emissions - including assessment of the need for detailed odour modelling study;</i> v. <i>cleaning and hygiene of animal holding yards; and</i> vi. <i>waste disposal.</i>	An EMP has not been specifically prepared for the WWTP given the GHD WAA and the existing EPA licencing arrangements effectively address EMP considerations. The WWTP requires parallel Works Approval before it can be constructed or commissioned, ensuring environmental standards will be met. The WWTP is a positive development, representing a considerable environmental upgrade to the existing V&V Walsh operations.
2. <i>In determining any application for an abattoir use, the local government shall be satisfied that:</i> a. <i>any alteration or extension of use which cannot reasonably be classified to fall within an abattoir land-use is restricted to uses which are ordinarily classified as being incidental to the abattoir use of the land;</i> b. <i>the application has been referred to the relevant public authority and any comments or recommendations received have been taken into account by the local government;</i>	Accept reference in the DA to the parallel WAA and EP Act requirements. Most of these matters are part of the ongoing and overarching operation of the Abattoir which are covered by existing approvals. Outside of construction, dust emissions will be negligible given the WWTP is accessed via an all-weather road network, and the WWTP operates largely as an enclosed system. Noise & Odour – see comments in next section. Satisfied, the WWTP is an integral part of the approved Abattoir use. Referral to agencies including DWER is anticipated.

A11 condition	Applicant Comment
c. <i>the land-use will not present an unacceptable risk to existing sensitive land uses within the off-site buffer; and</i> d. <i>the land-use will not present an unacceptable risk to proposed sensitive land uses outside the off-site buffer.</i>	Satisfied, the WWTP is an enclosed system. The WAA demonstrates how odour from the WWTP (as against the broader existing Abattoir use) is managed within the buffer. Satisfied, the WWTP is an enclosed system. The WAA demonstrates there is no odour (as against the broader existing Abattoir use) from the WWTP expected, particularly outside of the buffer.
3. <i>The local government may determine that incidental development such as car park and staff amenities does not require advertising.</i>	N/a. Although wastewater management is a key component of Abattoir use, the WWTP is a significant equipment upgrade.

7.2 Development impacts

The WWTP is not expected to be visible from surrounding land, but if it is, it is distance views through trees, presenting as typical General Industry infrastructure against the backdrop of the V&V Walsh broader industrial operations. Given this separation, and the intervening vegetation plus buildings, considerations such as lighting and glare and colours, are compelled but are not expected to have discernible impact.

In terms of lighting, a level of lighting will be required around the clock, however this can be designed to ensure no light spill beyond the WWTP. This is appropriate given the interface the land has with areas of environmental value and habitat. A condition of approval is anticipated in this regard.

7.3 Environmental considerations

The subject land is positioned a considerable distance from sensitive receptors, including 1.7km from the nearest residential neighbour, however the WWTP site is proximate to the Preston River, Regional Open Space zone and EC697.

The WAA specifically addresses environmental considerations; however, it is acknowledged that these overlap with DA amenity and land use planning considerations.

In terms of planning related environmental considerations, the matter of vegetation clearing is addressed above. Other considerations include:

7.3.1 Odour

Odour is a key part of the design addressed in the WAA. Odour management and adhering to relevant standards is likely met simply as the new system is enclosed and due to separation distances to sensitive receptors but nonetheless, this is part of the detailed design and an operational requirement.

Compared to domestic wastewater, the wastewater from red meat processing facilities typically produces less odorous gases. Odour will continue to be managed for ongoing operations. The equalisation tanks are to be mixed and slightly aerated to avoid anaerobic processes starting early, which also minimises odour emissions.

Other operational processes such as filtration, pH adjustment, chlorination and UV sterilisation, as well as plant maintenance will assist with odour emissions. As part of the upgrade, the anaerobic zone which has potential for some level of odour, is being converted into a covered tank with odour treatment.

7.3.2 Noise

Like odour, noise is also a key part of the design addressed in the WAA, and as part of the detailed design / operational standards to be achieved.

The proposed WWTP is not expected to add to noise emissions from the facility. Noise from the WWTP will generally be limited to the operation of pumps and blowers within and attached to the enclosed system, commensurate with the existing noise generated at the premises and the General Industry zone, plus setback considerable distances to sensitive receptors.

7.3.3 Bunding

There is potential of discharges to land to occur, due to spills or leaks from chemicals required to operate the WWTP, or if there were system failure of the primary WWTP equipment.

Because of this, specific elements of the WWTP will be contained within bunds, with overflow back into the WWTS contingency areas. This includes specific bunding for chemical storage / loading and unloading, which has also been considered in the BMP.

Although the WWTP does not involve the storage of quantities of potentially hazardous or combustible materials that require a licence under the *Dangerous Goods Safety Act 2004* or the *Environmental Protection Act 1986* and there will be no flammable or combustible materials or substances stored on site, the WAA sets out up to 9,000 litres per chemical at any given time stored at the WWTP. Management principles will be implemented to required third party standards to minimise impacts of chemical spills including spill kits, routine inspections, and the bund to be low permeability and capable of holding 110% of the volume being stored.

7.3.4 Nutrient management

The resultant treated water will be stored and available for irrigation, however there is also potential for discharge of excess if this becomes necessary to the Preston River which would be subject to other approvals.

The WWTP system and storage has been designed to cater for an increased volume of animal throughput compared to the current WWTS. This creates additional and excess volume of treated water which may also be made available to other users subject to future reuse approvals, but in the first instance, and when volume produced is excess to need, such as during winter, this will be stored in the re-purposed ponds.

High nutrient levels in treated wastewater used for irrigation can result in eutrophication of surface water systems or contamination of groundwater systems which may affect sensitive receptors. The tertiary treatment process proposed, including disinfection of the WWTP ensures that the guidelines for the Non-potable Uses of Recycled Water in Western Australia (DoH, 2024) are followed.

Treated wastewater will also be reused for a range of purposes on site including the washdown area, turf farm irrigation via a central pivot (year-round), and on-site irrigation of pasture and tree lots. Water quality will be treated 'fit for purpose'.

7.3.5 Other waste products

Like the WWTS, solids will continue to be screened out of the WWTP. These will continue to be collected as is the current practice on site in skip bins, stored for removal off site by appropriately licenced operators for disposal at an approved waste management facility.

Whilst this is a WWTP, and the resultant water for reuse will be at a high standard, the system will produce a sludge by-product from the secondary and tertiary treatment phases. This sludge will be pumped to onsite dewatering equipment for disposal off site like the solid waste is.

7.3.6 Construction Management

Condition of approval is anticipated to provide a Construction Management Plan. This is also specifically addressed and committed to in the WAA. The Construction Management Plan is expected to include appropriate and standard controls and implementation requirements as follows:

- Part of the WWTP site is identified as having high to Moderate risk for Acid Sulphate Soils.
- Proximity, approximately 200m to the Preston River.
- Proximity to Regional Open Space and EC697.
- Fauna clearing prior to any vegetation clearing.

7.4 Clause 67(2) Decision Guidelines

Clause 67(2) of the Deemed Provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* set out matters the local government (and by default the Development Assessment Panel) is to have due regard to, to the extent that, in the opinion of the decision maker, those matters are relevant to the application.

The following reply is provided to the Clause 67 decision guidelines, as relevant to this proposal:

Table 2: Clause 67(2) evaluation

Clause 67 Consideration of application by local government	Applicant comment
(a) the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area.	The aims of the Scheme include (summarised): • Implement the LPS. • Coordinate and integrate planning at the local level with regional and state levels. • Avoid or mitigate land use and development impacts on environmental and public health. • Provide adequate and efficient servicing land development. • Facilitate the GBRS and the BGSRs. • Seek to achieve greater ecologically sustainable development that balances and integrates • Preservation and conservation of natural resources. • Facilitation of economic development

Clause 67 Consideration of application by local government	Applicant comment
	The proposed WWTP is part of a circular economy approach to improve wastewater management at the facility, and to do so with increased environmental benefit. The facility produces considerable waste, and the new WWTP will meet and potentially exceed present day regulatory requirements.
(b) the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving.	There are no new Schemes or amendments proposed that impact the subject land. Broadly, the proposal is considered to satisfy the principles of orderly and proper planning. It has been comprehensively designed and seeks to improve management of wastewater.
(c) any approved State planning policy.	Regard has been had in the BMP to SPP 3.7.
(d) any environmental protection policy approved under the <i>Environment Protection Act 1986</i> section 31(d)	These matters are specifically addressed in the WAA.
(e) any policy of the Commission.	Satisfied.
(f) any policy of the State.	Satisfied.
(fa) any local planning strategy for this Scheme endorsed by the Commission.	The proposal is consistent with the LPS, as the WWTP improves wastewater management at a significant local business. This builds on the city's competitive advantages and seeks to minimise risk on the natural environment and the locality.
(g) any local planning policy for the Scheme area.	Where applicable, the proposal is consistent with Local policies of the City. See earlier comments in this report.
(h) any structure plan or local development plan that relates to the development.	Not applicable.
(i) any report of the review of the local planning scheme that has been published under the <i>Planning and Development (Local Planning Schemes) Regulations 2015</i> .	Not applicable
(j) in the case of land reserved under this Scheme, the objectives of the reserve and the additional and permitted uses identified in this Scheme for the reserve.	Satisfied.

Clause 67 Consideration of application by local government	Applicant comment
(k) the built heritage conservation of any place that is of cultural significance.	Not applicable.
(l) the effect of the proposal on the cultural heritage significance of the area in which the development is located.	Satisfied.
(m) the compatibility of the development with its setting, including: (i) the compatibility of the development with the desired future character of its setting; and (ii) the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation, and appearance of the development.	The WWTP is in a discrete part of the subject land. It will look like typical industrial equipment, suited the General Industrial zone. The development is setback from the adjoining Regional Open Space and EC697, and appropriate investigations have been undertaken with regards to the environmental values of the subject land and land the WWTP will interface with.
(n) the amenity of the locality including the following: (i) environmental impacts of the development. (ii) the character of the locality. (iii) social impacts of the development.	The development is positioned a considerable distance from sensitive receptors. The nature of this development is consistent with the existing industrial nature of the Abattoir it will service.
(o) the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource.	As discussed, suitable management of run off and drainage is proposed. Components of the WWTP are bunded for contingency.
(p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved.	Given the intervening vegetation around the WWTP location, in hand with necessity to maintain an APZ surrounding it, no further landscaping is proposed.
(q) the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk.	The land is not identified as liable to flooding, and it sits outside of the SCA Land subject to inundation. In terms of fire risk, this is addressed in the provided BMP.
(r) the suitability of the land for the development taking in to account the possible risk to human health or safety.	These matters are largely addressed by the WAA, which is specific to impact on the environment as well as risk to human health and safety.

Clause 67 Consideration of application by local government	Applicant comment
	The WWTP upgrade improves wastewater management.
(s) the adequacy of — (i) the proposed means of access to and egress from the site; and (ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles.	Satisfied.
(t) the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety.	There will be an increase in traffic during construction, however once commissioned and operational, traffic impacts are negligible
(u) the availability and adequacy of the development for: (i) public transport services; (ii) Public utility services: (iii) Storage, management and collection of waste; (iv) Access for pedestrians and cyclists (including end of trip, toilet and shower facilities); (v) Access by older people and people with disability.	Largely not applicable considerations or sufficiently addressed.
(v) the potential loss of any community service or benefit resulting from the development other than potential loss that may result from economic competition between new and existing businesses.	Not applicable.
(w) the history of the site where the development is to be located.	V&V Walsh have been in operation for generations, and the subject land has been a meat processing facility since the 1960's. The site already operates under EPA licence, with the new WWTP part of a program of continuous improvement and commitment to meet, if not to exceed, environmental standards.
(x) the impact of the development on the community as a whole notwithstanding the impact of the development on individuals.	The new WWTP is a positive development that will improve wastewater management at this major facility.
(y) any submissions received on the application.	Comments will be provided at the conclusion of the advertising period.

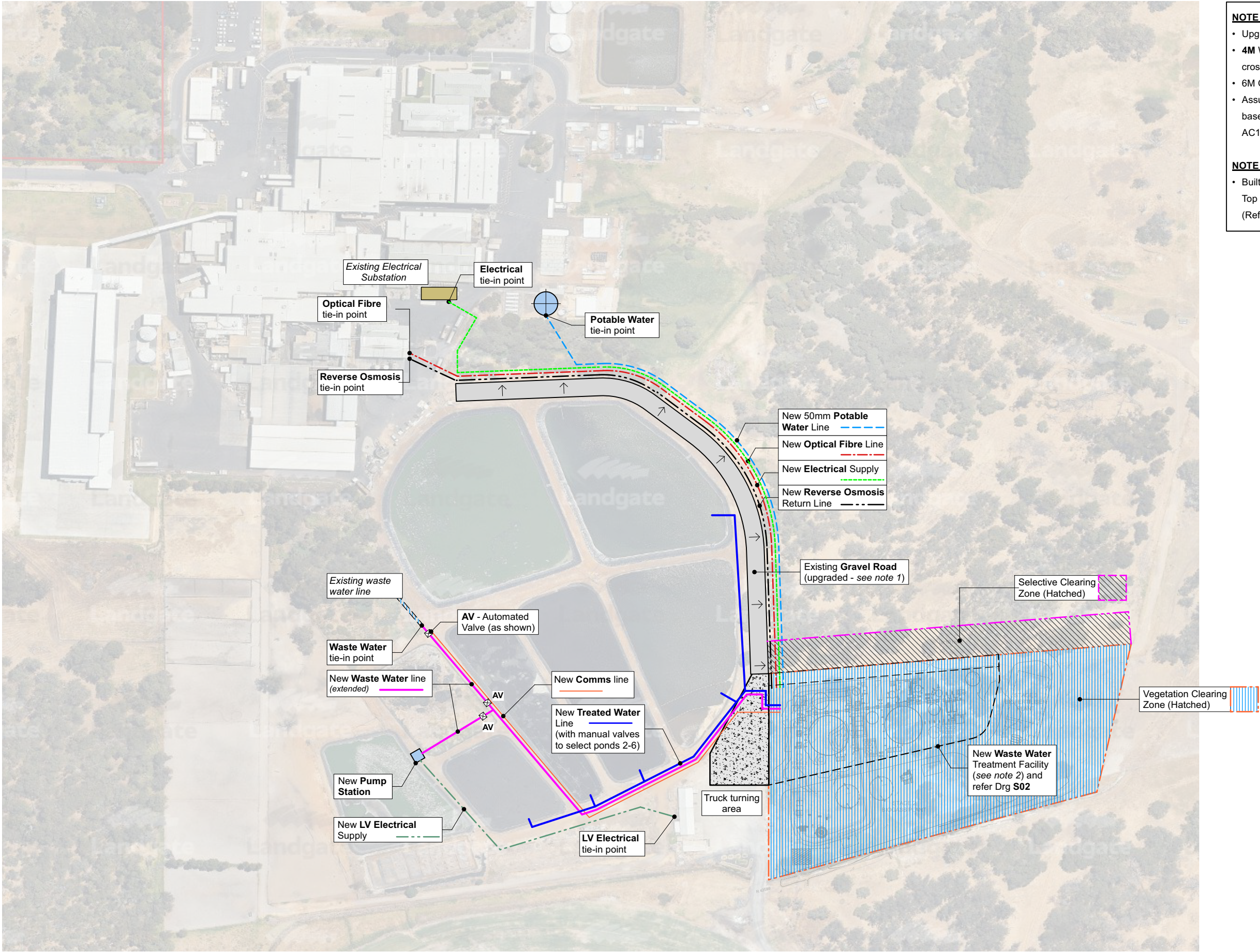
Clause 67 Consideration of application by local government	Applicant comment
(za) the comments or submissions received from any authority consulted under clause 66.	Comments will be provided at the conclusion of the referral period.
(zb) any other planning consideration the local government considers appropriate.	TBA by the local government.

8 Conclusion

The proposed WWTP is a positive and requisite upgrade to the existing WWTS. It has been carefully designed by industry experts, as well as the meat industry as best practice, with basis in circular economy principles. V&V Walsh are pleased to lead the way in this upgrade, the first of its kind in the meat industry in Australia.

V&V Walsh are a major employer, and their business has widespread connection and function in the broader agricultural and food sector, for both local markets and export.

Approval is recommended.

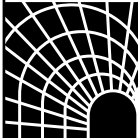


NOTE 1: NEW GRAVEL ROAD UPGRADE

- Upgrade gravel road to dense asphalt
- **4M** Width excluding shoulders with cross falls as shown
- 6M Overall including gravel
- Assume **250mm Thick** crushed rock basecourse with primer and 30mm AC10 Dense Apshalt

NOTE 2: WASTE WATER FACILITY

- Built on raised earthworks with Top of Pad at **12.0m AHD**
(Refer Veolia drawings)



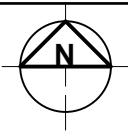
CAPITAL HOUSE AUSTRALASIA
ENGINEERS AND PROJECT MANAGERS
Perth Level 1, 172 St Georges Tce, Perth W.A. 6000
Phone: +61 (08) 9324 3211
Darwin Office 16, 32 Smith St, The Mall, Darwin, NT 0800
Phone: +61 (08) 7978 7740
ACN 009 436 140

Date	No.	Revision	By
10/12/2024	T	ISSUE FOR TENDER	DM
12/12/2024	T1	ISSUE FOR TENDER	DM

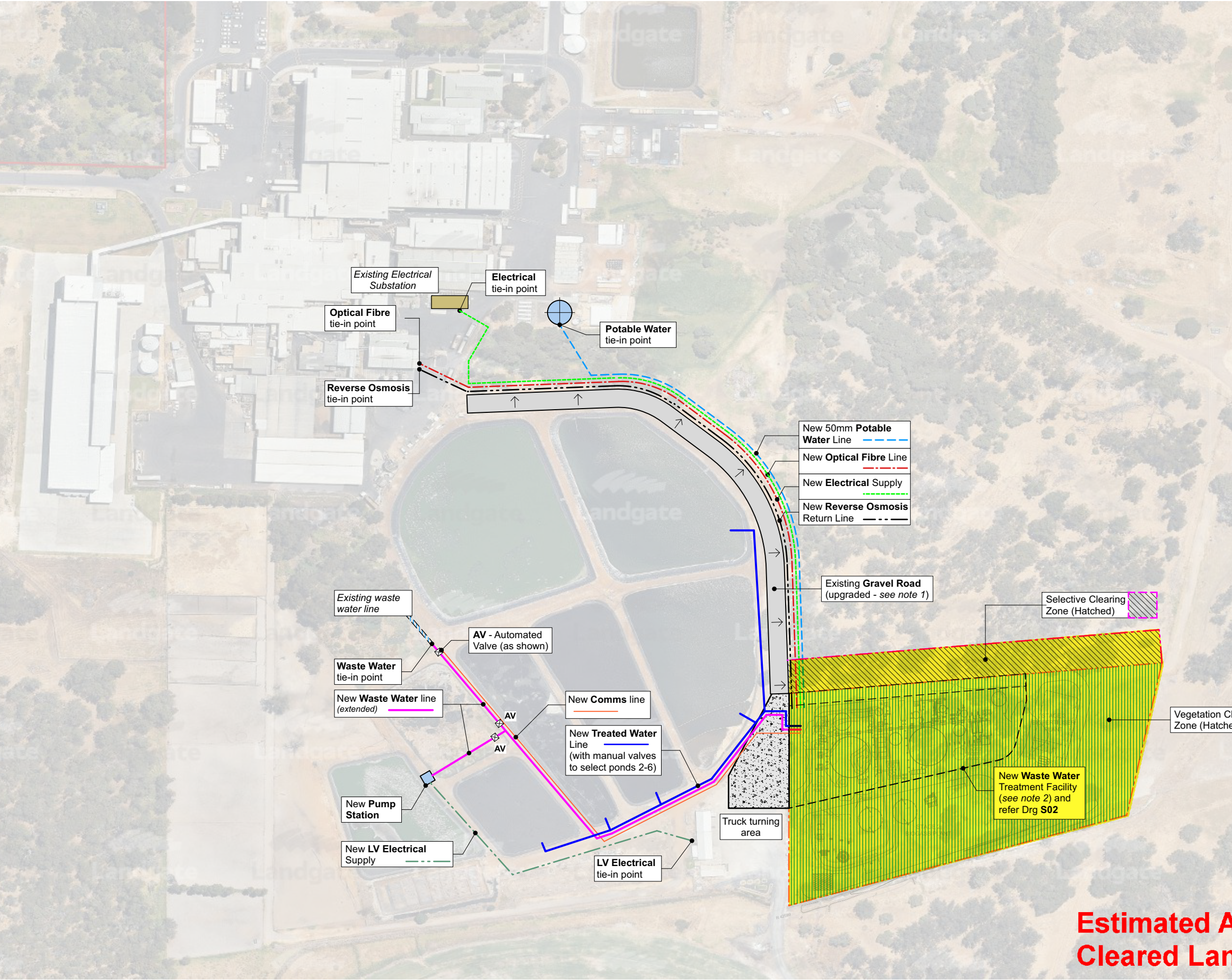
WASTEWATER TREATMENT PLANT
Rawlings Rd, Bunbury



GA PLAN



Approved:			
Designed: ON	Drawn: DM	Checked:	Scale : NTS
Job No: 24165	Drawing No: S01		Revision: T1

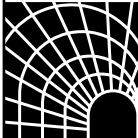


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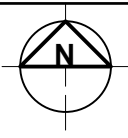
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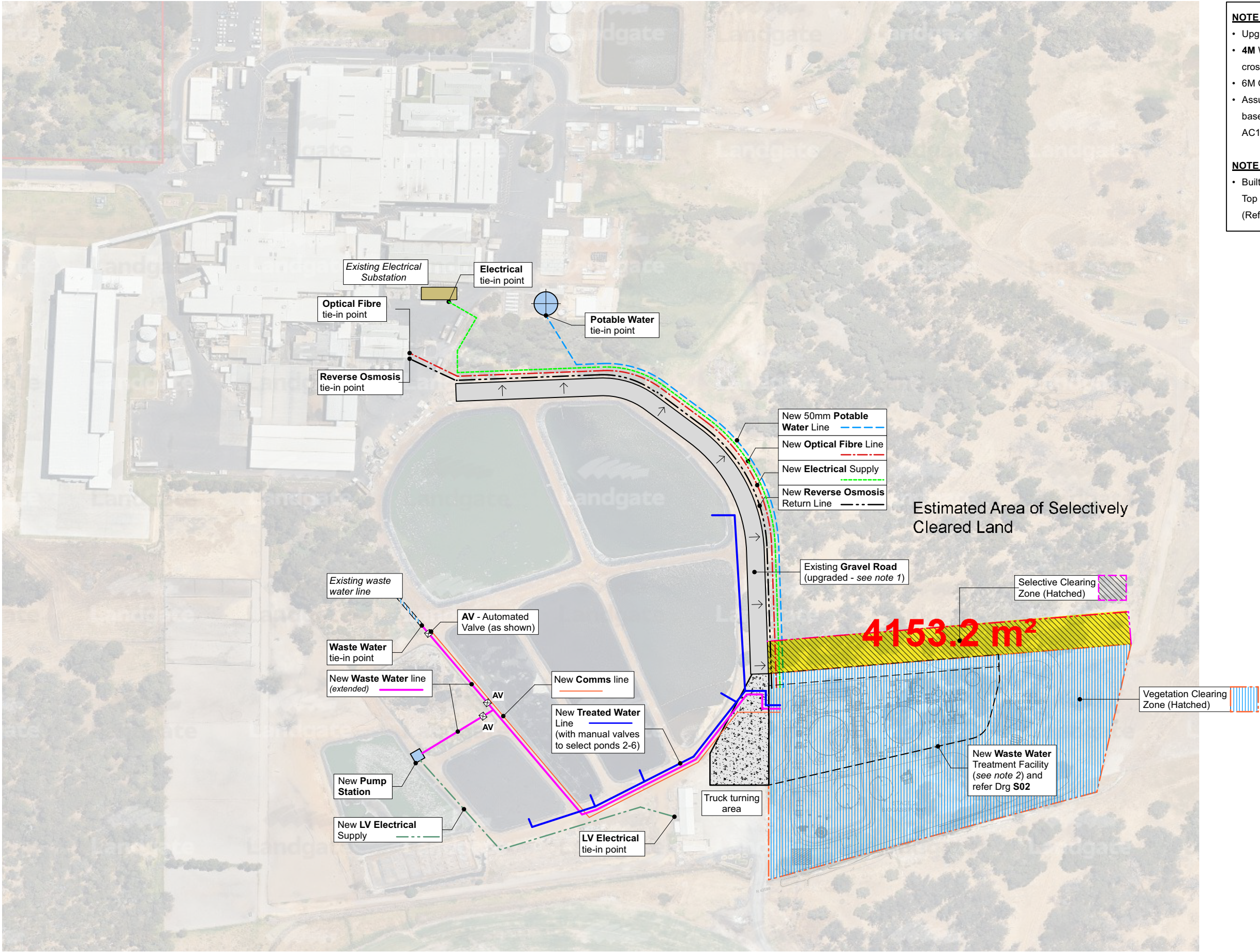
WASTEWATER TREATMENT PLANT
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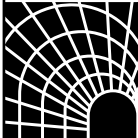


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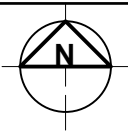
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12/12/2024	T1	ISSUE FOR TENDER	DM

WASTEWATER TREATMENT PLANT
Rawlings Rd, Bunbury

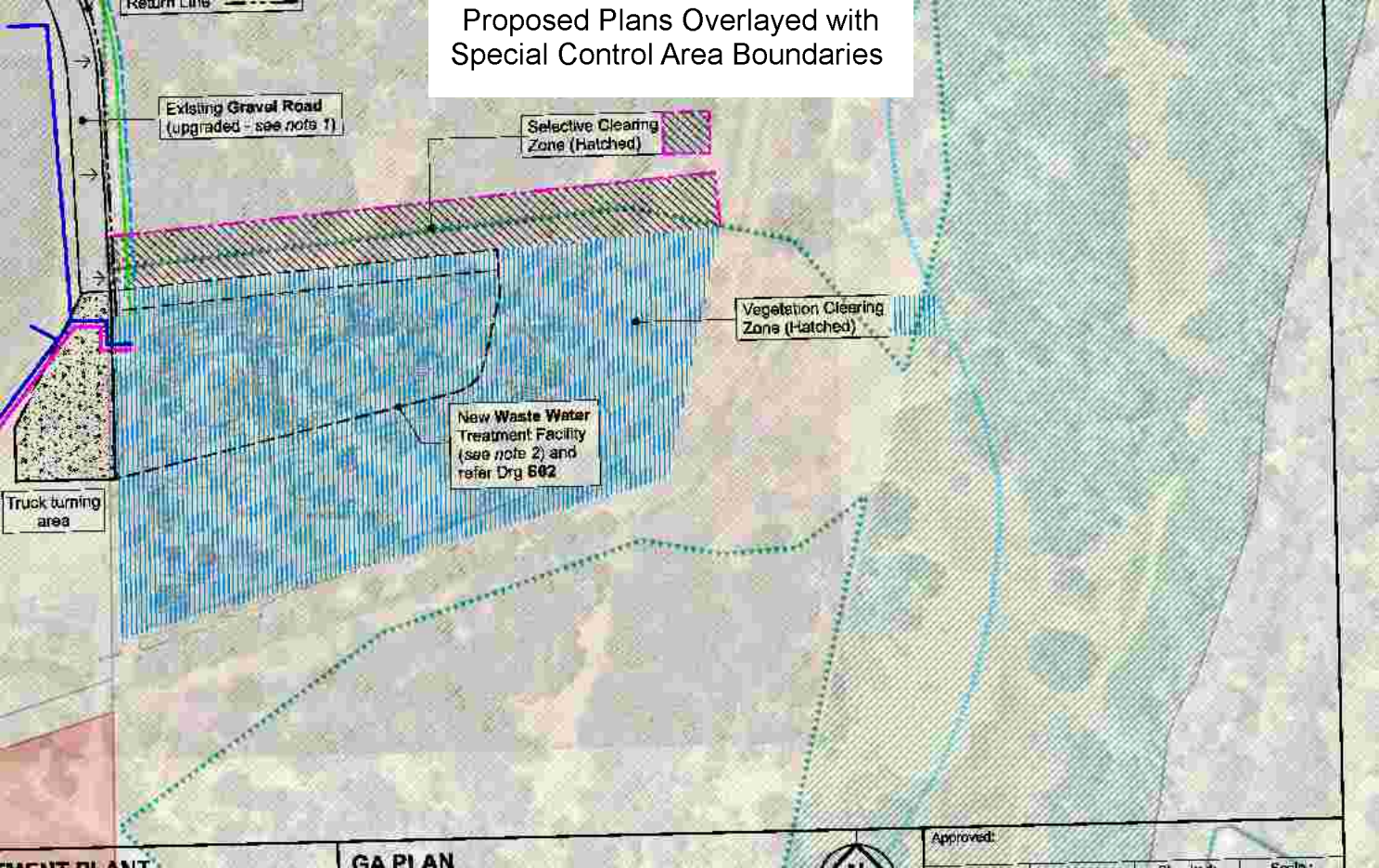


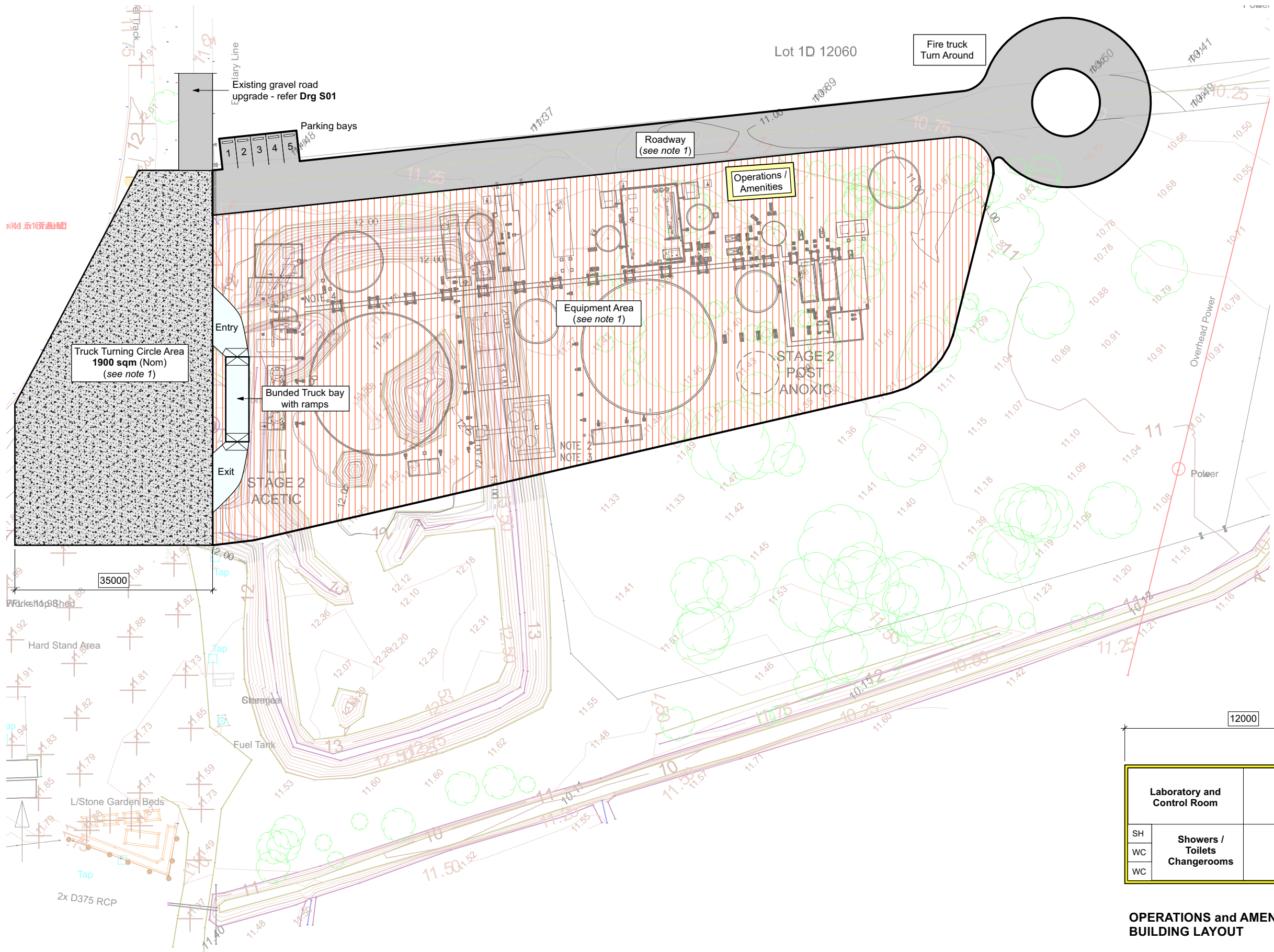
GA PLAN



Approved:			
Designed: ON	Drawn: DM	Checked:	Scale : NTS
Job No: 24165	Drawing No: S01		Revision: T1

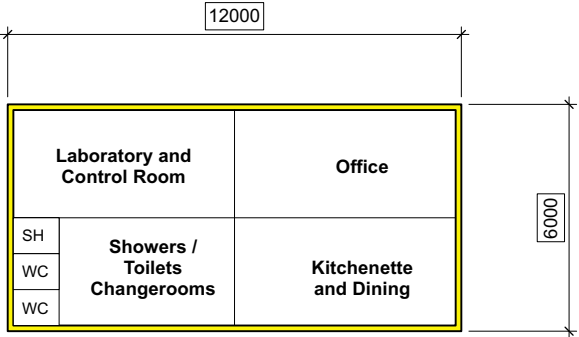
Proposed Plans Overlayed with Special Control Area Boundaries





NOTE 1: PAVEMENT AREA

- *Equipment Area* to be raised to **RL 12.00 AHD** and fully paved with **Rigid Concrete Reinforced Pavement**
- *Roadway Area* to be at **RL 12.00 AHD** and paved with dense asphalt on **250mm Thick** crushed rock basecourse with primer and 30mm AC10 Dense Asphalt
- *Truck Turning Circle Area* to be fully paved with **Rigid Concrete Reinforced Pavement**



**OPERATIONS and AMENITIES
BUILDING LAYOUT**



CAPITAL HOUSE AUSTRALASIA
ENGINEERS AND PROJECT MANAGERS

Perth Level 1, 172 St Georges Tce, Perth W.A. 6000
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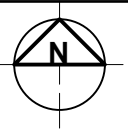
ACN 009 436 140

Date	No.	Revision	By
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12/12/2024	T1	ISSUE FOR TENDER	DM
30/09/2025	A	ISSUE FOR DA APPLICATION	DM

WASTEWATER TREATMENT PLANT
Rawlings Rd, Bunbury



PAVEMENT AREA PLAN

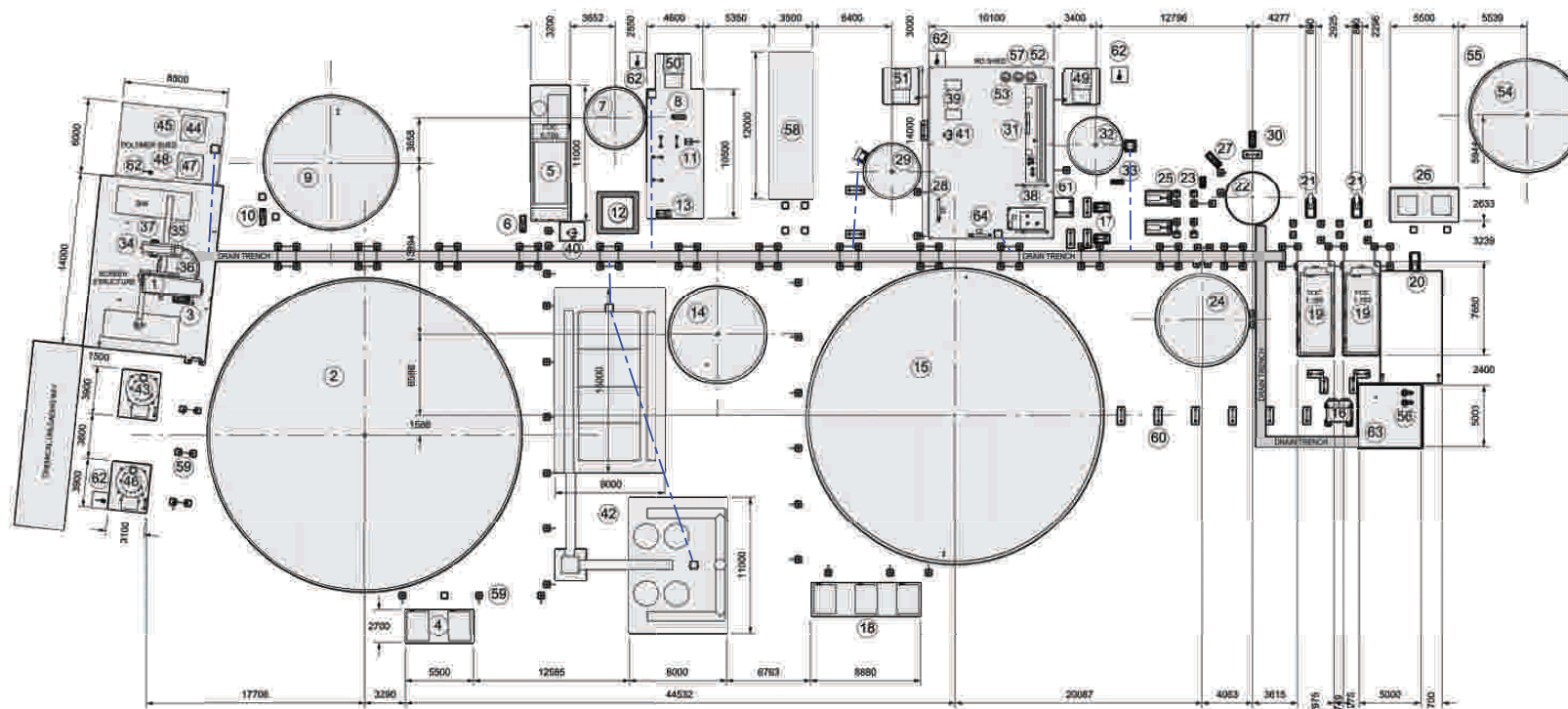


Approved:			
Designed: ON	Drawn: DM	Checked:	Scale : NTS
Job No: 24165	Drawing No: S02		Revision: A

ITEM	TAG	DESCRIPTION	ITEM	TAG	DESCRIPTION	ITEM	TAG	DESCRIPTION	ITEM	TAG	DESCRIPTION
1	RS01-01	ROTARY SCREEN	22	TL34-01	BACKPULSE TANK	43	SKD-7001	CAUSTIC SODA TANK AND PUMP	64	QN50-01	UV UNIT
2	TL10-01	EQUALISATION TANK	23	PC34-01	POLYMER SERVICE WATER PUMP	44	SKD-7201	DAF POLYMER PREP UNIT			
3	PC10-01	DAF FEED PUMP	24	TL35-01	RAS TANK	45	SKD-7202	DAF POLYMER PUMP SKID			
4	BV10-01/2	BLOWERS	25	PC35-01/2	RAS PUMPS	46	SKD-7301	PACI TANK AND PUMP			
5	RF15-01	DAF UNIT	26	BV35-01/2	MEMBRANE BLOWERS	47	SKD-7401	CENTRIFUGE POLYMER PREP UNIT			
6	PC16-03	DAF SLUDGE PUMP	27	PC40-01	UV FEED PUMP	48	SKD-7402	CENTRIFUGE POLYMER PUMP SKID			
7	TL15-01	DAF EFFLUENT TANK	28	QN40-01	UV UNIT	49	SKD-7501	SODIUM HYPO EC AND PUMPS			
8	PC15-05	HEAT EXCHANGER FEED PUMP	29	TL40-01	TREATED WATER TANK	50	SKD-7701	PHOSPHORIC ISC AND PUMP			
9	TS80-01	SLUDGE HOLDING TANK	30	PC40-03	RO BOOSTER PUMP	51	SKD-7801	CITRIC ACID ISCAD PUMP			
10	PC15-10	CENTRIFUGAL FEED PUMP	31	CP40-01	RO UNIT	52	SKD-7901	SWISS DRUM AND PUMP			
11	EH20-01	HEAT EXCHANGER	32	TL50-01	RECYCLED WATER TANK	53	SKD-8001	ANTISCALANT DRUM AND PUMP			
12	EL20-01	COOLING TOWER	33	PC50-03	SERVICE WATER PUMP	54	TL91-01	FIRE TANK (BY OTHERS)			
13	PC20-01	COOLING PUMPS	34	RMS-01	CENTRIFUGE	55	PC81-01/2	FIRE WATER PUMPS (BY OTHERS)			
14	TL25-01	ANOXIC TANK	35	NSS5-01	SCREW CONVEYOR	56	PC99-01/2	DRAIN PUMPS			
15	TL25-02	AEROBIC TANK	36	TL55-01	CONCENTRATE TANK	57	SKD-8101	DBNPA DRUM AND PUMP			
16	TL25-04	SPLITTER BOX	37	PC55-01	CONCENTRATE PUMP	58	MCC-01	SWITCHROOM (BY OTHERS)			
17	PC25-01/2	NITRATE RECIRCULATION PUMPS	38	TL56-01	CIP UNIT	59	PS-1	PIPE SUPPORT RADS			
18	BV25-01/2/3	BLOWERS	39	CAB5-01/2	AIR COMPRESSORS	60	PS-2	PIPE SUPPORT RADS			
19	TL30-01/31-01	MEMBRANE TANKS	40	TG65-01	AIR RECEIVER	61	PS-3	PIPE SUPPORT RADS			
20	PC30-01	MBR DRAIN PUMP	41	TG65-02	AIR RECEIVER	62	SS	SAFETY SHOWERS			
21	PV30-01/31-01	MBR PERMEATE/BACKPULSE PUMPS	42	SKD-8100	ODOUR UNIT	63	TL99-01	DRAIN SUMP			



--- UNDERGROUND DRAIN LINES



NOTE:
 1) ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 2) PLANTING TO BE DONE ABOVE FINISHED GRADE LEVEL 0.00.
 3) PUMP LEVELS NOTE FOR ITEMS 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

REF. NO.	REF. DRAWING TITLE	TITLE
1	REFERENCE DRAWING	

NO.	ISSUE FOR TENDER	FW	RM	ACL	APPROV
1	ISSUE FOR REVIEW	FW <td>RM <td>ACL <td>APPROV</td> </td></td>	RM <td>ACL <td>APPROV</td> </td>	ACL <td>APPROV</td>	APPROV
2	ISSUE FOR REVIEW	FW <td>RM <td>ACL <td>APPROV</td> </td></td>	RM <td>ACL <td>APPROV</td> </td>	ACL <td>APPROV</td>	APPROV
3	ISSUE FOR REVIEW	FW <td>RM <td>ACL <td>APPROV</td> </td></td>	RM <td>ACL <td>APPROV</td> </td>	ACL <td>APPROV</td>	APPROV
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1	ISSUE FOR REVIEW	FW <td>RM <td>ACL <td>APPROV</td> </td></td>	RM <td>ACL <td>APPROV</td> </td>	ACL <td>APPROV</td>	APPROV
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4	ISSUE FOR REVIEW	FW <td>RM <td>ACL <td>APPROV</td> </td></td>	RM <td>ACL <td>APPROV</td> </td>	ACL <td>APPROV</td>	APPROV

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PROJECT NO: **WWTP**

FOR: **V & V WALSH**

VEOLIA

DATE: **WA**

EQUIPMENT LAYOUT

SCALE: 1:200 PROJECT NO: 704320202

DRAWING NO: 704320202-00-MAE-001

SHEET 1 OF 2

FILENAME: 70432020200MAE0010.dwg

REVISION: **D**

A1

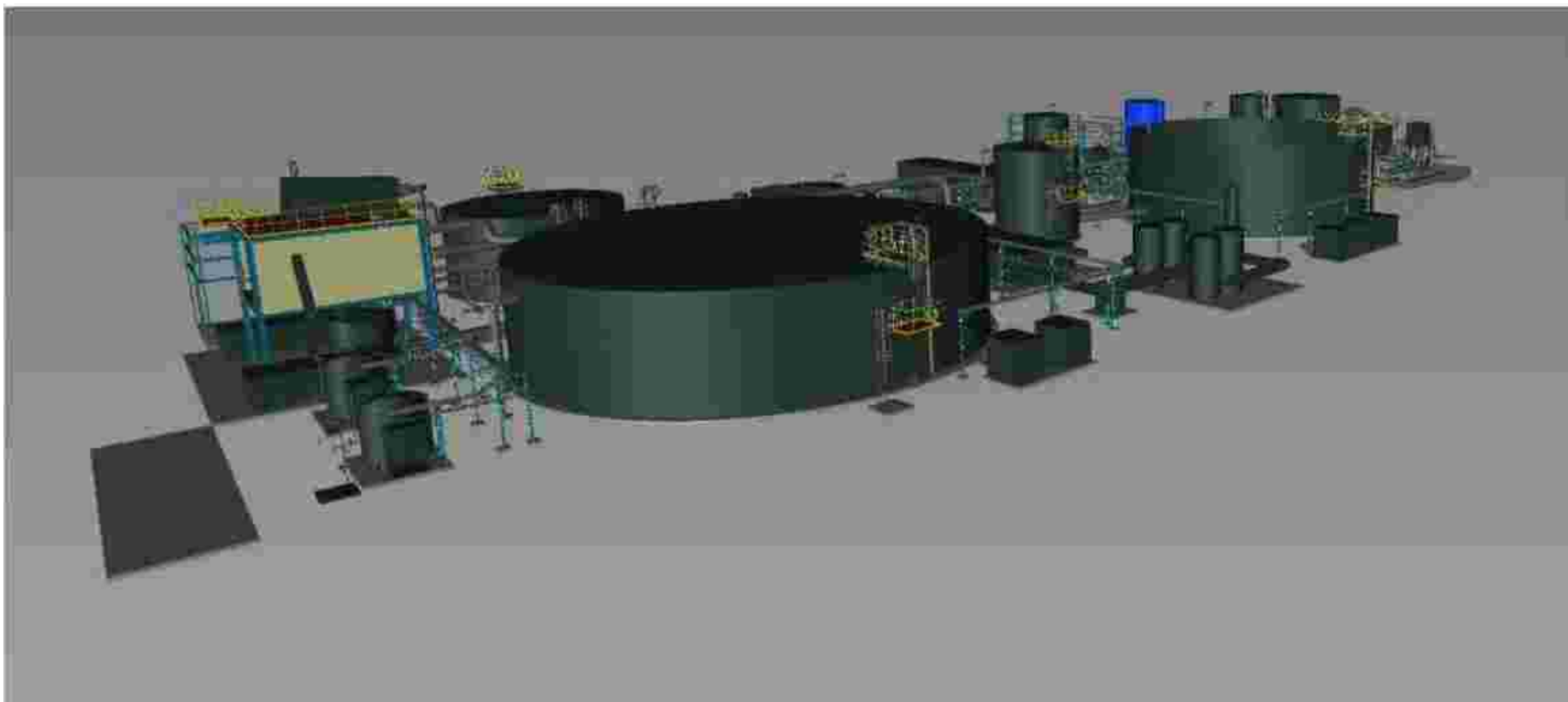
V&V Walsh 3D perspectives WWTP October 2025

Maximum plant height 7m above ground level

View 1 of 2



View 2 of 2



Appendix 2

Exemption to clearing native Vegetation, GHD 4.10.2024

Our ref: 12642886

11 October 2024

Cameron Cody
V&V Walsh Pty Ltd
PO Box 1713
Bunbury WA 6321

V&V Walsh – Exemption to clear native vegetation for proposed wastewater treatment plant

Dear Cameron

V&V Walsh Pty Ltd (V&V Walsh) operates a red meat processing facility (the Facility) in the suburb of Davenport within the greater Bunbury Region of Western Australia (WA) under Department of Water and Environmental Regulation (DWER) licence L6001/1989/15. The Facility is located approximately 6 km southeast of the Bunbury CBD and 160 km south of Perth within Lot 1 Rawling Road, Davenport (the Premises) (Figure 1).

Wastewater generated from the operation of the abattoir, and associated activities, is currently treated via an on-site Wastewater Treatment System (WWTS). The treated wastewater is used in the washdown area, turf farm irrigation via a central pivot (year-round), and on-site irrigation of pasture and a tree lot (during winter) within the Premises under DWER clearing permit CPS 8310/1.

The WWTS is unable to comply with conditions in the updated DWER licence, and so V&V Walsh is proposing to construct and operate a wastewater treatment plant (WWTP) which will ultimately replace the WWTS. The existing storage ponds will be retained to provide both contingency storage capacity in the event of a catastrophic event and storage water for treated water over the winter months.

V&V Walsh propose to clear up to 0.63 ha of native vegetation for the purpose of construction of the WWTP and up to 0.22 ha of native vegetation for fuel load reduction to the north of the WWTP (Figure 2). Fuel load reduction will involve clearing selected trees and understorey, however not all trees will be cleared therefore connectivity of fauna habitat will be maintained. The selected trees were identified by JBS&G fire management planning consultants as being required to be removed. The Bushfire Management Plan (in prep.) does not require clearing of all vegetation in the asset protection zone.

This letter has been prepared to advise that GHD Pty Ltd (GHD), on behalf of V&V Walsh, has assessed the nature and extent of the clearing of native vegetation and, in consultation with DWER (21 August 2024), considers that this activity is exempt from the requirement for a permit to clear native vegetation under s51c of the *Environmental Protection Act 1986* (EP Act). The assessment considered the exemptions under the Environmental Protection (Clearing of Native Vegetation) Regulations 2004, clearing to construct a building, Regulation 5, Item 1.

Native vegetation and fauna at the proposed clearing location

The proposed WWTP location is located in the South West Botanical Province of Western Australia within the Swan Coastal Plain bio-region and Perth sub-region. GHD was engaged by V&V Walsh to undertake a spring flora and fauna survey for vegetation type and condition, record key species including any Threatened or Priority Flora and assess fauna habitat. The survey was undertaken on 20 to 22 November 2023. The findings of the survey have informed this assessment to determine if the proposed clearing is exempt under regulations from requiring a clearing permit application.

Threatened and Priority Ecological Communities

The GHD (2024b) flora and fauna survey included two Project Areas and adjacent vegetation (site walkover areas). The proposed WWTP is located within Project Area 2 which has been predominantly cleared and/or contains a ground cover dominated by introduced grasses and herbs with isolated native trees and comprises of existing road, infrastructure and farmland. The survey confirmed that, whilst there were *Eucalyptus rudis* (Flooded Gum) recorded within the proposed WWTP location there was no riparian vegetation present (GHD, 2024b).

Based on the results of the desktop searches and the dominant species and landform features observed during the field survey, no EPBC or State listed TECs, or DBCA listed PECs (component of EPBC listed TECs) were identified within the WWTP location or broader survey area (GHD, 2024b). Vegetation recorded within the Project Areas does not meet the structural or compositional criteria to represent any of the TEC or PECs which have been identified within the study area, specifically: Banksia dominated woodlands of the Swan Coastal Plain and Herb Rich Shrublands in Clay Pans (FCT08).

Conservation significant flora

GHD (2024b) did not identify any Threatened flora species listed under the EPBC Act and/or the BC Act or DBCA Priority listed species within the proposed WWTP location or wider survey area during the field survey.

Conservation significant fauna

During the GHD (2024b) survey, two conservation significant fauna species were recorded within Project Area 2, however were not identified within the proposed WWTP location:

- Western Ringtail Possum (*Pseudocheirus occidentalis*) – EPBC Act and BC Act listed Critically Endangered (CR)
- Forest Red-tailed Black-Cockatoo (*Calyptrorhynchus banksii naso*) – EPBC Act and BC Act listed Vulnerable (VU)

A further seven conservation significant fauna species were considered likely to occur within the survey area however limited suitable habitat is available within the proposed WWTP location. The vegetation present has low habitat value for Black Cockatoo species. A small patch of *Eucalyptus rudis* (Flooded Gum) and *Agonis flexuosa* (Peppermint) trees is present however the area is parkland cleared. Seven potential breeding trees present (Flooded Gum) were recorded however none contain hollows. This area is not considered core foraging habitat for Black Cockatoos (Flooded Gum and Peppermints are considered low value) (GHD, 2024b).

Vegetation within the proposed WWTP location lacks structural diversity. While Western Ringtail Possum may utilise this habitat as a linkage to surrounding patches of vegetation (GHD, 2024b), no Western Ringtail Possum were recorded in this area of vegetation and the proposed clearing will not fragment fauna habitat, with the Preston River providing an ecological corridor along the eastern boundary of the V&V Walsh landholding. Therefore it is considered that the impact of the proposed clearing unlikely to be significant for Western Ringtail Possum.

Ten Clearing Principles

An assessment of the ten clearing principles determined that the proposed clearing is unlikely to be at variance to the ten Principles (Table 1).

Justification for exemption to clear

The guide to exemptions and regulations for clearing native vegetation under Part V of the EP Act, (the Guide) describes the provisions for regulating the clearing of native vegetation where an application for a clearing permit may be required or if the proposed clearing is eligible for exemption (DWER, 2019).

GHD's assessment of the extent of the clearing of native vegetation and the purpose for which the clearing is to occur considers that the clearing of native vegetation is exempt under Regulation 5, the purpose of the clearing is for lawful construction of a building or other structure on the property (Item 1) of the Guide (DWER, 2019).

Ongoing maintenance of vegetation around the WWTP, within 10 years of clearing, for fire risk reduction is exempt under Regional 5, Item 15 of the Guide (DWER, 2019).

Requirements of the exemption

V&V Walsh confirms that:

- V&V Walsh is the owner and has legal access to the proposed WWTP location
- V&V Walsh will not exceed the 5 ha threshold of clearing native vegetation in a financial year
- The vegetation is not riparian vegetation
- The site is not mapped as an ESA.

V&V Walsh confirms that clearing under the exemption will not be undertaken until all other necessary environmental and planning approvals are in place.

Please do not hesitate to contact the undersigned should have any queries or require further information.

Regards

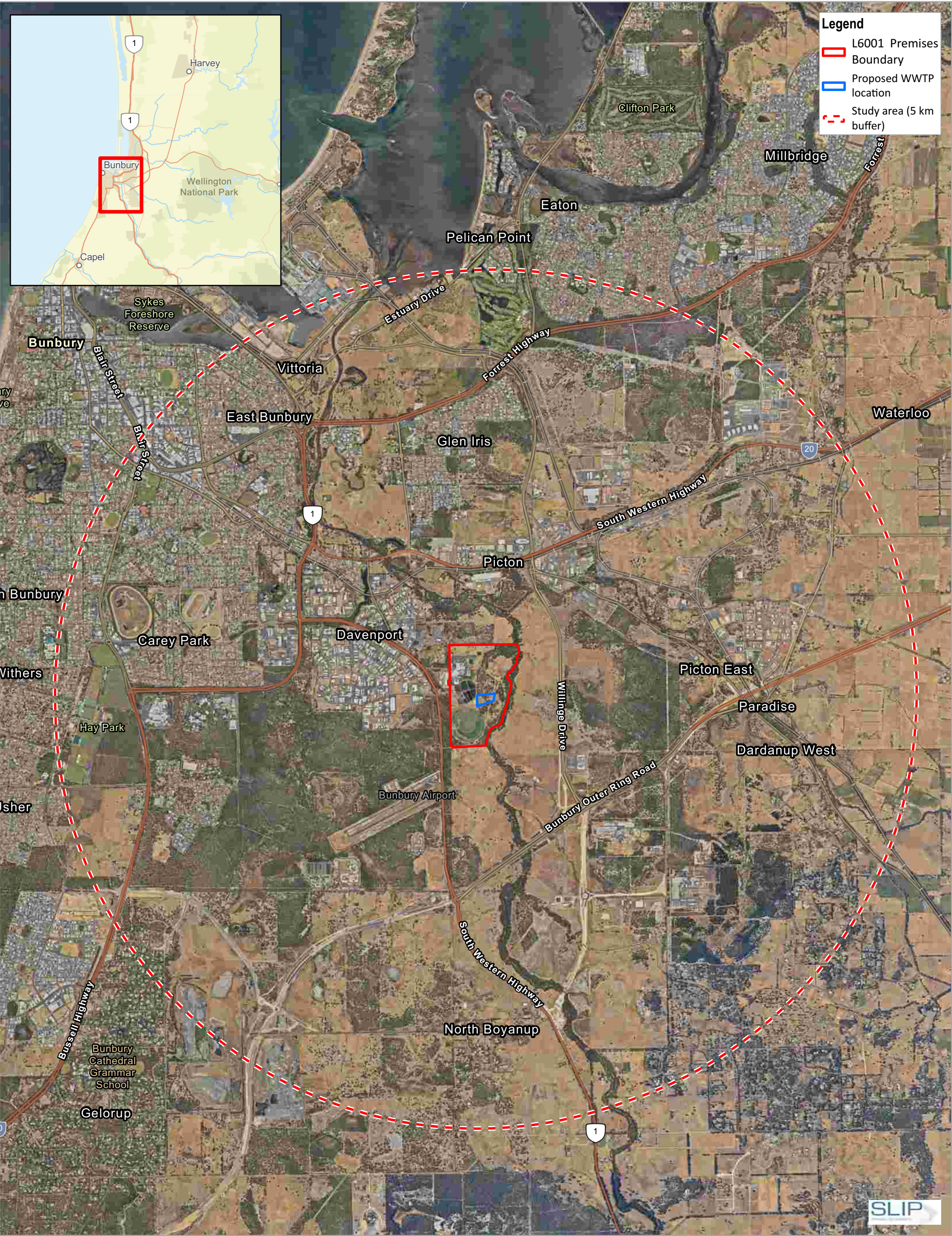


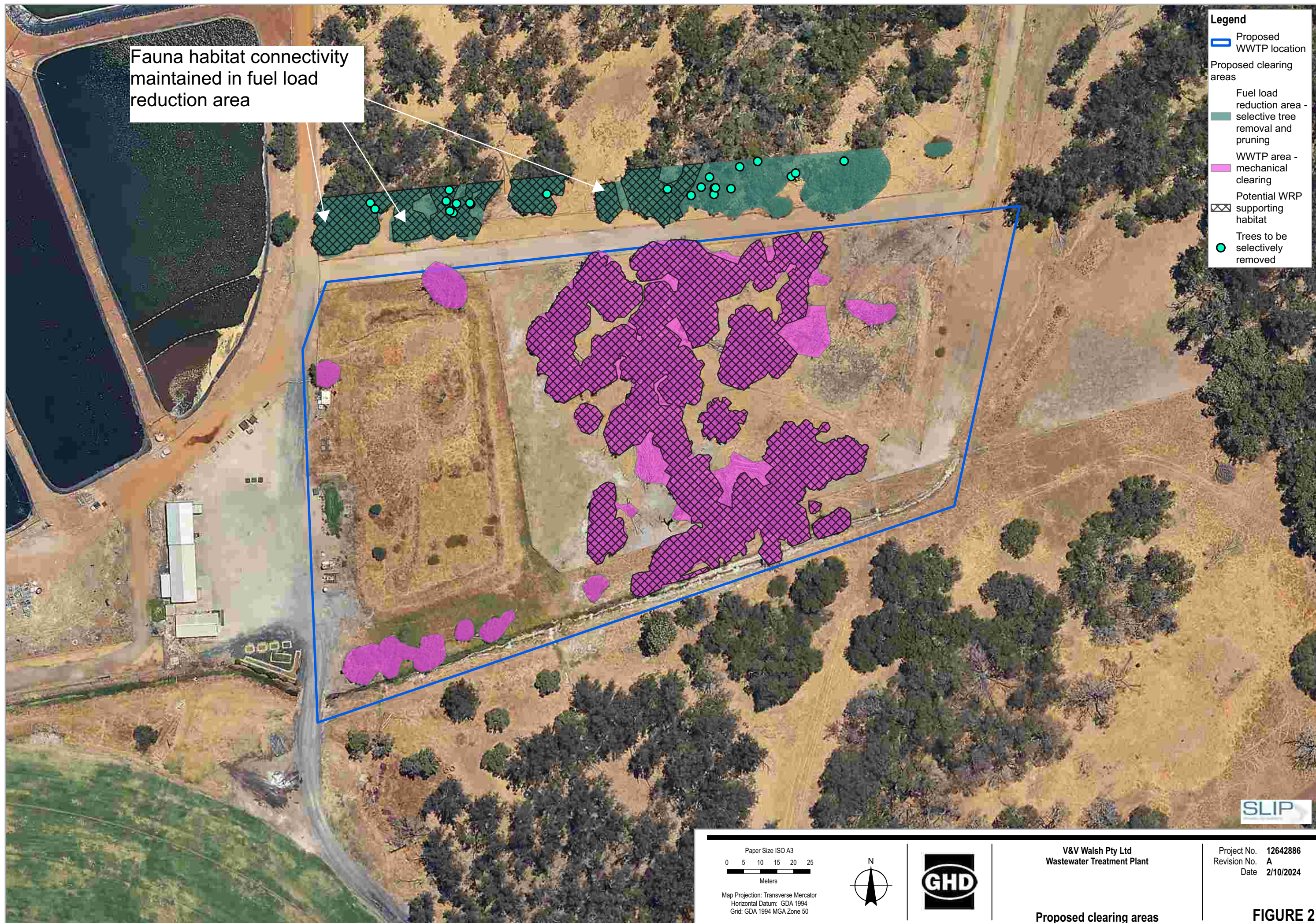
Fionnuala Hannon
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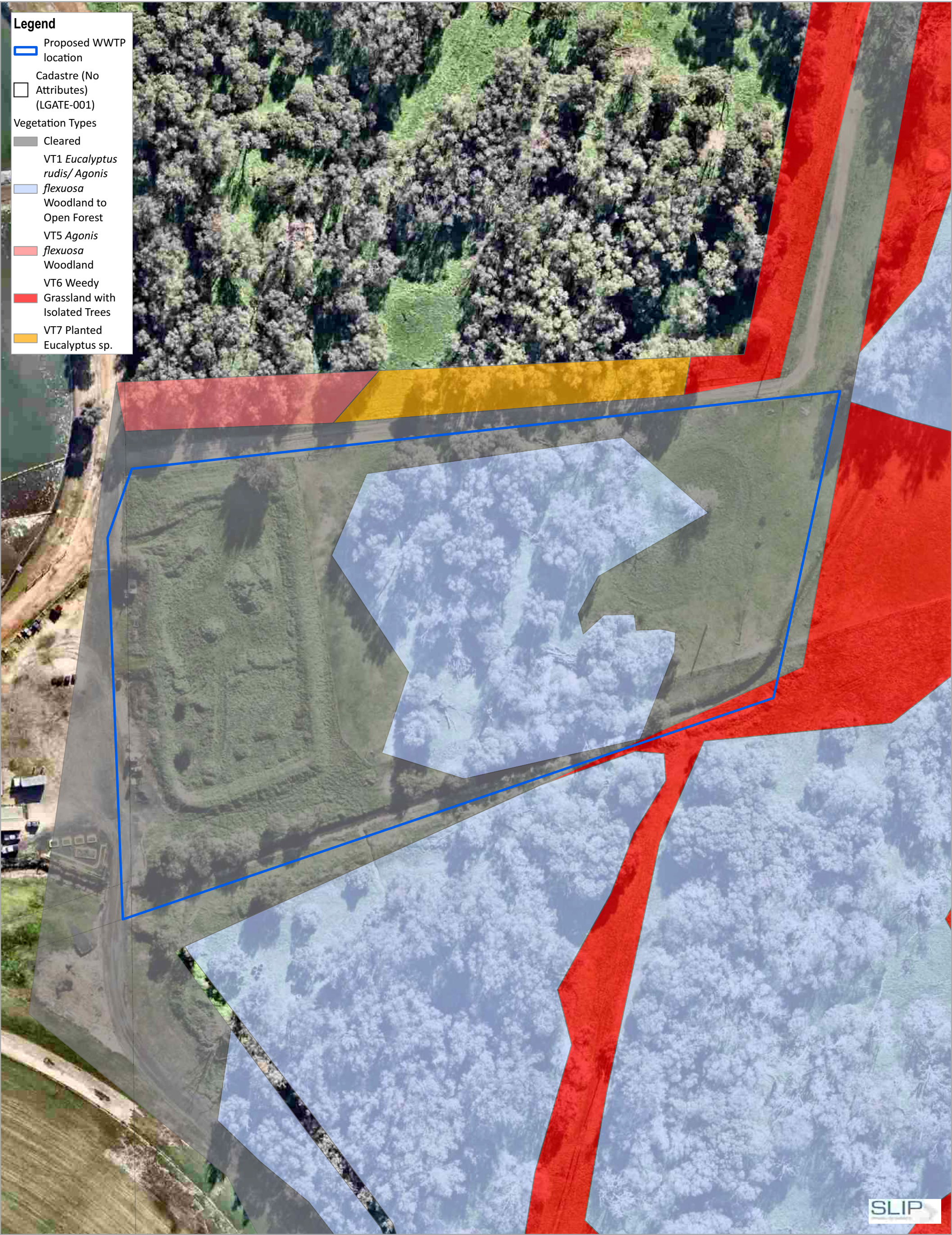
Attachment 1

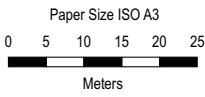
Figures

<i>Figure 1</i>	<i>Locality</i>
<i>Figure 2</i>	<i>Proposed clearing area</i>
<i>Figure 3</i>	<i>Vegetation types</i>
<i>Figure 4</i>	<i>Vegetation condition</i>
<i>Figure 5</i>	<i>Fauna habitat</i>
<i>Figure 6</i>	<i>Black Cockatoo habitat desktop assessment</i>
<i>Figure 7</i>	<i>Hydrology</i>
<i>Figure 8</i>	<i>Environmentally sensitive areas and DBCA managed lands</i>

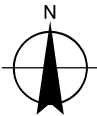








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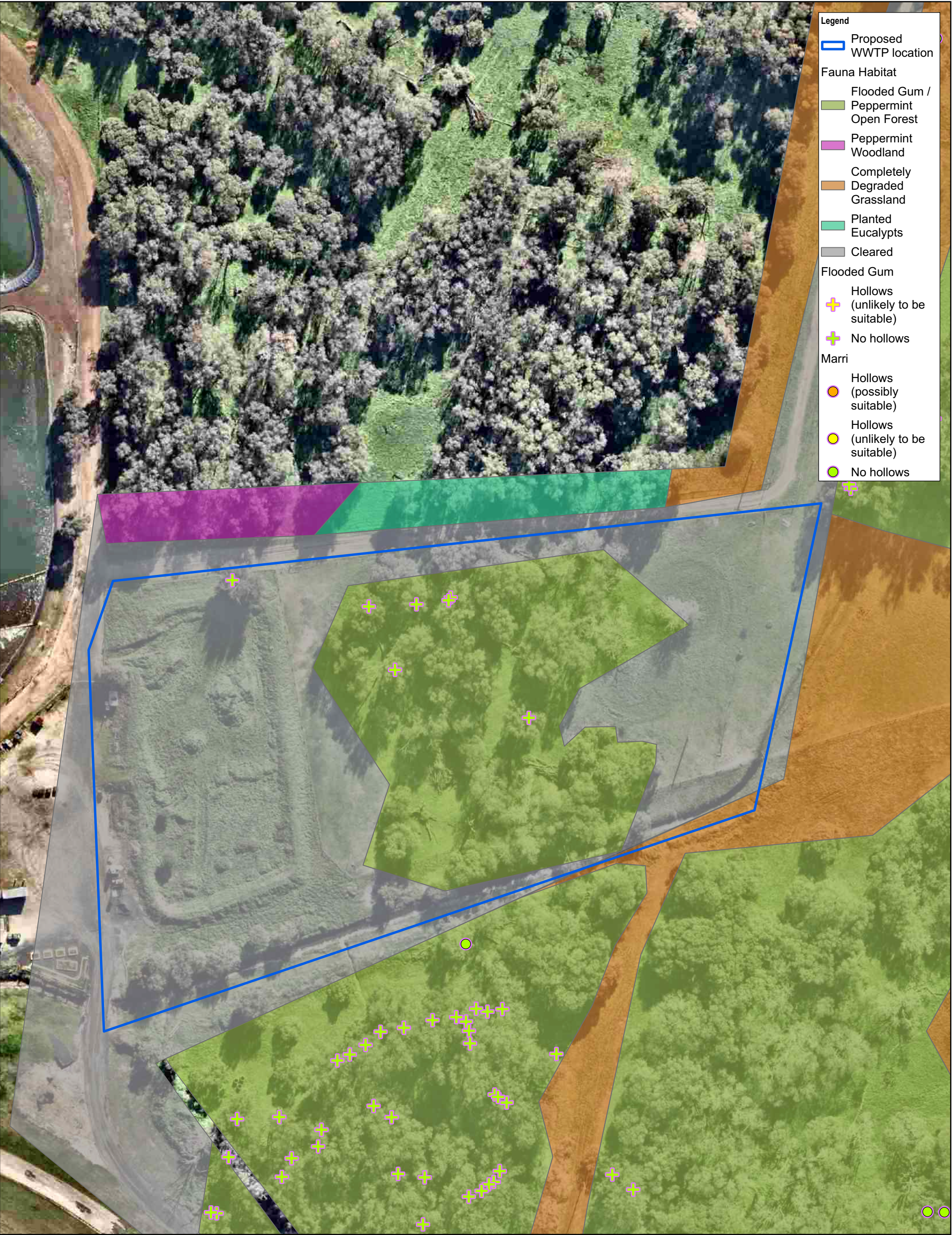


V&V Walsh Pty Ltd
Wastewater Treatment Plant

Project No. 12642866
Revision No. A
Date 1/10/2024

Vegetation Condition

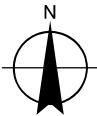
FIGURE 4



- Legend**
- Proposed WWTP location
 - Fauna Habitat**
 - Flooded Gum / Peppermint Open Forest
 - Peppermint Woodland
 - Completely Degraded Grassland
 - Planted Eucalypts
 - Cleared
 - Flooded Gum**
 - Hollows (unlikely to be suitable)
 - No hollows
 - Marri**
 - Hollows (possibly suitable)
 - Hollows (unlikely to be suitable)
 - No hollows

Paper Size ISO A3
0 5 10 15 20 25
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

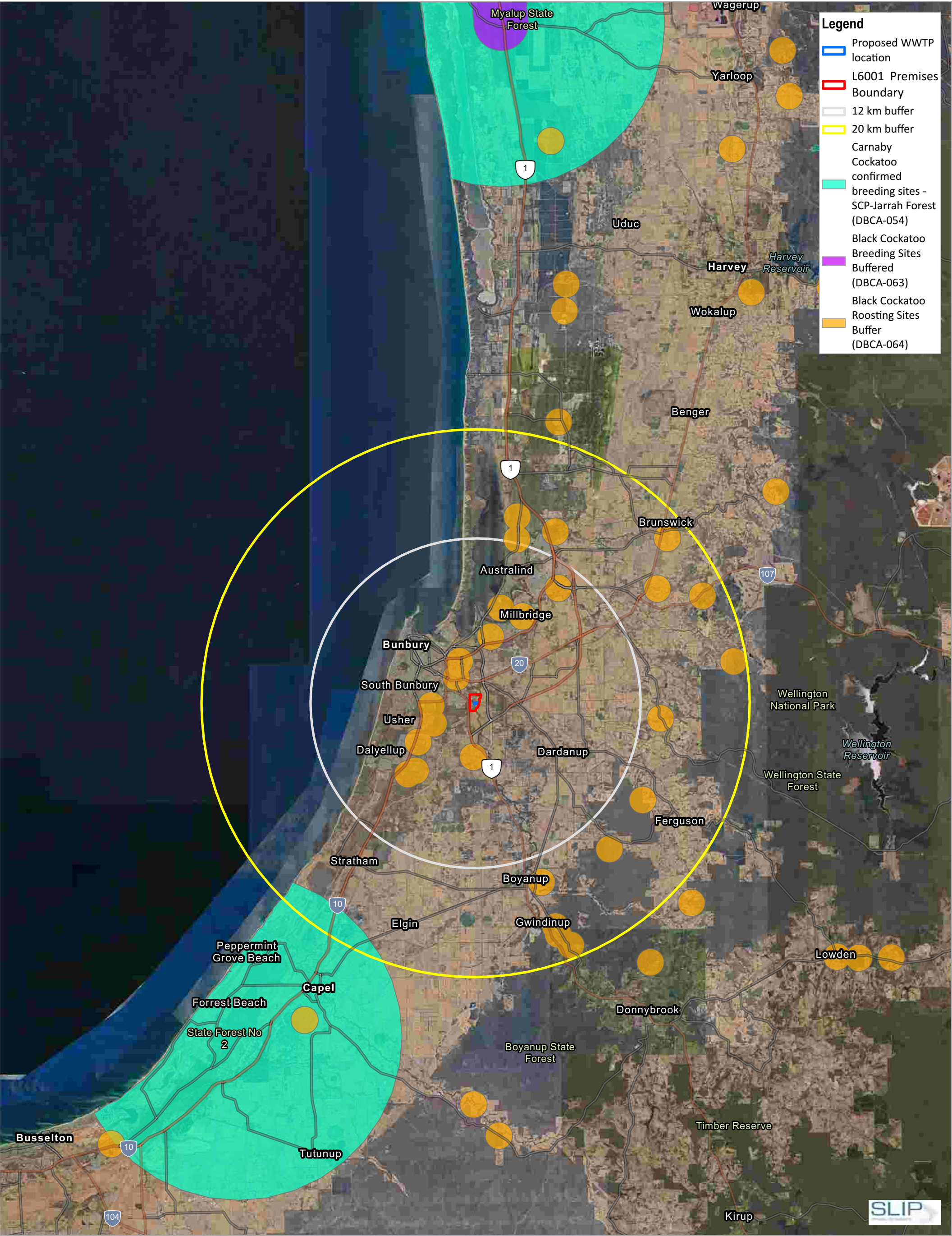


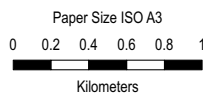
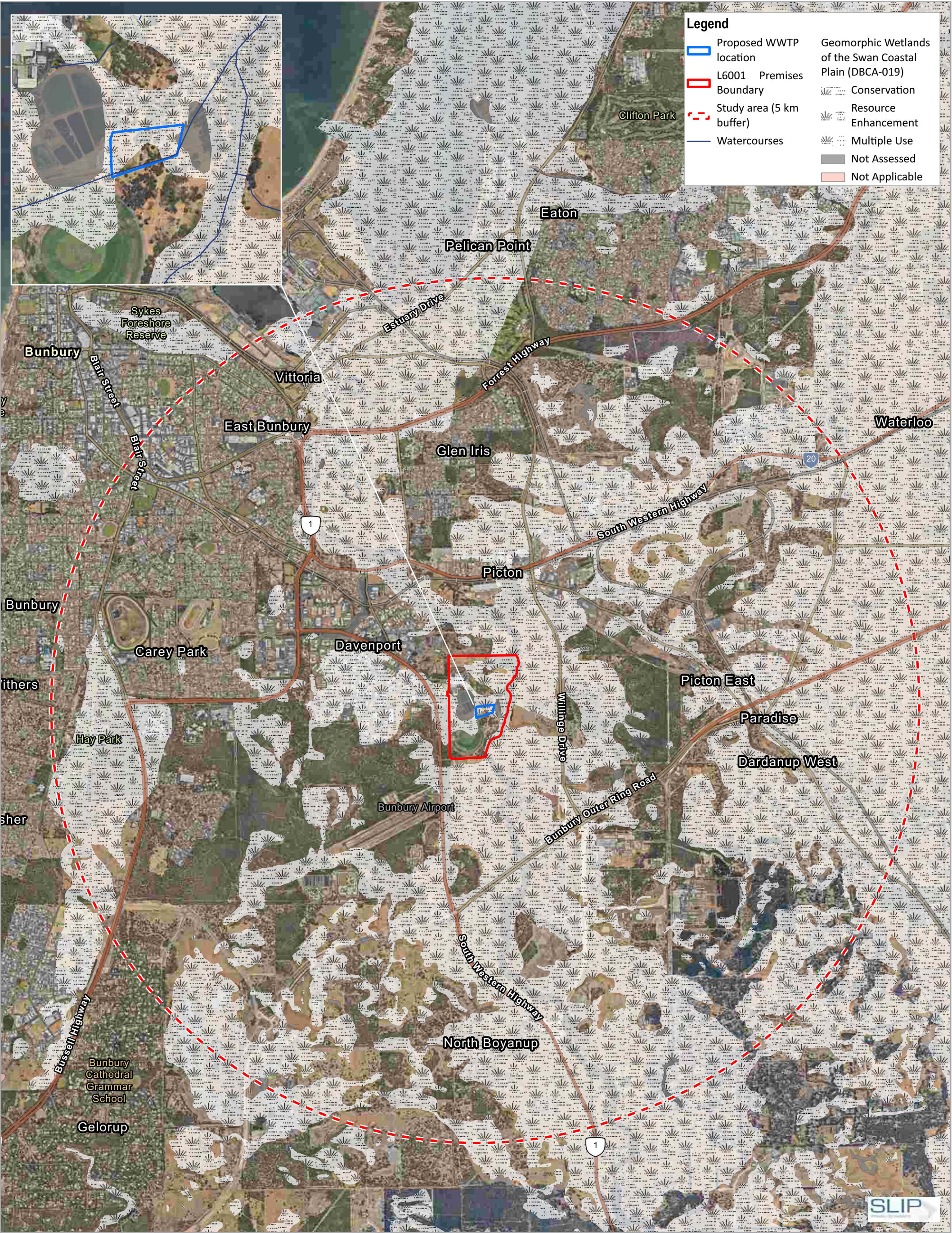
V&V Walsh Pty Ltd
Wastewater Treatment Plant

Fauna habitat

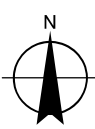
Project No. 12642866
Revision No. A
Date 25/09/2024

FIGURE 5





Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 50

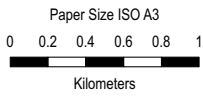
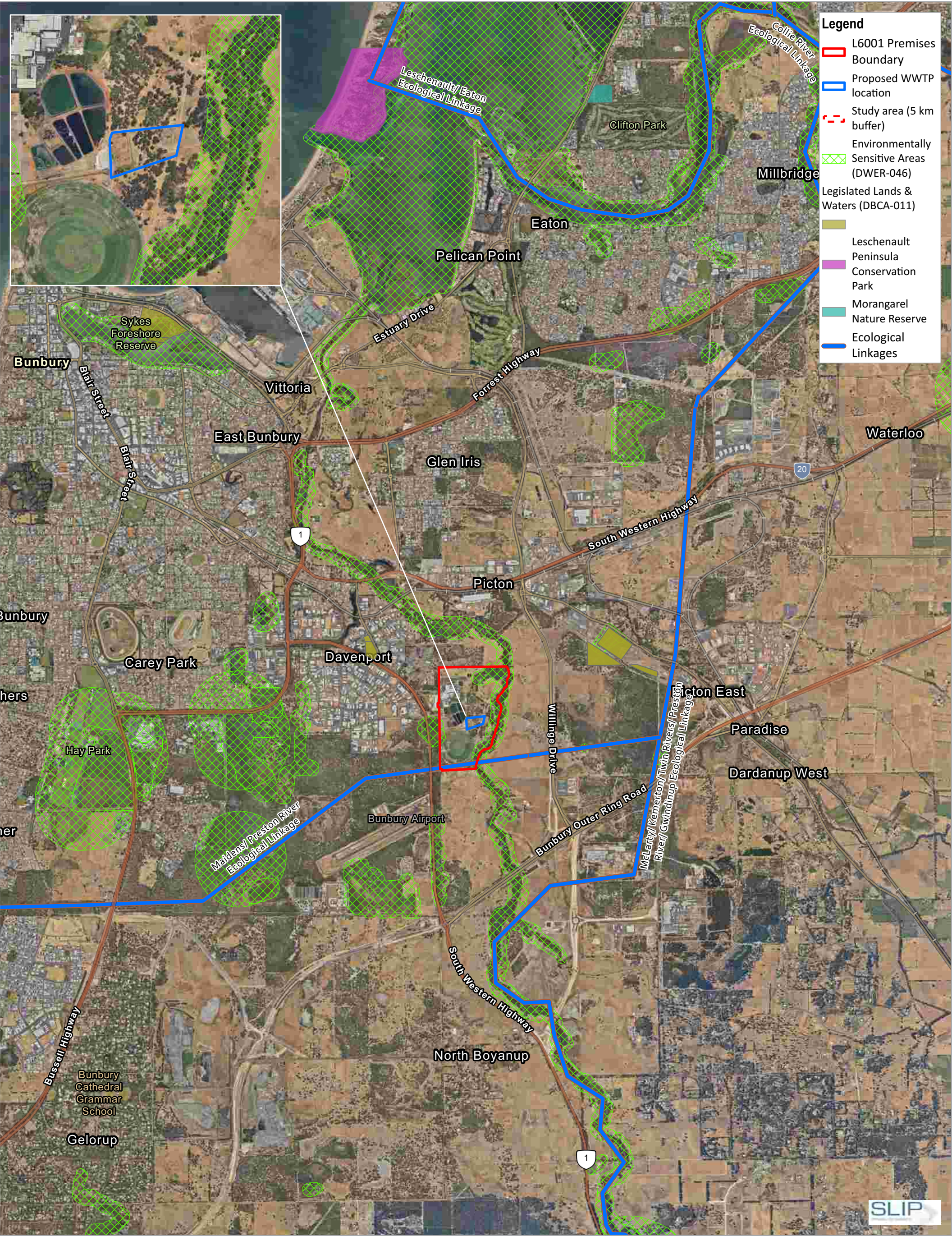


V&V Walsh Pty Ltd
Wastewater Treatment Plant

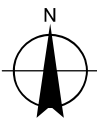
Project No. 12642866
Revision No. A
Date 25/09/2024

Hydrology

FIGURE 7



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 50



V&V Walsh Pty Ltd
Bio Resource Recovery Facility

ESAs, DBCA managed lands
& Ecological Linkages

Project No. 12642866
Revision No. A
Date 25/09/2024

FIGURE 8

Attachment 2

Assessment against the Ten Clearing Principles

Table 1 Assessment against the Ten Clearing Principles

Principle	Assessment	Outcome
A Native vegetation should not be cleared if it comprises a high level of biological diversity.	The proposed clearing area includes up to 0.85 ha of native vegetation as described in the Detailed and Targeted flora and vegetation survey (GHD, 2024b), comprised of four vegetation types (Figure 3), in Completely Degraded Condition (Figure 4). Up to 0.63 ha of native vegetation is proposed to be cleared for the purpose of construction of the WWTP and up to 0.22 ha within a fuel reduction zone to the north of the WWTP for bushfire control purposes. The remainder of the area is mapped as Cleared – previously cleared areas, including roads, tracks and other infrastructure. Vegetation units identified within native vegetation within the proposed clearing area include: – VT1: <i>Eucalyptus rudis</i> susp. <i>rudis</i> / <i>Agonis flexuosa</i> Woodland to Open Forest – Completely Degraded condition – VT5: <i>Agonis flexuosa</i> Woodland – Completely Degraded condition – VT6: Weedy grassland with isolated trees – Completely Degraded condition – VT7: Planted Eucalyptus sp. – planted Eucalyptus sp. with occasional <i>Agonis flexuosa</i> over weedy grasses and herbs – Completely Degraded condition. The DBCA Dandjoo database search identified 362 flora taxa representing 64 families previously recorded within 5 km of the survey area (DBCA, 2023). This total comprised 314 native taxa and 48 naturalised (introduced) taxa. Dominant families recorded included Fabaceae (45 taxa), Myrtaceae (32 taxa), Orchidaceae (32 taxa) and Cyperaceae (29 taxa) (GHD, 2024b). Sixty-two flora taxa (including subspecies and varieties) representing 28 families were recorded from Project area 2 (where the proposed clearing area is located) during the field survey. This total comprised 27 native taxa and 35 introduced taxa. Dominant families recorded from the project area included Poaceae (10 taxa), Fabaceae (8 taxa), Myrtaceae (8 taxa) and Asteraceae (6 taxa) (GHD, 2024b). The DBCA Dandjoo database (DBCA, 2023) identified 77 terrestrial vertebrate fauna species previously recorded within 5 km of the survey area. The 5 km radius used for the desktop assessment of the fauna assemblage included habitat types, such as marine habitats, that did not occur with the proposed clearing area. Therefore, marine species and fish, restricted to these habitat types are considered unlikely to occur within the proposed clearing area. Of the 77 fauna species previously recorded, 71 are native species and six are naturalised (introduced) species. A Basic and Targeted fauna survey undertaken by GHD (2024b) identified 27 species (20 birds, six mammals and one reptile) within Project area 2. The proposed clearing has been restricted to areas which have been disturbed for many years primarily for agricultural purposes, fertigation, access tracks and easements. Avoidance of native vegetation clearing was a key consideration in the preparation and planning of the WWPT location, including the following design aspects: – The WWTP has been located in previously disturbed agricultural land within Lot 1 which has been subject to grazing and clearing and is mapped as Degraded to Completely Degraded	The proposed clearing is not likely to be at variance to this principle

Principle	Assessment	Outcome
	– The WWTP has been situated to avoid fragmentation native vegetation and of the adjacent ecological linkages. Based on relatively low biodiversity within the survey area compared to the study area (approximately 17% of flora and 35% of fauna taxa) it is considered that the proposed clearing is not likely to be at variance to this Principle.	
B	Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia. Up to 0.63 ha of native vegetation is proposed to be cleared for the purpose of construction of the WWTP and up to 0.22 ha within a fuel reduction zone to the north of the WWTP for bushfire control purposes. The remainder of the area is mapped as Cleared – previously cleared areas, including roads, tracks and other infrastructure. Habitat types identified in during the Basic and Targeted fauna survey (GHD, 2024b) in the proposed clearing area include (Figure 5): – Flooded Gum/ Peppermint Open Forest – Peppermint Woodland – Planted Eucalyptus – Completely Degraded Grassland. Searches of the EPBC Act PMST (DCCEEW 2024), Dandjoo database (DBCA 2023) and DBCA database search identified the presence/ potential presence of 28 conservation significance fauna within the survey area. This total does not include those species that are exclusively marine as no marine habitat is present within the survey area. This does not include those species that are exclusively marine, or marine bird species as there is no marine habitat present within the proposed clearing area. Of the 28 significant fauna (Threatened and Priority listed species) identified in the desktop searches, two species were recorded and seven species are considered likely to occur in Project Area 2 (GHD, 2024b), however were not observed within the proposed WWTP location which is comprised of low value habitat and is parkland cleared. These species included the following: Recorded: – <i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black Cockatoo) (Vulnerable (VU) under the EBPC Act/ BC Act) – <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum) (Critically Endangered under the EBPC Act/ BC Act) Likely: – <i>Zanda baudinii</i> (Baudin's Black Cockatoo) (Endangered (EN) under the EBPC Act/ BC Act) – <i>Zanda latirostris</i> (Carnaby's Black Cockatoo) (EN under the EBPC Act/ BC Act) – <i>Falco peregrinus</i> (Peregrine Falcon) (OS under the BC Act) – Brush-tailed Phascogale (<i>Phascogale tapoatafa</i> subsp. <i>wambenger</i>) (Conservation Dependent (CD) under the BC Act) – <i>Isoodon fusciventer</i> (Quenda) (DBCA listed Priority 4) – <i>Falsistrellus mackenziei</i> (Western False Pipistrelle) (DBCA listed Priority 4) – <i>Ctenotus ora</i> (Coastal Plains Skink) (DBCA listed Priority 3). Species recorded, with potential habitat located within the proposed clearing area, are discussed below: Black Cockatoos (Carnaby's Cockatoo, Forest Red-tailed Black Cockatoo and Baudin's Cockatoo) A significance assessment was undertaken (GHD, 2024a) to determine if Matters of National Environmental Significance (MNES) listed under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) may be potentially impacted by the proposed clearing. This assessment identified the following with regard to Black Cockatoo habitat:	The proposed clearing is not likely to be at variance to this principle

Principle		Assessment	Outcome
		Breeding – The proposed clearing will not result in the clearing of any known or suitable nesting trees (Figure 5). – Within the proposed clearing area there are seven potential nesting trees > 500 mm DBH (<i>Eucalyptus rudis</i>). No trees contained suitable hollows for Black Cockatoo breeding. – The nearest recorded Black Cockatoo breeding site (GoWA, 2024) occurs approximately 18 km to the south-west (Figure 6). Roosting – No roosting sites were identified within the proposed clearing area (GHD, 2024b). – The closest known roosting site (buffered) located approximately 1.3 km to the north (GoWA, 2024) (Figure 6). Foraging – The vegetation within the proposed WWTP location is considered to have low foraging habitat value for Black Cockatoos as <i>Eucalyptus rudis</i> and <i>Agonis flexuosa</i> are not considered core foraging habitat (GHD, 2024b). Foraging habitat is present with vegetation along South Western Highway to the west and Preston River to the east. Western Ringtail Possum The vegetation within the proposed WWTP location lacks structural diversity however Western Ringtail Possum may utilise this habitat as a linkage to surrounding patches of vegetation (GHD, 2024b). Given the proposed clearing includes low quality (parkland cleared) supporting habitat and will not fragment fauna habitat i.e. fuel load reduction will maintain connectivity to vegetation to the north, it is considered that the impact of the proposed clearing unlikely to be significant for Western Ringtail Possum. Conclusion Prior to clearing, pre-clearance fauna searches will be undertaken within the area to be cleared and a suitably qualified fauna spotter will be on site during all native vegetation clearing activities. Given the small area of clearing and presence of low-quality fauna habitat, it is considered that the proposed clearing is not likely to be at variance to this principle.	
C	Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	Desktop searches of the EPBC Act PMST, Dandjoo, DBCA TPFL and WAHERB databases identified the presence/ potential presence of 59 significant flora species occurring within the study area (5 km buffer of the survey area) including 21 Threatened taxa listed under the EPBC Act and/or BC Act and 38 DBCA Priority listed species (GHD, 2024b). Of these taxa GHD (2024b) considered that one species, <i>Eucalyptus rudis</i> subsp. <i>cratyantha</i> (Priority 4) is considered as possibly occurring within the survey area. However, GHD (2024b) did not identify any Threatened flora species listed under the EPBC Act and/ or the BC Act or DBCA Priority listed species within the proposed clearing area or wider survey area during the field survey. It is considered that the proposed clearing is not likely to be at variance to this principle.	The proposed clearing is not likely to be at variance to this principle
D	Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for, the maintenance of a	Desktop assessment of the EPBC Act PMST and DBCA Threatened and Priority Ecological Communities databases identified the following Threatened Ecological Communities (TECs) listed under the EPBC Act and/ or BC Act as potentially occurring within the study area (5 km buffer) (GHD, 2024b): – Banksia Woodlands of the Swan Coastal Plain ecological community (Endangered under the EPBC Act) including the following components:	The proposed clearing is not likely to be at variance to this principle

Principle	Assessment	Outcome
threatened ecological community.	- Low lying <i>Banksia attenuata</i> woodlands or shrublands ('floristic community type 21c') - Southern <i>Banksia attenuata</i> woodlands ('floristic community type 21b') - Southern <i>Eucalyptus gomphocephala</i> – <i>Agonis flexuosa</i> woodlands (SCP25) (can be a component of the Endangered Banksia Woodlands of the Swan Coastal Plain EPBC listed TEC or the Tuart woodlands and forests of the Swan Coastal Plain EPBC listed TEC) - Clay Pans of the Swan Coastal Plain (Critically Endangered under the EPBC Act and Endangered under the BC Act) including the following components: - Dense shrublands on clay flats (floristic community type 9 as originally described in Gibson <i>et al.</i> (1994)) - Herb rich saline shrublands in clay pans (floristic community type 7 as originally described in Gibson <i>et al.</i> (1994)) - Herb Rich Shrublands in Clay Pans (SCP08) - Shrublands on dry clay flats (floristic community type 10a as originally described in Gibson <i>et al.</i> (1994)) - Empodisma peatlands of southwestern Australia (Endangered under the EPBC Act) - Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion (Critically Endangered under both the EPBC Act and BC Act) - Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community (Critically Endangered under the EPBC Act) - Sedgeland in Holocene dune swales of the southern Swan Coastal Plain (floristic community type 19 as originally described in Gibson <i>et al.</i> (1994)) (Endangered under the EPBC Act and Critically Endangered under the BC Act) - Subtropical and Temperate Coastal Saltmarsh (Vulnerable under the EPBC Act). Based on the results of the desktop searches, dominant species, landform features and field observations no EPBC or State listed TECs, or DBCA listed PECs (component of EPBC listed TECs) were identified within the proposed clearing area or broader survey area. Vegetation recorded within the project areas does not meet the structural or compositional criteria to represent any of the TEC or PECs which have been identified within the study area, specifically: Banksia dominated woodlands of the Swan Coastal Plain and Herb Rich Shrublands in Clay Pans (FCT08).	
E Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	The proposed clearing area is situated in the Southwest Botanical Province of WA (Beard, 1979) within the SCP (SWA) bioregion and the Perth (SWA2) subregion as described by the Interim Biogeographic Regionalisation of Australia (IBRA) (DCCEEW, 2024). The SCP bioregion is a low lying coastal plain, mainly covered with woodlands. The Perth subregion is composed of colluvial and aeolian sands, alluvial river flats and costal limestone. Heath and / or Tuart woodlands occur on limestone, Banksia and Jarrah-Banksia woodlands on Quaternary marine dunes of various ages and Marri on colluvial and alluvial soils. The subregion also includes a complex series of seasonal wetlands (Mitchell, Williams, & Desmond, 2002). Broad scale (1:250,000) pre-European vegetation mapping of the area has been completed at an association level (Beard, 1979). This indicates the proposed clearing area intersects one vegetation association: - Vegetation association 1000: Mosaic: Medium forest; Jarrah-Marri/Low woodland; Banksia/Low forest; Teatree (<i>Melaleuca</i> spp.) - Vegetation association 1182: Medium woodland; <i>Eucalyptus rudis</i> and <i>Melaleuca raphiophylla</i>. The pre-European mapping has been adapted and digitised by Shepherd <i>et al.</i> (2002). The extent of the vegetation associations have been determined by the State-wide vegetation remaining extent calculations maintained by the DBCA (latest	The proposed clearing is not likely to be at variance to this principle

Principle		Assessment						Outcome
	update March 2019 (GoWA, 2019a)). As shown below, the current extents of vegetation association 1000 and 1182 are less than 30 % of their pre-European extent at the IBRA Bioregion, IBRA subregion and within the Local Government Authority (LGA) levels.							
	Vegetation Assoc.		Scale	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	% Current extent in all DBCA managed land (proportion of Current Extent)	Reduction of current extent due to the proposed clearing
	Swan Coastal Plain IBRA Bioregion			1,501,221.93	578,997.37	38.57	38.47	0.85 ha (0.0001%)
	1000	State: WA	99,835.86	27,768.84	27.81	18.64	0.80 ha (0.003%)	
		IBRA Bioregion: SCP	94,175.31	24,869.20	26.41	19.18	0.80 ha (0.003%)	
		Sub-region: Perth	94,175.31	24,869.20	26.41	19.18	0.80 ha (0.003%)	
		LGA: City of Bunbury	2,171.67	621.00	28.60	2.12	0.80 ha (0.1%)	
	1182	State: WA	23,437.06	6,133.59	27.5	55.33	0.05 ha (0.0008%)	
		IBRA Bioregion: SCP	12,309.34	1,400.60	11.38	6.10	0.05 ha (0.004%)	
		Sub-region: Perth	12,309.34	1,400.60	11.38	6.10	0.05 ha (0.004%)	
		LGA: City of Bunbury	280.10	86.93	31.03	-	0.05 ha (0.06%)	
	Regional vegetation for the Swan Coastal Plain (at vegetation complex level) was mapped by Heddle et al. (1980) and updated and extended by Webb et al. (2016). The mapping indicates that two vegetation complexes are present within the proposed clearing area: – Southern River Complex – Open woodland of <i>Corymbia calophylla</i> (Marri) – <i>Eucalyptus marginata</i> (Jarrah) – <i>Banksia</i> species on elevated areas and a fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) – <i>Melaleuca raphiophylla</i> (Swamp Paperbark) along streams. South of the Murray River <i>Agonis flexuosa</i> (Peppermint) occurs in association with the Flooded Gum and Swamp Paperbark. – Swan Complex – Fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) – <i>Melaleuca raphiophylla</i> (Swamp Paperbark) with localised occurrence of low open forest of <i>Casuarina obesa</i> (Swamp Sheoak) and <i>Melaleuca cuticularis</i> (Saltwater Paperbark).							

Principle	Assessment					Outcome	
	GoWA (2019b) has assessed the vegetation complexes against presumed pre-European extents within the SWA IBRA Bioregion and LGA levels in the following tables. The current extents of the vegetation complexes occurring within the survey area are less than 20 % of the pre-European distribution within the SWA IBRA Bioregion and less than 30% within the LGA.						
	Vegetation Complex	Pre-European extent (ha)	Current extent (ha)	Proportion Pre-European extent remaining on Swan Coastal Plain (%)	Current extent remaining in all DBCA Managed Lands (%)		Reduction of current extent due to the proposed clearing
	Southern River Complex	58,781.48	10,832.18	18.43	1.60		0.13 ha (0.001%)
	Swan Complex	15,194.13	2,062.03	13.57	0.93		0.72 ha (0.03%)
	At the local government scale, as shown below, Southern River Complex and Swan Complex has less than 30% remaining in the City of Bunbury (GoWA, 2019a).						
	Vegetation Complex	Pre-European extent (ha)	Current extent (ha)	Remaining Extent (%)	Proportion of the vegetation complex within the LGA (%)		Reduction of current extent due to the proposed clearing (%)
	Southern River Complex	2,205.16	635.67	28.83	3.75		0.13 ha (0.006%)
	Swan Complex	305.61	88.07	28.82	2.01		0.72 ha (0.2%)
	Note: Orange shading indicates that less than 30%, and red indicates that less than 10%, of the pre-European extent remains.						
	The proposed clearing will result in 0.001% to 0.03% reduction in the current extent of these vegetation complexes within the Southern River and Swan Complexes in the State and 0.006% to 0.2% reduction within the City of Bunbury. Therefore, it is considered the proposed clearing is not likely to be at variance to this principle.						

Principle	Assessment	Outcome
F Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	The proposed clearing area does not intercept any watercourses or wetlands categorised as per the following accessed from Data WA (GoWA, 2024) (Figure 7): – DBCA's Directory of Important Wetlands in Australia (DBCA-045) – The closest Nationally Important Wetland is the Bengier Swamp, located approximately 24 km to the north east. – Ramsar Sites (DBCA-010) – The closest Ramsar site, the Peel-Yalgorup System, is located approximately 29 km to the north. – RIWI Act Rivers (DWER-036) – The closest RIWI listed river is the Preston River which is located approximately 200 m to the east. The majority of the proposed clearing area is intersects one Multiple Use Geomorphic Wetland (UFI 14239) and the Preston River, to the east, is mapped as a Conservation Category Geomorphic Wetland (UFI 14501) (GoWA, 2024). However, during the GHD (2024b) survey native vegetation with the proposed clearing area was not identified in associated with a wetland or watercourse and therefore it is considered the proposed clearing is not likely to be at variance to this principle.	The proposed clearing is not likely to be at variance to this principle
G Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	DWER groundwater salinity mapping (DWER-026) indicates that the proposed clearing area is located in an area with a TDS concentration of 500-1000 mg/L (GoWA, 2024) which indicates fresh marginal salinity (DER, 2021). The DPIRD soil salinity risk mapping (DPIRD-009) indicates the soil salinity risk within the proposed clearing area is mapped as L1 “<3% of map unit has a moderate to high salinity risk or is presently saline” (GoWA, 2024). The DWER Acid Sulfate Soil Risk mapping for the Swan Coastal Plain indicates that the western portion of the proposed clearing area is located in an area of High to Moderate risk area and the eastern portion is located in a Moderate to Low risk area of Acid Sulfate Soil within 3 m of the surface (GoWA, 2024). DPIRD Flood Risk Mapping (DPIRD-007) (GoWA, 2024) indicates that the proposed clearing area is mapped as “<3% of the map unit has a moderate to high flood risk”. The clearing of vegetation within the proposed clearing area has the potential to cause short term impacts during construction. Based on the proposed management actions clearing is unlikely to cause appreciable deterioration in the quality of the land. It is considered that the proposed clearing is not likely to be at variance to this principle.	The proposed clearing is not likely to be at variance to this principle
H Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	The proposed clearing area does not intercept any of the following (GoWA, 2024): – National parks/ other conservation reserves under DBCA Legislated Lands and Waters (DBCA-011), the closest is Reserve 41724 located approximately 1.2 km to the northwest. This land is listed as Crown Land under Section 5(1)(h) of the <i>Conservation and Land Management Act 1984</i> (CALM Act). – Redbook Recommended Conservation Reserves 1976-1991 (DBCA-029), the closest site, is mapped approximately 5.5 km to the northwest which corresponds with the Big Swamp Parkland Picnic Area. The nearest Environmentally Sensitive Areas (ESA) (DWER-046) is approximately 100 m to the east, which corresponds to the Preston River (GoWA, 2024) (Figure 8). Management actions will be implemented as per a Construction Environmental Management Plan (CEMP), developed prior to the construction phase, to mitigate impacts on the environmental values of the Preston River. It is considered that the proposed clearing is not likely to be at variance to this principle.	The proposed clearing is not likely to be at variance to this principle

Principle		Assessment	Outcome
I	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	The entirety of the proposed clearing area lies within the following (GoWA, 2024): – Bunbury Groundwater Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act) (RIWI Act, Groundwater Areas (DWER-034)) – Leschenault Inlet Management Area proclaimed under the <i>Waterways Conservation Act 1976</i>. The proposed clearing area is not located within the following (GoWA, 2024): – Public Drinking Water Source Areas (PDWSA – DWER-033) managed under the <i>Country Areas Water Supply Act 1947</i> (CAWS Act) – Irrigation District proclaimed under the RIWI Act (RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)) – Catchment Area managed under the CAWS Act as part of the Clearing Control Catchments (DWER-004). DPIRD Flood Risk Mapping (DPIRD-007) (GoWA, 2024) indicates that the proposed clearing area is mapped as “<3% of the map unit has a moderate to high flood risk”. Clearing of vegetation for construction of the WWTP has the potential to cause minor short-term impacts to a limited area during construction. The CEMP outlines management strategies manage/ minimise impacts to surface quality during construction. Management actions will be implemented as per a CEMP, developed prior to the construction phase, to mitigate impacts on the quality of surface or underground water during construction works. It is considered that the proposed clearing is not likely to be at variance to this principle.	The proposed clearing is not likely to be at variance to this principle
J	Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.	DPIRD Flood Risk Mapping (DPIRD-007) (GoWA, 2024) indicates that the proposed clearing area is mapped as “<3% of the map unit has a moderate to high flood risk”. Appropriate surface water management measures will be implemented as part of the construction of the WWTP via the CEMP. The proposed clearing is not expected to be likely to cause or exacerbate the incidence or intensity of flooding as this area has been largely cleared in the past. It is considered that the proposed clearing is not likely to be at variance to this principle.	The proposed clearing is not likely to be at variance to this principle

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Appendix 3- *Environment Protection and Biodiversity Conservation Act (1999)* Significance Assessment, GDH 4.10.2024

Report

11 October 2024

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From	Fionnuala Hannon - GHD Vicki Davies - GHD	Project No.	12642886
Project Name	V&V Walsh: WWTP environmental approvals		
Subject	<i>Environment Protection and Biodiversity Conservation Act 1999</i> Significance Assessment		

1. Introduction

V&V Walsh Pty Ltd (V&V Walsh) operates a red meat processing facility (the Facility) in the suburb of Davenport within the greater Bunbury Region of Western Australia (WA) under Department of Water and Environmental Regulation (DWER) licence L6001/1989/15. The Facility is located approximately 6 km southeast of the Bunbury CBD and 160 km south of Perth within Lot 1 Rawling Road, Davenport (the Premises) (Figure 1, Appendix A).

Wastewater generated from the operation of the abattoir, and associated activities, is currently treated via an on-site Wastewater Treatment System (WWTS). The treated wastewater is used in the washdown area, turf farm irrigation, on-site irrigation of pasture and a tree lot (during winter) within the Premises under DWER clearing permit CPS 8310/2.

The existing system is unable to achieve the requirements set in the updated DWER licence, requiring the implementation of a new wastewater treatment plant (WWTP). V&V Walsh is proposing to construct the WWTP which will ultimately replace the WWTS however there will be reuse of some existing ponds for contingency and treated wastewater storage.

Referral to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is triggered if a Proposal has or potentially has a significant impact on any Matters of National Environmental Significance (MNES). MNES are factors that require legislated protection in order to conserve biodiversity, protect World Heritage and National Heritage Places, and comply with international treaties.

This assessment considers whether MNES are likely to or may be present within the proposed clearing area (Table 1). The potential occurrence of MNES was informed at a desktop level by the EPBC Act PMST (DCCEEW, 2024) included in Appendix B and supplemented and verified by the biological survey field observations completed by GHD (2024).

1.1 Purpose of this report

The purpose of this document is to provide a significance assessment of Matters of National Environmental Significance (MNES) listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) which may be potentially impacted by the construction of the proposed WWTP.

1.2 Proposal location

1.2.1 Survey area

A spring Detailed and Targeted flora and vegetation survey and Basic and Targeted fauna survey was undertaken within two proposed project footprints and associated road infrastructure (Project Area 1 and Project Area 2) which comprised a total of 8.57 ha. A site walkover was undertaken in vegetation adjacent to the two Project Areas which comprised a total of 19.54 ha (GHD, 2024). The proposed WWTP is located within Project Area 2.

1.2.2 Desktop assessment areas

The following buffers have been applied for the purpose of desktop assessments:

- A 10 km buffer is defined as the study area for the purpose of EPBC Act PMST, flora and vegetation database searches.
- A 12 km buffer has been used for desktop assessment of available foraging resources for Black Cockatoos as this represents the distance Black Cockatoos will generally forage while breeding (DAWE, 2022).
- A 20 km buffer been used for desktop assessment of available of known night roosting habitat as Black Cockatoos will mainly forage in areas up to 20 km during the non-breeding period (DAWE, 2022).

1.2.3 Clearing footprint

V&V Walsh propose to clear up to 0.63 ha of native vegetation for the purpose of construction of the WWTP and up to 0.22 ha of native vegetation for fuel load reduction to the north of the WWTP for bushfire control. Fuel load reduction involves selective clearing of some trees and understorey, however not all trees will be cleared therefore connectivity of fauna habitat will be maintained (Figure 2, Appendix A).

1.3 Scope of works

The scope of work for the EPBC Act significance assessment included:

- A desktop assessment of the study area to identify vegetation and flora values, which may be in, or near the proposed clearing area.
- Review of flora and fauna field survey results to identify the vegetation community types and condition present, including any Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs), other significant vegetation, and habitat for significant flora and fauna species.
- Significance assessment of species listed as under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or *Biodiversity Conservation Act 2016* (BC Act) known or considered likely to occur based on the results of the desktop and field surveys.

2. EPBC Act Significance assessment

2.1 Potential impacts to Matters of National Environmental Significance

A spring Detailed and Targeted flora and vegetation survey and Basic and Targeted fauna survey was undertaken by GHD (2024) for potential site footprints and road networks (Project area 1 and Project area 2). A site walkover of neighbouring vegetation of the two proposed project sites was also undertaken and included a Basic and Targeted survey for Western Ringtail Possum and Black Cockatoo's as well as delineating the broad vegetation types and condition to provide an assessment of potential impacts of the project on surrounding areas.

The proposed WWTP is located within the existing Facility and has been selected to minimise the impact to the environment and threatened species. The proposed clearing area includes up to 0.85 ha of native vegetation as described in the Detailed and Targeted flora and vegetation survey (GHD, 2024), comprised of four vegetation types (Figure 3, Appendix A), in Completely Degraded Condition (Figure 4, Appendix A).

Up to 0.63 ha of native vegetation is proposed to be cleared for the purpose of construction of the WWTP and up to 0.22 ha of native vegetation within a fuel reduction zone to the north of the WWTP for bushfire control purposes. The remainder of the area is mapped as Cleared – previously cleared areas, including roads, tracks and other infrastructure. Vegetation units identified within native vegetation within the proposed clearing area include:

- VT1: *Eucalyptus rudis* susp. *rudis* / *Agonis flexuosa* Woodland to Open Forest – Completely Degraded condition
- VT5: *Agonis flexuosa* Woodland – Completely Degraded condition
- VT6: Weedy grassland with isolated trees – Completely Degraded condition
- VT7: Planted *Eucalyptus* sp. – planted *Eucalyptus* sp. with occasional *Agonis flexuosa* over weedy grasses and herbs – Completely Degraded condition.

The native vegetation proposed to be cleared is mapped as the following fauna habitat types, with varying Black Cockatoo and Western Ringtail Possum habitat values, identified in during the Basic and Targeted fauna survey (GHD, 2024):

- Flooded Gum/ Peppermint Open Forest
- Peppermint Woodland
- Planted Eucalyptus
- Completely Degraded Grassland.

The remainder is mapped as Cleared including previously cleared areas, including roads, tracks and other infrastructure.

Table 1 summarises the potential impacts to MNES based on the proposed clearing of native vegetation and fauna habitat within the proposed clearing area.

Table 1 Potential impacts to Matters of National Environmental Significance

Matters of National Environmental Significance	Presence/ potential presence within the Proposal area
World heritage properties	None present
National heritage places	None present
Wetlands of International Importance (Ramsar)	None present
Listed threatened ecological communities and threatened species	<u>Threatened Ecological Communities (TECs)</u> Desktop assessment of the EPBC Act PMST and DBCA Threatened and Priority Ecological Communities databases identified the following Threatened Ecological Communities (TECs) listed under the EPBC Act and/ or BC Act as potentially occurring within the study area (5 km buffer) (GHD, 2024): – Banksia Woodlands of the Swan Coastal Plain ecological community (Endangered under the EPBC Act) including the following components:

Matters of National Environmental Significance	Presence/ potential presence within the Proposal area
	- Low lying <i>Banksia attenuata</i> woodlands or shrublands ('floristic community type 21c') - Southern <i>Banksia attenuata</i> woodlands ('floristic community type 21b') - Southern <i>Eucalyptus gomphocephala</i> – <i>Agonis flexuosa</i> woodlands (SCP25) (can be a component of the Endangered Banksia Woodlands of the Swan Coastal Plain EPBC listed TEC or the Tuart woodlands and forests of the Swan Coastal Plain EPBC listed TEC) – Clay Pans of the Swan Coastal Plain (Critically Endangered under the EPBC Act and Endangered under the BC Act) including the following components: - Dense shrublands on clay flats (floristic community type 9 as originally described in Gibson <i>et al.</i> (1994)) - Herb rich saline shrublands in clay pans (floristic community type 7 as originally described in Gibson <i>et al.</i> (1994)) - Herb Rich Shrublands in Clay Pans (SCP08) - Shrublands on dry clay flats (floristic community type 10a as originally described in Gibson <i>et al.</i> (1994)) – Empodisma peatlands of southwestern Australia (Endangered under the EPBC Act) – Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion (Critically Endangered under both the EPBC Act and BC Act) – Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community (Critically Endangered under the EPBC Act) – Sedgelands in Holocene dune swales of the southern Swan Coastal Plain (floristic community type 19 as originally described in Gibson <i>et al.</i> (1994) (Endangered under the EPBC Act and Critically Endangered under the BC Act) – Subtropical and Temperate Coastal Saltmarsh (Vulnerable under the EPBC Act) Based on the results of the desktop searches, dominant species, landform features and field observations no EPBC or State listed TECs, or DBCA listed PECs (component parts of EPBC listed TECs) were identified within the proposed clearing area or broader survey area. Vegetation recorded within the project areas does not meet the structural or compositional criteria to represent any of the TEC or PECs which have been identified within the study area, specifically: Banksia dominated woodlands of the Swan Coastal Plain and Herb Rich Shrublands in Clay Pans (FCT08). <u>Threatened Flora</u> Desktop searches of the EPBC Act PMST, Dandjoo, DBCA TPFL and WAHERB databases identified the presence/ potential presence of 59 significant flora species occurring within the study area (5 km buffer of the survey area) including 21 Threatened taxa listed under the EPBC Act and/or BC Act and 38 DBCA Priority listed species (GHD, 2024). Of these taxa GHD (2024) considered that one species, <i>Eucalyptus rudis</i> subsp. <i>cratyantha</i> (Priority 4) as possibly occurring within the survey area. However, GHD (2024) did not identify any Threatened flora species listed under the EPBC Act and/ or the BC Act or DBCA Priority listed species within the proposed WWTP location or wider survey area during the field survey. <u>Threatened Fauna</u> The DBCA Dandjoo database (DBCA 2023) identified 77 terrestrial vertebrate fauna species previously recorded within 5 km of the survey area. The 5 km radius used for the desktop assessment of the fauna assemblage included habitat types, such as marine habitats, that did not occur with the proposed clearing area. Therefore, marine species and fish, restricted to these habitat types are considered unlikely to occur. Of the 77 fauna species previously recorded, 71 are native species and six are naturalised (introduced) species. Searches of the EPBC Act PMST (DCCEEW 2024), Dandjoo database (DBCA 2023) and DBCA database search identified the presence/potential presence of 28 conservation significance fauna within the survey area. This does not include those species that are exclusively marine, or marine bird species as there is no marine habitat present. Desktop assessment of PMST results identified the following (DCCEEW, 2024): – Threatened fauna species or species habitat known or may occur within the survey area:

Matters of National Environmental Significance	Presence/ potential presence within the Proposal area
	Birds - <i>Botaurus poiciloptilus</i> (Australasian Bittern) – EN - <i>Calidris acuminata</i> (Sharp-tailed Sandpiper) – VU - <i>Calidris canutus</i> (Red Knot) – VU - <i>Calidris ferruginea</i> (Curlew Sandpiper) – CR, MI - <i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black Cockatoo) – VU - <i>Charadrius leschenaultii</i> (Greater Sand Plover) – VU - <i>Falco hypoleucos</i> (Grey Falcon) – VU - <i>Numenius madagascariensis</i> (Eastern Curlew) – CR - <i>Sternula nereis nereis</i> (Australian Fairy Tern) – VU - <i>Tringa nebularia</i> (Common Greenshank) – EN - <i>Zanda baudinii</i> (Baudin's Black Cockatoo) – EN - <i>Zanda latirostris</i> (Carnaby's Black Cockatoo) – EN Mammals - <i>Dasyurus geoffroii</i> (Chuditch) – VU - <i>Setonix brachyurus</i> (Quokka) – VU - <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum) – CR Invertebrates - <i>Westralunio carteri</i> (Carter's Freshwater Mussel) – VU. Of the 28 significant fauna (Threatened and Priority listed species) identified in the desktop searches, two EPBC listed species were recorded during the field and two species are considered likely to occur in Project Area 2 (GHD, 2024) however were not observed within the proposed WWTP location which is comprised of low value habitat and is parkland cleared: Recorded: - <i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black Cockatoo) – VU - <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum) – CR Likely: - <i>Zanda baudinii</i> (Baudin's Black Cockatoo) – EN - <i>Zanda latirostris</i> (Carnaby's Black Cockatoo) – EN There were no water courses or winter wet swamps present within the proposed clearing area therefore aquatic fauna surveys were not required.
Listed migratory species	Eleven migratory terrestrial and wetland EPBC Act listed species may, are known to, or likely occur within the survey area and 5 km buffer (DCCEE, 2024). The GHD (2024) fauna assessment did not record any of these species and they were considered Unlikely or Highly Unlikely to occur. The habitat was not considered suitable for these species.
Commonwealth marine areas	None present
Great Barrier Reef Marine Park	None present
Nuclear actions	None present
Water resources in relation to coal seam gas and coal mining development	None present

2.2 Assessment of significance

2.2.1 Black Cockatoos

Overview of impact

The proposed clearing may result in potential impacts to three threatened Black Cockatoo species listed under the EPBC Act:

- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) – Vulnerable
- Baudin's Cockatoo (*Zanda baudinii*) – Endangered
- Carnaby's Cockatoo (*Zanda latirostris*) – Endangered.

The direct impacts from the Proposal include the following:

Breeding

- The Proposal will not result in clearing of any known or suitable nesting trees (Figure 5, Appendix A).
- Within the proposed clearing area there are seven potential nesting trees > 500 mm DBH (*Eucalyptus rudis*). No trees contained suitable hollows for Black Cockatoo breeding (Figure 5, Appendix A).
- The nearest recorded Black Cockatoo breeding site (GoWA, 2024) occurs approximately 18 km to the south-west (GoWA, 2024) (Figure 6, Appendix A).

Roosting

- No roosting sites were identified within the proposed clearing area (GHD, 2024).
- The closest DBCA mapped roosting site (buffered) is located approximately 1.3 km to the north (Figure 6, Appendix A).

Foraging

- The vegetation within the proposed WWTP location is considered to have low foraging habitat value for Black Cockatoos as *Eucalyptus rudis* and *Agonis flexuosa* are not considered core foraging habitat (GHD, 2024). Foraging habitat is present with vegetation along South Western Highway to the west and Preston River to the east.

Potential indirect impacts may include fauna injury/ mortality from vehicle strike during construction, habitat degradation from clearing edge effects, weeds, Phytophthora Dieback, rubbish and vehicle tracks, and disturbance of fauna due to noise, dust and vibration as a result of construction and operational activities.

Assessment of significance

Table 2 presents an assessment of the potential impacts of the Proposal on Black Cockatoos against the *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* (DoE 2013).

The criteria in the *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* refer to 'populations' and 'important populations'. The 'population of a species' is defined under the EPBC Act as an occurrence of the species in a particular area (DoE 2013). An 'important population' is defined as population that is necessary for the species' long-term survival and recovery (DoE 2013).

The Guideline states that an action is likely to have a significant impact on an endangered species if there is a real chance or possibility that it will:

- *Lead to a long-term decrease in the size of a population*
- *Reduce the area of occupancy of the species*
- *Fragment an existing population into two or more populations*
- *Adversely affect habitat critical to the survival of a species*
- *Disrupt the breeding cycle of a population*
- *Modify, destroy, remove, isolate, or decrease the availability or quality of habitat to the extent that the species is likely to decline*
- *Result in invasive species that are harmful to an endangered species becoming established in the endangered species' habitat*
- *Introduce disease that may cause the species to decline, or*
- *Interfere with the recovery of the species.*

'Populations' and 'important populations' have not been defined for Black Cockatoos, due to the mobile and widely-distributed nature of these species, and the variation in flock compositions (for example, between breeding and non-breeding seasons). For Black Cockatoos, it is more appropriate to consider significance in terms of impacts on habitat rather than a resident population (DAWE, 2022).

The *Referral guideline for Three WA threatened Black Cockatoo species* (DAWE, 2022) provides guidance on actions that are likely to require referral in terms of habitat rather than population, and therefore an assessment against the Commonwealth (2022) guidance is additionally provided in Table 3.

The Commonwealth (2022) guidelines indicate that an action is likely to require referral if the Proposal involves:

- Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the Minister.
- Loss of any potential nesting habitat is likely to require a referral to the minister.
- Loss of greater than or equal to 1 ha of foraging habitat scoring 5-10 using the foraging quality scoring tool is likely to require referral to the minister.
- Loss of greater than or equal to 10 ha of foraging habitat scoring 0-4 using the foraging quality scoring tool is likely to require referral to the minister.
- Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by black cockatoos is likely to require a referral to the minister.
- Removal of any part of a known night roosting site is likely to require referral to the minister.

As presented in Table 2 and Table 3 the proposed clearing is unlikely to result in significant impacts to the three species of Black Cockatoos, given the small area of clearing and presence of low-quality Black Cockatoo habitat (GHD, 2024).

Table 2 **Assessment against Significant Impact Guidelines 1.1 for Black Cockatoos (Endangered species)**

Criteria	Assessment	Significance
Lead to a long-term decrease in the size of a population	The Proposal is not expected to lead to a long-term decrease in the size of a Black Cockatoo population as: – Breeding: • The Proposal will not result in the clearing of any known or suitable nesting trees • Within the clearing footprint there are seven potential nesting trees (>500 mm DBH) (Figure 5, Appendix A). No trees contained hollows. • The nearest recorded Black Cockatoo breeding site (GoWA, 2024) occurs approximately 18 km to the south-west (Figure 6, Appendix A). – Roosting: • No roosting sites were identified within the proposed clearing area (GHD, 2024). • The closest known roosting site (buffered) located approximately 1.3 km to the north (GoWA, 2024) (Figure 6, Appendix A). – Foraging: • The vegetation within the proposed WWTP location is considered to have low foraging habitat value for Black Cockatoos as <i>Eucalyptus rudis</i> and <i>Agonis flexuosa</i> are not considered core foraging habitat (GHD, 2024). Foraging habitat is present with vegetation along South Western Highway to the west and Preston River to the east. The Proposal will not result in the clearing of breeding habitat, high quality foraging habitat or significant areas of roosting habitat.	Unlikely to be significant
Reduce the area of occupancy of the species	Black Cockatoos are highly mobile species and expected to forage outside the proposed clearing area. On this basis, the proposed clearing is unlikely to significantly reduce the area of occupancy of this species, which are expected to continue to utilise areas of native vegetation the immediate area and reserves (Kalgulup Regional Park) to the west and Preston River to the east.	Unlikely to be significant
Fragment an existing population into two or more populations	Black Cockatoos are highly mobile and for this species, fragmentation is considered when gaps between habitat patches exceed 4 km. The proposed clearing will not fragment existing habitat and not result in the fragmentation of Black Cockatoo populations.	Unlikely to be significant

Criteria	Assessment	Significance
Adversely affect habitat critical to the survival of a species	Habitat critical to survival for Carnaby's Cockatoo (as described in the DPaW (2013) recovery plan, includes: – The Eucalypt woodlands that provide nest hollows used for breeding, together with nearby vegetation that provides foraging, roosting and watering habitat that supports successful breeding – Woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established – In the non-breeding season, the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resources. Habitat critical for the survival of populations of Black Cockatoo species comprise all Marri, Karri and Jarrah forests, woodlands and remnants in the south-west of Western Australia receiving more than 600 mm of annual average rainfall (DEC, 2008). DCCEEW (2022) identifies critical habitat for all three species of Black Cockatoo as foraging habitat associated with breeding within the Jarrah Forest. The proposed clearing will not require the clearing of known or suitable nesting trees, nor any known or former breeding sites. The vegetation within the proposed clearing area is considered to have low foraging habitat value for Black Cockatoos (GHD, 2024).	Unlikely to be significant
Disrupt the breeding cycle of a population	The proposed clearing is not expected to disrupt the breeding cycle of a population of Black Cockatoos as the proposed clearing will not require the clearing of known or suitable nesting trees, nor any known or former breeding sites.	Unlikely to be significant
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The proposed clearing is not expected to impact the availability or quality of habitat to the extent that Black Cockatoos are likely to decline, as: – The Proposal will not result in the clearing of known roosting or breeding habitat nor does the Proposal lie adjacent to known breeding habitat – The Proposal area has existing weed disturbance – The Proposal will incorporate construction management to protect the integrity of Black Cockatoo habitat adjacent to the construction area. This includes erosion control, stormwater runoff and contaminant control measures.	Unlikely to be significant
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	The Proposal is not expected to introduce or spread invasive species into Black Cockatoo habitat. DPaW (2013), DEWHA (2009a) and TSSC (2018) identify the potential threats to the survival of Black Cockatoo species as nest competition from feral bees (such as <i>Apis mellifera</i> [European honeybee]) and other native invasive species. Continued loss of Black Cockatoo nesting hollows in general will increase the competition for remaining hollows by a variety of invasive species. Black Cockatoos are generally less resilient to these pressures and can be displaced by other native and invasive species. The Proposal does not involve any actions which could potentially introduce the European honeybee into the Proposal area or surrounds. The Proposal area has existing weed infestation associated with rural and existing land uses. The Proposal is not expected to result in the introduction or spread of weeds that will result in significant impacts to Black Cockatoo habitat, as the Proposal will implement management measures to mitigate and reduced the spread of the weeds within the Proposal area and the surrounding area. The Proposal is not expected to introduce any predator species (e.g., foxes, feral cats or rabbits). Feral cats and foxes may be vagrant visitors to the area, however the Proposal will not create a destination or facilitate access for predator species into surrounding areas of native vegetation.	Unlikely to be significant
Introduce disease that may cause the species to decline	The Proposal is not expected to introduce or spread disease that could cause Black Cockatoo populations to decline. The disease status of Black Cockatoos in the wild remains unknown, although infectious diseases such as beak and feather disease, avian	Unlikely to be significant

Criteria	Assessment	Significance
	polyomavirus and chlamydophilosis may pose a threat, as they are significant in other captive and free-living psittacine species. The Proposal does not involve any actions which could potentially introduce infectious diseases within Black Cockatoo populations which could cause the species to decline. The Proposal will include Dieback hygiene management during construction to protect adjacent Black Cockatoo habitat and incorporate access controls, equipment and vehicle washing/segregation, soil movement controls, and monitoring during construction. The Proposal is not expected to spread Dieback through sediment in stormwater runoff, as stormwater will be captured and will not discharge into Black Cockatoo habitat adjacent to the Proposal.	
Interfere with the recovery of the species	The Proposal is unlikely to significantly interfere with the recovery of the Black Cockatoos. Carnaby's Cockatoo recovery, as defined by the Recovery Plan (DPaW, 2013), is dependent upon stopping the further decline in the distribution and abundance of Carnaby's Cockatoo by protecting the species throughout their life stages and enhancing habitat critical for survival throughout their breeding and non-breeding range. Forest Red-tailed Black Cockatoo recovery, as defined by the Recovery Plan (DEC, 2008), is dependent on stopping further decline in the breeding populations of Forest Red-tailed Black Cockatoo and to ensure their persistence throughout their current range in the south-west of Western Australia. The Proposal does not involve clearing of breeding habitat, minimises fragmentation of foraging habitat and protects adjacent patches of foraging habitat from indirect impacts. Therefore, the Proposal is consistent with the Black Cockatoo recovery plans.	Unlikely to be significant
Conclusion	Based on the above assessment against the <i>Significant Impact Guidelines 1.1</i> (DoE, 2013), the proposed is unlikely to result in a significant impact to Black Cockatoos, due to the small area of clearing and presence of low quality Black Cockatoo habitat.	

Table 3 Assessment against the referral guidelines for Black Cockatoos (DAWE, 2022)

Criteria	Assessment	Conclusion
Breeding Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister. Loss of any potential nesting habitat is likely to require a referral to the minister.	The Proposal is not expected to have a significant impact upon Black Cockatoo breeding habitat as: – The proposed clearing will not result in the clearing of any known or suitable nesting trees (Figure 5, Appendix A). – Within the proposed clearing area there are seven potential nesting trees > 500 mm DBH (<i>Eucalyptus rudis</i>). No trees contained suitable hollows for Black Cockatoo breeding. – The nearest recorded Black Cockatoo breeding site (GoWA, 2024) occurs approximately 18 km to the south-west (GoWA, 2024) (Figure 6, Appendix A).	Unlikely to be significant
High-quality native foraging habitat Loss of greater than or equal to 1 ha of foraging habitat scoring 5-10 using the foraging quality scoring tool is likely to require referral to the minister.	The vegetation within the proposed WWTP location is considered to have low foraging habitat value for Black Cockatoos as <i>Eucalyptus rudis</i> and <i>Agonis flexuosa</i> are not considered core foraging habitat (GHD, 2024). Foraging habitat is present with vegetation along South Western Highway to the west and Preston River to the east.	Not applicable

Criteria	Assessment	Conclusion
<u>Lower-quality native foraging habitat</u> Loss of greater than or equal to 10 ha of foraging habitat scoring 0-4 using the foraging quality scoring tool is likely to require referral to the minister.	The Proposal will not result in the clearing of greater than 10 ha of lower-quality native foraging habitat. Less than 1 ha of native vegetation (low quality Black Cockatoo habitat) is proposed to be cleared.	Unlikely to be significant
<u>Exotic foraging habitat</u> Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by black cockatoos is likely to require a referral to the minister.	The Proposal will not result in the clearing of any exotic foraging habitat.	Not applicable
<u>Night roosting habitat</u> Removal of any part of a known night roosting site is likely to require referral to the minister.	– No roosting sites were identified within the proposed clearing area (GHD, 2024). – The closest known roosting site (buffered) located approximately 1.3 km to the north (GoWA, 2024) (Figure 6, Appendix A).	Unlikely to be significant

2.2.2 Western Ringtail Possum (Critically Endangered)

The home range of the Western Ringtail Possum is reported on average to be less than five hectares. Home ranges in peppermint dominated habitat are generally less than two hectares and average 0.4 ha and 0.3 ha for females and males respectively (Jones, How, & Kitchener, 1994). Densities as high as 20 possums per hectare have been determined in some remnants of the Busselton peppermint stands. Long-term survival of the species requires linkages between suitable habitat (DPaW, 2017).

The vegetation within the proposed WWTP location lacks structural diversity however Western Ringtail Possum may utilise this habitat as a linkage to surrounding patches of vegetation (GHD, 2024b). No Western Ringtail Possum were recorded in the proposed clearing area and the proposed clearing will not fragment fauna habitat, with Preston River providing an ecological corridor to the east, therefore it is considered that the impact of the proposed clearing unlikely to be significant for Western Ringtail Possum.

Of the 0.63 ha of clearing proposed for construction of the WWTP approximately 0.50 ha is assessed as potential supporting habitat for Western Ringtail Possum. V&V Walsh has designed the proposed WWTP based on the findings of the field surveys to minimise clearing of Western Ringtail Possum potential habitat and locate the proposed WWTP within areas of previous disturbances (where possible) to avoid habitat fragmentation.

Up to 0.22 ha of native vegetation, to the north of the WWTP, is proposed to be selectively cleared for fuel load reduction (Figure 2, Appendix A). Of this, approximately 0.12 ha of native vegetation is considered to be potential supporting habitat for Western Ringtail Possum. Fuel load reduction will involve clearing of some trees and understorey, however not all trees will be cleared therefore connectivity of the habitat will be maintained with areas to the north and east.

Prior to clearing, pre-clearance searches will be undertaken to ensure that no Western Ringtail Possum are within the area to be cleared.

Table 4 outlines the assessment of potential impact of the Proposal for Western Ringtail Possum against the Significant Impact Guidelines 1.1 (DoE, 2013).

Table 4

Assessment against Significant Impact Guidelines 1.1 for Western Ringtail Possum (Critically Endangered species)

Criteria	Assessment	Significance
Lead to a long-term decrease in the size of a population	The Proposal is not expected to result in a decrease in the size of a Western Ringtail Possum population. Potential indirect impacts may include fauna injury/ mortality from vehicle strike. Mitigation measures will be implemented that include traffic management (including speed limits) and the use of a fauna spotter to complete pre-clearance assessments. It is considered that the risk to Western Ringtail Possums can be managed to prevent the risk of a long-term decrease in the population.	Unlikely to be significant
Reduce the area of occupancy of the species	The proposed clearing is not expected to result in a decrease in the size of a Western Ringtail Possum population as the habitats identified the proposed clearing area will not fragment any known populations or patches of habitat.	Unlikely to be significant
Fragment an existing population into two or more populations	V&V Walsh has designed the proposed WWTP based on the findings of the field surveys to minimise clearing of Western Ringtail Possum potential habitat and locate the proposed WWTP within areas of previous disturbances (where possible) to avoid habitat fragmentation. Fuel load reduction will involve clearing of some trees and pruning of understorey, however not all trees will be cleared therefore connectivity of fauna habitat will be maintained.	Unlikely to be significant
Adversely affect habitat critical to the survival of a species	The Western Ringtail Possum recovery plan (DPaW, 2017) defines critical habitat states that habitat critical to the survival of the species is not well understood. Generally, it includes areas of high nutrient foliage, suitable structures for protecting / nesting and canopy continuity to avoid / escape predation and other threats. Areas of linkages and any habitat where the possums naturally occur is considered critical. As Western Ringtail Possums were observed during the GHD (2024), outside the proposed clearing area, it is considered to be supporting habitat that is within the naturally occurring extent for this species. Potential indirect impacts may include adjacent vegetation/ habitat degradation from clearing edge effects, weeds, Phytophthora Dieback and rubbish. These impacts will be managed throughout the construction and operational phases. Given the small area of clearing and low-quality fauna habitat present it is considered unlikely that the proposed clearing will result in significant loss of habitat for the Western Ringtail Possums in the local context.	Unlikely to be significant
Disrupt the breeding cycle of a population	The proposed clearing is not expected to result in disruption of the breeding cycle of a Western Ringtail Possum as vegetation is considered to be supporting rather than core habitat.	Unlikely to be significant
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	A Construction Environment Management Plan (CEMP) will be developed for the construction of the WWTP to protect the integrity of Western Ringtail Possum habitat adjacent to the proposed clearing area. This includes erosion control, stormwater runoff and contaminant control measures.	Unlikely to be significant
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	The proposed clearing is not expected to introduce any predator species (e.g., foxes, feral cats or rabbits) into the Proposal area. Feral cats may be vagrant visitors to the area, however the proposed clearing will not create a destination or facilitate access for predator species into surrounding areas of native vegetation. The proposed clearing is unlikely to result in the introduction of new invasive species to the area.	Unlikely to be significant

Criteria	Assessment	Significance
Introduce disease that may cause the species to decline	The proposed clearing is considered unlikely to result in the introduction of a disease. The CEMP will include hygiene management measures (weeds and disease) during construction to protect adjacent Western Ringtail Possum supporting habitat and incorporate access controls, equipment and vehicle washing/ segregation, soil movement controls, and monitoring during construction phase and ongoing maintenance during the operational phase.	Unlikely to be significant
Interfere with the recovery of the species	The Western Ringtail Possum Recovery Plan (DPaW, 2017) outlines the key items for the recovery of this species. The proposed clearing is not considered to result in habitat loss and fragmentation or increasing the competition for tree hollows (by reducing their availability), and therefore is likely to interfere with the recovery of the species.	Unlikely to be significant
Conclusion	Based on the above assessment against the <i>Significant Impact Guidelines 1.1</i> (DoE, 2013), the proposed clearing is considered unlikely to have a significant impact to Western Ringtail Possum potential supporting habitat.	

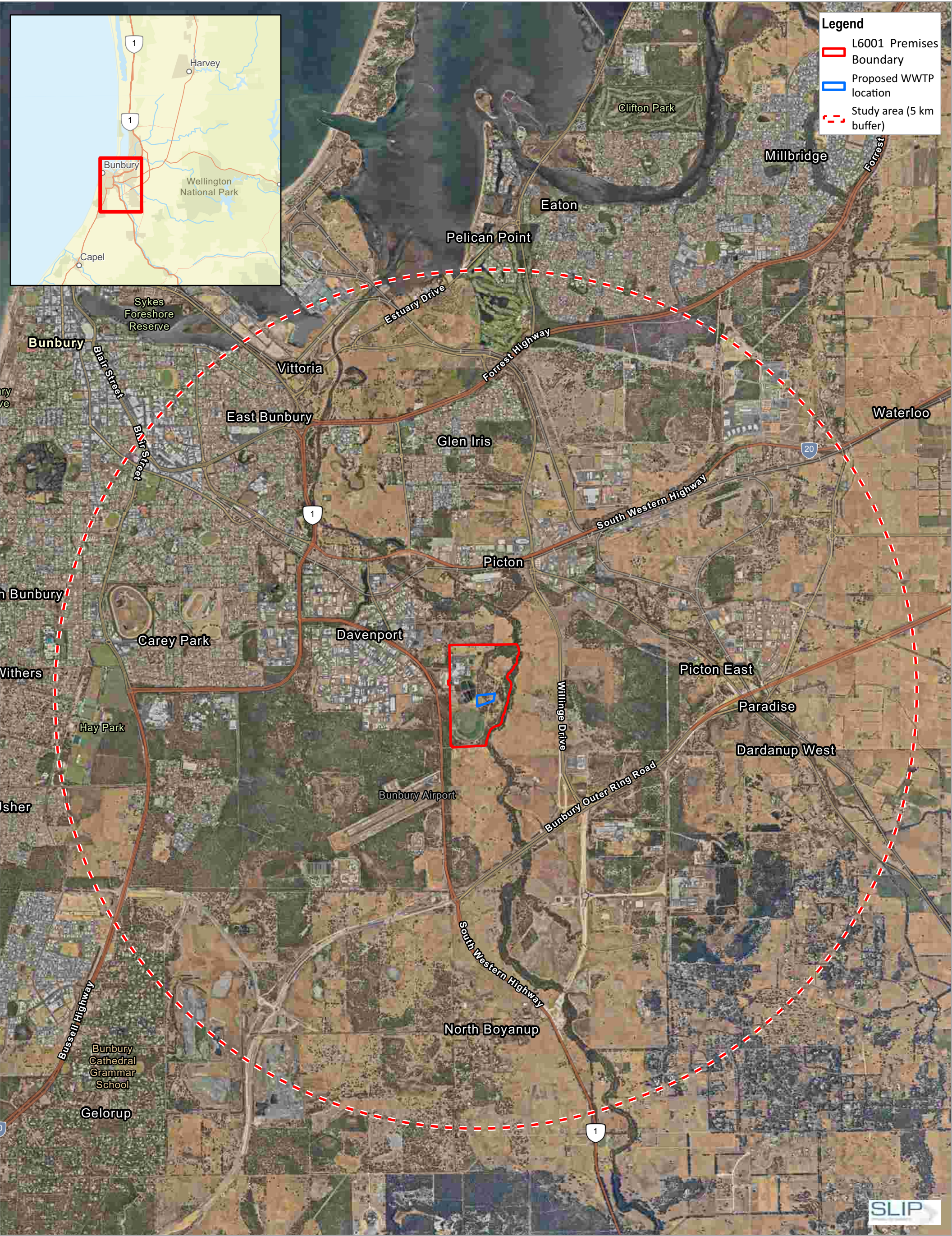
3. References

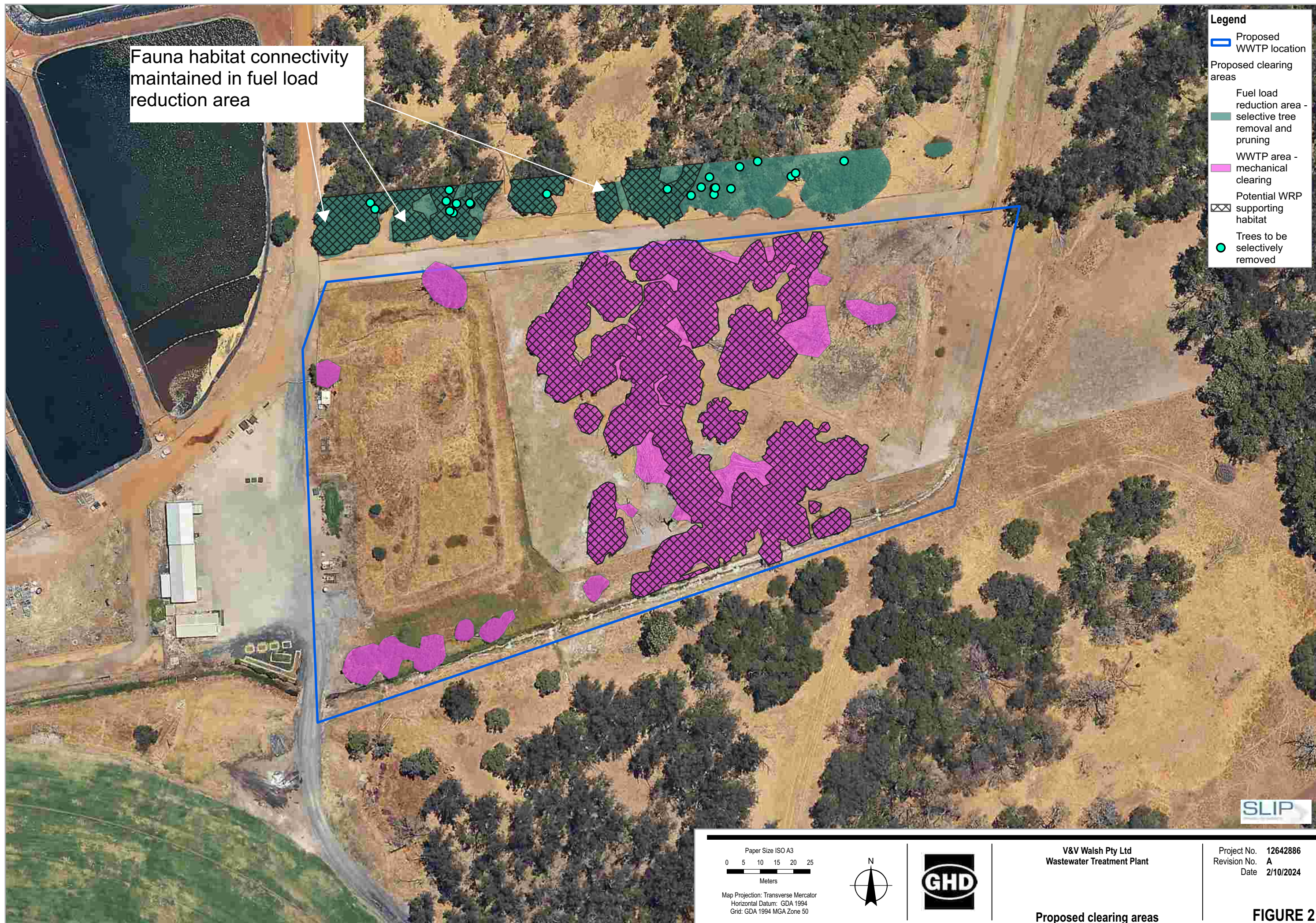
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Appendix A

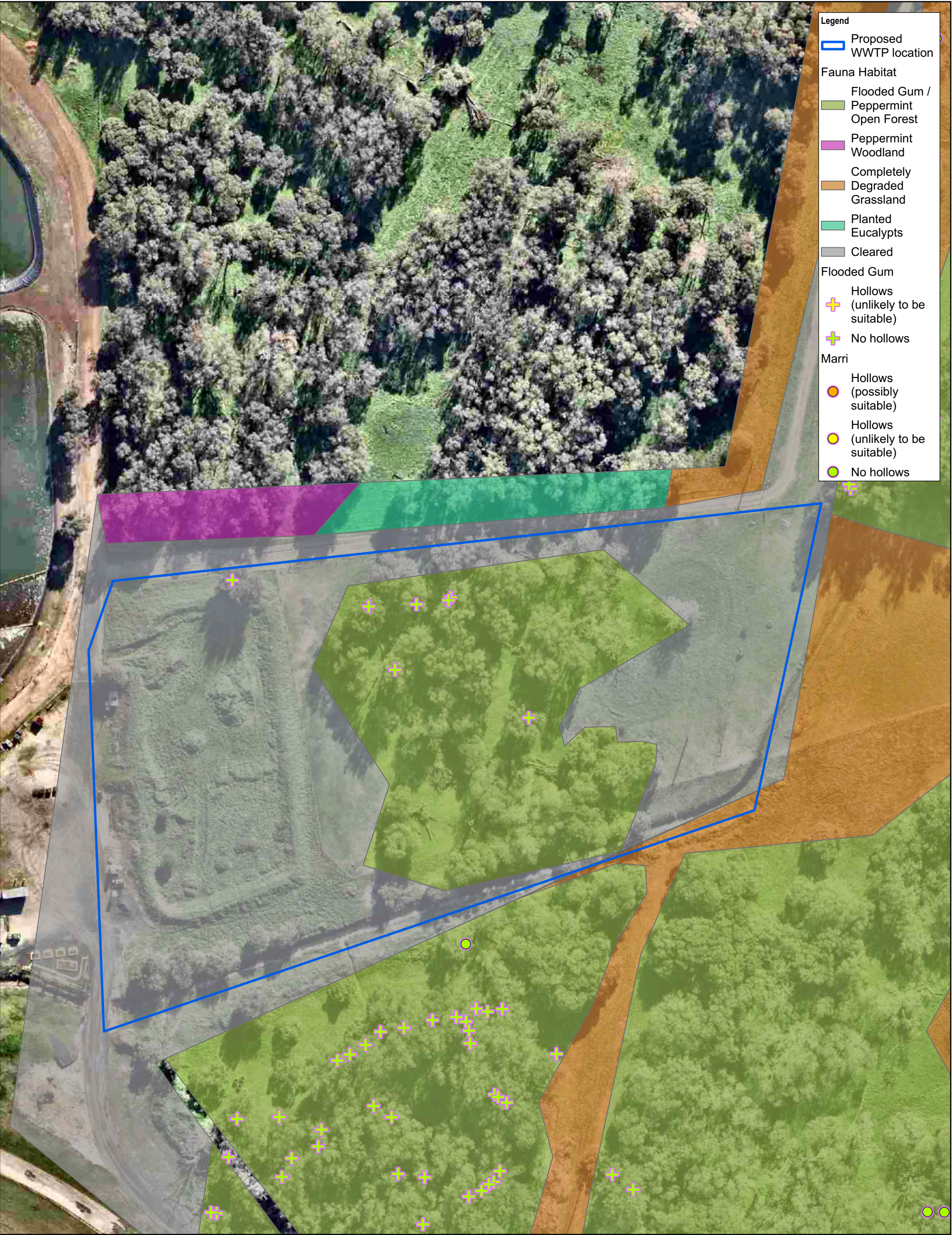
Figures

<i>Figure 1</i>	<i>Locality</i>
<i>Figure 2</i>	<i>Proposed clearing area</i>
<i>Figure 3</i>	<i>Vegetation types</i>
<i>Figure 4</i>	<i>Vegetation condition</i>
<i>Figure 5</i>	<i>Fauna habitat</i>
<i>Figure 6</i>	<i>Black Cockatoo breeding and roosting habitat desktop assessment</i>





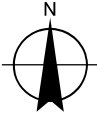




- Legend**
- Proposed WWTP location
 - Fauna Habitat**
 - Flooded Gum / Peppermint Open Forest
 - Peppermint Woodland
 - Completely Degraded Grassland
 - Planted Eucalypts
 - Cleared
 - Flooded Gum**
 - Hollows (unlikely to be suitable)
 - No hollows
 - Marri**
 - Hollows (possibly suitable)
 - Hollows (unlikely to be suitable)
 - No hollows

Paper Size ISO A3
0 5 10 15 20 25
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

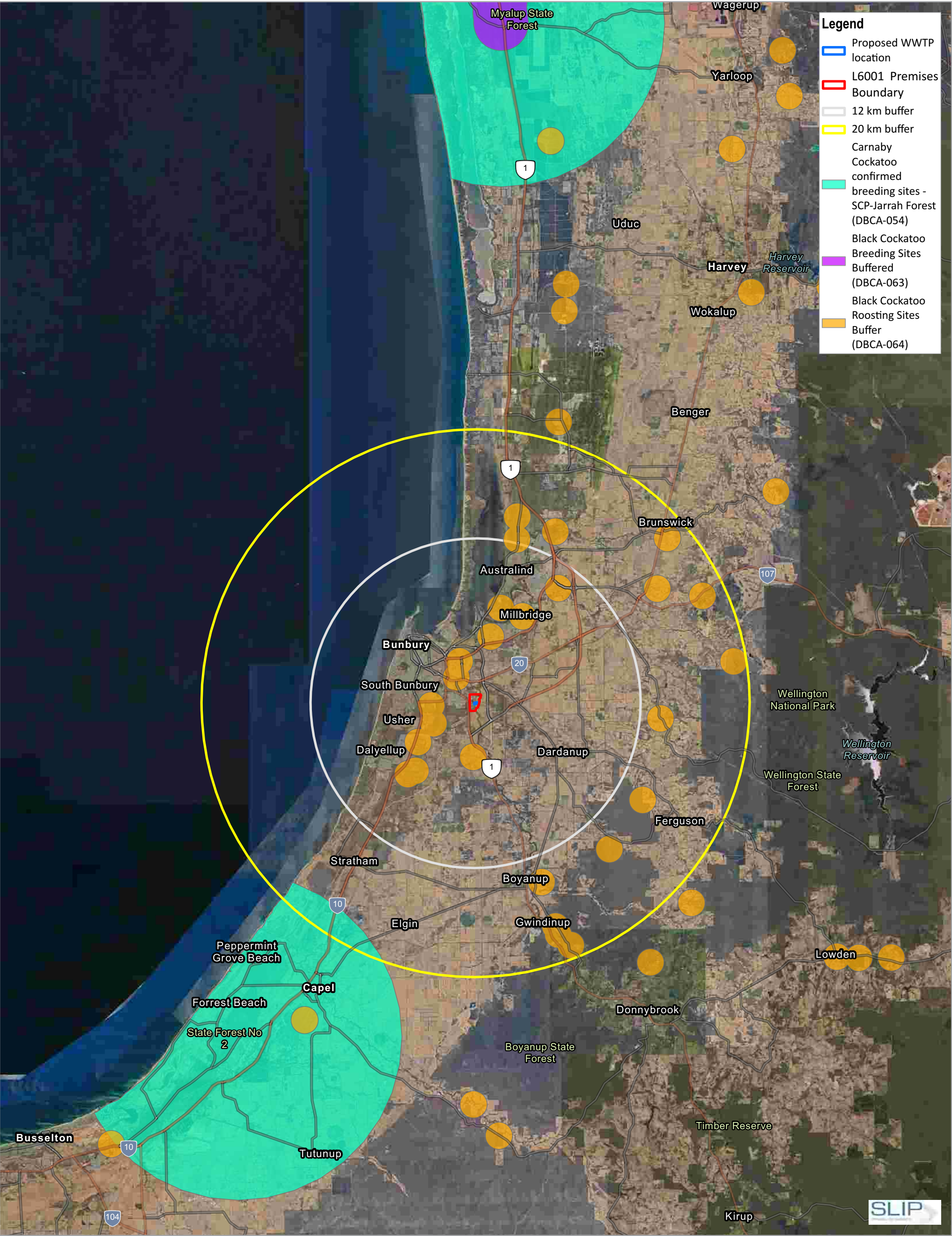


V&V Walsh Pty Ltd
Wastewater Treatment Plant

Fauna habitat

Project No. 12642866
Revision No. A
Date 25/09/2024

FIGURE 5



Appendix B

Protected Matters Search Tool results



Australian Government

**Department of Climate Change, Energy,
the Environment and Water**

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 28-Feb-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	67
Listed Migratory Species:	46

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	10
Commonwealth Heritage Places:	None
Listed Marine Species:	66
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	2
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	33
Key Ecological Features (Marine):	None
Biologically Important Areas:	8
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area	In feature area
Empodisma peatlands of southwestern Australia	Endangered	Community may occur within area	In buffer area only
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	Critically Endangered	Community may occur within area	In buffer area only
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species

[Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Phaethon rubricauda westralis Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
Zanda baudinii listed as Calyptorhynchus baudinii Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Breeding known to occur within area	In feature area
Zanda latirostris listed as Calyptorhynchus latirostris Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area	In feature area
FISH			
Nannatherina balstoni Balston's Pygmy Perch [66698]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat may occur within area	In feature area
OTHER			
Westralunio carteri Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area	In feature area
PLANT			
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area	In feature area
Austrostipa bronweniae listed as Austrostipa bronwenae [92773]	Endangered	Species or species habitat known to occur within area	In feature area
Austrostipa jacobsoniana [87809]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Banksia mimica Summer Honey-pot [82765]	Endangered	Species or species habitat may occur within area	In feature area
Banksia squarrosa subsp. argillacea Whicher Range Dryandra [82769]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Brachyscias verecundus Ironstone Brachyscias [81321]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Chamelaucium sp. S coastal plain (R.D.Royce 4872) Royce's Waxflower [87814]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat known to occur within area	In feature area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area	In feature area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leafed Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area	In feature area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Lambertia echinata subsp. occidentalis Western Prickly Honeysuckle [64528]	Endangered	Species or species habitat may occur within area	In buffer area only
Synaphea sp. Fairbridge Farm (D.Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Synaphea sp. Pinjarra Plain (A.S.George 17182) [86878]	Endangered	Species or species habitat may occur within area	In buffer area only
Synaphea sp. Serpentine (G.R.Brand 103) [86879]	Critically Endangered	Species or species habitat may occur within area	In feature area
Synaphea stenoloba Dwellingup Synaphea [66311]	Endangered	Species or species habitat likely to occur within area	In buffer area only

REPTILE

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
SHARK			
Carcharias taurus (west coast population) Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
Listed Migratory Species			
		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area	In buffer area only
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Hydroprogne caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Onychoprion anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands

[[Resource Information](#)]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Defence		
Defence - BUNBURY TRAINING DEPOT [50142]	WA	In buffer area only
Unknown		
Commonwealth Land - [51107]	WA	In buffer area only
Commonwealth Land - [50409]	WA	In buffer area only
Commonwealth Land - [50400]	WA	In buffer area only
Commonwealth Land - [50403]	WA	In buffer area only
Commonwealth Land - [51108]	WA	In buffer area only
Commonwealth Land - [50411]	WA	In buffer area only
Commonwealth Land - [50399]	WA	In buffer area only
Commonwealth Land - [50407]	WA	In buffer area only
Commonwealth Land - [50406]	WA	In buffer area only

Listed Marine Species

[[Resource Information](#)]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In buffer area only
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hydroprogne caspia as Sterna caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Puffinus assimilis Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat likely to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
Campichthys galei Gale's Pipefish [66191]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area	In buffer area only
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In buffer area only
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In buffer area only
Lissocampus fatiloquus Prophet's Pipefish [66250]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Mitotichthys meraculus Western Crested Pipefish [66259]		Species or species habitat may occur within area	In buffer area only
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area	In buffer area only
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In buffer area only
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Whales and Other Cetaceans		[Resource Information]	
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Unnamed WA40552	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA53600	Nature Reserve	WA	In buffer area only

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Lillydale Road Widening	2023/09476		Completed	In buffer area only
VV Walsh Cold Stores Expansion	2021/8902		Post-Approval	In feature area

Controlled action				
Bunbury Outer Ring Road Northern and Central Section Project, WA	2019/8471	Controlled Action	Post-Approval	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Bunbury Outer Ring Road Southern Section	2012/6652	Controlled Action	Completed	In buffer area only
Bunbury Outer Ring Road Southern Section project, WA	2019/8543	Controlled Action	Final PD	In buffer area only
Bunbury Port Berth 14A Expansion & Coal Storage & Loading Facility, WA	2014/7200	Controlled Action	Post-Approval	In buffer area only
Clearing for Bunbury Airport Expansion, WA	2013/6872	Controlled Action	Post-Approval	In buffer area only
Construction of new sporting field	2007/3333	Controlled Action	Post-Approval	In buffer area only
Koppers Wood Products Wood Processing Facility	2012/6691	Controlled Action	Post-Approval	In buffer area only
Preston Industrial Park	2012/6312	Controlled Action	Completed	In buffer area only
Remove 1.87ha of degraded parkland cleared vegetation to utilising the area for	2010/5661	Controlled Action	Post-Approval	In buffer area only
Residential development, College Grove, WA	2015/7579	Controlled Action	Completed	In buffer area only
Somerville Drive Extension	2011/6153	Controlled Action	Post-Approval	In buffer area only
Stage 2 of the Bunbury Port Access Project	2010/5768	Controlled Action	Post-Approval	In feature area
Urban development subdivision	2013/6955	Controlled Action	Post-Approval	In buffer area only
Yarragadee Water Supply Development	2005/2073	Controlled Action	Completed	In feature area
Not controlled action				
Extension of Brittain Road to connect with the South Western Hwy/Robertson Drive intersection	2007/3707	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
New automotive centre at the Southwest Institute of Technology, Bunbury, WA	2010/5766	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Proposal to widen Harris Road within the Shire of Dardanup, WA	2013/6934	Not Controlled Action	Completed	In buffer area only
Proposed Fuel Reduction Burn, Loughton Park, Bunbury, WA	2014/7148	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 54 Vittoria Road, Glen Iris, WA	2018/8308	Not Controlled Action	Completed	In buffer area only
Residential Development - Assorted Lots Parade Rd, Washington Av & Bussell Hwy, Usher WA	2013/6935	Not Controlled Action	Completed	In buffer area only
Sand Extraction, Lot 265 Ducane Road, Gelorup, WA	2012/6616	Not Controlled Action	Completed	In buffer area only
South Western Highway Reconstruction between Waterloo and Hynes Roads, Waterloo	2010/5617	Not Controlled Action	Completed	In buffer area only
Vegetation clearing for industrial development	2013/6960	Not Controlled Action	Completed	In buffer area only
Woodcrest Rise Estate Residential Development	2007/3794	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Waterloo to Busselton 132kV Transmission Line	2002/816	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Bunbury Port Berth 14 Development, Bunbury Port Inner Harbour	2011/6023	Referral Decision	Completed	In buffer area only
Bunbury Water Resource Recovery Scheme - Stage 2 Pipeline	2022/9145	Referral Decision	Referral Publication	In buffer area only
Bunbury WRRS - Stage 2 Pipeline	2021/9092	Referral Decision	Completed	In buffer area only
Biologically Important Areas				
Scientific Name		Behaviour	Presence	Buffer Status
Seabirds				
Ardenna pacifica				
Wedge-tailed Shearwater [84292]		Foraging (in high	Known to occur	In buffer area only

Scientific Name	Behaviour numbers)	Presence	Buffer Status
Eudyptula minor Little Penguin [1085]	Foraging (provisioning young)	Known to occur	In buffer area only
Onychoprion anaethetus Bridled Tern [82845]	Foraging (in high numbers)	Known to occur	In buffer area only
Puffinus assimilis tunneyi Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In buffer area only
Sternula nereis Fairy Tern [82949]	Foraging (in high numbers)	Known to occur	In buffer area only
Whales			
Balaenoptera musculus brevicauda Pygmy Blue Whale [81317]	Distribution	Known to occur	In buffer area only
Balaenoptera musculus brevicauda Pygmy Blue Whale [81317]	Migration	Known to occur	In buffer area only
Megaptera novaeangliae Humpback Whale [38]	Migration (north and south)	Known to occur	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
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- [-University of New England](#)
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- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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V&V Walsh Wastewater Treatment Plant

V & V Walsh Pty Ltd

Bushfire Management Plan – Development Application for an industrial land use

67237 | 170,004 (Rev 0)

15 September 2025



We acknowledge the Traditional Custodians of Country throughout Australia and their connection to land, sea and community.

We pay our respect to Elders past, present and emerging and in the spirit of reconciliation we commit to working together for our shared future where every person is respected, valued and has strong sense of belonging.

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Appendix B	Asset Protection Zone standards (Planning for Bushfire Guidelines)
Appendix C	Vehicular access technical requirements (Planning for Bushfire Guidelines)
Appendix D	Local government firebreak notice

Abbreviations

Term	Definition
AS 3959	<i>Australian Standard 3959-2018 Construction of buildings in bushfire-prone areas (SA 2018)</i>
APZ	Asset Protection Zone
BAL	Bushfire Attack Level
BEP	Bushfire Emergency Plan
BMP	Bushfire Management Plan
BPAD	Bushfire Planning and Design
BRRF	Bio Resource Recovery Facility
CCW	Conservation Category Wetland
DAF Ponds	Dissolved Air Flotation ponds
DBCA	Department of Biodiversity Conservation and Attractions
DFES	Department of Fire and Emergency Services
DPIRD	Department of Primary Industries and Regional Development
DPLH	Department of Planning, Lands and Heritage
DWER	Department of Water and Environmental Regulation
EAR	Environmental Assessment Report
EP Act	<i>Environmental Protection Act 1986</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ESA	Environmentally Sensitive Area
F/US	Flat/upslope
FDI	Fire Danger Index
Guidelines	<i>Planning for Bushfire Guidelines (WAPC 2024)</i>
ha	Hectare
km	Kilometer
m ²	Square metre
m	Metre
MUW	Multiple Use Wetland
N/A	Not applicable
OBS	Outcomes based solution
SA	Standards Australia
SPP 3.7	<i>State Planning Policy 3.7 Bushfire (WAPC 2024)</i>
TEC	Threatened Ecological Community
WAPC	Western Australian Planning Commission
WTP	Wastewater Treatment Plant

1. Proposal details

1.1 Background

1.1.1 Proposed development

V&V Walsh is lodging a development application in relation to proposed development of a Wastewater Treatment Plant (WTP) within a portion of the Bunbury meat processing facility site located at Lot 1 (31) Rawling Road Davenport (the project area), in the City of Bunbury. The WTP forms Stage 1 of a broader Bio Resource Recovery Facility (BRRF), with Stages 2 and 3 anticipated to be developed at a later time (see Figure 1-1; Capital House Australasia 2024).

The site plan (Figure 1-1; Capital House Australasia 2024) and equipment layout plan (Figure 1-2, Veolia Water Technologies 2024) identify that the WTP is proposed to comprise the following elements:

- Operations and amenities building (including laboratory and control room, office, showers, toilets, changerooms, kitchenette and dining area)
- Chemical storage
- Anaerobic digester
- Water/waste processing tanks
- Substations
- Pumping station
- New stock fence around the perimeter of Stage 1
- Paved equipment area in the centre
- Roadway area along the north border to be paved with dense asphalt
- 1,900 m² paved truck turning circle area to the west
- Bunded truck bay with ramps on the western edge of the site
- Access point from the existing gravel road to the northwest of the site.

1.1.2 Proposed habitable buildings

The proposed development includes the following habitable buildings:

- Amenities lab/control room (Class 8).

1.1.3 Potential bushfire hazards

The proposed land use does not involve the storage of quantities of potentially hazardous or combustible materials that require a licence under the *Dangerous Goods Safety Act 2004* or the *Environmental Protection Act 1986* and there will be no flammable or combustible materials or substances stored on site.

As per the Works Approval Supporting Document prepared by GHD in 2024, any chemicals will be stored in low permeability bunded areas with hardstand, as per Australian Standards, with additional controls in place to prevent and contain spills.

1.1.4 Proposed site occupancy

Hours of operation and maximum occupancy of the proposed land uses are detailed in Table 1-1.

Table 1-1: Hours of operation and maximum occupancy

Building	Hours of operation	Maximum occupancy Staff
Office/control room	Mon–Fri 6:30 am–6:30 pm	- Two site operators - One supervisor

1.2 Site description

The WTP is proposed to be located within the middle western portion of Lot 1, to the southeast of the existing settling ponds as depicted on the Location Plan (Figure 1-3).

The project area, and including the future stage development area, comprises approximately 0.67 ha within Lot 1 on Diagram 12060 and is surrounded by:

- A farm track and degraded forest vegetation (Peppermint [*Agonis flexuosa*] and non-native Eucalypts) to the north.
- Degraded Flooded Gum (*Eucalyptus rudis*) and Peppermint woodland interspersed with grassland to the south.
- Areas of grazed pasture land directly east, and Preston River (vegetated with degraded Marri [*Corymbia callophylla*] and Flooded Gum forest vegetation) approximately 180 m to the east.
- Developed areas including several large Dissolved Air Flotation (DAF) ponds, and a turf farm within Lot 5 (land owned by V&V Walsh) to the west, and the existing V&V Walsh meat processing facility buildings, infrastructure, carparks and roads to the northwest.

An internal access route runs east and then south off Rawling Road through the facility, and along the western border of the project area. Rawling Road connects to a major public road, South Western Highway, providing access in multiple directions. This route is continuous with the driveway servicing the adjacent turf farm and is the nominated secondary access route for the V&V Walsh facility by way of formal recognition as an emergency access way (EAW). The EAW provides access to Mayfair Road to the southwest, and back to South West Highway.

1.3 Bushfire prone designation

The project area is fully designated as Bush Fire Prone Area 2 on the *Map of Bush Fire Prone Areas* (see Plate 1-1).

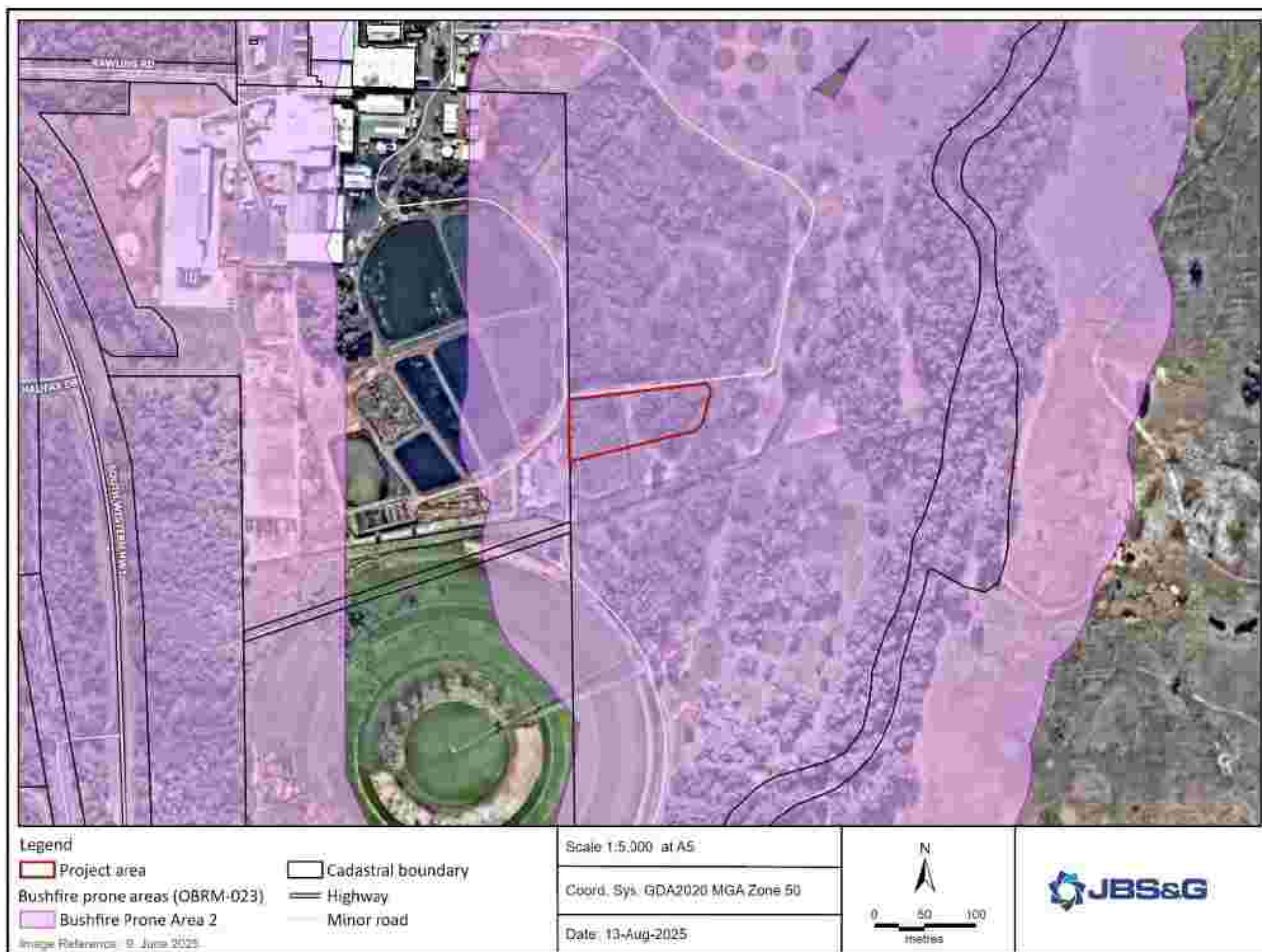


Plate 1-1: Bushfire prone designation (ORBM 2024)

1.4 Purpose

This Bushfire Management Plan (BMP) has been prepared to address requirements under Policy Measure 7.1 (General measures) of *State Planning Policy 3.7 Bushfire* (SPP 3.7; WAPC 2024) and *Planning for Bushfire Guidelines* (the Guidelines; WAPC 2024) and in accordance with *AS 3959-2018 Construction of buildings in bushfire prone areas* (AS 3959; SA 2018).

This report provides an assessment of the proposed development, bushfire risk context, and required bushfire mitigation measures and includes:

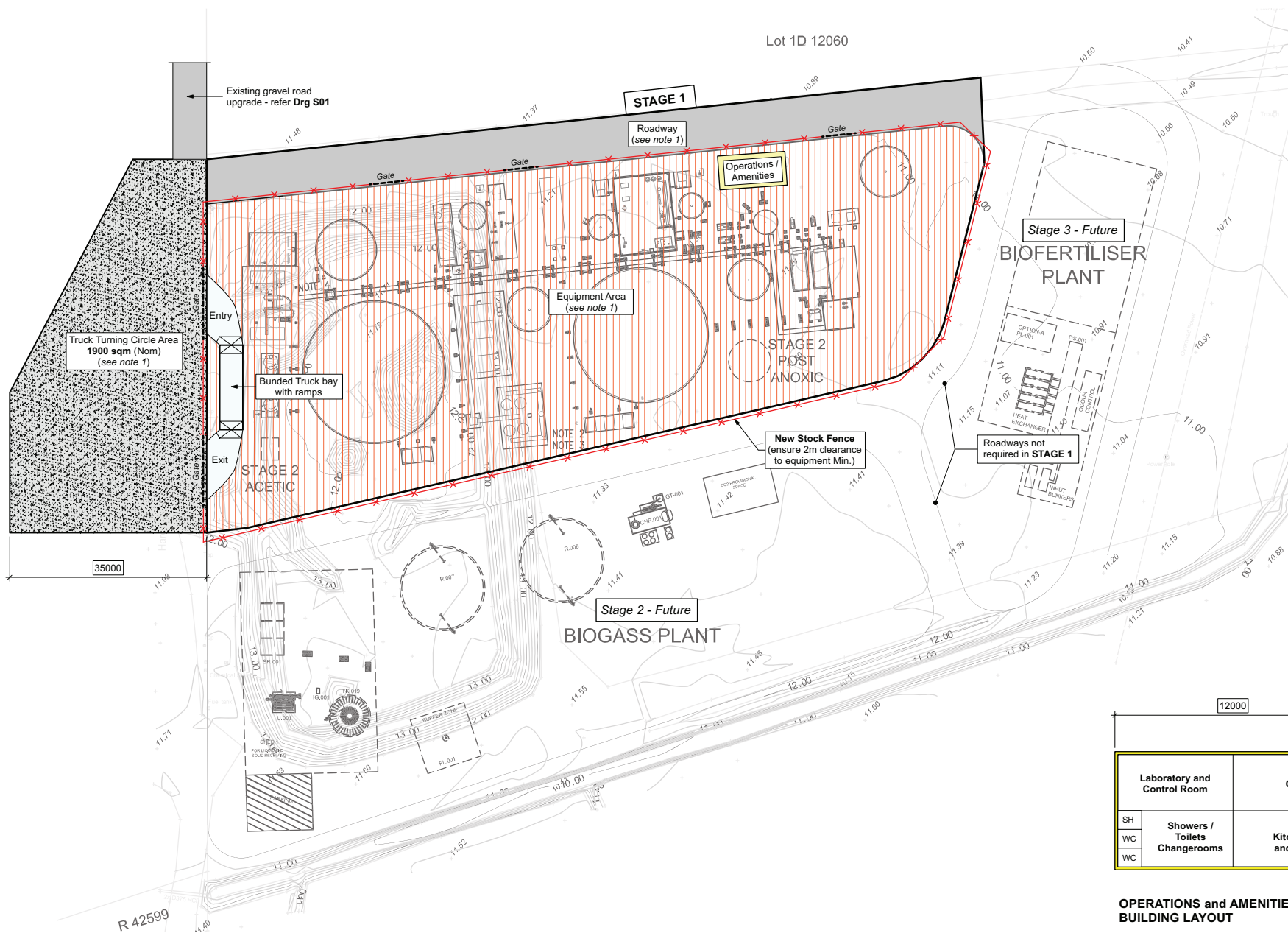
- Identification of environmental, biodiversity or conservation values that may be impacted by the proposed development or proposed bushfire risk mitigation measures.
- A review of existing and post-development vegetation class and slope within the project area and surrounds.
- The results of a Bushfire Attack Level (BAL) contour assessment to demonstrate the indicative BAL ratings across the project area.
- Details of any bushfire hazard issues relevant to the site and proposed development.

- A compliance assessment to demonstrate the proposed development can comply with Bushfire Protection Criteria 7 (Development – Commercial and industrial) of the Guidelines.
- A list of stakeholder responsibilities for implementing the bushfire measures set out within this BMP.

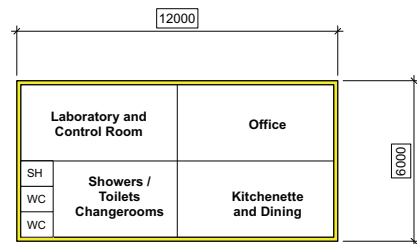
1.5 Other plans/reports

Relevant reports known to have been prepared for the project area include:

- Internal advice memo regarding bushfire compliance and vegetation modification requirements, prepared for V&V Walsh by JBS&G (67237 M01 V&V Walsh WWTP, Rev A, 2024)
- Bushfire Management Plan prepared to support the DA for a freezer plate facility within the western portion of the V&V Walsh site (61811 R01 BMP Lot 5 Rawling Road Davenport DA, Rev 1, 2025) by Strategen-JBS&G.
- Wastewater Treatment Plant Works Approval Supporting Document, 2024, prepared for V&V Walsh by GHD.



- NOTE 1: PAVEMENT AREA**
- Equipment Area to be raised to RL 12.00 AHD and fully paved with Rigid Concrete Reinforced Pavement
 - Roadway Area to be at RL 12.00 AHD and paved with dense asphalt on 250mm Thick crushed rock basecourse with primer and 30mm AC10 Dense Asphalt
 - Truck Turning Circle Area to be fully paved with Rigid Concrete Reinforced Pavement



OPERATIONS and AMENITIES
BUILDING LAYOUT

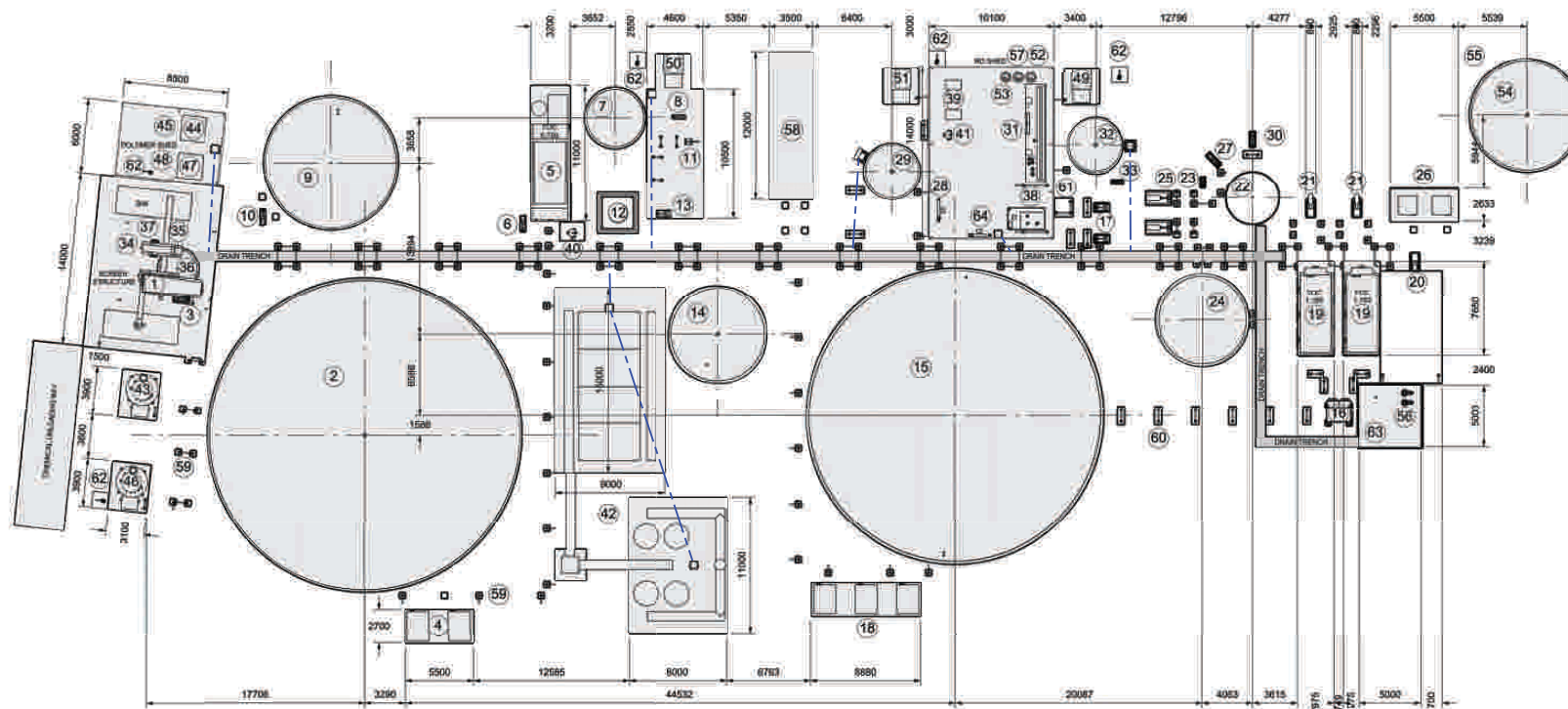
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12/12/2024	T1	ISSUE FOR TENDER	DM

Approved:			
Designed: ON	Drawn: DM	Checked:	Scale : NTS
Job No: 24165	Drawing No: S02		Revision: T1

ITEM	TAG	DESCRIPTION	ITEM	TAG	DESCRIPTION	ITEM	TAG	DESCRIPTION	ITEM	TAG	DESCRIPTION
1	RS01-01	ROTARY SCREEN	22	TL34-01	BACKPULSE TANK	43	SKD-7001	CAUSTIC SODA TANK AND PUMP	54	QN50-01	UV UNIT
2	TL10-01	EQUALISATION TANK	23	PC34-01	POLYMER SERVICE WATER PUMP	44	SKD-7201	DAF POLYMER PREP UNIT			
3	PC10-01	DAF FEED PUMP	24	TL35-01	RAS TANK	45	SKD-7202	DAF POLYMER PUMP SKID			
4	BV10-01/2	BLOWERS	25	PC35-01/2	RAS PUMPS	46	SKD-7301	PACI TANK AND PUMP			
5	RF15-01	DAF UNIT	26	BV35-01/2	MEMBRANE BLOWERS	47	SKD-7401	CENTRIFUGE POLYMER PREP UNIT			
6	PC16-03	DAF SLUDGE PUMP	27	PC40-01	UV FEED PUMP	48	SKD-7402	CENTRIFUGE POLYMER PUMP SKID			
7	TL15-01	DAF EFFLUENT TANK	28	QN40-01	UV UNIT	49	SKD-7501	SODIUM HYPO EC AND PUMPS			
8	PC15-05	HEAT EXCHANGER FEED PUMP	29	TL40-01	TREATED WATER TANK	50	SKD-7701	PHOSPHORIC ISC AND PUMP			
9	TS80-01	SLUDGE HOLDING TANK	30	PC40-03	RO BOOSTER PUMP	51	SKD-7801	CITRIC ACID ISCAD PUMP			
10	PC15-10	CENTRIFUGAL FEED PUMP	31	CP40-01	RO UNIT	52	SKD-7901	SWISS DRUM AND PUMP			
11	EH20-01	HEAT EXCHANGER	32	TL50-01	RECYCLED WATER TANK	53	SKD-8001	ANTISCALANT DRUM AND PUMP			
12	EL20-01	COOLING TOWER	33	PC50-03	SERVICE WATER PUMP	54	TL91-01	FIRE TANK (BY OTHERS)			
13	PC20-01	COOLING PUMPS	34	RMS-01	CENTRIFUGE	55	PC81-01/2	FIRE WATER PUMPS (BY OTHERS)			
14	TL25-01	ANOXIC TANK	35	NSS5-01	SCREW CONVEYOR	56	PC99-01/2	DRAIN PUMPS			
15	TL25-02	AEROBIC TANK	36	TL55-01	CONCENTRATE TANK	57	SKD-8101	DBNPA DRUM AND PUMP			
16	TL25-04	SPLITTER BOX	37	PC55-01	CONCENTRATE PUMP	58	MCC-01	SWITCHROOM (BY OTHERS)			
17	PC25-01/2	NITRATE RECIRCULATION PUMPS	38	TL56-01	CIP UNIT	59	PS-1	PIPE SUPPORT RADS			
18	BV25-01/2/3	BLOWERS	39	CAB5-01/2	AIR COMPRESSORS	60	PS-2	PIPE SUPPORT RADS			
19	TL30-01/31-01	MEMBRANE TANKS	40	TG65-01	AIR RECEIVER	61	PS-3	PIPE SUPPORT RADS			
20	PC30-01	MBR DRAIN PUMP	41	TG65-02	AIR RECEIVER	62	SS	SAFETY SHOWERS			
21	PV30-01/31-01	MBR PERMEATE/BACKPULSE PUMPS	42	SKD-8100	ODOUR UNIT	63	TL99-01	DRAIN SUMP			



--- UNDERGROUND DRAIN LINES



NOTE:
 1) ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 2) PLANTING TO BE DONE ABOVE FINISHED GRADE LEVEL (F.G.L.).
 3) PUMP LEVELS NOTE FOR ITEMS 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

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3	ISSUE FOR REVIEW	PN RM NOL J/10/04
4	ISSUE FOR REVIEW	PN RM NOL J/10/04
5	ISSUE FOR REVIEW	PN RM NOL J/10/04
6	ISSUE FOR REVIEW	PN RM NOL J/10/04

REV.	BY	DATE	APP.	BY	DATE
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2	PN	10/10/04	PN	10/10/04	
3	PN	10/10/04	PN	10/10/04	

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NO: **EQUIPMENT LAYOUT**

SCALE: 1:200 PROJECT NO: 704320202

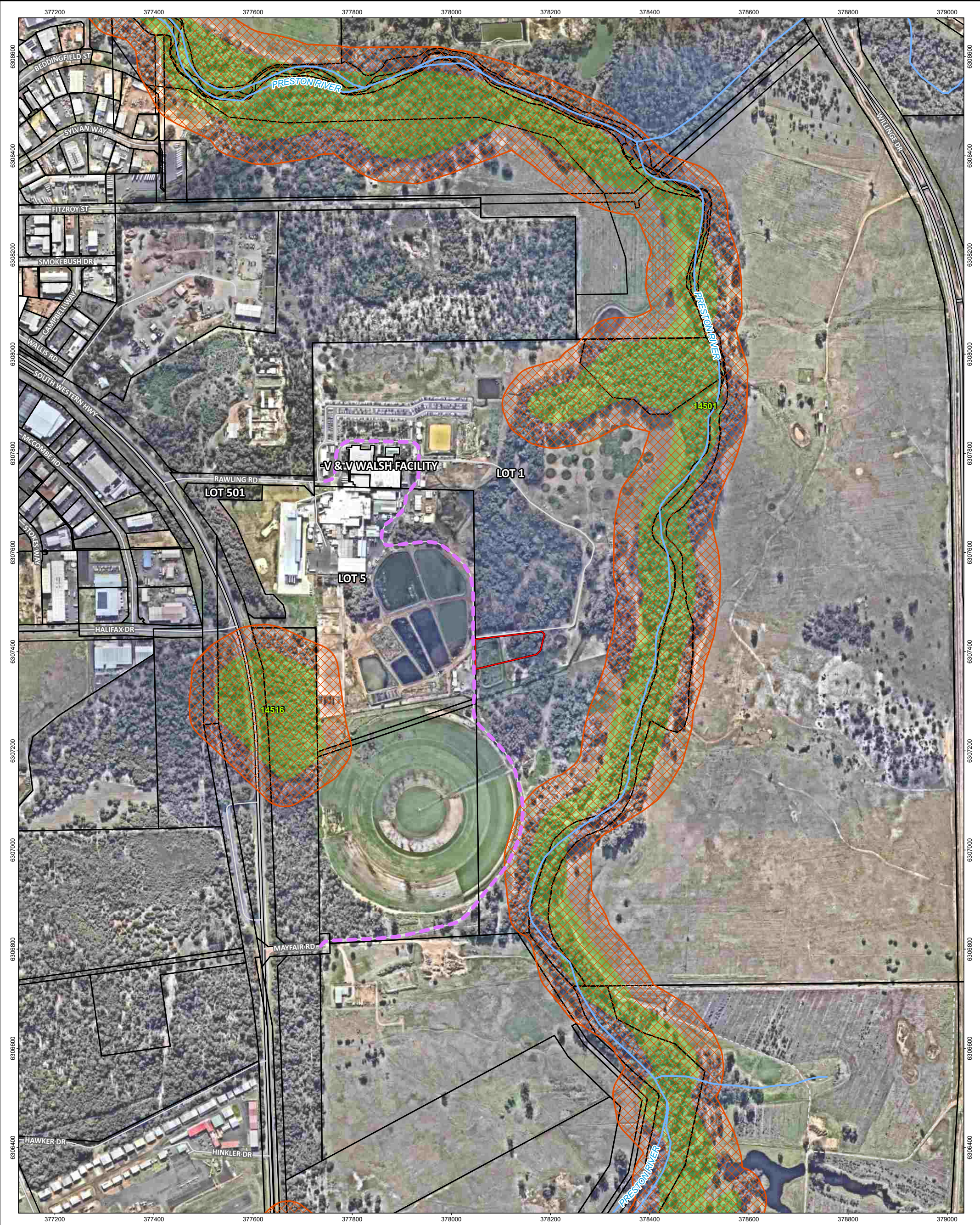
DRAWING NO: **704320202-00-MAE-001**

SHEET 1 OF 2

FILENAME: 70432020200MAE001.dwg

REVISION: **D**

A1



Legend Project area Cadastral boundary (LGATE-002) Environmentally Sensitive Areas (DWER-046) Geomorphic wetlands (DBCA - 019) Conservation Watercourses (DWER-031) Internal access route Roads (LGATE-195) Highway Minor road Track			0200metres		Lot 1, 31 Rawling Road, Davenport, WA LOCATION PLAN
	Job Number: 67237		Scale 1:7,000 at A3		
	Client: V & V Walsh		Coord. Sys. GDA2020 MGA Zone 50		FIGURE: 1.3
	Drawn By: bsunderland				
	Checked By: LRobertson		Version: Rev A Date: 21-Aug-2025		

2. Environmental considerations

2.1 Environmental values

A search of publicly available environmental databases and review of an ecological survey undertaken by GHD in November 2023 (GHD 2024a) is summarised in Table 2-1 to provide an overview of the environmental values associated with the project area and proposed development.

Table 2-1: Summary of environmental values

Environmental value	Present within or adjacent to the project area	Description
Environmentally Sensitive Area (ESA)	Adjacent	A Swan Coastal Plain (SCP) Wetland ESA is located approximately 180 m to the east of the development area (Preston River). A second SCP Wetland ESA is located approximately 260 m to the west of the development area, within Crown reserve area.
Swan Bioplan Regionally Significant Natural Area	N/A	N/A
Ecological linkages	Within and adjacent	The project area is located within the Maidens/Preston River (East-West) Ecological Linkage.
Wetlands	Adjacent	Both adjacent wetlands are listed as (Geomorphic wetlands of the SCP) Conservation wetlands. The project area is within a Multiple Use wetland area.
Waterways	Adjacent	The Preston River is located approximately 180 m east of the project area.
Threatened Ecological Communities listed under the EPBC Act	No	The flora and fauna survey (GHD 2024a) confirmed that none of the vegetation types mapped within the project area are representative of any known TECs.
Threatened and priority flora	No	No threatened flora listed under the EPBC Act or BC Act, or Priority Flora listed by DBCA were recorded within the proposed clearing area during the flora and fauna survey (GHD 2024a).
Fauna habitat listed under the EPBC Act	No	A number of potential Black Cockatoo habitat trees were recorded during the site survey, however none were observed to have suitable hollows (GHD 2024a). Potential Western Ringtail Possum (WRP) habitat within the project area is considered to be low quality for the species.
Threatened and priority fauna	No	No WRP or evidence of Black Cockatoo were observed within the project area during the site survey (GHD 2024a).
Bush Forever site	No	No Bush Forever sites are located within or adjacent to the development area.
DBCA managed lands and waters (includes legislated lands and waters and lands of interest)	Adjacent	A Crown Freehold area of interest is located approximately 650 m to the west. The project area is adjacent to several areas of Kalgulup Regional Park. No Legislated Lands or Waters are located within or adjacent to the project area.
Heritage	Within and adjacent	The project area is situated inside an Aboriginal Cultural Heritage (ACH) Historic Place 5815 "Bunbury/Preston River" (Artefacts / Scatter; Camp). To the east of the project area is

Environmental value	Present within or adjacent to the project area	Description
		Aboriginal Cultural Heritage (ACH) Register Place 19795 "Preston River".

2.2 Native vegetation – modification and clearing

The proposed development will involve clearing to establish the ultimate development footprint, including the Stage 1 WTP (this development) and future Stages 2 and 3 (biogas plant and biofertiliser plant). In addition to this clearing, APZs of 21 m (toward Class A Forest) and 8 m (toward Class G Grassland) will be established and maintained around the proposed WTP infrastructure, with the final alignment of the APZs being determined at the detailed design stage.

Up to 0.63 ha of native vegetation is proposed to be cleared to accommodate construction of the wider BRRF infrastructure and access road. Up to 0.22 ha will be cleared within the proposed APZs for the wider BRRF. Clearing will be undertaken under exemption under Regulation 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (GHD 2024b; GHD 2024c). Federal environmental assessment and referral requirements under the *Environmental Protection Act 1986* and *Environment Protection and Biodiversity Conservation Act 1999* will be addressed as required.

The majority of native vegetation proposed to be cleared is in a Completely Degraded condition due to historical clearing and current sheep grazing practices (GHD 2024a).

2.3 Revegetation / landscape plans

No landscaping or revegetation is proposed as part of the proposal.

3. Bushfire assessment results

3.1 Bushfire Attack Level contour assessment inputs

3.1.1 Methodology

A Bushfire Attack Level (BAL) contour assessment has been undertaken in accordance with Method 1 of AS 3959 for the project area. The Method 1 procedure incorporates the following factors:

- State-adopted FDI 80 rating.
- Vegetation classification.
- Effective slope.
- Distance maintained between proposed development areas and the classified vegetation.

The BAL rating gives an indication of the level of bushfire attack (i.e. the radiant heat flux) that may be received by future development and subsequently informs the standard of building construction and/or setbacks required for proposed habitable development to potentially withstand such impacts and/or deliver compliance with the bushfire protection criteria of the Guidelines.

The BAL contours are based on:

- The classification of and effective slope under vegetation that will be retained post-development, as observed at the time of inspection.
- Consideration of the proposed on-site clearing extent and resultant vegetation exclusions.
- Separation distances between future habitable development and classified vegetation achieved in line with the Site Plan (refer to; Figure 1-1).
- Consideration of proposed Asset Protection Zones (APZs).

Should there be any changes in development design or classified vegetation extent that results in a modified BAL outcome, then the BAL contours will need to be reassessed.

3.1.2 Vegetation classification

Classified vegetation and exclusions were assessed within the project area and adjoining 150 m through on-ground verification on 27 June 2024 in accordance with AS 3959 and the *Visual Guide for Bushfire Risk Assessment in Western Australia* (DoP 2016). Georeferenced site photos and a description of the vegetation classifications and exclusions are contained in Appendix A and depicted in Figure 3-1.

Vegetation within the WTP site and surrounding area contains areas of Eucalypt (Tuart, Flooded Gum, Marri and other large non-native species) and Peppermint (*Agonis flexuosa*) forest and woodland interspersed with areas of grazed pastureland. The vegetated areas are generally degraded and lack understorey fuels due to past grazing practices. While the understorey fuels typical of forest structure are lacking, the canopy is relatively well connected throughout the stands of trees, which warrants a precautionary classification of Class A Forest.

Land associated with the existing water treatment ponds and turf farm to the west of the proposed WTP site, and existing access roads are in a managed condition with minimal fuel loads present and can be excluded under AS 3959 Clauses 2.2.3.2 (e) and (f) as low threat vegetation.

The full BRRF site will be fully cleared during Stage 1 works. Land inside the WTP site is assumed to be non-vegetated (Clause 2.2.3.2 (e) exclusion). While native vegetation within the remainder of the BRRF site (Stages 2 and 3) will also be cleared, this land has been classified as Class G Grassland, as a temporary measure until the future stages are developed.

3.1.3 Effective slope

Two metre elevation contours throughout the 150 m assessment area are depicted in **Figure 3-1**. The assessment area is predominantly flat (0°), however slopes down toward the Preston River channel. Forest vegetation has an effective downslope of >0-5° in this location (Plot 2), however is greater than 100 m from the WTP site and has no bearing on the BALs.

3.1.4 Asset Protection Zones

In order to achieve BAL-29 or below for the proposed development elements, APZs will be established and maintained around the proposed Stage 1 WTP infrastructure. The indicative APZs are identified in Figure 3-1 and comprises

- 21 m APZ around the perimeter of the WTP along the northern edge (in response to Plot 1 [Class A Forest, Flat/upslope]).
- 8 m APZ to the south and east of the WTP (in response to Plot 2 [Class G Grassland, Flat/upslope]).

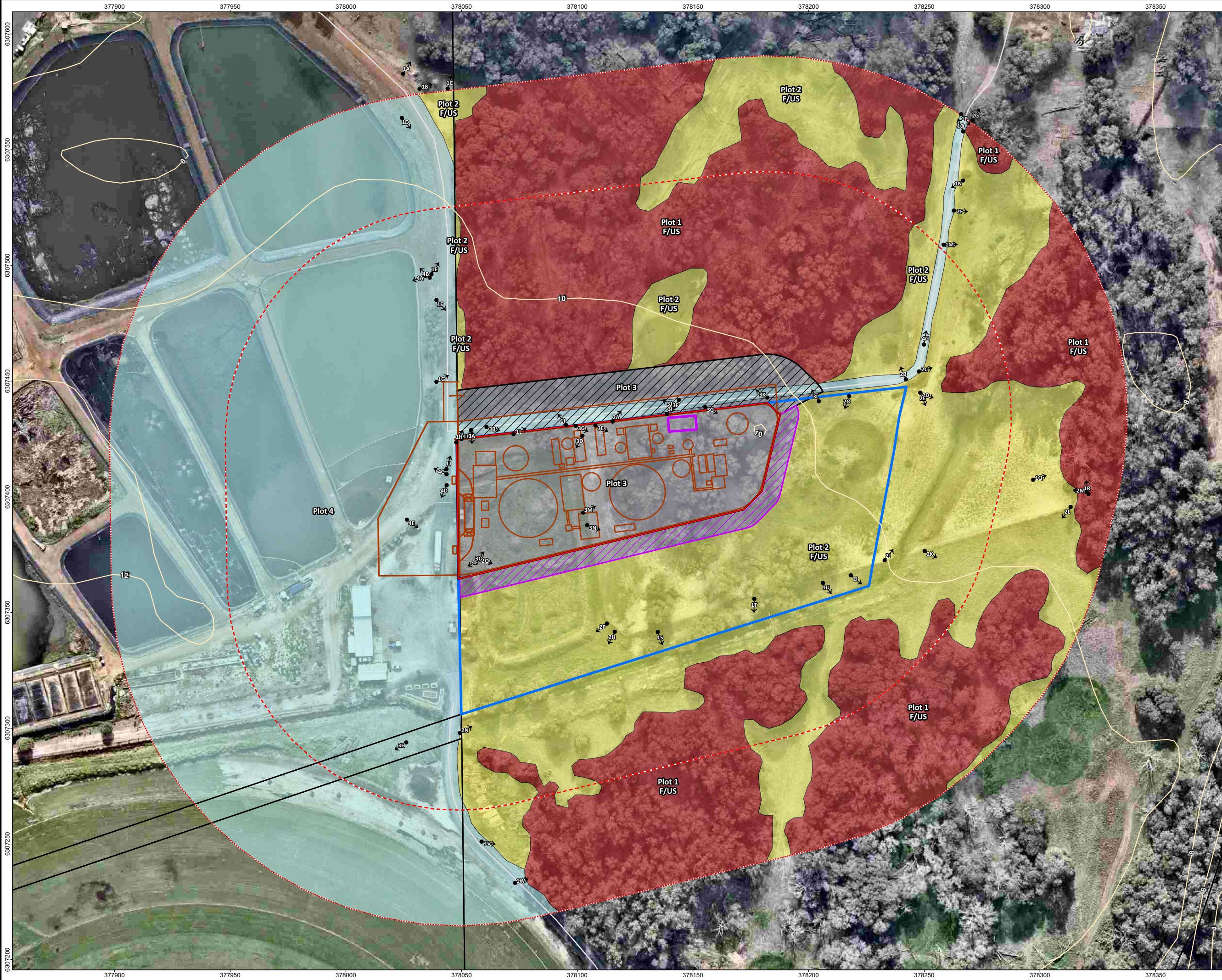
The final alignment of the APZs will be determined at the detailed design stage, during final siting of the buildings and infrastructure. The APZs are to be managed on an ongoing basis in accordance with Appendix B.1 of the Guidelines (Appendix A) and AS 3959 Clauses 2.2.3.2 (e) & (f).

3.1.5 Summary of inputs

Figure 3-1 illustrates the anticipated post-development vegetation classifications and exclusions following completion of construction works and implementation of the APZ around the perimeter of the proposed Stage 1 WTP. The post-development vegetation classifications/exclusions and effective slope are summarised in **Table 3-1**.

Table 3-1: Summary of post-development vegetation classifications, exclusions and effective slope

Vegetation plot	Vegetation classification	Effective slope	Comments
1	Class A Forest	Flat/upslope (0°)	Remnant / native vegetation areas retained to the north, east and south.
2	Class G Grassland	Flat/upslope (0°)	Areas of grazed pastureland where grassland may become unmanaged throughout the summer season, within the balance of the BRRF (following clearing of trees) and other surrounding grassed areas.
3	Area to be modified to low threat (Clause 2.2.3.2)	N/A	All land to be cleared within the WTP site, 21 m and 8m APZs around the WTP perimeter, that will be modified to and managed in a low threat state.
4	Excluded – Non-vegetated (Clause 2.2.3.2 [e])	N/A	Non-vegetated and managed farm tracks running east-west along the northern border of the project area. Water treatment ponds, turf farm and access roads to the west.



- Legend**
- Project area
 - 100m assessment area
 - 150m assessment area
 - Cadastral boundary
 - Development envelope
 - 21m APZ
 - 8m APZ
 - Vegetation classification
 - Class A Forest
 - Class G Grassland
 - Class 2.2.3.2 (e) & (f)
 - Area to be modified to non-vegetated and low threat state
 - Operations/amenities
 - Proposed lot layout
 - Topographic contours in m AHD (DPIRD-072)
 - Roads (LGATE-195)
 - Minor road
 - Photo point directions



Job No: 67237

Client: V & V Walsh

Version: A Date: 22-Aug-2025

Drawn By: bsunderland

Checked By: LRobertson

Scale 1:1,500 at A3

0 25 50
metres

Coord. Sys. GDA2020 MGA Zone 50

**Lot 1, 31 Rawling Road,
Davenport, WA**

**POST DEVELOPMENT VEGETATION
CLASSIFICATION AND EFFECTIVE SLOPE**

FIGURE 3.1

3.2 Bushfire Attack Level contour assessment outputs

3.2.1 BAL contour assessment results

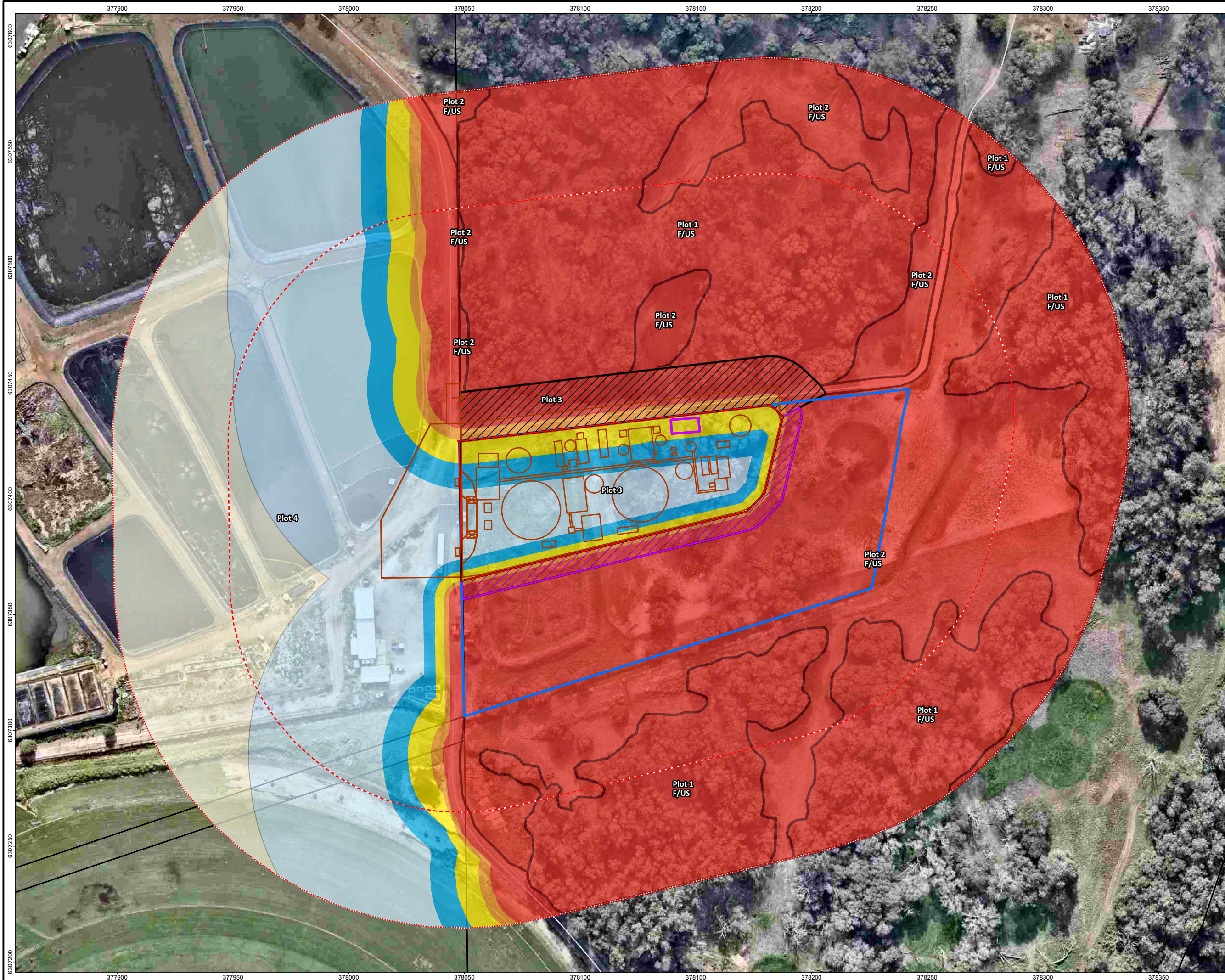
The results of the BAL contour assessment are detailed in **Table 3-2** and illustrated in **Figure 3-2**. The highest BAL applicable to the external boundary of the proposed buildings and infrastructure is BAL-29.

Table 3-2: BAL contour assessment results – Stage 1 WTP

Plot	Vegetation classification	Effective slope	APZ	Separation distance (to project area)	BAL
1	Class A Forest	Flat/upslope (0°)	21 m	21 m	BAL-29
2	Class G Grassland	Flat/upslope (0°)	8 m	8 m	BAL-29
3	Modified to non-vegetated and/or low threat (Clauses 2.2.3.2 [e] and/or [f])	N/A	N/A	N/A	N/A
4	Excluded – Non-vegetated (Clause 2.2.3.2 [e])	N/A	N/A	N/A	N/A
Highest BAL					BAL-29

Table 3-3: BAL contour assessment results – Habitable buildings

Habitable building	Plot	Vegetation classification	Effective Slope	APZ	Separation distance (to building)	BAL
Operations, Amenities and Laboratory building	1	Class A Forest	Flat/upslope (0°)	21 m	22 m	BAL-29

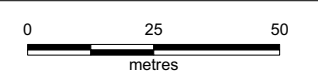


- Legend**
- Project area
 - 100m assessment area
 - 150m assessment area
 - Cadastral boundary
 - Development envelope
 - 21m APZ
 - 8m APZ
 - Classified vegetation
 - BAL contours
 - BAL FZ
 - BAL 40
 - BAL 29
 - BAL 19
 - BAL 12.5
 - BAL Low
 - Operations/amenities
 - Proposed lot layout
 - Roads (LGATE-195)
 - Minor road



Job No: 67237
Client: V & V Walsh
Version: A
Date: 22-Aug-2025
Drawn By: bsunderland
Checked By: LRobertson

Scale 1:1,500 at A3



Coord. Sys. GDA2020 MGA Zone 50

**Lot 1, 31 Rawling Road,
Davenport, WA**

BAL CONTOUR MAP

FIGURE 3.2

4. Identification of bushfire hazard issues

4.1 Bushfire context

A search of bushfire history within the local area shows that the surrounding land has historically been subject to several bushfires, ranging from small, contained fires to large, landscape scale-bushfires.

The highest risk bushfire scenario that could potentially impact the proposed development are from the south-west (this large area of mixed vegetation extends from Manea Park, surrounding the airport and along the road verge) via long fire runs through predominantly forest interspersed with scrub vegetation, on flat to gently sloping land. These scenarios could result in elevated radiant heat and ember attack output at the proposed development interface, particularly under predominant summer afternoon wind conditions from the south-west. Buffers to these scenarios are in place via South Western Highway (western site interface) and an open area turf farm (southwestern site interface), which are expected to provide sufficient defensible space to assist in mitigating bushfire risk from these scenarios.

A mixed vegetation fire run from the east through predominant forest and grassland fuels could also impact the proposed development, however, internal APZ and road interfaces are expected to be sufficient to mitigate this risk.

Temporary on-site grassland hazards present on construction of the proposed WTP may be present within future BRRF development stages to the south. However, the hazards will be temporary in nature and an APZ will be sufficient to achieve ultimate BAL outcomes and ingress of a fire to within the project area.

On completion of development of the site, bushfire hazards will be limited to external vegetation to the north, south and east. A bushfire occurring within this vegetation is expected to be readily manageable through the internal road interfaces and adjoining low threat areas.

4.2 Bushfire hazard issues

Examination of the environmental considerations and bushfire assessment has identified the following potential bushfire hazard issues for the proposed development:

1. The BAL Contour assessment identifies that the future habitable buildings have the capacity to achieve BAL-29. A 21 m APZ will be established around the north, east and south perimeter inclusive of all proposed buildings to ensure the rating is maintained for the life of the development. This will involve ongoing mowing of grass to a height of 100 mm or lower.
2. The future cleared area surrounding the southern and eastern border of the WTP will not be developed until Stages 2 and 3 of the BRRF. It has been assumed as a precautionary measure that this area will comprise temporary Class Grassland hazards and a minimum 8 m wide APZ is required to be established to ensure the WTP infrastructure remains subject to worst-case BAL-29 impacts.
3. The existing private driveway network servicing the site complies with Guidelines requirements under BP7. A second access route is also available adjacent to the turf farm which connects to Mayfair Road then South Western Highway and has been secured for the V&V Walsh facility through preparation of the previous BMP for the now constructed freezer plate facility (Strategen-JBS&G 2022). A compliant turnaround area is to be provided within 30 m of the proposed operations/amenities (habitable) building.
4. A suitable bushfire fighting water supply and associated infrastructure will need to be provided to enable an immediate fire suppression response at the proposed development.

Bushfire mitigation measures designed to address the abovementioned bushfire hazard issues are further discussed in Section 5 of this BMP.

5. Assessment against the bushfire protection criteria

5.1 Compliance assessment

Compliance with Elements 1 – 4 of Bushfire Protection Criteria (BPC) 7: Development – Commercial and industrial is demonstrated by meeting the acceptable solutions, as detailed in Table 5-1.

Table 5-1: Compliance with BPC 7: Development – Commercial and industrial

Outcomes	Acceptable solutions	Method of compliance	Statement of development compliance	Compliance can be achieved
Element 1: Location				
Not applicable	Not applicable	N/A	N/A	N/A
Element 2: Siting and design				
O2 – Ensure siting and design solutions: - manage or mitigate the bushfire risk to people, property and infrastructure; and - avoid, or where unavoidable, minimises the clearing of native vegetation.	A2.1a Siting and design Every habitable building achieves a radiant heat impact not exceeding 29 kW/m ² (BAL-29).	Acceptable solution	The BAL contour assessment (see Section 3) indicates that the proposed habitable buildings and infrastructure can achieve BAL-29 or lower. 21 m and 8 m wide low threat APZs will be employed to achieve this outcome.	✓
	A2.1b Siting in an area with a radiant heat impact exceeding 29 kW/m² (BAL-40 or BAL-FZ) The siting of a commercial or industrial habitable building, with a radiant heat impact exceeding 29 kW/m ² (BAL-40 or BAL-FZ) should only be considered where: - the lot was created prior to December 2015; and - there are demonstrated site characteristics and/or biodiversity or conservation values that	N/A	N/A	N/A

Outcomes	Acceptable solutions	Method of compliance	Statement of development compliance	Compliance can be achieved
	prevent the achievement of a radiant heat impact not exceeding 29 kW/m² (BAL-29); and It is demonstrated that the reduction of the building footprint or a redesign to manage or mitigate the risk, is not practical or appropriate. If the provision of an APZ in accordance with acceptable solution A2.2 cannot be achieved, then the vegetation immediately surrounding the building is to be managed as defensible space in accordance with Appendix B.2, Table 9 – APZ technical requirements.			
	A2.2 Asset Protection Zone (APZ) Where a habitable building cannot be wholly located within an area with a radiant heat impact not exceeding 29 kW/m² (BAL-29) in its pre-development state, an APZ is to be provided and meet the following requirements: - Width – the APZ is to be measured from the development site, and of sufficient size to ensure the radiant heat impact of a bushfire does not exceed 29 kW/m² (BAL-29) in all circumstances. - Location – the APZ is to be contained solely within the boundaries of the lot, except in instances where: - the vegetation on the adjoining lot(s) is, and will continue to be, low threat as per Clause 2.2.3.2 of AS 3959 or the requirements of Appendix B.2, Table 9 – APZ technical requirements, or an alternative standard in a	Acceptable solution	The BAL contour assessment identifies that a 21 m APZ and 8 m APZ can be contained within lot boundaries to achieve a BAL-29 or lower rating (see Section 3). Predevelopment Class A Forest and Class G Grassland classification will be removed within the APZs upon modification. The APZs will meet the requirements of and be subject to ongoing management in accordance with the standards outlined in the Guidelines (see Appendix B).	✓

Outcomes	Acceptable solutions	Method of compliance	Statement of development compliance	Compliance can be achieved
	local planning scheme, on an ongoing basis in perpetuity; or - the adjoining land is, and will remain in perpetuity, non-vegetated. - Management – the APZ is managed in accordance with the requirements of Appendix B.2, Table 9 – APZ technical requirements, or an alternative standard in a gazetted local planning scheme.			
	A2.3 Clearing of native vegetation The development avoids, or where unavoidable, minimises the clearing of native vegetation.	Acceptable solution	Establishment of the site requires clearing of the entire BRRF site for construction of infrastructure (up to 0.63 ha of native vegetation will be cleared). A further up to 0.22 ha of native vegetation is to be modified to a low threat state to accommodate the APZs. This does not necessarily need to involve full clearing of the native vegetation. High value trees may be strategically retained within the APZ as part of low threat landscaping. The extent of clearing/modification within the BMP will be confirmed at detailed design stage. GHD (2024c) has confirmed that the proposed clearing meets exemptions under Regulation 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004.	✓
	A2.4 Storage of hazardous, flammable and/or combustible materials	Acceptable solution	The Proponent has advised that there will be no hazardous, flammable and/or combustible materials stored on site. Notwithstanding, the proposed APZs will	✓

Outcomes	Acceptable solutions	Method of compliance	Statement of development compliance	Compliance can be achieved
	Where a proposed land use will include the storage of hazardous, flammable and/or combustible materials as part of its ongoing day to day operations, the materials are to be stored in an area that: - is subject to a radiant heat impact not exceeding 29 kW/m² (BAL-29); - is non-combustible and shields the materials to reduce their exposure to radiant heat from the bushfire to levels significantly lower than 29 kW/m² and prevents the entry of debris and embers; and - limits to the degree necessary and practical, the escape of sources of ignition from the stored materials into bushfire prone vegetation.		ensure that all infrastructure is subject to a maximum of BAL-29 as required. As per the Works Approval Supporting Document prepared by GHD (2024b), any chemicals will be stored in low permeability bunded areas with hardstand, as per Australian Standards, with additional controls in place to prevent and contain spills.	
Element 3: Vehicular access				
O3 – Ensure the design and capacity of vehicular access and egress provide: - for efficient and effective evacuation to a suitable destination(s) and/or - as a contingency measure for vulnerable land uses, an on-site shelter, where demonstrated appropriate, as a last resort option.	A3.1 Private driveway There are no private driveway technical requirements (prescribed by these Guidelines) where the private driveway is within a lot serviced by reticulated water and is no greater than 70 metres in length between the most distant external part of the habitable building and the public road. In circumstances where the above conditions are not met, the private driveway is to meet all of the following requirements: - requirements in Appendix B.3 Table 10, Column 5; and - passing bays every 200 metres with a minimum length of 20 metres and a minimum additional carriageway width of 2 metres (i.e. the combined	Acceptable solution	The internal access road servicing the WTP is greater than 70 m to a public road and is required to comply with the provisions of A3.1. The existing access road is approximately 6 m wide and has previously been assessed as meeting EAW standards (JBS&G 2022), which also ticks the box for private driveway standards. The new proposed road along the northern boundary of the WTP is proposed to be 6 m wide which complies with the width requirements of A3.1. A compliant turn around area is to be provided within 30 m of the habitable	✓

Outcomes	Acceptable solutions	Method of compliance	Statement of development compliance	Compliance can be achieved
	carriageway width of the passing bay and constructed private driveway to be a minimum 6 metres); and turn-around area (Figure 30) and within 30 metres of the habitable building (Figure 38).		building (operations/amenities building) and is to be depicted on final plans prepared post development approval.	
Element 4: Water supply				
O4 – Ensure that sufficient water is available to enable people, property and infrastructure to be defended from bushfire.	A4.1 Water supply Where a reticulated water supply is existing or proposed, a hydrant connection(s) should be provided in accordance with the specifications of the relevant water supply authority. Where these specifications cannot be met, a water tank(s) should be provided in accordance with the requirements of Appendix A.4, Table 11 – Water supply dedicated for bushfire firefighting.	Acceptable solution	On-site hydrants will be provided via extension from existing reticulated supply servicing the wider V&V Walsh facility.	✓

6. Responsibilities for implementation and management of the bushfire mitigation measures

Implementation of the BMP is the responsibility of V&V Walsh to ensure bushfire management measures are adopted and implemented on an ongoing basis. A bushfire responsibilities table is provided in Table 6-1 to drive implementation of all bushfire management works associated with this BMP.

Table 6-1: Responsibilities for implementation and management of the bushfire measures

Implementation/management table	
No.	Implementation action
1. Developer – prior to occupation of buildings/receiving licence to operate	
1-1	Undertake clearing within the wider BRRF development envelope to ensure post-development vegetation is low threat within the WTP site, and worst-case Class G Grassland within the Stage 2 and 3 development areas.
1-2	Establish required APZs and maintain in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959, including slashing/mowing of grassland and weeds to height of less than 100 mm. Retain significant trees within the APZ where possible.
1-3	Construct the new proposed internal driveway to the standards stated in this BMP, ensuring a compliant turnaround area is provided within 30 m of the operations/ablutions building.
1-4	Construct the reticulated firefighting hydrant system to service the proposed WTP.
1-5	Comply with the City of Bunbury annual firebreak notice as amended (see Appendix D).
1-6	Undertake BMP compliance assessment/certification (if required).
2. Facility management – ongoing	
2-1	Maintain WTP site and APZs in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959, including slashing/mowing of grassland and weeds to height of less than 100 mm.
2-2	Maintain on-site hydrants and associated infrastructure on an ongoing basis.
2-3	Maintain integrity of bunded areas and enclosed structures for compliant hazardous, flammable and combustible materials storage.
2-4	Maintain the private driveway and turn around on an ongoing basis to the standards stated in the BMP.
2-5	Comply with the City of Bunbury annual firebreak notice as amended (see Appendix D).

7. References

- Capital House Australasia 2024, *Wastewater treatment plant, Rawlings Road Bunbury, Pavement Area Plan*, dated 10 December 2024, Prepared for V&V Walsh by Capital House Australasia Engineers and Project Managers.
- Department of Planning (DoP) 2016, *Visual guide for bushfire risk assessment in Western Australia*, Department of Planning, Perth.
- GHD 2024a, *Bio Resource Recovery Plan Project Sites, Spring Flora and Fauna Survey*, Report prepared for V&V Walsh Pty Ltd, GHD, Perth.
- GHD 2024b, *Wastewater Treatment Plant Works Approval Supporting Document*, Report prepared for V&V Walsh Pty Ltd, GHD, Perth.
- GHD 2024c, *V&V Walsh – Exemption to clear native vegetation for proposed water treatment plan*, Letter from GHD to V&V Walsh, dated 11 October 2024.
- JBS&G 2024, *67237 M01 V&V Walsh WWTP Advice (Rev A): “Proposed Bio Resource Recovery Facility – Bushfire compliance advice”*. Report prepared for V&V Walsh Pty Ltd, JBS&G, Bunbury/Perth.
- Office of Bushfire Risk Management (OBRM) 2024, *Map of Bush Fire Prone Areas*, [Online], Government of Western Australia, available from: <https://maps.slip.wa.gov.au/landgate/bushfireprone/>, [04/10/2024].
- Standards Australia (SA) 2018, *Australian Standard AS 3959–2018 Construction of Buildings in Bushfire-prone Areas*, Standards Australia, Sydney.
- Strategen-JBS&G (now JBS&G) 2022, *Bushfire Management Plan, Portion Lot 1050 South Western Highway, Davenport, WA*, report prepared for V&V Walsh by Strategen-JBS&G.
- Veolia Water Technologies 2024, *Equipment layout plan, V&V Walsh*, Sheet 1, 2 December 2024, Plan prepared for V&V Walsh by Veolia Water Technologies.
- Western Australian Planning Commission (WAPC) 2024, *State Planning Policy 3.7 Bushfire*, Western Australian Planning Commission, Perth.
- Western Australian Planning Commission (WAPC) 2024, *Planning for Bushfire Guidelines*, November 2024, Western Australian Planning Commission, Perth.
- Strategen-JBS&G 2025, *Bushfire Management Plan (Development Application): Portion Lot 1050 South Western Highway, Davenport, WA 6230*, Report prepared for V&V Walsh Pty Ltd, Strategen-JBS&G, Bunbury/Perth.

Appendix A Photos of vegetation plots

Plot 1

Vegetation classification	Pre-development	Class A Forest Flat/Upslope
	Post-development	Class A Forest Flat/Upslope

Description / justification

Trees 10-30 m high at maturity, dominated by Eucalypts, multi-tiered structure comprising tall canopy layer, shrubby middle layer and grass/herb/sedge understorey. Approximately 70% canopy cover. Located to the north, east and south of the Lot 1 and project area.

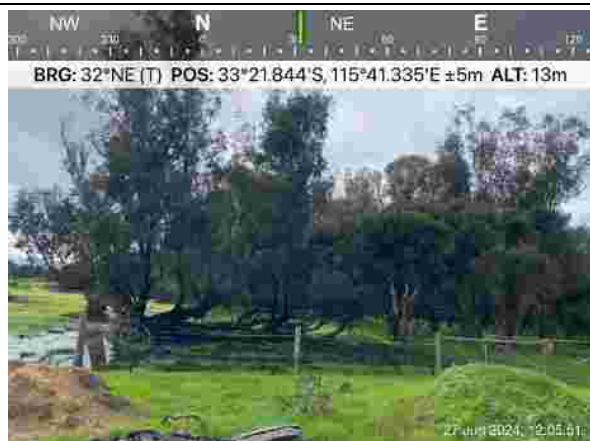


Photo ID: 1a



Photo ID: 1c



Photo ID: 1e



Photo ID: 1b (background)



Photo ID: 1d (background)



Photo ID: 1f

Plot 1



Photo ID: 1g



Photo ID: 1i



Photo ID: 1k (left hand side of photo)



Photo ID: 1h



Photo ID: 1j (background)



Photo ID: 1l (left hand side of photo)

Plot 1



Photo ID: 1m



Photo ID: 1o



Photo ID: 1q



Photo ID: 1n



Photo ID: 1p (background)



Photo ID: 1r

Plot 1



Photo ID: 1s (background)



Photo ID: 1t (background)



Photo ID: 1u (background)



Photo ID: 1v



Photo ID: 1w

Plot 2

Vegetation classification	Pre-development	Class A Forest Flat/Upslope / Class G Grassland Flat/Upslope
	Post-development	Class G Grassland Flat/Upslope

Description / justification

Grassland assumed to be at maturity and ≤ 100 mm high, grazed pastureland.



Photo ID: 2a (foreground)



Photo ID: 2c (foreground)



Photo ID: 2e



Photo ID: 2b (foreground)



Photo ID: 2d (foreground)



Photo ID: 2f (foreground)

Plot 2



Photo ID: 2g (foreground)



Photo ID: 2i (foreground)



Photo ID: 2k (foreground)



Photo ID: 2h



Photo ID: 2j



Photo ID: 2l (foreground)

Plot 2



Photo ID: 2m



Photo ID: 2n



Photo ID: 2o



Photo ID: 2p



Photo ID: 2q

Plot 3

Vegetation classification	Pre-development	Class A Forest and Class G Grassland
	Post-development	Modified to non-vegetated and/or low threat (Clauses 2.2.3.2 [e] and/or [f])

Description / justification

Land within the development area to be cleared, and a 21 m APZ around the WTP perimeter to be established, both comprising pre-development of Eucalypt forest and grazed pastureland / grasslands.



Photo ID: 4a



Photo ID: 4c



Photo ID: 4e



Photo ID: 4b



Photo ID: 4d



Photo ID: 4f

Plot 3



Photo ID: 4g



Photo ID: 4i (APZ to be cleared)



Photo ID: 4k (APZ to be cleared)



Photo ID: 4h



Photo ID: 4j (APZ to be cleared)



Photo ID: 4l (APZ to be cleared)

Plot 3



Photo ID: 4m



Photo ID: 4o



Photo ID: 4n

Plot 4

Vegetation classification	Pre-development	Excluded – Non-vegetated (Clause 2.2.3.2 [e])
	Post-development	Excluded – Non-vegetated (Clause 2.2.3.2 [e])

Description / justification

Existing low threat and non-vegetated areas including paved roadway running east-west along the northern border to the project area and built from within the adjoining V&V Walsh facility and surrounding roads.



Photo ID: 3a



Photo ID: 3c



Photo ID: 3e



Photo ID: 3b



Photo ID: 3d



Photo ID: 3f

Plot 4



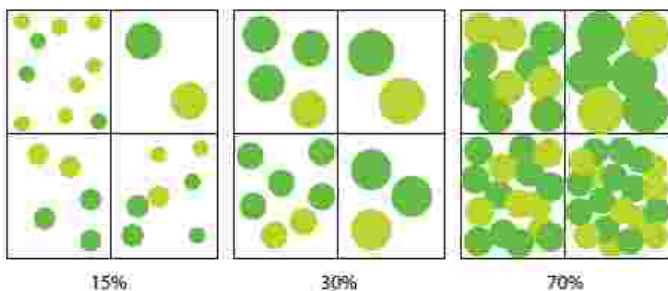
Photo ID: 3g



Photo ID: 3h

Appendix B Asset Protection Zone standards (Planning for Bushfire Guidelines)

Appendix B.2, Table 9: Asset Protection Zones technical requirements

Object	Requirement
Fences within the APZ	Should be constructed from non-combustible materials (for example, iron, brick, limestone, metal post and wire, or bushfire-resisting timber referenced in Appendix F of AS 3959).
Fine fuel load (combustible, dead vegetation matter less than 6 mm in thickness)	- Should be managed and removed on a regular basis to be maintained as low threat vegetation. - Should be maintained at less than two tonnes per hectare (on average). - Mulches should be non-combustible such as stone, gravel, shells, rock or crushed mineral earth or wood mulch more than five millimetres in thickness.
Trees* (more than 6 m in height)	- Trunks at maturity should be a minimum distance of six metres from all elevations of the building. - Branches at maturity should not touch or overhang a building or powerline. - Lower branches and loose bark should be removed to a height of two metres above the ground and/or surface vegetation. - Canopy cover within the APZ should be less than 15 per cent of the total APZ area. - Tree canopies at maturity should be at least 5 m apart to avoid forming a continuous canopy. Stands of existing mature trees with interlocking canopies may be treated as an individual canopy provided the total canopy cover within the APZ does not exceed 15 per cent and is not connected to the tree canopy outside the APZ. Tree canopy cover – ranging from 15 to 70 per cent at maturity 
Shrub* and scrub* (0.5 m to 6 m in height). Shrub and scrub more than 6 m in height are to be treated as trees.	- Should not be located under trees or within three metres of buildings. - Should not be planted in clumps more than five square metres in area. - Clumps should be separated from each other and any exposed window or door by at least 10 metres.
Ground cover* (less than 0.5 m in height. Ground cover more than 0.5 m in height is to be treated as shrub)	- Can be planted under trees but must be maintained to remove dead plant material, as prescribed in 'Fine fuel load' above. - Can be located within two metres of a structure but three metres from windows or doors if more than 100 mm in height.
Grass	- Grass should be maintained at a height of 100 mm or less, at all times. - Wherever possible, perennial grasses should be used and well-hydrated with regular application of wetting agents and efficient irrigation.
Defendable space	Within three metres of each wall or supporting post of a habitable building; the area is kept free from vegetation but can include ground cover, grass and non-combustible mulches as prescribed above.

Appendix B.2, Table 9: Asset Protection Zones technical requirements

Object	Requirement
Liquid petroleum gas cylinders	• Should be located on the side of a building farthest from the likely direction of a bushfire or on the side of a building where surrounding classified vegetation is upslope, at least one metre from vulnerable parts of a building. • The pressure relief valve should point away from the house. • No flammable material within six metres from the front of the valve. • Must sit on a firm, level and non-combustible base and be secured to a solid structure.
<i>* Plant flammability, landscaping design and maintenance should be considered – refer to explanatory notes</i>	
Source: <i>Planning for Bushfire Guidelines (WAPC 2024)</i>	

Appendix C Vehicular access technical requirements (Planning for Bushfire Guidelines)

Appendix B.3, Table 10: Vehicular access technical requirements

1		2		3		4		5		
Technical requirements	Perimeter roads		Public roads		Emergency access way ³		Fire service access route ³		Battle-axe and private driveways ¹	
Map of Bush Fire Prone Areas designation	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1
Minimum horizontal clearance (m)	12	8	See note 5		10	6	10	6	6	
Minimum vertical clearance (m)	4.5									
Minimum weight capacity (t)	15									
Maximum grade unsealed road ³	See note 5		See note 5		1:10 (10% or 6°)					
1:7 (14.3% or 8°)										
1:10 (10% or 6°)										
8.5										

¹ Driveways and battle-axe legs to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision where not required to comply with the widths in this Appendix or the Guidelines.

² Dips must have no more than a 1 in 8 (12.5% - 7.1 degrees) entry and exit angle.

³ To have crossfalls between 3 per cent and 6 per cent.

⁴ For sealed roads only the maximum grade of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50 metres is permissible, except for short constrictions to 3.5 metres for no more than 30 metres in length where an obstruction cannot be reasonably avoided or removed.

⁵ As outlined in the Institute of Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards Main Roads standard, supplement, policy or guideline and/or any applicable or relevant local government standard or policy.

Appendix D Local government firebreak notice

AUSTRALIAN FIRE DANGER RATING SYSTEM

The Australian Fire Danger Rating System (AFDRS) uses a four-tier system to assess the potential danger in the event of a bushfire, aiding the community in taking necessary action to ensure their safety.

Each rating level gives a message that will encourage action dependent on the level of threat.



Daily forecasted fire danger ratings, provided by the Department of Fire and Emergency Services will be shown on roadside signs, and updated by City of Bunbury Rangers.

The Australian Fire Danger Rating Systems signs are located at the following four locations:

- Forrest Highway
- South Western Highway
- Ocean Drive
- Bussell Highway

Visit emergency.wa.gov.au to view the daily Fire Danger Rating, which is published at 4pm the day before.

FURTHER INFORMATION TO STAY SAFE

While following the directions from the City of Bunbury and the Department of Fire and Emergency Services, here are a few tips to protect your property and reduce the risk of a fire:

- 🔥 Ensure roofs and gutters are cleared of flammable materials
- 🔥 Remove accumulated leaves, twigs, dead bushes and trees capable of fuelling a fire
- 🔥 Prune shrubs so they are not overhanging
- 🔥 Store petrol and gas safely
- 🔥 Cut grass around your property to 5cm or less

STAY INFORMED

- ⚠️ For emergency alerts and warnings, visit emergency.wa.gov.au
- 📡 Subscribe to weather bureau updates and for emergency warnings.
- ☎️ Call the Department of Fire and Emergency Services on **13 3337**.
- 📺 Follow @dfeswa and @bunburycity on Facebook for live and local updates.
- 📻 Listen to ABC South West for updates.
- 🚧 Check fire rating roadside signs located across Bunbury.

Scan the QR code to view our fire safety information.



HAVE A BUSHFIRE PLAN?

For the safety of you and your family, ensure you have a plan in place should a bushfire occur.

Having a pre-prepared kit will save you valuable time in an evacuation. Ensure you pack important items including non-perishables, spare clothes, first aid kit, water, and a torch.

For a personal bushfire plan, download the My Bushfire Plan or visit mybushfireplan.wa.gov.au



FIRE CONTROL

IN THE CITY OF BUNBURY



EVERYONE HAS A DUTY TO HELP REDUCE THE RISK OF FIRE

Western Australia is highly bushfire prone due to its dry bushland and soil, and extreme temperatures during summer months.

It's important for everyone to be prepared and know the restrictions put in place to mitigate the risk of bushfires and keep the community safe.

BUSH FIRES ACT 1954

Under Section 33 of the Bush Fires Act 1954, all City of Bunbury residents have a legal requirement to undertake fire prevention works on their property by 1 November, and to be maintained until 5 May.

City of Bunbury Fire Control Officers will start inspections during the fire control period and non-compliance can result in severe penalties.

Additionally, the City may also arrange fire prevention works at your property and you will be liable for all associated costs.

Where the area of the land is less than 2024sqm:

Slash/mow all grass to a height no greater than 10 centimetres and remove all cut materials and other flammable matter such as leaf matter and dead vegetation, from the property.

Where the area of the land is greater than 2024sqm:

Slash/mow all grass to a height no greater than 10 centimetres and remove all cut materials and/or install a firebreak of three metres wide and four metres high, clear of all bush and flammable material along all external boundaries of the land.

Total removal of all flammable material from the property may be considered an acceptable alternative.

FIRE BREAK EXEMPTION

Application required in writing to the City of Bunbury prior to 1 November

RESTRICTED BURNING PERIOD

Burn permits required - 1 November until 10 December

PROHIBITED BURNING PERIOD

No fires permitted - 11 December until 24 March
(Subject to extensions)

RESTRICTED BURNING PERIOD

Burn permits required - 25 March until 5 May
(Subject to extensions)

BURNING PERMITS

Each year, burning is not permitted from 11 December to 24 March inclusive.

A burning permit must be obtained for the burning of any materials (including garden refuse) from 1 November to 10 December and from 25 March to 5 May.

Permits are automatically cancelled on days of high and extreme fire danger and no burning of any type is permitted, including incinerators.

Permits to burn must be obtained from the City of Bunbury and all conditions imposed by the City's Fire Control Officers and Authorised Persons must be followed.

Burning without a permit or approval may be subject to penalties, prosecution, or civil action.



CAMPFIRES, FIRE PITS, BARBECUES AND PIZZA OVENS

Campfires are prohibited on any land from 1 November to 5 May.

Fire pits are not permitted at all during the prohibited burning period from 11 December to 24 March.

Fire pits are permitted to be used during restricted burning periods 1 November to 10 December and 25 March to 5 May under certain conditions, and must be set up correctly to prevent the spread of the fire.

For the purposes of cooking, pizza ovens, wood-fuelled barbecues and smokers are not permitted during prohibited burning periods 11 December to 24 March, when the fire danger rating is 'high' or above, or when a Total Fire Ban is declared.

Permits are required during restricted burning periods and may be cancelled should changes in weather conditions or other presented risks occur. Owners of campfires, fire pits, pizza ovens or wood-fuelled barbecues should stay up-to-date with the Department of Fire and Emergency Services website for fire danger rating information and Total Fire Ban notices.

FIREBREAKS

A firebreak refers to a cleared strip of land free from flammable materials, including wood, leaves, and grass that may ignite and burn.

To be compliant, firebreaks must be accessible for firefighting vehicles, with a vertical clearance of four metres and three metres wide with no obstructions. They also must not end abruptly or lead to dead ends.

While firebreaks do not prevent fires, they provide access for firefighters and can help contain the spread of fires.

Firebreaks can be created by mineral earth or maintained green lawns.

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			Name	Signature	Date
A	Carrienne Graham	Louisa Robertson (BPAD 36748, Level 3)	Louisa Robertson (BPAD 36748, Level 3)	<i>LM Robertson</i>	22 August 2025
0	Louisa Robertson (BPAD 36748, Level 3)	Louisa Robertson (BPAD 36748, Level 3)	Louisa Robertson (BPAD 36748, Level 3)	<i>LM Robertson</i>	15 September 2025



Adelaide

Kaurna Country | 100 Hutt Street,
Adelaide, SA 5000
T: 08 8431 7113

Brisbane

Turrbal/Yuggera Country | Level 37,
123 Eagle Street, Brisbane, QLD 4000
T: 07 3211 5350

Bunbury

Wardandi Country | 177 Spencer Street,
Bunbury, WA 6230
T: 08 9792 4797

Byron Bay

Bundjalung Country | 1/64 Kingsley Street,
Byron Bay NSW 2481
T: 07 3211 5350

Gold Coast

Yugambah Country | Level 2/14
Edgewater Court, Robina, QLD 4226
T: 07 3211 5350

Hobart

Muwinina Country | Level 2,
137 Liverpool Street, Hobart, TAS 7000
T: 03 6208 3700

Melbourne

Wurundjeri Country | Level 19,
31 Queen Street, Melbourne, VIC 3000
T: 03 9642 0599

Perth

Whadjuk Country | Allendale Square,
Level 9, 77 St Georges Terrace, WA 6000
T: 08 9380 3100

Sydney

Gadigal Country | Level 8,
179 Elizabeth Street, Sydney, NSW 2000
T: 02 8245 0300

Wollongong

Dharawal Country | Level 1,
1 Burelli Street, Wollongong, NSW 2500
T: 02 4225 2647



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Lot 31 Rawling Road, Davenport – Proposed Wastewater Treatment Plant

DFES Issue	DFES assessment	DFES action	JBS&G comment	JBS&G recommended action
Policy Measure 7.1 ii. c. Compliant Preparation of a BAL Contour Map				
Vegetation Classification or Exclusions	Classified Plot 2 – not demonstrated Vegetation Plot 2 cannot be substantiated as Class G Grassland with the limited information and photographic evidence provided. Photograph IDs 2n, 2o and 2p present as a higher classification (due to the greater than 10% foliage cover of trees in the area). Other areas with dense tree cover have been included in the plot however the photographs appear to not include these locations. The BMP should detail specifically how the Class G Grassland classification was derived as opposed to Class A Forest. If unsubstantiated, the vegetation classification should be revised to consider the vegetation at maturity as per AS 3959, or the resultant BAL ratings may be inaccurate. DFES notes that updated classifications are likely to impact the size of the required Asset Protection Zone (APZ) and increase the area of vegetation clearing required.	BAL Rating cannot be validated. Further evidence to support the vegetation classification of Plot 2 is required.	Sections 2.2 and 3 of the BMP identify that the full BRRF site, which includes Stage 1 (this development) and Stages 2 & 3 (future development) will be cleared during Stage 1 construction works. This will result in clearing of the existing trees to the south and east of the WTP site. A precautionary approach has been taken to classify the future Stage 2 and 3 development areas as Class G Grassland. Photos 2n, 2o and 2p depict photos of the existing trees to be cleared within the future stages and replaced with grassland.	No action required – Class G Grassland classification is appropriate for Plot 2 due to the proposed extent of onsite clearing.
Vegetation Classification or Exclusions	Classified Plot 3/excluded Plot 4 – not demonstrated It is noted that Plots 3 and 4 appear to have all photographs incorrectly labelled. On this basis DFES is unable to validate either plot. Further, it is unclear if a mechanism is present to exclude all vegetation that is excluded as managed to low threat.	BAL Rating cannot be validated.	There was an error in the photo tables for Plot 3 and Plot 4 provided as Appendix A where the photos in the Plot 3 photo table were labelled as '4a, 4b' etc and the photos in the Plot 4 photo table as '3a, 3b' etc. The tables have been corrected and are included as Attachment A of this document. The vegetation excluded as low threat comprises permanent non-vegetated and low threat areas, including settling ponds, roads, driveways, laydown areas and a reticulated and maintained turf farm. The City of Bunbury Fire Control Notice provides the enforcement mechanism for ongoing low threat management through the following requirement: <i>Slash/mow all grass to a height no greater than 10 centimetres and remove all slashed materials and/or install a firebreak of three metres wide and four metres high, clear of all bush and flammable material along all external boundaries of the land. Total removal of all flammable material from the property may be considered an acceptable alternative. This standard must be maintained until 5 May.</i>	The BMP can be revised to correct the minor administrative error, if required.
Policy Measure 7.1 ii. e. Compliance with the Bushfire Protection Criteria 7: Development – Commercial and Industrial				
Siting and Design – Siting and Design and Asset Protection Zone	A2.1a and A2.2 – not demonstrated The BAL ratings cannot be validated for the reason(s) outlined in Table 1.	BAL Rating cannot be validated. Modification to the BMP is required to address the Assessment advice in Table 1.	Addressed above	Addressed above
Vehicular Access – Private Driveway	A3.1 – not demonstrated The BMP states that the proposal will comply with all requirements, however, does not include figures of the final driveway layout (including all turning areas, hardstands and hydrants). As the BMP has been provided to support the development application, DFES consider	Compliance with Vehicular Access not demonstrated.	Detailed design is still in progress and design of the WTP and access road has not yet been finalised. Tables 5-1 and 6-1 of the BMP state that compliance with private driveway requirements of the Guidelines will be addressed following development approval through the condition clearance process. JBS&G will be engaged to	No action required – requirements will be addressed following development approval

DFES Issue	DFES assessment	DFES action	JBS&G comment	JBS&G recommended action
	that the BMP should include detailed drawings of the above requirements to ensure that compliance is achieved. The length of the private driveway is not specified and should comply with the requirements of acceptable solution A3.1 of the Guidelines.	Modification to the BMP is required to address the Assessment advice.	prepare a BMP compliance assessment to ensure these compliance provisions are met. The proposed access road will be approximately 920 m when measured from Rawling Road in the northwest, to the proposed habitable building. In terms of compliance with A3.1, the length of the private driveway is not required to be specified since the existing and proposed access road is/will be at least 6 m wide and there is accordingly no need to provide separate passing bays along the course of the route.	
Water Supply	A4.1 – not demonstrated It has not been demonstrated that the hydrant system is sufficient for the proposed development. No detail is provided of the number or location of the proposed hydrants. DFES is unable to provide comment in the absence of further information to validate the BMP assessment comments.	Compliance with Water Supply for firefighting not demonstrated. Modification to the BMP is required to address the Assessment advice.	Detailed design is still in progress and design of the onsite water reticulation system has not yet been finalised. Following development approval, the Proponent will undertake consultation with the necessary water supply authorities and DFES to ensure an appropriate supply of firefighting water is provided. These requirements will be addressed within the BMP compliance assessment prepared by JBS&G.	No action required – requirements will be addressed following development approval

Attachment A Supplementary information

Plot 3		
Vegetation classification	Pre-development	Class A Forest and Class G Grassland
	Post-development	Modified to non-vegetated and/or low threat (Clauses 2.2.3.2 [e] and/or [f])
Description / justification		
Land within the development area to be cleared, and a 21 m APZ around the WWTP perimeter to be established, both comprising pre-development of Eucalypt forest and grazed pastureland / grasslands.		
 Photo ID: 3a		 Photo ID: 3b
 Photo ID: 3c		 Photo ID: 3d

Plot 3



Photo ID: 3e



Photo ID: 3f



Photo ID: 3g



Photo ID: 3h



Photo ID: 3i (APZ to be cleared)



Photo ID: 3j (APZ to be cleared)

Plot 3



Photo ID: 3k (APZ to be cleared)



Photo ID: 3m



Photo ID: 3o



Photo ID: 3l (APZ to be cleared)



Photo ID: 3n

Plot 4

Vegetation classification	Pre-development	Excluded – Non-vegetated (Clause 2.2.3.2 [e])
	Post-development	Excluded – Non-vegetated (Clause 2.2.3.2 [e])
Description / justification		

Existing low threat and non-vegetated areas including paved roadway running east-west along the northern border to the project area and built from within the adjoining V&V Walsh facility and surrounding roads.



Photo ID: 4a



Photo ID: 4c



Photo ID: 4e



Photo ID: 4b



Photo ID: 4d



Photo ID: 4f

Plot 4



Photo ID: 4g



Photo ID: 4h

Schedule of Submissions

Proposed Upgrade Wastewater Treatment Plan

#31 Rawling Road DAVENPORT

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
Government / Service Agency Comments				
1.	Main Roads WA Southwest Region Planning Services Kerry Jones [REDACTED] swrplanning@mainroads.wa.gov.au	I refer to your email of 31 October 2025 and advise that Main Roads has no objections in principle to the proposed development, subject to construction traffic accessing the site from Rawling Road only.	Noted, no comment	Noted.
2.	Department of Planning, Lands and Heritage Isabella Tanti – Project Support Officer – Heritage & Property Services Isabella.Tanti@dplh.wa.gov.au	Thank you for your enquiry regarding the proposed Wastewater Treatment Plant associated with existing abattoir at Lot 1, 31 Rawling Road Davenport Please see the attached correspondence. Should you have any questions, please submit your enquiry via the Acknowledge portal at https://achknowledge.dplh.wa.gov.au/ (See Below Letter) Dear Mr Tancheff,	Noted, No comment	Noted.

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		ABORIGINAL HERITAGE – WASTEWATER TREATMENT PLANT - DAVENPORT Thank you for your enquiry dated 31st of October 2025 seeking comment from the Department of Planning, Lands and Heritage (DPLH), Aboriginal Heritage Conservation team, regarding the proposed development of a wastewater treatment plant associated with existing abattoir at Lot 1 Rawling Road, Davenport. A review of the Register of Places and Objects, as well as the DPLH Aboriginal Heritage Database, concludes that the subject area intersects with Aboriginal heritage place Bunbury/Preston River (ID 5815). However, this place has been assessed by the Aboriginal Cultural Heritage Committee as not a site, as it does not meet section 5 of the <i>Aboriginal Heritage Act 1972</i> (AHA). Therefore, based on the current information held by DPLH no approvals under the AHA are required for the proposed Activity. DPLH also advises that the City of Bunbury regularly checks Aboriginal Cultural Heritage Inquiry System should new Aboriginal heritage be reported within your subject area.		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		Should you have any queries regarding this advice please contact Isabella Tanti, Project Support Officer, at Isabella.Tanti@dplh.wa.gov.au or on 08 6551 9013.		
3.	Department of Primary Industries & Regional Development (DPIRD) Leon van Wyk – Manager – Land Use Planning Section Leon.Vanwyk@dpiird.wa.gov.au	COMMENT: Development Application LOT 1 (31) Rawling Road DAVENPORT - Proposed Upgrade Wastewater Treatment Plant Thank you for the opportunity to comment on the proposed upgrade of the Wastewater Treatment Plant (WWTP) at 31 Rawling Road, Davenport. The Department of Primary Industries and Regional Development (DPIRD) supports the upgrades to wastewater treatment at the site as it will contribute to a reduction of the current nutrient loading rates. The increase in winter storage capacity by freeing up the current pond treatment system will further aid wastewater management and reduce nutrient export in the winter months. DPIRD's Agribusiness Development assessed the proposal and provided the following comments: While the WWTP is designed to achieve high nutrient removal rates, the volume, quality and timing of wastewater irrigated	Noted. The WWTP is subject to EPA Works Approval, granted 12/11/2025. There are several options for reuse and disposal of the excess treated wastewater, including irrigation. All disposals will accord with necessary legislative requirements. The excess water may also be made available to other users for reuse, which would be preferable to other options however no other end user has to date been secured.	Noted, whilst DPIRD have considered some concerns around treated water. It is noted that the applicant has been granted a works approval from DWER in relation to the treatment and disposal of treated wastewater into the environment. The offsite affects of the water treatment and reuse therefore considered to have been addressed by virtue of this approval.

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		has not been quantified. A detailed assessment has not been done due to this information gap, however irrigation of water salinities above 600 mg/L should address plant salt tolerance, and irrigation of water salinities above 2,500 mg/L should include leaching fraction calculations to address salt accumulation in the root zone. Chlorination of irrigation water is DPIRD's least preferred method of disinfection, due to its potential impacts on plant health, soil health, and the creation of disinfection by-products. It is unclear why a high level of disinfection of treated water is being undertaken for irrigation purposes, when the risk to human health can be reduced by limiting exposure. OFFICIAL If you have any queries regarding the comments, please contact Leon van Wyk at (08) 9780 6171 or leon.vanwyk@dpird.wa.gov.au.		
4.	Department of fire and Emergency Services Michael Ball – Senior Land Use Planning Officer – [REDACTED]	RE: LOT 31 RAWLING ROAD, DAVENPORT – PROPOSED WASTEWATER TREATMENT PLANT – DEVELOPMENT APPLICATION I refer to the above proposal and attach a copy of our response for your records. Should you require clarification of the	Noted, see updated advice from JBS&G. The queries raised are minor and self-explanatory. No further referral back to DFES is required.	Noted. As per RAR report it is considered that these matters raised by DFES can be resolved through a submission of an updated BMP post granting decision, to the satisfaction of the City on advice from DFES.

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
	advice@dfes.wa.gov.au	matters raised, please do not hesitate to contact me on the undersigned. RE: LOT 31 RAWLING ROAD, DAVENPORT – PROPOSED WASTEWATER TREATMENT PLANT – DEVELOPMENT APPLICATION I refer to your email dated 31 October 2025 regarding the submission of a Bushfire Management Plan (BMP) (Version 0), prepared by JBS&G and dated 15 September 2025, for the above proposed development. This advice relates to the <i>State Planning Policy 3.7 Bushfire</i> (SPP 3.7) and supporting <i>Planning for Bushfire Guidelines</i> (Guidelines), as well as DFES' role and responsibilities as Hazard Management Agency for Fire in Western Australia. General Comment • DFES acknowledges that the site currently accommodates an abattoir, and the proposed development includes a new wastewater treatment plant. • The submitted BMP includes administrative inaccuracies and does not appear to include sufficient information for some elements of the Bushfire Protection Criteria to allow compliance to be determined. Updates and additional		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		information are required to ensure that compliance is achieved. • Specific requirements of SPP 3.7 and the Guidelines are to be further addressed in the BMP as outlined in the below assessment Tables 1 and 2. Recommendation: Compliance with acceptable solutions approach not demonstrated – modifications required DFES advises that the BMP has not demonstrated that the proposed development complies with the following requirements of SPP 3.7 and the Guidelines: 1. Element 2: Siting and Design; 2. Element 3: Vehicular Access; and 3. Element 4: Water Supply. DFES recommends the BMP be modified as per the Assessment advice provided in Tables 1-3 to ensure it is accurate and the bushfire risk management/mitigation measures are effective and can be implemented in perpetuity to manage/mitigate the bushfire risk to people, property and infrastructure to an acceptable level and appropriate to the land use and location. The required modifications are listed in the table(s) below. Should the modified BMP affect the		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		design of the proposal, the proposal should be amended to reflect these modifications. Could you please forward notification of the application determination to DFES for our records. If you require any clarification or further information regarding the below assessment, please do not hesitate to contact me on telephone number 9395 9819. Updated referral response following response from bushfire consultant 27/1/2026 Thank you for your time on the phone and follow up email. Following a review of the updated information, I can provide the following updates to our original response: 1. Classified Plot 2 can be validated as Class G Grassland on the basis that the decision maker is satisfied that all trees will be removed. It is noted that the lack of a 'predevelopment' vegetation assessment led to some confusion in relation to the proposed classification. 2. In relation to Plots 3 and 4, DFES does not object to the exclusion of		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		areas managed to low threat, on the basis that there is an enforceable mechanism to ensure this in perpetuity. DFES notes that the Fire Control Notice does not operate year-round, therefore an enforceable mechanism would need to be detailed to ensure it can be enforced. 3. If the above two points can be validated, A2.1 and A2.2 will be compliant. 4. A3.1/A4.1 – DFES considers that at the development application stage, the applicant should be able to demonstrate compliance. It is noted that the response does not discuss the provision of turning areas or show the route of the overall private driveway length, therefore it is unclear if the final development will achieve compliance with A3.1. As discussed, there is insufficient evidence to confirm compliance with A4.1 at this time.		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
5.	Department of Water & Environmental Regulation Andrew Cresswell – Senior Natural Resource Management Officer Andrew.cresswell@der.wa.gov.au	2025.224.1 – City Of Bunbury – Development Approval (DA) Application for Wastewater Treatment Plant (WWTP) – V & V Walsh – Lot 1 Rawling Road, Davenport (DWER Ref: REQ- 0001868) DWER Response Thank you for referring the above-mentioned proposal to the Department of Water and Environmental Regulation (Department) for consideration. The Department understands the proposal is being considered by the City under the Regional Development Assessment Panel (RDAP) framework and associated approvals under the City's Town Planning Scheme No. 8 and the Greater Bunbury Region Scheme. The Department understands this proposal aims to replace the existing Wastewater Treatment System (WTTS). It is expected the new plant will reduce waste, improve the quality of effluent water, reduce risk to the environment and potentially provide a source of suitably treated greywater. The WWTP will also enable the proponent to continue operating under its existing environmental approvals. The DA application is supported by the following documentation. • RDAP Application, Planned Focus,	Noted, an Advice Note referencing necessary EPA Operating Licences, Works Approvals and Clearing requirements is anticipated.	Noted, DWER has considered the application and noted they have no objection to the proposal including vegetation removal, wastewater treatment, impacts to environment and water resource values.

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		October 2025 • Clearing Assessment, GHD, October 2024 • EPBC Act Significance Assessment, October 2024 • Bushfire Management Plan, JBS&G, July 2025 • WWTP Works Approval Supporting Document, GHD, October 2025 • Wastewater Design, AMPC, April 2024 • Bio Resources Recovery Plant – Project Sites, Spring Flora and Fauna Survey, GHD, August 2024 The Department does not object to the proposal however we have identified the potential for impacts on environment and/or water resource values and/or management. Key issues and advice have been provided below. 1. Issue: Operating Licenses and works approvals Advice: A works approval authorising the construction, commissioning and time limited operation of the proposed wastewater treatment plant was granted by the Department on 12 November 2025 (W6975/2024/1). Discussion:		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		The Department of Water and Environmental Regulation (DWER) regulates emissions and discharges from the construction and operation of prescribed premises through a works approval and licensing process, under Part V, Division 3 of the Environmental Protection Act 1986 (EP Act). The categories of prescribed premises are outlined in Schedule 1 of the Environmental Protection Regulations 1987. The EP Act requires a works approval to be obtained before constructing a prescribed premises and makes it an offence to cause an emission or discharge from an existing prescribed premises unless they are the holder of a works approval or licence (or registration) and the emission is in accordance with any conditions to which the licence or works approval is subject. The development application was reviewed in relation to works approval and licence requirements under Part V Division 3 of the EP Act. This premises is licensed under Part V of the Environmental Protection Act 1986 (EP Act (licence number L6001/1989/15) under the following categories for the nominated throughput:		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		Category 15 Abattoir: Premises on which animals are slaughtered. Category description 470,000 tonnes per annual period (hot standard carcase weight) 16 Rendering operations: premises on which substances from animal material are processed or extracted. Category description 10,000 tonnes per annual period 55 Livestock saleyard or holding pen: premises on which live animals are held, pending their sale, shipment or slaughter. Category description 900,000 animals per period 83 Fellmongering: premises on which animal		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		skins or hides are dried, cured or stored. Category description 900,000 skins or hides per annual period. The Licence Holder is V & V Walsh Pty Ltd. The Licence (L6001/1989/15) currently authorises operation of the premises including the discharge of treated wastewater on the premises using the existing wastewater treatment system (WTS). A works approval authorising the construction, commissioning and time limited operation of the proposed wastewater treatment plant (WWTP) was granted on 12 November 2025 (W6975/2024/1). The works approval appears to be consistent with the proposed development. Operation of the new WWTP, including discharge to the existing WTS ponds and to land via irrigation, is subject to conditions under the licence and works approval. A copy of the licence and works approval, and Decision Report documenting the department's decision is available at https://www.der.wa.gov.au/our-work/licences-andworks-approvals/current-licences.		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		The proposed WWTP is designed with a larger capacity than the existing WTS. While the works approval authorises construction of the larger WWTP, it does not authorise any expansion activities or any increase in the volume of wastewater authorised for treatment and/or discharge. Conditions with the works approval (W6975/2024/1) limit the volume of wastewater directed to the new WWTP to ensure that treatment and discharge volumes are consistent with current operations. Any future changes to the licence, including proposed expansions to the premises or increase in the volume of wastewater discharged, will require an amendment application to be submitted by the Licence Holder for assessment under Part V of the EP Act. The application forms and further information is available at https://environmentonline.dwer.wa.gov.au and / or if there are queries relating to this Licence, to contact DWER at info@dwer.wa.gov.au or 6364 7000, or submit an enquiry via the Environment Online Portal. The department is aware that V & V Walsh Pty Ltd are investigating alternative options for disposal of treated wastewater, including discharge to Preston River. Discharge of treated wastewater to Preston River is not authorised under the		

#	Name / Address	Summary of Submission	Proponent Response to Submission	Officer Comments on Submission
		current licence or works approval. Any proposal to discharge treated wastewater to Preston River would also be subject to a separate application and assessment process under Part V of the EP Act. Please note that this advice is provided based on information provided. Should this information change, a works approval or licensing requirements may also change. Applicants are encouraged to contact DWER at the above contact details to clarify requirements, should there be changes to the development proposal. 1. Issue: Native Vegetation Clearing Advice: A portion of the site currently operates under CPS8310/2. This clearing permit enables the fertigation of wastewater from the existing WTS under strict controls however it does not enable the 'physical clearing' of native vegetation for existing operations or those proposed under this development application. Discussion: Under section 51C of the <i>Environmental Protection Act 1986</i> (EP Act), clearing of native vegetation is an offence unless: • it is undertaken under the authority of a clearing permit • it is done after the person has received		

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		notice under Section 51DA (5) that a clearing permit is not required the clearing is subject to an exemption Exemptions for clearing that are a requirement of written law, or authorised under certain statutory processes, are contained in Schedule 6 of the EP Act. Exemptions for low impact routine land management practices outside of environmentally sensitive areas (ESAs) are contained in the <i>Environmental Protection (Clearing of Native Vegetation) Regulations 2004</i> (the Clearing Regulations). Based on the information provided, should development approval be issued, clearing to construct a building or structure is likely to be exempt from the requirement for a clearing permit under Regulation 5, Item 1 of the Clearing Regulations. Note that this exemption does not apply prior to development approval being issued. Please also note that clearing for a building / structure, combined with other exempt clearing activities on the property, must not exceed five hectares in a financial year. In the event there are modifications to the proposal that may impact aspects of		

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		environment and/or water management, the Department should be notified to enable assessment.		
6.	Department of Biodiversity, Conservation & Attractions Matthew Wansborough - Regional Coordinator matthew.wansborough@dbca.wa.gov.au	RDAP 5/2025/224/1- Waste Water Treatment Plant - Abattoir - Lot 1 (#31) Rawling Road Davenport WA Thank you for your email dated 31 October 2025 requesting comments from the Department of Biodiversity, Conservation and Attractions (DBCA) on the above development application. The following comments are provided pursuant to DBCA's responsibilities under the <i>Conservation and Land Management Act 1984</i> (CALM Act) and the <i>Biodiversity Conservation Act 2016</i> (BC Act). Advice to City <u>Native Fauna</u> Western ringtail possums (WRP) and black cockatoos are listed as threatened fauna under the BC Act and the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). WRP and Black cockatoos have been found in close proximity to the subject land. The Vegetation Clearing Zone and Selective Clearing Zone identified on the development plans contain vegetation that	Noted. The DBCA advice suggests development of a fence along the eastern boundary of the new WWTP to Kalgalup Regional Park. This is an onerous and unnecessary additional cost, and we would oppose a condition requiring this because it is not required or practical. Although the subject land, 31 Rawling Road is within 2 zones under the Planning Schemes that apply, the zone boundary does not follow a cadastral / title / ownership boundary or a fence. Land zoned Regional Open Space (ROS) remains in private ownership and management of V&V Walsh; it has not been acquired for public purpose. This said, the ROS portion is well managed, setback and away from the primary Abattoir functions. The new WWTP is self-contained and positioned on a bunded system surrounded by managed APZ that is wholly outside of and setback from the ROS and any areas of environmental value. The Construction Management Plan provided as part of the EPA Works Approval also sufficiently caters to protecting the balance of the site and surrounding land from construction	Noted. There is no clear nexus between the requirements of the fence and the proposed works and as such the request is not supported. It is recommended that DBCA should consult with the applicant prior to the proposed future stages of the WWTP as a fence could impede the construction of the future stages to the WWTP.

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		is considered medium suitability for WRP habitat (Shedley and Williams, 2014), and contributes to an ecological corridor identified in the Southwest Regional Ecological Linkages report (Molloy et al, 2009). DBCA recommends that clearing within the Vegetation and Selective Clearing Areas is minimised where possible. If found to be present, threatened fauna should be encouraged to disperse into the surrounding vegetation prior to any works commencing. Upon commencement, any vegetation clearing should be undertaken in such a manner that allows the dispersal of threatened fauna. If fauna does not disperse, a fauna spotter holding authorisation under the BC Act may need to be contacted to manage displaced threatened fauna. The taking (including capturing or killing) of threatened fauna is regulated under the BC Act. For further information regarding responsibilities relating to threatened fauna please email speciesandcommunities@dbca.wa.gov.au Kalgulup Regional Park The western portion of Lot 1 along the Preston River is identified under the Greater Bunbury Region Scheme as being Regional Open Space (ROS) that forms part	impacts.	

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		of the Kalgulup Regional Park. There should be no impact upon the Kalgulup Regional Park from the proposed development, including weed spread, pollution (solid, liquid, gas), surface or groundwater flow, or vehicle encroachment. It is recommended the eastern boundary of the proposed development area be fenced to manage accidental vehicle and/or wind-blown litter encroachment into the Kalgulup Regional Park.		
7.	Department of Planning Lands and Heritage June Liaw June.Liaw@dplh.wa.gov.au	Thanks for forwarding. Apologies for the delay in responding. Based on the plans provided, it appears the proposed development is proposed on General Industry-zoned land under the Greater Bunbury Region Scheme (GBRS) and abuts Regional Open Space. As per RES 2014/03, a DA under the GBRS is not required as the development is ancillary and incidental to the existing abattoir land use and does not encroach onto the Regional Open Space reservation.	Noted, no comment.	Noted.

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		Based on DEL 2014/01, the City is delegated to determine an application (should it be required) where the City accepts the advice and recommendation of the Department of Planning, Lands and Heritage. Please feel free to contact me if you have any further queries.		
8.	Water Corporation Donna McDermott LandPlanning@watercorporation.com.au	Thank you for your letter dated 31st October 2025. We offer the following comments regarding this proposal. Reticulated water and sewerage are currently not available to the subject land. The Water Corporation has no objection to the proposed upgrade of the WWTP and disposal solution due to the area not being serviced by the Water Corporation. The information provided above is subject to review and may change. If the proposal has not proceeded within the next 6 months, please contact us to confirm that this information is still valid. Please provide the above comments to the landowner, developer and/or their representative.	Noted, no comment	Noted.

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		Should you have any queries or require further clarification on any of the above issues, please do not hesitate to contact the Enquiries Officer.		
9.	DWER – (EPA) Tonja Boyd tonja.boyd@dwer.wa.gov.au	Thanks for providing the additional information. I have discussed with some of my colleagues and can advise that generally, DWER EPA Services does not provide comments on development applications; EPA Services undertakes environmental impact assessments of proposals referred to the EPA. The provisions of the <i>Environmental Protection Act 1986</i> (EP Act) provide for decision making authorities to refer significant proposals to the EPA for EIA under Part IV of the EP Act. A significant proposal is defined as a proposal likely, if implemented, to have a significant effect on the environment and includes a significant amendment of an approved proposal. Further guidance regarding consideration of significance can be found in the EPA's statement of principles factors objectives	Noted, no comment.	Noted.

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		and aims, or alternatively EPA Services can be contacted directly to discuss further, including a pre referral meeting. I hope this is of assistance.		
10.	Western Australian Meat Industry Authority (WAMIA) I-Lyn Loo i-lyn.loo@wamia.wa.gov.au	Thank you for the opportunity to comment on the development application for a Wastewater Treatment Plant at abattoir located on Rawlings Road Davenport (V&V Walsh). The Authority is aware of V&V Walsh's plans and understands the proposed wastewater treatment plant will enable them to maintain and / or increase production levels under their DWER environmental licence. The Authority is generally supportive of initiatives that improve operational efficiency, capacity, compliance and overall performance of Western Australian abattoirs. V&V Walsh has remained compliant with the WAMIA Act 1976 and associated regulations. In this context, the Authority has no objection to the proposal.	Noted, no comment.	Noted.
11.	Department of Health Jane Cook EHD.ExecutiveSupport	Thank you for your letter dated 31 December 2025, requesting comment from the Department of Health (DoH) on the above proposal. DoH position	Noted, recognising the Department of Health makes no commentary on the proposed wastewater solution for the Laboratory amenities – either for disposal to land or for collection and disposal offsite.	Noted.

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	t@health.wa.gov.au	☒ No objection – with comments and/or recommended conditions and advice notes provided below. DoH advice The DoH notes the new wastewater treatment plant (plant) will be located within the curtilage of the existing facility in a small area of disturbed ground to the southeast of the existing wastewater settlement lagoons. The site is surrounded by existing abattoir and wastewater treatment infrastructure, and an airport and numerous commercial units to the west; and a creek (Preston River) system and open cleared bushland to the east. The nearest sensitive land uses are greater than 1.7km to the northeast. The proposed plant appears to comprise large tanks and enclosed water treatment equipment. The new facility will be regulated by the Department of Water and Environment Regulation under the Environment Protection Act License (L6001/1989/15) and odour emissions from the facility are not considered to be an issue. 1. Water supply and wastewater disposal		

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		A minimum setback from the irrigation area and the Preston River must be maintained in accordance with the Government Sewerage Policy 2019. A minimum buffer must also be maintained for the residential area. 2. Industrial / agricultural interface/Contaminated sites Wastewater treatment plants and abattoirs are classified as potentially contaminating land uses under Department of Water and Environmental Regulation (DWER) <i>Assessment and Management of Contaminated Sites</i> (Nov 2021), Appendix B. Contaminated site issues should be fully addressed through the land planning process. The EPA guideline <i>Separation Distances between Industrial and Sensitive Land Uses</i> (2005) recommends: • A default buffer of 1,000 metres around abattoirs due to potential noise, dust, odour and associated risks. • Appropriate separation distances around wastewater treatment plants. The DoH expects proponents to meet these requirements now and into the future.		

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		While odour may not directly harm physical health, persistent nuisance odours can cause stress and anxiety, which may lead to illness. The site is within low-lying land on the Preston River floodplain. Flood impacts and related public health risks, both current and future, must be assessed and managed. Should you have any queries or require further information, please contact System Performance on 9222 2000 or eh.eSubmissions@health.wa.gov.au.		



PART C – OTHER BUSINESS

- 1. State Administrative Tribunal Applications and Supreme Court Appeals**
- 2. Meeting Closure**